

604211/011



Insulating enclosures and installation material

604211/011 March '01  
Printed in Italy  
7000004-01/008 Facility Services/CAL



In consideration of modifications to Standards and materials,  
the characteristics and overall dimensions indicated in this  
catalogue may be considered binding only following  
confirmation by ABB SACE

ABB SACE S.p.A.  
Enclosures and Cable Systems Division  
Viale Vicenza, 61  
36063 Marostica (VI) - Italy  
Tel.: ++39 0424 478200 - Telefax: ++39 0424 478310

<http://www.abb.com>



# Summary

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# Presentation

## General

ABB presents a very extensive range of consumer units and switchboards for the simple installation of modular components, made even faster today as a result of the rapid Unifix cabling system. This wide choice makes it possible to satisfy the requirements of a whole group of applications, and the Unibox consumer units, in particular, have a modern design that fits in perfectly with almost any type of environment and decor.

Some of the different boxes supplied by ABB satisfy the requirement of an electric circuit to be safe even under the most difficult environmental conditions; to this end, water-proof boxes are available, that guarantee complete protection for branch connection and also for mounting devices. It should be noted that many of the series of enclosures are fitted with a flange in bi-material for facilitated branch connection.



The switchboards in the Livorno series, in particular, satisfy requirements arising in emergency situations where a rapid and efficient control to halt the circuit is necessary. A wide range of empty enclosures and control devices are also available for creating the terminal section of an electric plant. These are designed to be installed with rigid and protective conduits.



# Presentation

## General

The switchboards in the Marostica series, designed to accommodate the main IEC 309-1 plug models on the market, complete the range of protected and water proof enclosures for mounting and protecting modular components. Due to their structural and safety characteristics they are particularly suitable for environments such as warehouses, green-houses, commercial installations, fairs, hospitals, community buildings, work-sites,



electric material are in line with the same quality standards as the main components. A wide assortment of junction boxes, metal section bars, cable-ties, fixing accessories and cabling is available, allowing the user to make the most appropriate choice in any application situation to create a circuit that is always perfect.

In the following pages we present the main characteristics of



sports facilities etc.

An electric circuit is "state-of-the-art" when all its details have been designed specifically to guarantee the maximum safety of the people who will use it as well as the operating reliability of the plant itself. For this reason also the minor components and accessories supplied by ABB for the correct installation of the

some of the most important innovations introduced by ABB

- Unibox consumer units
- Flange in bi-material
- Unifix cabling system



# Unibox IP 40 Series wall-mounting consumer units

A new idea for installation in residential environments and in the tertiary sector

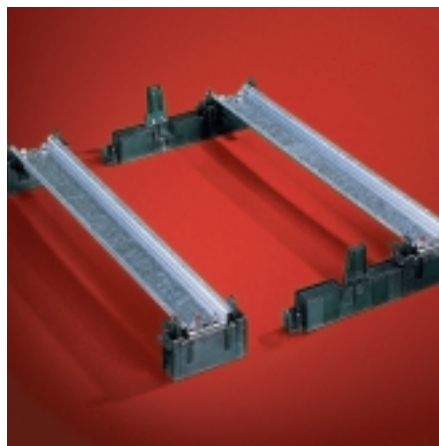
## Many advantages at a more than competitive price

- snap-on components and accessories, quickly mounted without screws;
- modular, snap-on frame that is easy to extract and ideal for bench installation;
- frame that can be positioned at the bottom of the consumer unit and kept at an angle by practical hook wires, making it possible to keep the cables in order and to rationalise the paths easily, using the available space;
- cover fixed with rapid-pitch screws (easy to seal if necessary) so that installation can be carried out quickly even on surfaces that are not perfectly regular;
- entire range designed to be used with the Unifix SL rapid cabling system;
- possibility of mounting terminal boxes at the top or at the bottom, with the snap-on method;
- alignment system to make it easy to position the trunking;
- maximum versatility in trunking (trimmed) and conduits (flange for conduits up to 40 mm in diameter) branch connections;
- designed also for corrugated conduits arriving from the wall;
- possibility of branch connection in batteries of more than one consumer unit;
- consumer units already fitted with fixing accessories (screws and wall plugs);
- possibility of mounting an extra module for every row of circuit breakers.

Unibox consumer units bear the IMQ mark in compliance with CEI 23-48 and CEI 23-49 standards; they also comply with the German Standard DIN 43871 and are:

- made in thermoplastic material, resistant to the glow wire test up to 750°C;
- with dimensional stability from -25°C to +85°C and with a resistance to impact of 10 Joule (equivalent of grade IK 09);
- equipped with a special cover for holes used to fix the unit to the wall, guaranteeing double, total insulation;
- fitted with accessories for keeping cabling in order and for blocking incoming and outgoing cables;
- fitted with spring-operating doors, with a push-pull system, designed for a lock with key;
- equipped with a film protected door.

Modular, snap-on frame that is easy to extract and ideal for bench installation.



Fitted with accessories for keeping cabling in order and for blocking incoming and outgoing cables.



# Unibox IP 40 Series wall-mounting consumer units

A new idea for installation in residential environments and in the tertiary sector

Maximum versatility in trunking (trimmed) and conduits (flange for conduits up to 40 mm in diameter) branch connections.



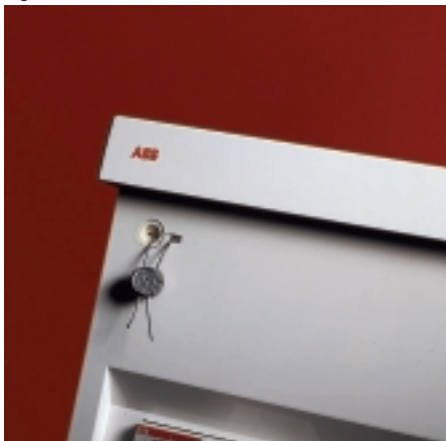
An article with innovative but discrete and simple lines that cannot be mistaken

- a product with a distinguished design, available in modern white RAL 9016 or in the more traditional RAL 7035 grey
- perfectly suitable for installation in the home or in the workplace, the products are available without a door or with a single transparent smoked or opaque door in models with one, two or three rows
- a surface that is slightly curved and two slightly converging lines, to enclose the best low voltage solutions.

Fitted with spring-operating doors, with a push-pull system, designed for a lock with key.



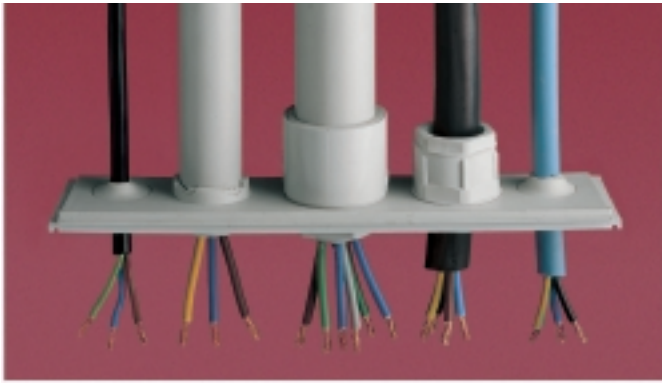
Cover fixed with rapid-pitch screws (easy to seal if necessary) so that installation can be carried out quickly even on surfaces that are not perfectly regular.



Alignment system to make it easy to position the trunking.



# Consumer units with flange in bi-material for facilitated branch connections



the cable clamp are no longer required!

The new flange is fitted to the polycarbonate consumer units in the Europa Series: Europa Polycarbonate IP 65, Fly IP 65 and Europa Polycarbonate IP40 Series consumer units. Installation is quicker and more profitable: while the structure of the flange itself is, in fact, made in rigid material, the inlets are in a soft material (rubber). Branch connections with a cable or cable conduit or with a conduit and conduit clamp are made in just a couple of seconds by a small hole or incision. Just follow the simple instructions and cut in the right place. Whatever system you choose, the high degree of protection from dust and liquids remains the same: IP 65 for consumer units with a door and IP 40 for those without. Another advantage is the fact that the flange can be pulled out of the consumer units, and therefore preparation work can be carried out conveniently. Branch connections made with the flange in bi-material are more economically advantageous because they reduce installation times, plus the fact that, because the price of the consumer units is the same as traditional ones, in applications using just the conduit or the cable there is a net saving in the cost of the conduit or cable clamp.

Quick installation, freedom of choice, advantageous prices, these are the new opportunities that the new facilitated branch connection system offer to installers.

## Creating branch connections is no longer a problem

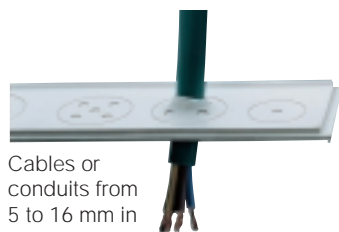
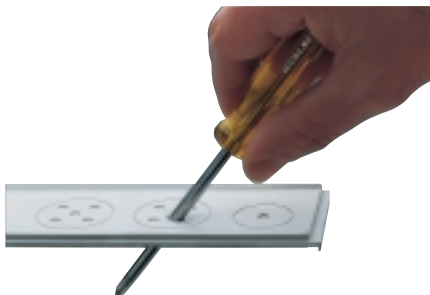
A cutter or a pair of scissors and off you go: the branch connection is already finished. Do you want to use a conduit clamp or a cable clamp? Or do you prefer to insert the pipe on its own or directly with the cable? It doesn't make any difference. Drills or cutters are no longer necessary with ABB consumer units fitted with the new flange in bi-material. The whole operation is carried out in the simplest possible way, very quickly and without extra costs, because, if you like, the conduit clamp or



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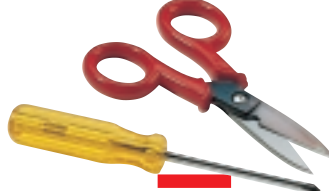
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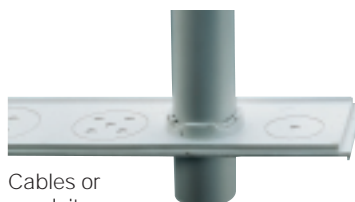
Cables or conduits from 5 to 16 mm in diameter



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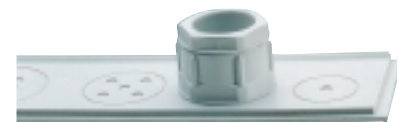
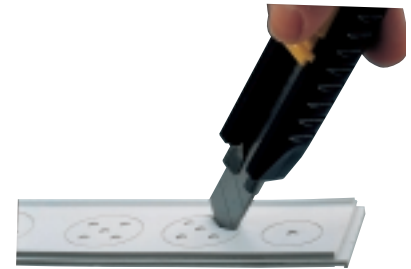
Cables or conduits from 17 to 35 mm in diameter



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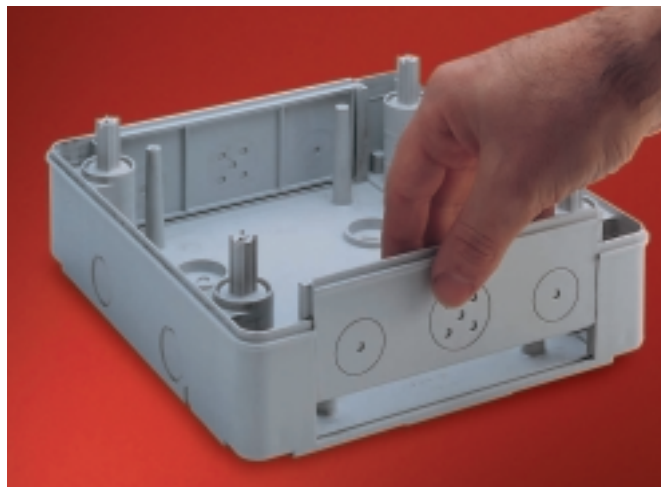
Cable clamps, conduit clamps and connectors from 13 to 32 mm in diameter



# Consumer units with flange in bi-material for facilitated branch connections

## Many opportunities are offered

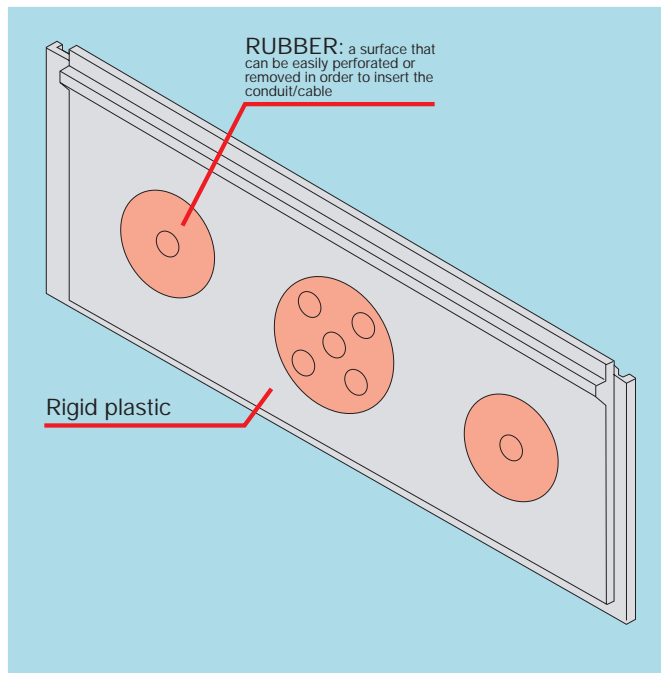
- **Guarantee of IP 65 degree of protection**  
In direct branch connection the elastic properties of the flange rubber guarantee that it adheres completely to the plastic of the conduit or the cable sheath
- **Economic advantage**  
By branch connecting directly with the cable or conduit you have a net saving in the cost of the conduit/cable clamp
- **Installation speed**  
Make a hole or a cut in the soft part and the flange is ready to connect directly with the conduit/cable
- **Versatility of connection systems**  
This system gives you great freedom of choice in deciding whether to connect directly with the conduit/cable or to use the cable/conduit clamp



Because the flanges are so easy to pull out, the job of installing consumer units can be carried out quickly and it also makes it possible to replace them in the future should shock requirements change.

## Innovative constructional characteristics

- **Rigid plastic**  
Makes the structure very strong
- **Soft plastic (rubber)**  
Makes it easy to insert the conduits or cables, guaranteeing IP 65 degree of protection
- **Rubber-covered surface**  
The whole flange is covered with a layer of rubber which, thanks to its practical snap-on mechanism, adheres perfectly to the consumer units, guaranteeing IP 65 degree of protection



In the new flange, installed on ABB polycarbonate consumer units, the soft part is pressed together with the unit (i.e. it is not made separately and then applied).

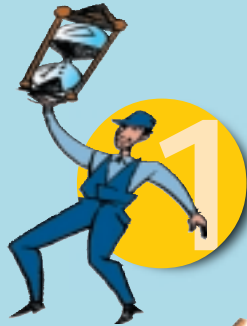
The rubber is therefore strongly connected to the plastic structure guaranteeing a perfect seal against dust and water, even protecting it from the entry of jets of water coming from any direction (IP 65 in compliance with CEI 70-1 – IEC 529 Standards).

# Unifix

## The new ABB cabling system for consumer units and switchboards

A new product from ABB that makes the work of installers and panel builders easier, making it possible to build a perfect "switchboard" component inside electric distribution plants. In the L and SL versions the Unifix system makes it simple, fast and safe to cable all modular System pro *M* devices inside ABB consumer units. Unifix has been specially designed so that it can be inserted in the ABB low voltage distribution system, and therefore fully exploits the perfect integration of ABB products coming from the different divisions, optimising the choice of components and the installation and cabling of electric switchboards. The basic characteristic of this innovative system is the fact that the standardisation of cabling components (which means a low cost for the user, easy availability of the components and maximum safety) results in a system that is completely flexible. In fact, all the most common applications can be accurately sized, using Unifix, without any limitations on the types or the combinations of devices that can be installed.

### These are the most significant advantages of the Unifix system



#### Cabling time

Cabling time is considerably reduced by using Unifix. You do not need to use cables to supply the power to each device because rigid, snap-on connectors, standardised for the various types of devices, are used.



#### Safety

Unifix is a step forward in the standardisation of low voltage electric switchboards: in fact, the rigid connectors make it possible to extend the results of the type tests (temperature rise and short circuit) to the input cabling of devices produced by ABB.



#### Economy

##### (in terms of installation and maintenance)

Thanks to the reduction in operating time, material (wires and cable terminals) and space, you can obtain a more advanced technical solution compared with traditional cabling, with a considerable cost saving.



#### Use of standard devices

Unifix can be applied to all ABB devices and therefore does not require any changes, additional accessories or special or modified equipment.



#### Variable step

Unlike the traditional cabling combs, Unifix uses variable step: therefore, circuit breakers with different polarities can be installed on the same row as auxiliary elements. This characteristic means that the system is totally flexible and can be used on all low voltage distribution switchboards, without any limitation to the layout or type of devices installed.

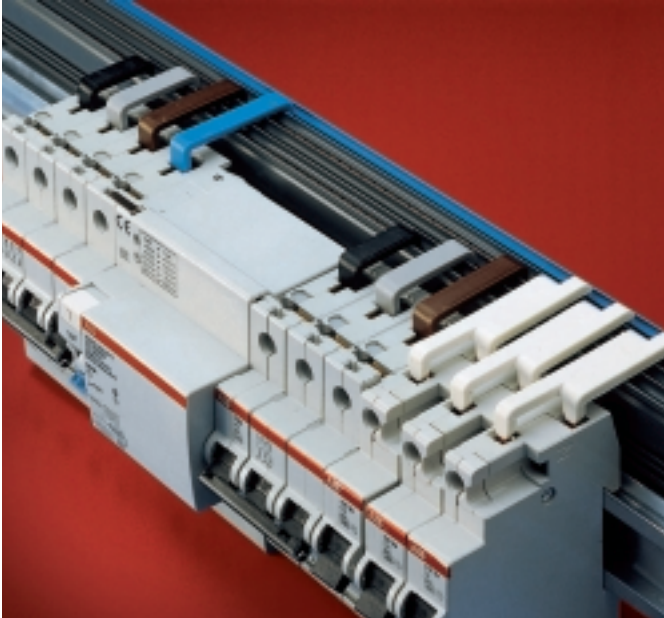
# Unifix

## The new ABB cabling system for consumer units and switchboards

### Unifix L series

This version is dedicated to cabling modular devices in the System pro M series both inside ArTu® ABB switchboards and ABB polycarbonate consumer units.

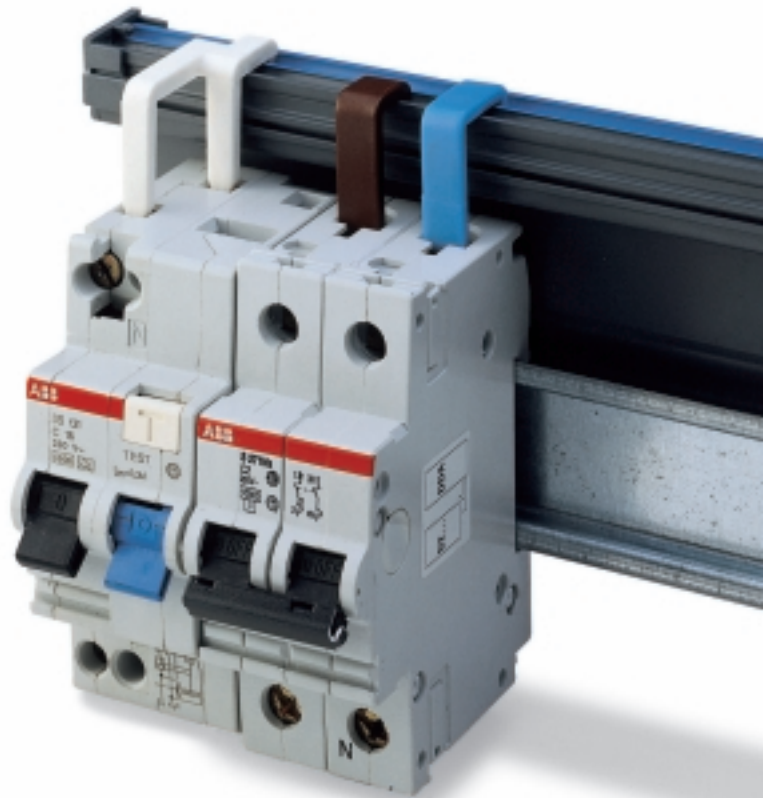
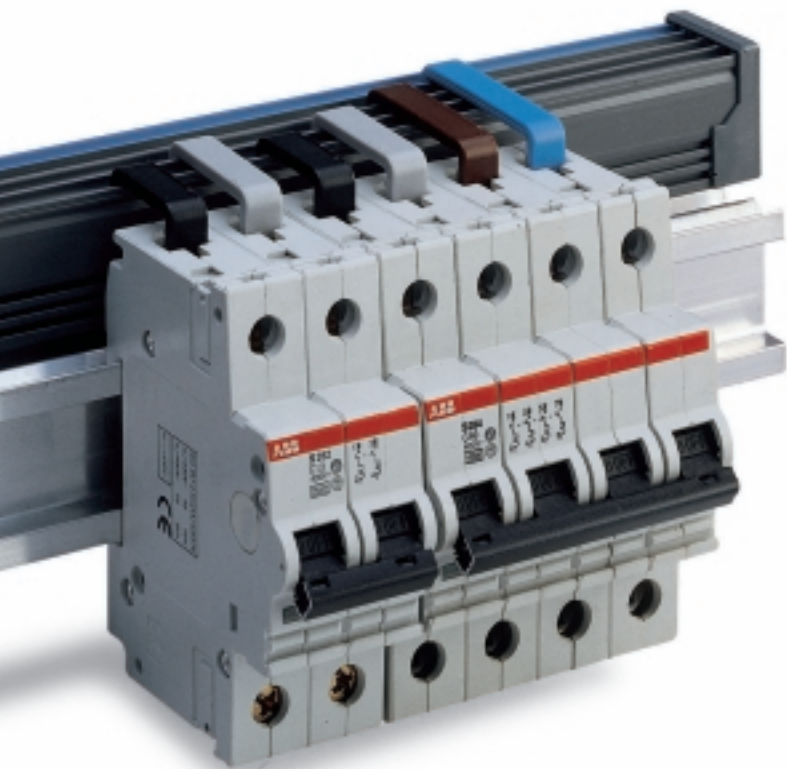
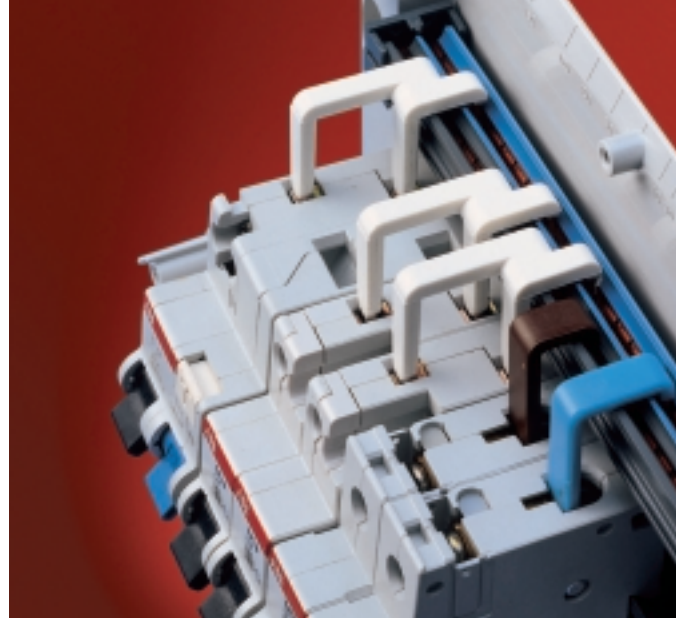
For rated currents up to 100 A and short circuit currents up to 25 kA.



### Unifix SL series

A simplified version of the L version for cabling modular, bi-polar devices of the System pro M series inside ABB consumer units in thermoplastic material.

For rated currents up to 40 A and short circuit currents up to 10 kA.



1





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# Consumer units

## Summary table

### IP 40 flush-mounting consumer units

### IP 40 wall-mounting consumer units

Estetica Series  
residential  
application

Europa Series  
residential  
application

Unibox Series  
residential/tertiary  
application

Europa Series  
residential/tertiary  
application



Without door

With transparent, smoky, horizontally hinged door

With opaque, vertically hinged door

With transparent, smoky, vertically hinged door

Without door

With opaque, vertically hinged door

With transparent, smoky, vertically hinged door

Without door

With opaque, vertically hinged door

RAL 9001 white

RAL 9001 white  
RAL 7024 grey

RAL 9001 white  
RAL 7035 grey

RAL 9001 white  
RAL 7035 grey

RAL 9001 white  
RAL 7035 grey

RAL 9016 white  
RAL 7035 grey

RAL 9016 white  
RAL 7035 grey

white RAL 9001  
RAL 7035 grey

white RAL 9001  
RAL 7035 grey

Modules

2

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3

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4

**12 004**  
160x180x82

**12 024-12 037**  
160x180x90

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6

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8

**12 008**  
230x180x82

**12 028-12 038**  
230x180x90

**12 040-12 026**  
230x180x90

**12 057-12 058**  
230x180x90

**12 208-12 228**  
215x220x105

**12 238-12 248**  
215x220x105

**12 258-12 268**  
215x220x105

**12 408-12 428**  
230x200x95

**12 438-12 448**  
230x200x95

10

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12

**12 012**  
300x180x82

**12 032-12 042**  
300x180x90

**12 041-12 027**  
300x180x90

**12 061-12 062**  
300x180x90

**12 212-12 232**  
295x245x115

**12 242-12 252**  
295x245x115

**12 262-12 272**  
295x245x115

**12 412-12 432**  
305x200x95

**12 442-12 452**  
305x200x95

18

**12 013**  
410x180x82

**12 033-12 043**  
410x180x90

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20

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24

**12 014**  
300x395x92

**12 034-12 044**  
300x395x100

**12 045-12 030**  
300x395x90

**12 063-12 064**  
300x395x90

**12 214-12 234**  
295x390x115

**12 244-12 254**  
295x390x115

**12 264-12 274**  
295x390x115

**12 414-12 434**  
305x350x95

**12 444-12 454**  
305x350x95

36

**12 016**  
300x545x92

**12 036-12 046**  
300x545x100

**12 048-12 031**  
300x545x90

**12 065-12 066**  
300x545x90

**12 216-12 236**  
295x515x115

**12 246-12 256**  
295x515x115

**12 266-12 276**  
295x515x115

**12 416-12 436**  
305x500x120

**12 446-12 456**  
305x500x120

54

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**12 052-12 035**  
410x545x100

**12 067-12 068**  
410x545x100

**12 217-12 237**  
405x515x115

**12 247-12 257**  
405x515x115

**12 267-12 277**  
405x515x115

**12 417-12 437**  
305x570x120

**12 447-12 457**  
305x570x120

# Consumer units

## Summary table

IP 40 flush-mounting consumer units			IP 55 and IP 65 wall-mounting consumer units					Fronts	
Europa Series	Europa Polyc. Series	Wall covers	IP 55 Europa Series		Fly IP65 Polyc. Series	IP55 Europa Polycarbonate Series		IP 40 and IP 55 panel fronts	
residential/tertiary application	tertiary/industrial application	residential/tertiary application	tertiary/industrial application		residential/tertiary/industrial application	residential/tertiary/industrial application		tertiary/industrial application	
									
With transparent, smoky, vertically hinged door	Without door	Without door	Spring closing	Key lock	With transparent door	With opaque, vertically hinged door	With transparent, smoky, vertically hinged door	Panel fronts	
RAL 9001 white RAL 7035 grey	RAL 7035 grey	RAL 9001 white RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	(*)opaque door RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	IP 40 RAL 7035 grey	IP 55
-	2-4 moduli 12 702 100x160x85	12 402-12 422 50x140x65	-	-	12 742-12 722 <sup>(*)</sup> 100x160x100	-	-	12 362 81x90x50	-
-	-	-	-	-	-	-	-	12 363 99x90x50	-
-	12 704 140x220x110	12 404-12 424 95x160x65	12 644 125x180x105	12 684 125x180x105	-	12 724 140x220x140	12 744 140x220x140	12 364 117x90x50	12 658 125x180x34
-	-	12 406-12 426 140x160x65	12 646 160x180x105	12 686 160x180x105	-	-	-	-	12 659 160x180x34
12 458-12 468 230x200x95	12 708 205x220x110	-	-	-	12 743 205x220x140	12 728 205x220x140	12 748 205x220x140	-	-
-	-	-	12 650 280x130x105 12 654 280x130x105	12 690 230x180x105	-	-	-	-	12 660 230x180x34
12 462-12 472 305x200x95	12 712 275x220x110	-	-	-	12 745 275x220x140	12 732 275x220x140	12 752 275x220x140	-	-
-	-	-	-	-	-	12 733 380x220x140	12 753 380x220x140	-	-
-	-	-	12 652 250x230x135	12 692 150x230x135	-	-	-	-	-
12 464-12 474 305x350x95	12 714 275x370x110	-	-	-	12 746 275x370x140	12 734 275x370x140	12 754 275x370x140	-	-
12 466-12 476 305x500x120	12 716 275x570x110	-	-	-	12 747 275x570x140	12 735 380x370x140 12 736 275x570x140	12 755 380x370x140 12 756 275x570x140	-	-
12 467-12 477 305x570x120	12 718 380x570x120	-	-	-	-	12 738 380x570x140	12 758 380x570x140	-	-

Residential application



FLO9800



IMQ mark  
in compliance with CEI 23-48 and 23-49 Standards



# IP 40 flush-mounting consumer units

## Estetica Series

### Technical characteristics

- degree of protection IP 40
- insulation class II  $\square$
- available in 3 versions: without door colour RAL 9001 white and with transparent, smoky door with horizontal hinge
- colour RAL 9001 white and RAL 7024 grey
- available in the following material:
  - RAL 9001 white thermoplastic, self-extinguishing in compliance with UL 94 V-O Standard and resistant to abnormal heat and fire up to 960°C (glow wire test) in compliance with IEC 695-2-1 Standard
  - RAL 7024 grey thermoplastic, self-extinguishing in compliance with UL 94 V-O Standard and resistant to abnormal heat and fire up to 650°C (glow wire test) in compliance with IEC 695-2-1 Standard
- resistant to chemical agents (water, saline solutions, acids, mineral bases and oils), atmospheric agents and UV rays
- dimensional stability under constant operating conditions from -20° to +85° C
- resistance to impacts 6 joules
- flush-mounting enclosure fitted with push-in inlets for inserting corrugated, protective conduits
- extractable DIN rail frame to facilitate bench cabling
- consumer units manufactured to compensate for any imperfections during installation (thanks to slots at the points where the front parts are hooked on)
- models with eight modules and more designed for the use of the UNIFIX SL fast-cabling system
- personalised finish on request (bur, marble, patterned etc.)
- consumer units manufactured in compliance with CEI 23-48, CEI 23-49 and IEC 670 Standards
- consumer units supplied complete with:
  - aesthetic flanges for covering the housing door holes (2 flanges supplied for each door)
  - 4 module covers per row
  - 1 self-adhesive label per row
  - 1 plate for CEI 23-51 certification
  - instruction sheet



# IP 40 flush-mounting consumer units

## Estetica Series

4 modules

8 modules

12 modules

### Without door

RAL 9001 white



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 004</b>	160x180x82	1/24



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 008</b>	230x180x82	1/14



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 012</b>	300x180x82	1/10

### With transparent smoky door, horizontally hinged

RAL 9001 white



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 024</b>	160x180x90	1/24



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 028</b>	230x180x90	1/14



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 032</b>	300x180x90	1/10

### With transparent smoky door, horizontally hinged

RAL 7024 grey



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 037</b>	160x180x90	1/24



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 038</b>	230x180x90	1/14



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 042</b>	300x180x90	1/10

# IP 40 flush-mounting consumer units

## Estetica Series

**18 modules**

**24 modules**

**36 modules**

### Without door

RAL 9001 white



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 013</b>	410x180x82	1/6



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 014</b>	300x395x92	1/5



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 016</b>	300x545x92	1/3

### With transparent smoky door, horizontally hinged

RAL 9001 white



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 033</b>	410x180x90	1/6



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 034</b>	300x395x100	1/5



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 036</b>	300x545x100	1/3

### With transparent smoky door, horizontally hinged

RAL 7024 grey



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 043</b>	410x180x90	1/6



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 044</b>	300x395x100	1/5



Article	Dimensions (mm) WxHxD	No. items Box/pack
<b>12 046</b>	300x545x100	1/3

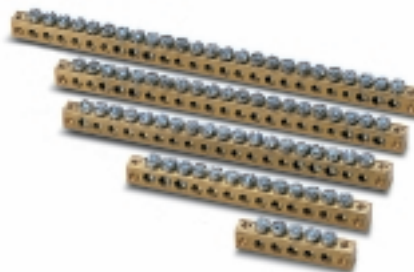
# IP 40 flush-mounting consumer units

## Accessories for flush-mounting Estetica Series consumer units

### Terminal holders



### Terminal bars



2

Article	Description	For consumer units type	Box/pack No. items
<b>12 540</b>	for 8 modules	12 008-12 028-12 038	12/144
<b>12 541</b>	for 12 modules per row	12 012-12 032-12 042 12 014-12 034-12 044 12 016-12 036-12 046	12/144
<b>12 542</b>	for 18 modules per row	12 013-12 033-12 043	12/108

The terminal board is completed by combining the necessary terminal bars to the terminal holders, taking care to keep the terminal bars separated from each other.

#### Recommended configuration

No. modules	Consumer unit	Terminal holders Articles x quantity	Terminal bars Articles x quantity
<b>8</b>	12 008-12 028-12 038	12 540 x 1	12 531 x 1 12 532 x 1
<b>12</b>	12 012-12 032-12 042	12 541 x 1	12 532 x 2
<b>18</b>	12 013-12 033-12 043	12 542 x 1	12 531 x 1 12 534 x 1
<b>24</b>	12 014-12 034-12 044	12 541 x 2	12 531 x 2 12 533 x 2
<b>36</b>	12 016-12 036-12 046	12 541 x 2	12 531 x 2 12 534 x 2

Terminal holders and terminal bars are supplied separately. In this way, by inserting one or two terminal bars into the terminal holder you can create the best terminal for your requirements, with the advantage of obtaining a terminal block that is cheap as well as personalised, due to the fact that you only need to use material that is really necessary.

Some standard configurations are illustrated in the table.

All the possible configurations that can be created for each type of consumer units are given in the technical details.

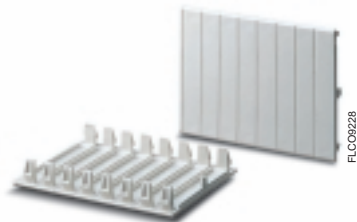
Article	Description No. of holes x Ø holes (mm) + No. holes x Ø holes (mm)	Box/pack No. items
<b>12 531</b>	5x4.5	1/20
<b>12 532</b>	10x4.5 + 3x5.6	1/20
<b>12 533</b>	16x4.5 + 3x5.6	1/20
<b>12 534</b>	15x4.5 + 6x5.6	1/20
<b>12 535</b>	19x4.5 + 6x5.6	1/20

The terminal bars can be installed on any kind of terminal holder; they are snapped onto these with 2 clips per bar, through two holes made at the ends of the bar itself.

# IP 40 flush-mounting consumer units

## Accessories for flush-mounting Estetica Series consumer units

### Module covers



Article	Colour	No. modules	Box/pack No. items
12 857	RAL 9001 white	1	50/1500
12 859	RAL 9001 white	4	50/600
12 895	RAL 7024 grey	1	50/1500
12 896	RAL 7024 grey	4	50/600

### Aesthetic covers



Article	Colour	Box/pack No. items
12 868	RAL 9001 white (pair)	10/120
12 869	RAL 7024 grey (pair)	10/120

### Spare doors



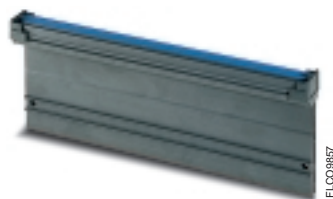
Transparent smoky	Opaque	For consumer units type	Box/pack No. items
12 051	12 047	12 024 – 12 037	1/80
12 053	12 049	12 028 – 12 038	1/50
12 055	12 050	12 032 – 12 042 12 034 – 12 044 12 036 – 12 046	1/50
12 060	12 056	12 033 – 12 043	1/50

### Screw lead sealing accessory



Article	Box/pack No. items
12 860	1/50

### Unifix SL cabling system



Article	Type	Description	Box/pack No. items
ED 3157	XUSLT08	bar 2P 8 modules	6/24
ED 3165	XUSLT12	bar 2P 12 modules	6/24
ED 3173	XUSLT18	bar 2P 18 modules	6/24

Residential application



FLC08602



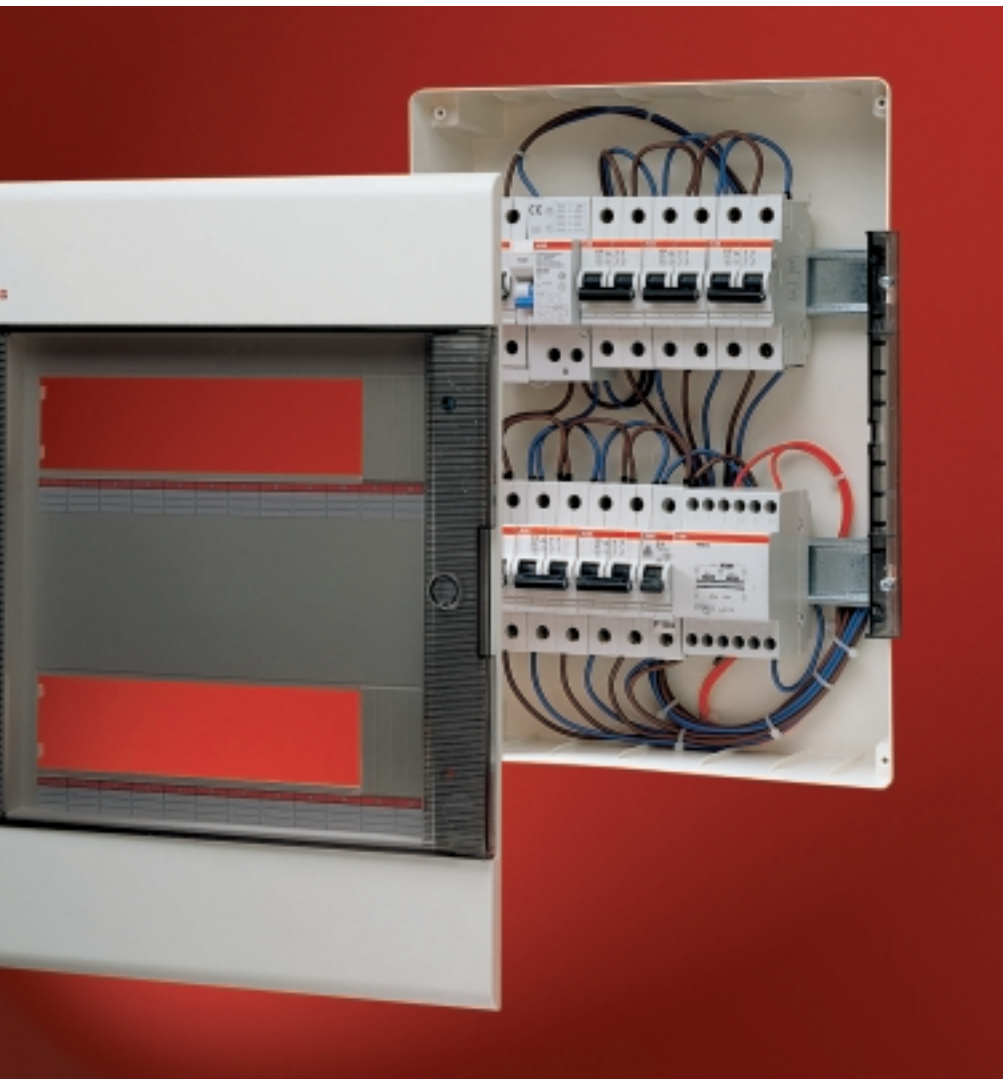
IMQ mark  
in compliance with CEI 23-48 and 23-49 Standards

# IP 40 flush-mounting consumer units

## Europa Series

### Technical characteristics

- degree of protection IP 40
- insulation class II  $\square$
- available in 2 versions: with opaque door and with transparent, smoky door with vertical hinge
- available in the following material:
  - RAL 9001 white thermoplastic, self-extinguishing in compliance with UL 94 V-O Standard and resistant to abnormal heat and fire up to 960°C (glow wire test) in compliance with IEC 695-2-1 Standard
  - RAL 7035 grey thermoplastic, self-extinguishing in compliance and resistant to abnormal heat and fire up to 650°C (glow wire test) in compliance with IEC 695-2-1 Standard
- resistant to chemical agents (water, saline solutions, acids, mineral bases and oils), atmospheric agents and UV rays
- dimensional stability under constant operating conditions from -20° to +85° C
- resistance to impacts 6 joules
- door designed to be fitted with a pin lock art. 12 867 (page 2/15)
- flush-mounting consumer unit fitted with push-in inlets for inserting corrugated, protective conduits
- extractable DIN rail frame to facilitate bench cabling
- consumer units manufactured to compensate for any imperfections during the installation (thanks to slots at the points where the front parts are hooked on)
- all models designed for the use of the UNIFIX SL fast-cabling system
- consumer units manufactured in compliance with CEI 23-48, CEI 23-49 and IEC 670 Standards
- consumer units supplied complete with:
  - 4 module covers per row
  - 1 self-adhesive label per row
  - 1 plate for CEI 23-51 certification
  - instruction sheet



FLC0885

# IP 40 flush-mounting consumer units

## Europa Series

8 modules

12 modules

24 modules

### With opaque door, vertically hinged

RAL 9001 white / RAL 7035 grey



FLCO9018

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 040</b>	white	230x180x90	1/14
<b>12 026</b>	grey	230x180x90	1/14



FLCO9020

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 041</b>	white	300x180x90	1/10
<b>12 027</b>	grey	300x180x90	1/10



FLCO9021

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 045</b>	white	300x395x90	1/5
<b>12 030</b>	grey	300x395x90	1/5

### With transparent smoky door, vertically hinged

RAL 9001 white / RAL 7035 grey



FLCO9024

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 057</b>	white	230x180x90	1/14
<b>12 058</b>	grey	230x180x90	1/14



FLCO9025

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 061</b>	white	300x180x90	1/10
<b>12 062</b>	grey	300x180x90	1/10



FLCO9026

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 063</b>	white	300x395x90	1/5
<b>12 064</b>	grey	300x395x90	1/5



# IP 40 flush-mounting consumer units

## Europa Series

36 modules

54 modules

### With opaque door, vertically hinged

RAL 9001 white / RAL 7035 grey



FLCO9022



FLCO9022

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 048</b>	white	300x545x90	1/3
<b>12 031</b>	grey	300x545x90	1/3

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 052</b>	white	410x545x100	1/1
<b>12 035</b>	grey	410x545x100	1/1

### With transparent smoky door, vertically hinged

RAL 9001 white / RAL 7035 grey



FLCO9027



FLCO9028

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 065</b>	white	300x545x90	1/3
<b>12 066</b>	grey	300x545x90	1/3

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 067</b>	white	410x545x90	1/1
<b>12 068</b>	grey	410x545x90	1/1

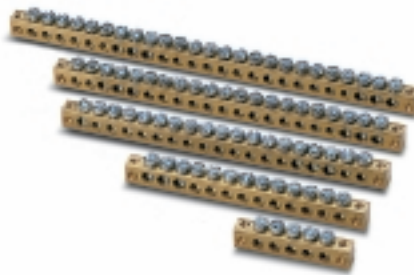
# IP 40 flush-mounting consumer units

## Accessories for flush-mounting Europa Series consumer units

### Terminal holders



### Terminal bars



Article	Description	For consumer units type	Box/pack No. items
<b>12 540</b>	for 8 modules	12 040-12 026-12 057-12 058	12/144
<b>12 541</b>	for 12 modules per row	12 041-12 027-12 061-12 062 12 045-12 030-12 063-12 064 12 048-12 031-12 065-12 066	12/144
<b>12 542</b>	for 18 modules per row	12 052-12 035-12 067-12 068	12/108

The terminal board is completed by combining the necessary terminal bars to the terminal holders, taking care to keep the terminal bars separated from each other.

#### Recommended configuration

No. modules	Consumer unit	Terminal holders Articles x quantity	Terminal bars Articles x quantity
<b>8</b>	12 040-12 026-12 057-12 058	12 540 x 1	12 531 x 1 12 532 x 1
<b>12</b>	12 041-12 027-12 061-12 062	12 541 x 1	12 532 x 2
<b>24</b>	12 045-12 030-12 063-12 064	12 541 x 2	12 531 x 2 12 533 x 2
<b>36</b>	12 048-12 031-12 065-12 066	12 541 x 2	12 531 x 2 12 534 x 2
<b>54</b>	12 052-12 035-12 067-12 068	12 542 x 2	12 532 x 2 12 535 x 2

Terminal holders and terminal bars are supplied separately. In this way, by inserting one or two terminal bars into the terminal holder you can create the best terminal for your requirements, with the advantage of obtaining a terminal block that is cheap as well as personalised, due to the fact that you only need to use material that is really necessary.

Some standard configurations are illustrated in the table.

All the possible configurations that can be created for each type of consumer unit are given in the technical details.

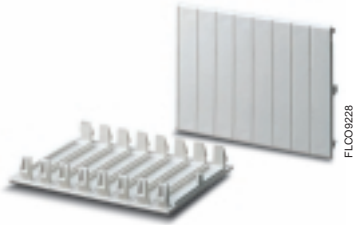
Article	Description No. of holes x Ø holes (mm) + No. holes x Ø holes (mm)	Box/pack No. items
<b>12 531</b>	5x4.5	1/20
<b>12 532</b>	10x4.5 + 3x5.6	1/20
<b>12 533</b>	16x4.5 + 3x5.6	1/20
<b>12 534</b>	15x4.5 + 3x5.6	1/20
<b>12 535</b>	19x4.5 + 3x5.6	1/20

The terminal bars can be installed on any kind of terminal holder; they are snapped onto these with 2 clips per bar, through two holes made at the ends of the bar itself.

# IP 40 flush-mounting consumer units

## Accessories for flush-mounting Europa Series consumer units

### Module covers



Article	Colour	No. modules	Box/pack No. items
<b>12 857</b>	RAL 9001 white	1	50/1500
<b>12 859</b>	RAL 9001 white	4	50/600
<b>12 861</b>	RAL 7035 grey	1	50/1500
<b>12 863</b>	RAL 7035 grey	4	50/600

### Lock with key



Article	Description	Box/pack No. items
<b>12 867</b>	Pin type	1/10

### Spare doors



Opaque		For consumer units type	Box/pack No. items
RAL 9001 white	RAL 7035 grey		
<b>12 078</b>	<b>12 070</b>	12 040 – 12 026	1/50
<b>12 079</b>	<b>12 071</b>	12 041 – 12 027	1/50
<b>12 080</b>	<b>12 072</b>	12 045 – 12 030	1/25
<b>12 081</b>	<b>12 073</b>	12 048 – 12 031	1/20
<b>12 088</b>	<b>12 087</b>	12 052 – 12 035	1/10

### Transparent smoky

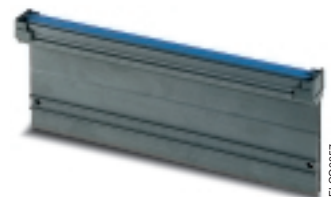
	For consumer units type	Box/pack No. items
<b>12 074</b>	12 057 – 12 058	1/50
<b>12 075</b>	12 061 – 12 062	1/50
<b>12 076</b>	12 063 – 12 064	1/25
<b>12 073</b>	12 065 – 12 066	1/20
<b>12 089</b>	12 067 – 12 068	1/10

### Screw lead sealing accessory



Article	Box/pack No. items
<b>12 860</b>	1/50

### Unifix SL cabling system



Article	Type	Description	Box/pack No. items
<b>ED 315 7</b>	XUSLT08	bar 2P 8 modules	6/24
<b>ED 316 5</b>	XUSLT12	bar 2P 12 modules	6/24
<b>ED 317 3</b>	XUSLT18	bar 2P 18 modules	6/24

Residential/tertiary application



PLC0801



IMQ mark  
in compliance with CEI 23-48 and 23-49 Standards

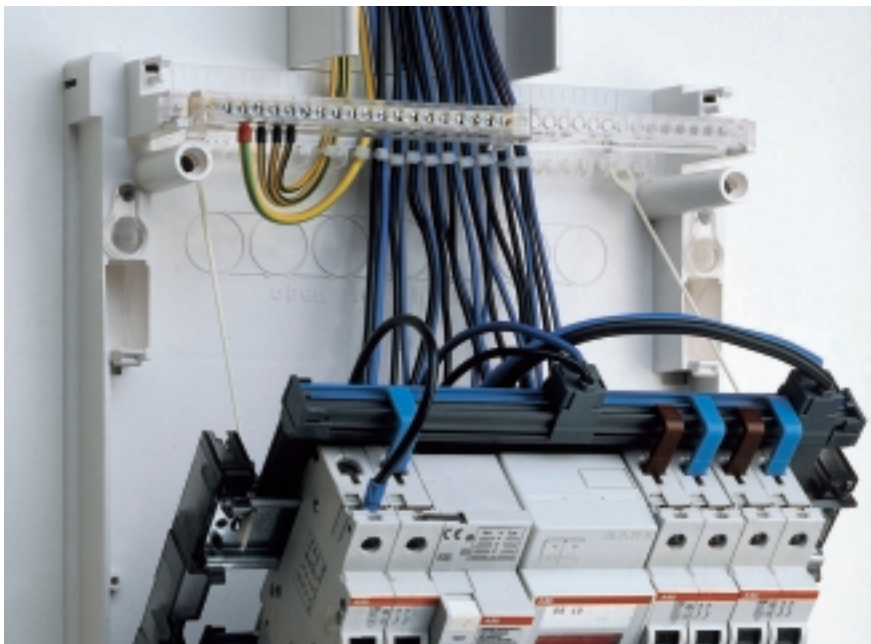
# IP 40 wall-mounting consumer units

## Unibox Series

### Technical characteristics

- degree of protection IP 40
- insulation class II
- available in 3 versions: without door, with opaque door and with transparent, smoky door with vertical hinge
- available in RAL 9016 white and RAL 7035 grey
- in thermoplastic, self-extinguishing and resistant to abnormal heat and fire up to 960°C (glow wire test) in compliance with IEC 695-2-1 Standard
- resistant to chemical agents (water, saline solutions, acids, mineral bases and oils), atmospheric agents and UV rays
- dimensional stability under constant operating conditions from -20° to +85° C
- shock resistant 10 joules (IK 09 level)
- door opening with push-pull mechanism
- door designed to be fitted with a coded lock art. 12 530 (page 2/21)
- base of the consumer unit fitted with a special system to cover the holes used to attach it to the wall to guarantee perfect insulation
- extractable DIN rail frame to facilitate bench cabling that can be angled at a fixed position to make it easier to work on the connection cables. It can also be dismantled (and snapped on to reassemble it)) to make it easier to cable the individual wires; the frame can be snapped onto the base of the consumer unit without having to use any extra screws
- all the models are provided with one extra module per row that can be used by removing the 1/2 module trimmings at the ends of each row
- screws for fixing the cover in rapid pitch insulating thermoplastic material that can be lead sealed easily without extra accessories, making it possible to compensate for uneven brickwork up to 4 mm
- a cable holding system guarantees safe and tidy cabling securing the input and output cables to a special accessory that protects the terminals from direct mechanical interference
- models with eight modules and more designed for the use of the UNIFIX SL fast-cabling system
- personalised finish on request (bur, marble, patterned etc.)
- consumer units manufactured in compliance with CEI 23-48, CEI 23-49 and IEC 670 Standards
- consumer units complying with the stringent German Standard DIN 43871 concerning insulating consumer units for modular devices (excluding 8 and 54 modules)
- components and accessories are easy to assembly by snapping on, without the need for screws
- elegant attractive line following the latest trends in design; **patented model**
- consumer units supplied complete with:
  - 4 module covers per row
  - 1 self-adhesive label per row
  - protective film for door
  - cable-clip accessory
  - 5 transparent cable-ties (100x2.5 mm) for securing cables
  - 4 screws/wall plugs for attaching to the wall
  - rigid flange for branch connections with conduits
  - 1 plate for CEI 23-51 certification
  - instruction sheet

2



# IP 40 wall-mounting consumer units

## Unibox Series

8 modules

12 modules

24 modules

### Without door

RAL 9016 white / RAL 7035 grey



FLC09047



FLC09049

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 208</b>	white	215x220x105	1/9
<b>12 228</b>	grey	215x220x105	1/9

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 212</b>	white	295x245x115	1/6
<b>12 232</b>	grey	295x245x115	1/6

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 214</b>	white	295x390x115	1/4
<b>12 234</b>	grey	295x390x115	1/4

### With opaque door, vertically hinged

RAL 9016 white / RAL 7035 grey



FLC09060



FLC09069



FLC09068

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 238</b>	white	215x220x105	1/9
<b>12 248</b>	grey	215x220x105	1/9

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 242</b>	white	295x245x115	1/6
<b>12 252</b>	grey	295x245x115	1/6

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 244</b>	white	295x390x115	1/4
<b>12 254</b>	grey	295x390x115	1/4

### With transparent smoky door, vertically hinged

RAL 9016 white / RAL 7035 grey



FLC09052



FLC09053



FLC09054

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 258</b>	white	215x220x105	1/9
<b>12 268</b>	grey	215x220x105	1/9

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 262</b>	white	295x245x115	1/6
<b>12 272</b>	grey	295x245x115	1/6

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 264</b>	white	295x390x115	1/4
<b>12 274</b>	grey	295x390x115	1/4

# IP 40 wall-mounting consumer units

## Unibox Series

### 36 modules

### 54 modules

#### Without door

RAL 9016 white / RAL 7035 grey



Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 216</b>	white	295x515x115	1/1
<b>12 236</b>	grey	295x515x115	1/1

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 217</b>	white	405x515x115	1/1
<b>12 237</b>	grey	405x515x115	1/1

#### With opaque door, vertically hinged

RAL 9016 white / RAL 7035 grey



Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 246</b>	white	295x515x115	1/1
<b>12 256</b>	grey	295x515x115	1/1

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 247</b>	white	405x515x115	1/1
<b>12 257</b>	grey	405x515x115	1/1

#### With transparent smoky door, vertically hinged

RAL 9016 white / RAL 7035 grey



Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 266</b>	white	295x515x115	1/1
<b>12 276</b>	grey	295x515x115	1/1

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 267</b>	white	405x515x115	1/1
<b>12 277</b>	grey	405x515x115	1/1

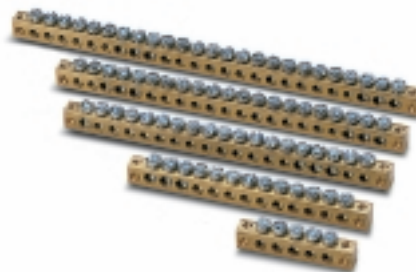
# IP 40 wall-mounting consumer units

## Accessories for wall-mounting Unibox Series consumer units

### Terminal holders



### Terminal bars



Article	Description	For consumer units type	Box/pack No. items
<b>12 540</b>	for 8 modules	12 208-12 228-12 238 12 248-12 258-12 268	12/144
<b>12 541</b>	for 12 modules per row	12 212-12 232-12 242 12 252-12 262-12 272 12 214-12 234-12 244 12 254-12 264-12 274 12 216-12 236-12 246 12 256-12 266-12 276	12/144
<b>12 542</b>	for 18 modules per row	12 217-12 237-12 247 12 257-12 267-12 277	12/108

The terminal board is completed by combining the necessary terminal bars to the terminal holders, taking care to keep the terminal bars separated from each other.

#### Recommended configuration

No. modules	Consumer unit	Terminal holders Articles x quantity	Terminal bars Articles x quantity
<b>8</b>	12 208-12 228-12 238 12 248-12 258-12 268	12 540 x 1	12 531 x 1 12 532 x 1
<b>12</b>	12 212-12 232-12 242 12 252-12 262-12 272	12 541 x 1	12 532 x 2
<b>24</b>	12 214-12 234-12 244 12 254-12 264-12 274	12 541 x 2	12 531 x 2 12 533 x 2
<b>36</b>	12 216-12 236-12 246 12 256-12 266-12 276	12 541 x 2	12 531 x 2 12 534 x 2
<b>54</b>	12 217-12 237-12 247 12 257-12 267-12 277	12 542 x 2	12 535 x 2

Terminal holders and terminal bars are supplied separately. In this way, by inserting one or two terminal bars into the terminal holder you can create the best terminal for your requirements, with the advantage of obtaining a terminal block that is cheap as well as personalised, due to the fact that you only need to use material that is really necessary.

Some standard configurations are illustrated in the table.

All the possible configurations that can be created for each type of consumer unit are given in the technical details.

Article	Description No. of holes x Ø holes (mm) + No. holes x Ø holes (mm)	Box/pack No. items
<b>12 531</b>	5x4.5	1/20
<b>12 532</b>	10x4.5 + 3x5.6	1/20
<b>12 533</b>	16x4.5 + 3x5.6	1/20
<b>12 534</b>	15x4.5 + 6x5.6	1/20
<b>12 535</b>	19x4.5 + 6x5.6	1/20

The terminal bars can be installed on any kind of terminal holder; they are snapped onto these with 2 clips per bar, through two holes made at the ends of the bar itself.



# IP 40 wall-mounting consumer units

## Accessories for wall-mounting Unibox Series consumer units

### Spare doors



FLC09277

#### Opaque

RAL 9016 white	RAL 7035 grey	For consumer units type	Box/pack No. items
<b>12 511</b>	<b>12 516</b>	12 238 – 12 248	1/25
<b>12 512</b>	<b>12 517</b>	12 242 – 12 252	1/15
<b>12 513</b>	<b>12 518</b>	12 244 – 12 254	1/10
<b>12 514</b>	<b>12 519</b>	12 246 – 12 256	1/5
<b>12 515</b>	<b>12 520</b>	12 247 – 12 257	1/5

#### Transparent smoky

	For consumer units type	Box/pack No. items
<b>12 521</b>	12 258 – 12 268	1/25
<b>12 522</b>	12 262 – 12 272	1/15
<b>12 523</b>	12 264 – 12 274	1/10
<b>12 524</b>	12 266 – 12 276	1/5
<b>12 525</b>	12 267 – 12 277	1/5

The mechanism for push-pull art. No. 12526 (in packs of 5 items) should be always ordered with each door

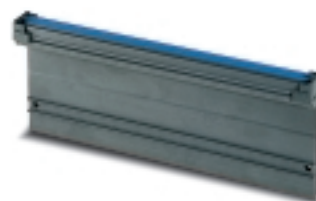
### Module covers



FLC09118

Article	Colour	No. modules	Box/pack No. items
<b>12 555</b>	RAL 9016 white	4	50/600
<b>12 863</b>	RAL 7035 grey	4	50/600

### Unifix SL cabling system



FLC09857

Article	Description	Box/pack No. items
<b>ED 324 9</b>	XUSLT08+1-bar 2P 8+1 modules	1/16
<b>ED 325 6</b>	XUSLT12+1-bar 2P 12+1 modules	1/12
<b>ED 326 4</b>	XUSLT18+1-bar 2P 18+1 modules	1/8

2

### Lock with key



FLC09274

Article	Description	Box/pack No. items
<b>12 530</b>	coded type	1/10

### Cable-clip accessory



FLC09278

Article	Box/pack No. items
<b>12 550</b>	1/30

### Coupling element



FLC09121

Article	Box/pack No. items
<b>12 556</b>	10/100

Residential/tertiary application



FLC09603




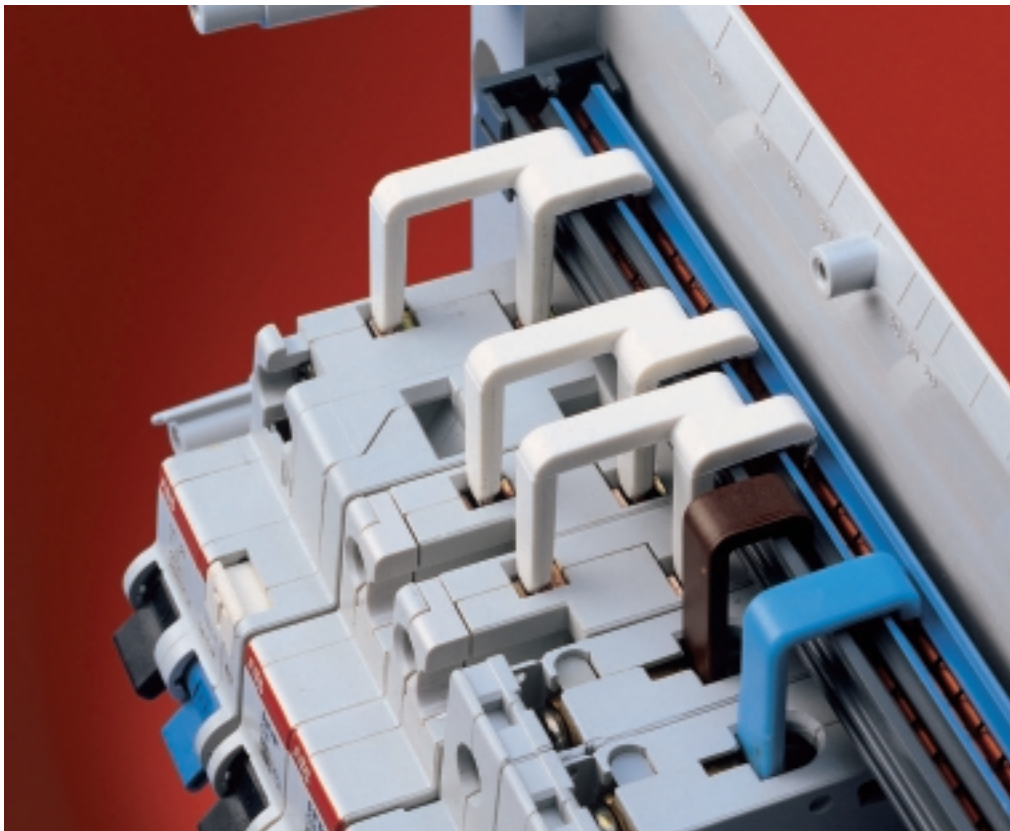
IMQ mark  
in compliance with CEI 23-48 and 23-49 Standards

# IP 40 wall-mounting consumer units

## Europa Series

### Technical characteristics

- degree of protection IP 40
- insulation class II 
- available in 3 versions: without door, with opaque door and with transparent, smoky door with vertical hinge
- available in the following material:
  - RAL 9001 white thermoplastic, self-extinguishing in compliance with UL 94 V-O Standard and resistant to abnormal heat and fire up to 960°C (glow wire test) in compliance with IEC 695-2-1 Standard
  - RAL 7035 grey thermoplastic, self-extinguishing in compliance and resistant to abnormal heat and fire up to 650°C (glow wire test) in compliance with IEC 695-2-1 Standard
- resistant to chemical agents (water, saline solutions, acids, mineral bases and oils), atmospheric agents and UV rays
- dimensional stability under constant operating conditions from -20° to +85° C
- shock resistant 6 joules
- symmetrical, reversible door to open on either sides, designed to be fitted with a coded lock art. 12 8647 (page 2/27)
- front part designed for input of cable trunking measuring up to 200x60 mm; possibility of branch connection with conduit thanks to a flange included in the supply
- consumer units designed with roomy interiors to make cabling easy and tidy
- devices with a depth of 53 and 68 mm can be installed on switchboxes with 8-12-24 modules and devices with a depth of up to 75 mm on consumer units with 36-54 modules
- all models designed for the use of the UNIFIX SL fast-cabling system
- consumer units manufactured in compliance with CEI 23-48, CEI 23-49 and IEC 670 Standards
- consumer units supplied complete with:
  - 1 rigid flange for branch connection with conduit
  - 4 module covers per row
  - 1 self-adhesive label per row
  - 1 plate for CEI 23-51 certification
  - instruction sheet



FLC09289

# IP 40 wall-mounting consumer units

## Europa Series

8 modules

12 modules

24 modules

### Without door

RAL 9001 white / RAL 7035 grey



FLC09032



FLC09033



FLC09034

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 408</b>	white	230x200x95	1/12
<b>12 428</b>	grey	230x200x95	1/12

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 412</b>	white	305x200x95	1/10
<b>12 432</b>	grey	305x200x95	1/10

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 414</b>	white	305x350x95	1/6
<b>12 434</b>	grey	305x350x95	1/6

### With opaque door, vertically hinged

RAL 9001 white / RAL 7035 grey



FLC09037



FLC09038



FLC09039

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 438</b>	white	230x200x95	1/12
<b>12 448</b>	grey	230x200x95	1/12

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 442</b>	white	305x200x95	1/10
<b>12 452</b>	grey	305x200x95	1/10

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 444</b>	white	305x350x95	1/6
<b>12 454</b>	grey	305x350x95	1/6

### With transparent smoky door, vertically hinged

RAL 9001 white / RAL 7035 grey



FLC09042



FLC09043



FLC09044

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 458</b>	white	230x200x95	1/12
<b>12 468</b>	grey	230x200x95	1/12

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 462</b>	white	305x200x95	1/10
<b>12 472</b>	grey	305x200x95	1/10

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 464</b>	white	305x350x95	1/6
<b>12 474</b>	grey	305x350x95	1/6

# IP 40 wall-mounting consumer units Europa Series

## 36 modules

## 54 modules

### Without door

RAL 9001 white / RAL 7035 grey



FLC09035



FLC09036

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 416</b>	white	305x500x120	1/3
<b>12 436</b>	grey	305x500x120	1/3

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 417</b>	white	305x570x120	1/2
<b>12 437</b>	grey	305x570x120	1/2

### With opaque door, vertically hinged

RAL 9001 white / RAL 7035 grey



FLC09040



FLC09041

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 446</b>	white	305x500x120	1/3
<b>12 456</b>	grey	305x500x120	1/3

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 447</b>	white	305x570x120	1/2
<b>12 457</b>	grey	305x570x120	1/2

### With transparent smoky door, vertically hinged

RAL 9001 white / RAL 7035 grey



FLC09045



FLC09046

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 466</b>	white	305x500x120	1/3
<b>12 476</b>	grey	305x500x120	1/3

Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 467</b>	white	305x570x120	1/2
<b>12 477</b>	grey	305x570x120	1/2

# IP 40 wall-mounting consumer units

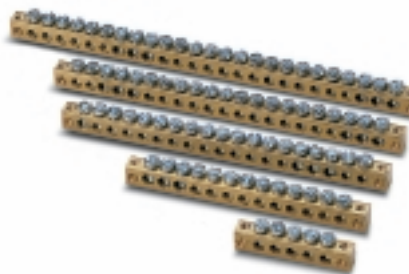
## Accessories for wall-mounting Europa Series consumer units

### Terminal holders



FLC0827

### Terminal bars



FLC0828

Article	Description	For consumer units type	Box/pack No. items
<b>12 540</b>	for 8 modules	12 408-12 428-12 438	12/144
		12 448-12 458-12 468	
<b>12 541</b>	for 12 modules per row	12 412-12 432-12 442	12/144
		12 452-12 462-12 472	
		12 414-12 434-12 444	
		12 454-12 464-12 474	
		12 416-12 436-12 446	
		12 456-12 466-12 476	
<b>12 543</b>	for 18 modules per row	12 417-12 437-12 447	12/108
		12 457-12 467-12 477	

The terminal board is completed by combining the necessary terminal bars to the terminal holders, taking care to keep the terminal bars separated from each other.

Article	Description	Box/pack No. items
	No. of holes x Ø holes (mm) + No. holes x Ø holes (mm)	
<b>12 531</b>	5x4.5	1/20
<b>12 532</b>	10x4.5 + 3x5.6	1/20
<b>12 533</b>	16x4.5 + 3x5.6	1/20
<b>12 534</b>	15x4.5 + 6x5.6	1/20
<b>12 535</b>	19x4.5 + 6x5.6	1/20

The terminal bars can be installed on any kind of terminal holder; they are snapped onto these with 2 clips per bar, through two holes made at the ends of the bar itself

### Recommended configuration

No. modules	Consumer unit	Terminal-holders Articles x quantity	Terminal bars Articles x quantity
<b>8</b>	12 408-12 428-12 438	12 540 x 1	12 531 x 1
	12 448-12 458-12 468		12 532 x 1
<b>12</b>	12 412-12 432-12 442	12 541 x 1	12 532 x 2
	12 452-12 462-12 472		
<b>24</b>	12 414-12 434-12 444	12 541 x 2	12 531 x 2
	12 454-12 464-12 474		12 533 x 2
<b>36</b>	12 416-12 436-12 446	12 541 x 2	12 531 x 2
	12 456-12 466-12 476		12 534 x 2
<b>54</b>	12 417-12 437-12 447	12 543x 2	12 535 x 2
	12 457-12 467-12 477		

Terminal holders and terminal bars are supplied separately. In this way, by inserting one or two terminal bars into the terminal holder you can create the best terminal for your requirements, with the advantage of obtaining a terminal block that is cheap as well as personalised, due to the fact that you only need to use material that is really necessary.

Some standard configurations are illustrated in the table.

All the possible configurations that can be created for each type of consumer unit are given in the technical details.

# IP 40 wall-mounting consumer units

## Accessories for wall-mounting Europa Series consumer units

2

### Spare doors



FLC09224

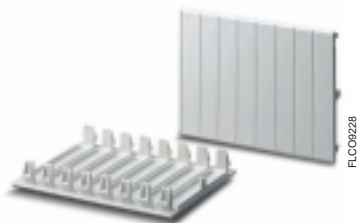
#### Opaque

RAL 9001 white	RAL 7035 grey	For consumer units type	Box/pack No. items
<b>12 078</b>	<b>12 070</b>	12 438 – 12 448	1/50
<b>12 079</b>	<b>12 071</b>	12 442 – 12 452	1/50
<b>12 080</b>	<b>12 072</b>	12 444 – 12 454	1/25
<b>12 081</b>	<b>12 073</b>	12 446 – 12 456	1/10
<b>12 095</b>	<b>12 094</b>	12 447 – 12 457	1/10

#### Transparent smoky

	For consumer units type	Box/pack No. items
<b>12 074</b>	12 458 – 12 468	1/50
<b>12 075</b>	12 462 – 12 472	1/50
<b>12 076</b>	12 464 – 12 474	1/25
<b>12 077</b>	12 466 – 12 476	1/20
<b>12 096</b>	12 467 – 12 477	1/10

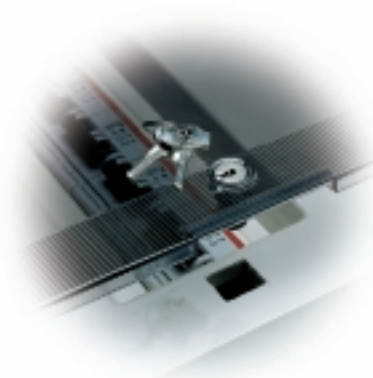
### Module covers



FLC09228

Article	Colour	No. modules	Box/pack No. items
<b>12 857</b>	RAL 9001 white	1	50/1500
<b>12 859</b>	RAL 9001 white	4	50/600
<b>12 861</b>	RAL 7035 grey	1	50/1500
<b>12 863</b>	RAL 7035 grey	4	50/600

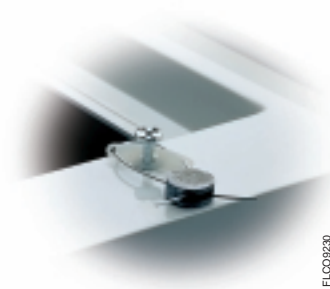
### Lock with key



FLC09233

Article	Description	Box/pack No. items
<b>12 864</b>	coded type	1/10

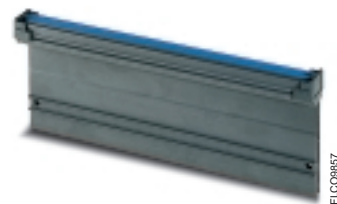
### Screw lead sealing accessory



FLC09230

Article	Box/pack No. items
<b>12 860</b>	1/50

### Unifix SL cabling system



FLC09857

Article	Type	Description	Box/pack No. items
<b>ED 315 7</b>	XUSLT08	bar 2P 8 modules	6/24
<b>ED 316 5</b>	XUSLT12	bar 2P 12 modules	6/24
<b>ED 317 3</b>	XUSLT18	bar 2P 18 modules	6/24

Residential/tertiary application



F1070



IMQ mark  
in compliance with CEI 23-48 and 23-49 Standards



# IP 40 wall-mounting consumer units

## Europa Polycarbonate Series

### Technical characteristics

- degree of protection IP 40
- insulation class II
- available in self-extinguishing polycarbonate resistant to abnormal heat and fire up to 960°C (glow wire test) in compliance with IEC 695-2-1 Standard
- available in RAL 7035 grey
- material with low halogen content
- dimensional stability under constant operating conditions from -25° to +115° C
- shock resistant 20 joules (IK 10 level)
- high resistance to UV rays
- extractable DIN rail frame to facilitate bench cabling. It can also be dismantled (and snapped on to reassemble it) to make it easier to cable the individual wires.
- possibility of installing devices with depth of 53, 68 and 75 mm
- possibility of installation in environments with major risk in the event of a fire (CEI 64-8 part 7 section 751 Standard) and in AD-FT environments (CEI 64-2 IV edition Standard)
- models with 8 and more modules fitted with flanges for facilitate input of conduits and cables
- models with 8 and more modules designed for the use of the UNIFIX L fast-cabling system
- consumer units manufactured in compliance with CEI 23-48, CEI 23-49 and IEC 670 Standards
- consumer units supplied complete with:
  - 4 module covers per row
  - 1 self-adhesive label per row
  - 1 plate for CEI 23-51 certification
  - 4 screw-cover caps for guarantee
  - instruction sheet



FLC06935

# IP 40 wall-mounting consumer units

## Europa Polycarbonate Series

2-4 modules

4 modules

8 modules

12 modules

Without door

RAL 7035 grey

2



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 702</b>	100x160x85	1/36



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 704</b>	140x220x110	1/19



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 708</b>	205x220x110	1/9



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 712</b>	275x220x110	1/7

# IP 40 wall-mounting consumer units

## Europa Polycarbonate Series

24 modules

36 modules

54 modules

### Without door

RAL 7035 grey



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 714</b>	275x370x110	1/5

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 716</b>	275x570x110	1/3

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 718</b>	380x570x120	1/2

2

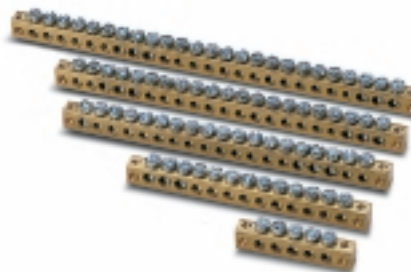
# IP 40 wall-mounting consumer units

## Accessories for wall-mounting Europa Polycarbonate Series consumer units

### Terminal holders



### Terminal bars



Article	Description	For consumer units type	Box/pack No. items
<b>12 538</b>	for 4 modules	12 704	12/360
<b>12 539</b>	for 8 modules	12 708	12/360
<b>12 540</b>	for 12 modules per row	12 712-12 714-12 716	12/144
<b>12 543</b>	for 18 modules per row	12 718	12/108

The terminal board is completed by combining the necessary terminal bars to the terminal holders, taking care to keep the terminal bars separated from each other.

Article	Description	Box/pack No. items
	No. of holes x Ø holes (mm) + No. holes x Ø holes (mm)	
<b>12 531</b>	5x4.5	1/20
<b>12 532</b>	10x4.5 + 3x5.6	1/20
<b>12 533</b>	16x4.5 + 3x5.6	1/20
<b>12 534</b>	15x4.5 + 6x5.6	1/20
<b>12 535</b>	19x4.5 + 6x5.6	1/20

The terminal bars can be installed on any kind of terminal holder; they are snapped onto these with 2 clips per bar, through two holes made at the ends of the bar itself.

### Recommended configuration

No. modules	Consumer unit	Terminal holders Articles x quantity	Terminal bars Articles x quantity
<b>4</b>	12 704	12 538 x 2	12 531 x 2
<b>8</b>	12 708	12 539 x 2	12 531 x 2
<b>12</b>	12 712	12 540 x 1	12 531 x 1 12 532 x 1
<b>24</b>	12 714	12 540 x 2	12 533 x 2
<b>36</b>	12 716	12 540 x 2	12 534 x 2
<b>54</b>	12 718	12 543x 2	12 535 x 2

Terminal holders and terminal bars are supplied separately. In this way, by inserting one or two terminal bars into the terminal holder you can create the best terminal for your requirements, with the advantage of obtaining a terminal block that is cheap as well as personalised, due to the fact that you only need to use material that is really necessary.

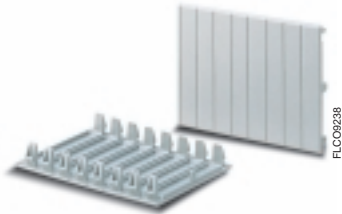
Some standard configurations are illustrated in the table.

All the possible configurations that can be created for each type of consumer unit are given in the technical details.

# IP 40 wall-mounting consumer units

## Accessories for wall-mounting Europa Polycarbonate Series consumer units

### Module covers



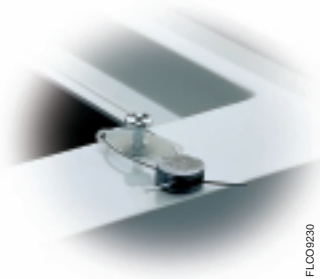
Article	Colour	No. modules	Box/pack No. items
<b>12 861</b>	RAL 7035 grey	1	50/1500
<b>12 863</b>	RAL 7035 grey	4	50/600

### Wall brackets



Article	Description	Box/pack No. items
<b>12 858</b>	in insulating material	1/20

### Screw lead sealing accessory



Article	Box/pack No. items
<b>12 860</b>	1/50

### Semi-flush-mounting frames



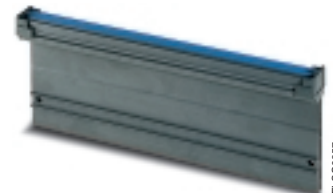
Article	For consumer units type	Box/pack No. items
<b>12 590</b>	12 704	5/20
<b>12 591</b>	12 708	5/20
<b>12 592</b>	12 712	5/20
<b>12 593</b>	12 714	5/20
<b>12 594</b>	12 716	5/5
<b>12 595</b>	12 718	5/5

### Spare flanges



Article	For consumer units with	Box/pack No. items
<b>12 600</b>	8 modules	30/120
<b>12 601</b>	12, 24, 36 (12x3 rows) modules	20/80
<b>12 602</b>	54 modules	20/80

### Unifix L cabling system



Article	Type	Description	Box/pack No. items
<b>ED 298 5</b>	XULT208	bar 2P 8 modules	6/24
<b>ED 299 3</b>	XULT212	bar 2P 12 modules	6/24
<b>ED 300 9</b>	XULT218	bar 2P 18 modules	6/24
<b>ED 294 4</b>	XULT412	bar 4P 12 modules	6/24
<b>ED 295 1</b>	XULT418	bar 4P 18 modules	6/24

Residential/tertiary application



FLC08862




IMQ mark  
in compliance with CEI 23-48 and 23-49 Standards

# IP 40 wall-mounting consumer units

## Wall-mounting covers

### Technical characteristics

- degree of protection IP 40
- insulation class II 
- available in material:
  - thermoplastic RAL 9001 white self-extinguishing in compliance with UL 94 V-0 Standard and resistant to abnormal heat and fire up to 960°C (glow wire test) in compliance with IEC 695-2-1 Standard
  - thermoplastic RAL grey 7035 grey self-extinguishing and resistant to abnormal heat and fire up to 960°C (glow wire test) in compliance with IEC 695-2-1 Standard
- resistant to chemical agents (water, saline solutions, acids, mineral bases and oils), to atmospheric agents and UV rays
- dimensional stability under constant operating conditions from -20° to +85° C
- shock resistant 6 joules
- covers produced in compliance with CEI 23-48, CEI 23-49 and IEC 670 Standards



FLCO0820

# IP 40 wall-mounting consumer units

## Wall-mounting covers

2 modules

4 modules

6 modules

Without door

RAL 9001 white / RAL 7035 grey



Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 402</b>	white	50x140x65	1/45
<b>12 422</b>	grey	50x140x65	1/45



Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 404</b>	white	95x160x65	1/20
<b>12 424</b>	grey	95x160x65	1/20



Article	Colour	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 406</b>	white	140x160x65	1/12
<b>12 426</b>	grey	140x160x65	1/12



# IP 40 wall-mounting consumer units

## Accessories for wall-mounting covers

### Terminal bars

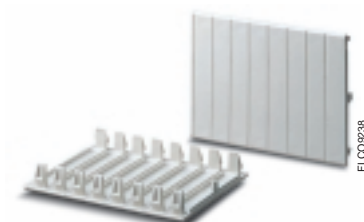


FLC09290

Article	Description	For covers	Box/pack
	No. of holes x Ø holes (mm) + No. holes x Ø holes (mm)	type	No. items
<b>12 502</b>	2x4.5 + 3x5.6	12 404-12 406 12 424-12 426	1/25

The terminal bar can be fixed to covers using the supplied screws

### Module covers



FLC09238

Article	Colour	No. modules	Box/pack
			No. items
<b>12 857</b>	RAL 9001 white	1	50/1500
<b>12 859</b>	RAL 9001 white	4	50/600
<b>12 861</b>	RAL 7035 grey	1	50/1500
<b>12 863</b>	RAL 7035 grey	4	50/600

2

### Screw lead sealing accessory



FLC09230

Article	Box/pack
	No. items
<b>12 860</b>	1/50

Tertiary/Industrial application




FLO09806

# IP 55 and IP 65 wall-mounting consumer units

## IP 55 Europa Series

### Technical characteristics

- degree of protection IP 55
- insulation class II 
- available with transparent smoky door horizontally hinged in the version with sealable spring closure and with key lock
- available in RAL 7035 grey
- available in thermoplastic self-extinguishing material resistant to abnormal heat and fire up to 650°C (glow wire test) in compliance with IEC 695-2-1 Standard
- resistant to chemical agents (water, saline solutions, acids, mineral bases and oils), to atmospheric agents and UV rays
- dimensional stability under constant operating conditions from -20° to +85° C
- shock resistant 6 joules
- possibility of installation in environments with major risk in the event of fire (CEI 64-8 part 7 section 751 Standard) and in AD-FT environments (CEI 64-2 Standard, IV edition)
- 10 and 20 module consumer units can be attached to the wall with brackets art. 12 858 (see page 2/42)
- consumer units made and produced in compliance with CEI 23-48, CEI 23-49 and IEC 670 Standards
- consumer units supplied complete with:
  - 4 module covers per row
  - 1 self-adhesive label per row
  - 1 plate for CEI 23-51 certification
  - 3 25 mm cable glands



FLC09836

# IP 55 and IP 65 wall-mounting consumer units

## IP 55 Europa Series

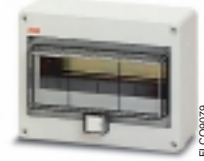
4 modules

6 modules

10 modules

### Spring closing

RAL 7035 grey



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 644</b>	125x180x105	1/18

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 646</b>	160x180x105	1/12

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 650</b>	230x180x105	1/10

4 modules

6 modules

10 modules

### Key lock

RAL 7035 grey



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 684</b>	125x180x105	1/18

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 686</b>	160x180x105	1/12

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 690</b>	230x180x105	1/10

# IP 55 and IP 65 wall-mounting consumer units

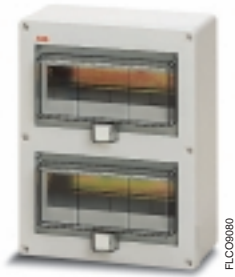
## IP 55 Europa Series

### 20 modules

### 10 modules special

#### Spring closing

RAL 7035 grey



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 652</b>	250x320x135	1/6



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 654</b>	250x320x135	1/6

### 20 modules

#### Key lock

RAL 7035 grey



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 692</b>	250x320x135	1/6

# IP 55 and IP 65 wall-mounting consumer units

## Accessories for wall-mounting IP 55 Europa Series consumer units

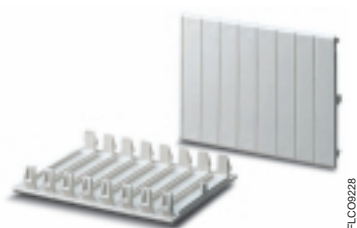
### Terminal blocks



2

Article	Description		For consumer units type	Box/pack No. items
	Neutral terminal blocks No. of holes x Ø holes (mm) + No. holes x Ø holes (mm)	Earth terminal blocks No. of holes x Ø holes (mm) + No. holes x Ø holes (mm)		
<b>12 880</b>	2x4.5 + 3x5.6	2x4.5 + 3x5.6	12 644-12 684	10/60
<b>12 882</b>	6x4.5 + 5x5.6	2x4.5 + 3x5.6	12 646-12 686	10/60
<b>12 884</b>	6x4.5 + 5x5.6	2x4.5 + 3x5.6	12 650-12 690	10/40
<b>12 886</b>	2 (6x4.5 + 5x5.6)	2 (2x4.5 + 3x5.6)	12 652-12 692-12 654	10/40

### Module covers



### Wall brackets



Article	Colour	No. modules	Box/pack No. items
<b>12 861</b>	RAL 7035 grey	1	50/1500
<b>12 863</b>	RAL 7035 grey	4	50/600

Article	Description	For consumer units with	Box/pack No. items
<b>12 858</b>	in insulating material	8,10 modules	1/20

# IP 55 and IP 65 wall-mounting consumer units

## Accessories for wall-mounting IP 55 Europa Series consumer units

### Lock with key



Article	Description	Box/pack No. items
<b>12 865</b>	Coded type	1/10

### Spare transparent smoky door

Spring closing



Article	For consumer units type	Box/pack No. items
<b>12 696</b>	12 644 - 12 684	10/40
<b>12 697</b>	12 646 - 12 686	10/40
<b>12 698</b>	12 650 - 12 690	10/20
	12 652 - 12 692 - 12 654	

Residential/tertiary/industrial application



FLC0805S



IMQ mark  
in compliance with CEI 23-48 and 23-49 Standards



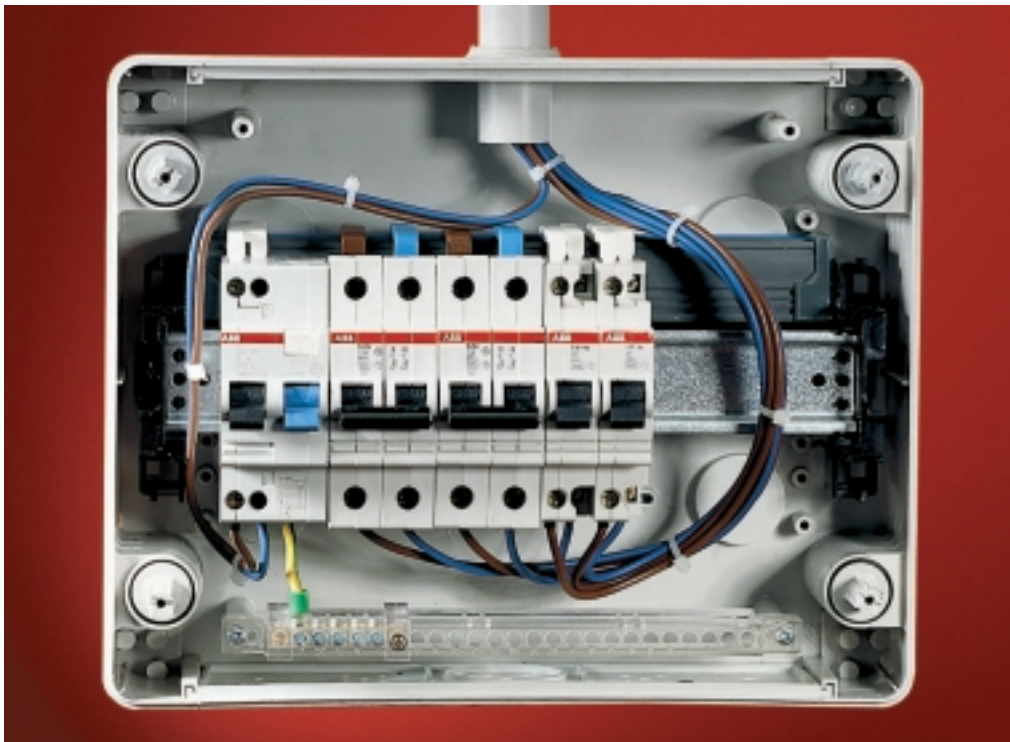
# IP 55 and IP 65 wall-mounting consumer units

## IP 65 Polycarbonate Fly Series

### Technical characteristics

- degree of protection IP 65
- insulation class II
- consumer units fitted with horizontally hinged, transparent smoky doors for each row of devices, designed to be fitted with coded lock and key, art. 12 866 (page 2/49)
- available in RAL 7035 grey
- in polycarbonate, self-extinguishing and resistant to abnormal heat and fire up to 960°C (glow wire test) in compliance with IEC 695-2-1 Standard
- material with low halogen content
- dimensional stability under constant operating conditions from -25° to +115° C
- shock resistant 20 joules (IK 10 level)
- high resistance to UV rays
- extractable DIN rail frame to facilitate bench cabling. It can also be dismantled (and snapped on to reassemble it) to make it easier to cable the individual wires
- possibility of installing devices with depths of 53, 68 and 75 mm
- possibility of installation in environments with major risk in the event of fire (CEI 64-8 part 7 section 751 Standard) and in AD-FT environments (CEI 64-2 Standard, IV edition)
- models with 8 and over modules equipped with flanges for facilitated input of conduits and cables
- models with 8 and over modules designed to be used with rapid UNIFIX L cabling system
- consumer units made and produced in compliance with CEI 23-48, CEI 23-49 and IEC 670 Standards
- consumer units supplied complete with:
  - 4 module covers per row
  - 1 self-adhesive label per row
  - 4 screw cover caps for guarantee
  - 1 plate for CEI 23-51 certification
  - instruction sheet

2



FLCO0826

# IP 55 and IP 65 wall-mounting consumer units

## IP 65 Polycarbonate Fly Series

**2/4 modules**

**8 modules**

**12 modules**

**With horizontally hinged transparent door**

RAL 7035 grey

**2**



FLC09072

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 742</b>	100x160x100	1/33
<b>12 722<sup>(*)</sup></b>	100x160x100	1/33



FLC09073

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 743</b>	205x220x140	1/8



FLC09074

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 745</b>	275x220x140	1/6

<sup>(\*)</sup>Opaque door

# IP 55 and IP 65 wall-mounting consumer units

## IP 65 Polycarbonate Fly Series

24 modules

36 modules

With horizontally hinged transparent door

RAL 7035 grey



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 746</b>	275x370x140	1/4



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 747</b>	275x570x140	1/2

# IP 55 and IP 65 wall-mounting consumer units

## Accessories for IP 65 Polycarbonate Fly Series consumer units

### Terminal holders



FLC09827

Article	Description	For consumer units type	Box/pack No. items
<b>12 539</b>	for 8 modules	12 743	12/360
<b>12 540</b>	for 12 modules per row	12 745-12 746-12 747	12/144

The terminal board is completed by combining the necessary terminal bars to the terminal holders, taking care to keep the terminal bars separated from each other.

#### Recommended configuration

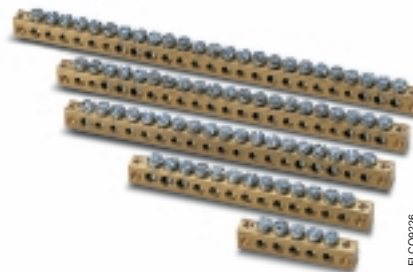
No. modules	Consumer unit	Terminal holders Articles x quantity	Terminal bars Articles x quantity
<b>8</b>	12 743	12 539 x 2	12 531 x 2
<b>12</b>	12 745	12 540 x 1	12 531 x 1 12 532 x 1
<b>24</b>	12 746	12 540 x 2	12 533 x 2
<b>36</b>	12 747	12 540 x 2	12 534 x 2

Terminal holders and terminal bars are supplied separately. In this way, by inserting one or two terminal bars into the terminal holder you can create the best terminal for your requirements, with the advantage of obtaining a terminal block that is cheap as well as personalised, due to the fact that you only need to use material that is really necessary.

Some standard configurations are illustrated in the table.

All the possible configurations that can be created for each type of consumer unit are given in the technical details.

### Terminal bars

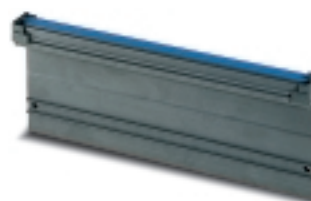


FLC09828

Article	Description No. of holes x Ø holes (mm) + No. holes x Ø holes (mm)	Box/pack No. items
<b>12 531</b>	5x4.5	1/20
<b>12 532</b>	10x4.5 + 3x5.6	1/20
<b>12 533</b>	16x4.5 + 3x5.6	1/20
<b>12 534</b>	15x4.5 + 6x5.6	1/20
<b>12 535</b>	19x4.5 + 6x5.6	1/20

The terminal bars can be installed on any kind of terminal holder; they are snapped onto these with 2 clips per bar, through two holes made at the ends of the bar itself.

### Unifix L cabling system



FLC09857

Article	Type	Description	Box/pack No. items
<b>ED 298 5</b>	XULT208	bar 2P 8 modules	6/24
<b>ED 299 3</b>	XULT212	bar 2P 12 modules	6/24
<b>ED 294 4</b>	XULT412	bar 4P 12 modules	6/24

### Spare doors



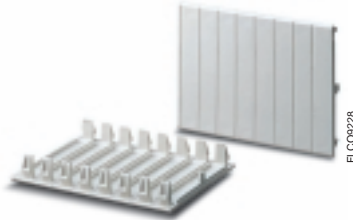
FLC09841

Article	Description	For consumer units type	Box/pack No. items
<b>12 567</b>	Opaque RAL 7035 grey for 2 mod.	12 722	10/60
<b>12 577</b>	Transparent for 2 mod.	12 742	10/60
<b>12 565</b>	Transparent for 8 mod.	12 743	10/20
<b>12 566</b>	Transparent for 12, 24, 36 (12x3 rows) mod.	12 745-12 746 12 747	8/16

# IP 55 and IP 65 wall-mounting consumer units

## Accessories for IP 65 Polycarbonate Fly Series consumer units

### Module covers



Article	Colour	No. modules	Box/pack No. items
<b>12 861</b>	RAL 7035 grey	1	50/1500
<b>12 863</b>	RAL 7035 grey	4	50/600

### Plastic wall brackets



Article	Description	Box/pack No. items
<b>12 858</b>	in insulating material	1/20

### Screw lead sealing accessory



Article	Box/pack No. items
<b>12 860</b>	1/50

### Semi-flush-mounting frames



Article	For consumer units type	Box/pack No. items
<b>12 591</b>	12 743	5/20
<b>12 592</b>	12 745	5/20
<b>12 593</b>	12 746	5/20
<b>12 594</b>	12 747	5/5

### Spare flanges



Article	For consumer units with	Box/pack N. pezz
<b>12 600</b>	8 modules	30/120
<b>12 601</b>	12, 24, 36 (12x3 rows) modules	20/80

### Lock with key



Article	Description	Box/pack No. items
<b>12 866</b>	coded type	1/10

Residential/tertiary/industrial application



FLO0804



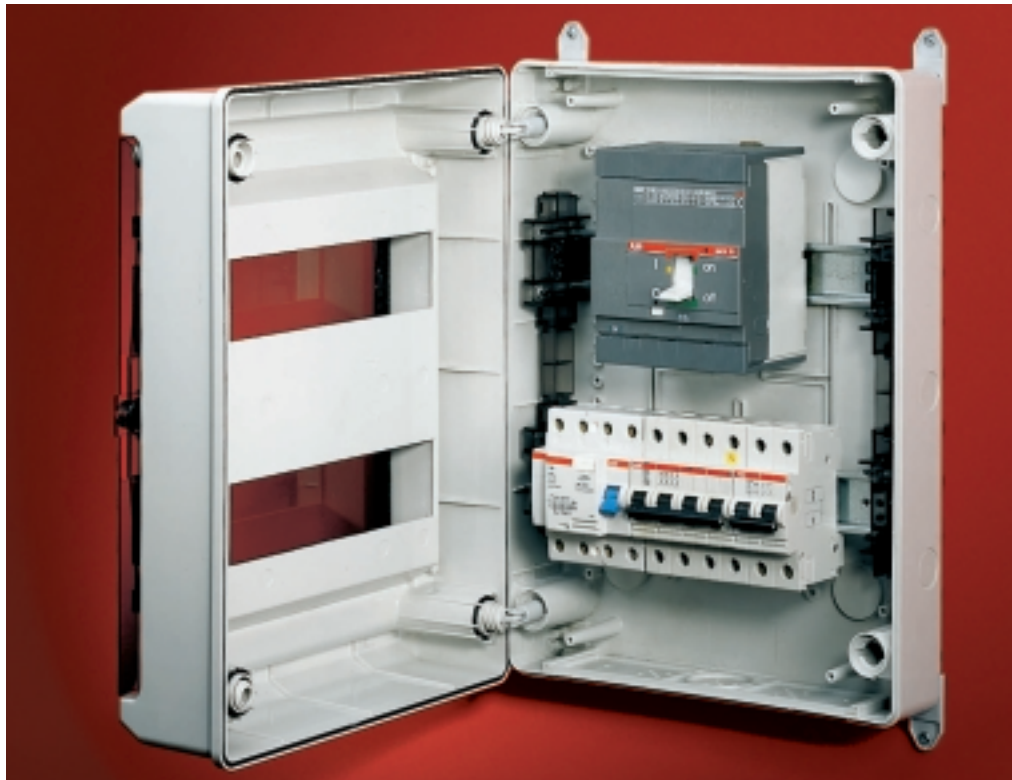
IMQ mark  
in compliance with CEI 23-48 and 23-49 Standards

# IP 55 and IP 65 wall-mounting consumer units

## IP 65 Polycarbonate Europa Series

### Technical characteristics

- degree of protection IP 65
- insulation class II
- available in two versions: with opaque door and with transparent smoky door vertically hinged
- available in RAL 7035 grey
- in polycarbonate, self-extinguishing and resistant to abnormal heat and fire up to 960°C (glow wire test) in compliance with IEC 695-2-1 Standard
- material with low halogen content
- dimensional stability under constant operating conditions from -25° to +115°C
- shock resistant 20 joules (IK 10 level)
- high resistance to UV rays
- door designed to be fitted with coded lock and key, art. 12 866 (page 2/55)
- extractable DIN rail frame to facilitate bench cabling. It can also be dismantled (and snapped on to reassemble it) to make it easier to cable the individual wires
- possibility of installing devices with depths of 53, 68 and 75 mm
- perfectly symmetrical consumer units with the possibility of attaching the door hinge onto the front (by means of the special articulated screws supplied) on the right or left with 140° opening
- possibility of installation in environments with major risk in the event of fire (CEI 64-8 part 7 section 751 Standard) and in AD-FT environments (CEI 64-2 Standard, IV edition)
- models with 8 or more modules designed to be used with the UNIFIX L cabling system
- models with 8 or more modules equipped with flanges to facilitate input of conduits and cables
- consumer units made and produced in compliance with CEI 23-48, CEI 23-49 and IEC 670 Standards
- consumer units supplied complete with:
  - No. 4 module covers per row
  - No. 1 self-adhesive label per row
  - No. 4 screw-cover caps to guarantee
  - accessories for attaching the hinges to the front
  - No. 1 plate for CEI 23-51 certification
  - instruction sheet



FLC09832

# IP 55 and IP 65 wall-mounting consumer units

## IP 65 Polycarbonate Europa Series

4 modules

8 modules

12 modules

18 modules

With opaque, vertically hinged door

RAL 7035 grey



FLC09089



FLC09090



FLC09091



FLC09092

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 724</b>	140x220x140	1/14

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 728</b>	205x220x140	1/9

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 732</b>	275x220x140	1/6

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 733</b>	380x220x140	1/5

With transparent, smoky, vertically hinged door

RAL 7035 grey



FLC09097



FLC09098



FLC09099



FLC09100

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 744</b>	140x220x140	1/14

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 748</b>	205x220x140	1/9

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 752</b>	275x220x140	1/6

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 753</b>	380x220x140	1/5



# IP 55 and IP 65 wall-mounting consumer units

## IP 65 Polycarbonate Europa Series

**24 modules**

**36 modules**

**36 modules**

**54 modules**

### With opaque, vertically hinged door

RAL 7035 grey



FLC09083



FLC09084



FLC09085



FLC09086

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 734</b>	275x370x140	1/4

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 735</b>	380x370x140	1/2

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 736</b>	275x570x140	1/2

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 738</b>	380x570x140	1/2

### With transparent, smoky, vertically hinged door

RAL 7035 grey



FLC09101



FLC09102



FLC09103



FLC09104

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 754</b>	275x370x140	1/4

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 755</b>	380x370x140	1/2

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 756</b>	275x570x140	1/2

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 758</b>	380x570x140	1/2

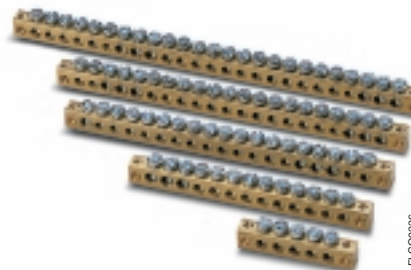
# IP 55 and IP 65 wall-mounting consumer units

## Accessories for IP 65 Polycarbonate Europa Series

### Terminal holders



### Terminal bars



Article	Description	For consumer units type	Box/pack No. items
<b>12 538</b>	for 4 modules	12 724-12 744	12/360
<b>12 539</b>	for 8 modules	12 728-12 748	12/360
<b>12 540</b>	for 12 modules per row	12 732-12 752 12 734-12 754 12 736-12 756	12/144
<b>12 543</b>	for 18 modules per row	12 733-12 753 12 735-12 755 12 738-12 758	12/108

The terminal board is completed by combining the necessary terminal bars to the terminal holders, taking care to keep the terminal bars separate from each other.

### Recommended configuration

No. modules	Consumer unit	Terminal holders Articles x quantity	Terminal bars Articles x quantity
<b>4</b>	12 724-12 744	12 538 x 2	12 531 x 2
<b>8</b>	12 728-12 748	12 539 x 2	12 531 x 2
<b>12</b>	12 732-12 752	12 540 x 1	12 531 x 1 12 532 x 1
<b>18</b>	12 733-12 753	12 543 x 1	12 531 x 1 12 535 x 1
<b>24</b>	12 734-12 754	12 540 x 2	12 533 x 2
<b>36 (18x2 rows)</b>	12 735-12 755	12 543 x 2	12 534 x 2
<b>36 (12x3 rows)</b>	12 736-12 756	12 540 x 2	12 534 x 2
<b>54</b>	12 738-12 758	12 543 x 2	12 535 x 2

Terminal holders and terminal bars are supplied separately. In this way, by inserting one or two terminal bars into the terminal-holder you can create the best terminal for your requirements, with the advantage of obtaining a terminal block that is cheap as well as personalised, due to the fact that you only need to use material that is really necessary.

Some standard configurations are illustrated in the table.

All the possible configurations that can be created for each type of consumer unit are given in the technical details.

Article	Description	Box/pack No. items
<b>12 531</b>	No. of holes x Ø holes (mm) + No. holes x Ø holes (mm) 5x4.5	1/20
<b>12 532</b>	10x4.5 + 3x5.6	1/20
<b>12 533</b>	16x4.5 + 3x5.6	1/20
<b>12 534</b>	15x4.5 + 6x5.6	1/20
<b>12 535</b>	19x4.5 + 6x5.6	1/20

The terminal bars can be installed on any kind of terminal holder; they are snapped onto these with 2 clips per bar, through two holes made at the ends of the bar itself.

### Unifix L cabling system

Article	Type	Description	Box/pack No. items
<b>ED 298 5</b>	XULT208	bar 2P 8 modules	6/24
<b>ED 299 3</b>	XULT212	bar 2P 12 modules	6/24
<b>ED 300 9</b>	XULT218	bar 2P 18 modules	6/24
<b>ED 294 4</b>	XULT412	bar 4P 12 modules	6/24
<b>ED 295 1</b>	XULT418	bar 4P 18 modules	6/24

### Spare doors

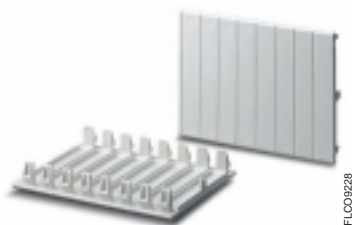


Opaque RAL 7035 grey	Transparent smoky	For consumer units type	Box/pack No. items
<b>12 568</b>	<b>12 578</b>	12 724-12 744	1/8
<b>12 569</b>	<b>12 579</b>	12 728-12 748	1/10
<b>12 570</b>	<b>12 580</b>	12 732-12 752	1/8
<b>12 571</b>	<b>12 581</b>	12 734-12 754	1/5
<b>12 572</b>	<b>12 582</b>	12 736-12 756	1/10
<b>12 573</b>	<b>12 583</b>	12 738-12 758	1/8
<b>12 584</b>	<b>12 586</b>	12 733-12 753	1/20
<b>12 585</b>	<b>12 587</b>	12 735-12 755	1/8

# IP 55 and IP 65 wall-mounting consumer units

## Accessories for IP 65 Polycarbonate Europa Series

### Module covers



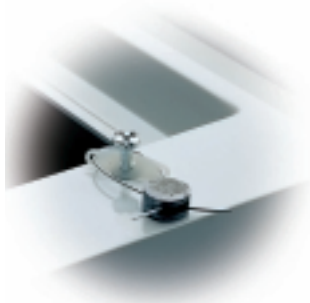
Article	Colour	No. modules	Box/pack No. items
<b>12 861</b>	RAL 7035 grey	1	50/1500
<b>12 863</b>	RAL 7035 grey	4	50/600

### Plastic wall brackets



Article	Description	Box/pack No. items
<b>12 858</b>	in insulating material	1/20

### Screw lead sealing accessory



Article	Box/pack No. items
<b>12 860</b>	1/50

### Semi-flush-mounting frames



Article	For consumer units type	Box/pack No. items
<b>12 590</b>	12 724-12 744	5/20
<b>12 591</b>	12 728-12 748	5/20
<b>12 592</b>	12 734-12 752	5/20
<b>12 593</b>	12 734-12 754	5/20
<b>12 594</b>	12 736-12 756	5/5
<b>12 595</b>	12 738-12 758	5/5
<b>12 596</b>	12 733-12 753	5/5
<b>12 597</b>	12 735-12 755	5/5

### Spare flanges



Article	For consumer units type	Box/pack No. items
<b>12 600</b>	8 Modules	30/120
<b>12 601</b>	12, 24, 36 (12x3 file) Modules	20/80
<b>12 602</b>	18, 36 (18x2 file) Modules	20/80

### Lock with key



Article	Description	Box/pack No. items
<b>12 866</b>	coded type	1/10

Tertiary/Industrial application



FLC0814



FLC0813



# Panel fronts

## IP 40 and IP 55 panel fronts

### IP 40 fronts for panel

#### Technical characteristics

- degree of protection IP 40
- insulation class II  $\square$
- in polycarbonate, self-extinguishing and resistant to abnormal heat and fire up to 960°C (glow wire test) in compliance with IEC 695-2-1 Standard
- available in RAL 7035 grey
- resistant to chemical agents (water, saline solutions, acids, mineral bases and oils), to atmospheric agents and UV rays
- dimensional stability under constant operating conditions from -20° to +85° C

### IP 55 fronts for panel

#### Technical characteristics

- degree of protection IP 55
- insulation class II  $\square$
- available with transparent smoky door horizontally hinged in the version with lock and lead-sealable spring
- door designed to take a lock with coded key art. 12 865 (page 2/59)
- available in RAL 7035 grey
- in polycarbonate, self-extinguishing and resistant to abnormal heat and fire up to 650°C (glow wire test) in compliance with IEC 695-2-1 Standard
- dimensional stability under constant operating conditions from -20° to +85° C
- shock resistant 6 joules
- resistant to chemical agents (water, saline solutions, acids, mineral bases and oils), to atmospheric agents and UV rays
- fronts supplied with:
  - 4 module covers per row
  - instruction sheet



FLC00856

# Panel fronts

## IP 40 and IP 55 panel fronts

2 modules

3 modules

4 modules

### IP 40 panel fronts

7035 RAL grey



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 362</b>	81x90x50	1/40

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 363</b>	99x90x50	1/40

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 364</b>	117x90x50	1/24

4 modules

6 modules

10 modules

### IP 55 panel fronts

Spring closing  
7035 RAL grey



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 658</b>	125x180x34	1/10

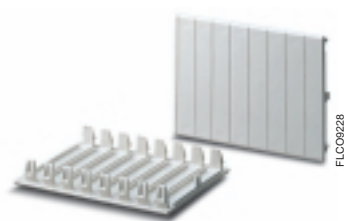
Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 659</b>	160x180x34	1/10

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 660</b>	230x180x34	1/10

# Panel fronts

## Accessories for IP 55 panel fronts

### Module covers



Article	Colour	No. modules	Box/pack No. items
<b>12 861</b>	RAL 7035 grey	1	50/1500
<b>12 863</b>	RAL 7035 grey	4	50/600

### Lock with key



Article	Description	Box/pack No. items
<b>12 865</b>	coded type	1/10

2

### Spare transparent smoky doors

Spring closing



Article	For fronts type	Box/pack No. items
<b>12 696</b>	12 658	10/40
<b>12 697</b>	12 659	10/40
<b>12 698</b>	12 660	10/20



## Index

### Livorno Series flush and wall-mounting consumer units

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Wall-mounting consumer units .....	3/3



Tertiary/industrial application



FLO0818

# Emergency consumer units

## Livorno Series flush and wall-mounting consumer units

### Livorno series flush-mounting consumer units

#### Technical characteristics

- degree of protection IP 40 and IP 55 depending on the version
- insulation class II
- available in the colours RAL 3000 red and RAL 7035 grey
- in thermoplastic material, self-extinguishing and resistant to abnormal heat and fire up to 650°C (glow wire test) in compliance with IEC 695-2-1 Standard
- dimensional stability under constant operating conditions from -25° to +85° C
- resistance to chemical (water, saline solutions, acids, mineral bases and oils) and environmental agents
- high resistance to UV rays
- consumer units fitted with lock and coded key
- door front with breakable glass 0.75 J (IK 05 level)
- possibility of installation in environments with major risk in the event of fire (CEI 64-8 part 7 section 751 Standard) and in AD-FT environments (CEI 64-2 Standard, IV edition)
- consumer units made and produced in compliance with CEI 23-48, CEI 23-49 and IEC 670 Standards
- consumer units supplied complete with:
  - 4 module covers per row
  - 4 screw-cover caps to guarantee
  - 1 certification plate

### Livorno series flush-mounting consumer units

#### Technical characteristics

- degree of protection IP 40, IP 55 and IP 65 depending on the version
- insulation class II
- available in colours RAL 3000 red and RAL 7035 grey
- in thermoplastic material, self-extinguishing and resistant to abnormal heat and fire up to 650°C (glow wire test) in compliance with IEC 695-2-1 Standard
- dimensional stability under constant operating conditions from -25° to +85° C
- resistance to chemical (water, saline solutions, acids, mineral bases and oils) and environmental agents
- high resistance to UV rays
- consumer units fitted with lock and coded key
- door front with breakable glass 0.75 J (IK 05 level)
- possibility of installation in environments with major risk in the event of fire (CEI 64-8 part 7 section 751 Standard) and in AD-FT environments (CEI 64-2 Standard, IV edition)
- articles 13 170 and 13 174 can be fitted with the following accessories:
  - terminal holder art. 12 539\*
  - semi-flush-mounting frame art. 12 591
  - spare flange art. 12 600
- consumer units made and produced in compliance with CEI 23-48, CEI 23-49 and IEC 670 Standards
- consumer units supplied complete with:
  - 4 module covers per row
  - 4 screw-cover caps to guarantee
  - 1 certification plate

\* see page 2/54 for installable terminal bars



# Emergency consumer units

## Livorno Series flush and wall-mounting consumer units

100x100x50 mm

200x245x82 mm

200x245x82 mm

### Flush-mounting version

**IP 55**  
RAL 3000 red  
Possibility of installing on flush-mounting enclosure with inter-axis of 83.5 mm. With luminous button (E10-12/24V incandescence and 220V fluorescence), with 1 NO contact + 1 NC contact (2A, 250 V) complete with glass-breaking hammer



Article	No. items Box/pack
<b>13 183</b>	1/13

Glass-breaking hammer	
<b>13 186</b>	1/10

**IP 40**  
RAL 3000 red



Article	Description	No. items Box/pack
<b>13 144</b>	with DIN x 6 mod. guide	1/7
<b>13 154</b>	with panel	1/7

**IP 40**  
RAL 7035 grey



Article	Description	No. items Box/pack
<b>13 143</b>	with DIN x 6 mod. guide	1/7
<b>13 153</b>	with panel	1/7

100x100x50 mm

205x220x140 mm

205x220x140 mm

165x180x110 mm

### Wall-mounting version

**IP 55**  
RAL 3000 red  
With luminous button (E10-12/24V incandescence and 220V fluorescence), with 1 NO contact + 1 NC contact (2A, 250 V) complete with glass-breaking hammer



Article	No. items Box/pack
<b>13 180</b>	1/14

**IP 65**  
RAL 3000 red  
Fitted with flanges for facilitated branch connections



Article	Description	No. items Box/pack
<b>13 171</b>	with DIN x 6 mod. guide	1/6
<b>13 175</b>	with panel	1/6

**IP 65**  
RAL 7035 grey  
Fitted with flanges for facilitated branch connections



Article	Description	No. items Box/pack
<b>13 170</b>	with DIN x 6 mod. guide	1/6
<b>13 174</b>	with panel	1/6

**IP 55**  
RAL 3000 red



Article	Description	No. items Box/pack
<b>13 161</b>	with DIN x 6 mod. guide	1/12
<b>13 165</b>	with panel	1/12

# Emergency consumer units

## Livorno Series flush and wall-mounting consumer units

165x180x110 mm

170x210x110 mm

170x210x110 mm

### Wall-mounting version

IP 55  
RAL 7035 grey

IP 40  
RAL 3000 red

IP 40  
RAL 7035 grey



FLCO9281



FLCO9120



FLCO9283

Article	Description	N.pezzi Box/pack
13 160	with DIN x 6 mod. guide	1/12
13 164	with panel	1/12

Article	Description	N.pezzi Box/pack
13 141	with DIN x 6 mod. guide	1/6
13 151	with panel	1/6

Article	Description	N.pezzi Box/pack
13 140	with DIN x 6 mod. guide	1/6
13 150	with panel	1/6



## Index

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Tertiary/Industrial application



FLC0810



IMQ mark  
in compliance with CEI 23-48 Standards

# Switchboards

## Europa Series switchboards for industrial applications

### Technical characteristics

- degree of protection IP 65
- insulation class II
- available in the versions with vertically hinged opaque and transparent smoky doors
- available in RAL 7035 grey
- in polycarbonate material, self-extinguishing and resistant to abnormal heat and fire up to 960°C (glow wire test) in compliance with IEC 695-2-1 Standard
- material with low halogen content
- dimensional stability under constant operating conditions from -25° to +115° C
- shock resistant 20 joules (IK 10 level)
- high resistance to UV rays
- perfectly symmetrical switchboards with the possibility of attaching the door hinge onto the front (by means of the special articulated screws supplied) on the right or left with 140° opening
- doors designed to take lock with coded key, art. 12 866 (page 4/6)
- designed for the insertion of an extractable frame with pre-drilled panelling for mounting 100, 125 and 160 A circuit breakers
- possibility of installation in environments with major risk in the event of fire (CEI 64-8 part 7 section 751 Standard) and in AD-FT environments (CEI 64-2 Standard, IV edition)
- all models (except for art. 12 764 and 12 784) are equipped with flanges to facilitate insertion of conduits and cables
- switchboards made and produced in compliance with CEI 23-48, CEI 23-49 and IEC 670 Standards
- switchboards supplied complete with:
  - 4 screw-cover caps to guarantee
  - accessories for hinging the front part
  - 1 certification plate
  - instruction sheet



FL009809



# Switchboards

## Europa Series switchboards for industrial applications

140x220x140 mm

205x220x140 mm

275x220x140 mm

### Opaque vertically hinged door

RAL 7035 grey



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 764</b>	140x220x140	1/14

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 768</b>	205x220x140	1/9

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 772</b>	275x220x140	1/6

### Transparent, smoky vertically hinged door

RAL 7035 grey



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 784</b>	140x220x140	1/14

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 788</b>	205x220x140	1/9

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 792</b>	275x220x140	1/6

# Switchboards

## Europa Series switchboards for industrial applications

275x370x140 mm

275x570x140 mm

380x570x140 mm

### Opaque vertically hinged door

RAL 7035 grey



FLCO9144



FLCO9141



FLCO9142

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 774</b>	275x370x140	1/4

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 776</b>	275x570x140	1/2

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 778</b>	380x570x140	1/2

4

### Transparent, smoky vertically hinged door

RAL 7035 grey



FLCO9139



FLCO9140



FLCO9135

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 794</b>	275x370x140	1/4

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 796</b>	275x570x140	1/2

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 798</b>	380x570x140	1/2

# Switchboards

## Accessories for Europa Series switchboards for industrial applications

### Kit for modular circuit breakers

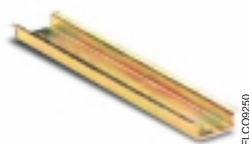
Circuit breakers 100, 125 160 A on DIN guide



Article	For switchboards type	No. modules	Box/pack No. items
<b>12 820</b>	12 774 - 12 794	12 for 1 rows	1/8
<b>12 821</b>	12 776 - 12 796	24 for 2 rows	1/5
<b>12 822</b>	12 778 - 12 798	36 for 2 rows	1/5

### DIN section bars

Complete with screws



Article	For switchboards type	Box/pack No. items
<b>12 852</b>	12 764 - 12 784	50/600
<b>12 854</b>	12 768 - 12 788	30/360
<b>12 855</b>	12 772 - 12 792 12 774 - 12 794 12 776 - 12 796	50/200
<b>12 856</b>	12 778 - 12 798	50/200

### Universal cutter

For drill



Article	Box/pack No. items
<b>12 894</b>	1/30

to use for side branch connections

4

### Base plates

In aluminium-plated metal



Article	For switchboards type	Box/pack No. items
<b>12 842</b>	12 764 - 12 784	1/10
<b>12 844</b>	12 768 - 12 788	1/10
<b>12 845</b>	12 772 - 12 792	1/10
<b>12 846</b>	12 774 - 12 794	1/5
<b>12 847</b>	12 776 - 12 796	1/5
<b>12 848</b>	12 778 - 12 798	1/5

### Base plates

In insulating material



Article	For switchboards type	Box/pack No. items
<b>12 832</b>	12 764 - 12 784	1/10
<b>12 834</b>	12 768 - 12 788	1/10
<b>12 835</b>	12 772 - 12 792	1/10
<b>12 836</b>	12 774 - 12 794	1/5
<b>12 837</b>	12 776 - 12 796	1/5
<b>12 838</b>	12 778 - 12 798	1/5

### Fixed counter-doors



Article	For switchboards type	Box/pack No. items
<b>12 825</b>	12 774 - 12 794	1/10
<b>12 826</b>	12 776 - 12 796	1/10
<b>12 827</b>	12 778 - 12 798	1/10

### Lock with key



Article	For switchboards type	Box/pack No. items
<b>12 866</b>	coded type	1/10

### Module covers



Article	Colour	No. modules	Box/pack No. items
<b>12 861</b>	RAL 7035 grey	1	50/1500
<b>12 863</b>	RAL 7035 grey	4	50/600

### Wall brackets



Article	Description	Box/pack No. items
<b>12 858</b>	in insulating material	1/20

# Switchboards

## Accessories for Europa Series switchboards for industrial applications

### Terminal holders



Article	For switchboards type	Box/pack No. items
<b>12 538</b>	12 764 - 12 784	12/360
<b>12 539</b>	12 768 - 12 788	12/360
<b>12 540</b>	12 772 - 12 792 12 774 - 12 794 12 776 - 12 796	12/144
<b>12 543</b>	12 778 - 12 798	12/108

The terminal board is completed by combining the necessary terminal bars to the terminal holders, taking care to keep the terminal bars separate from each other.

### Recommended configuration

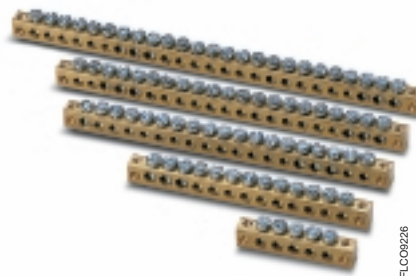
N. modules	Consumer unit	Terminal holders Articles x quantity	Terminal bars Articles x quantity
<b>12 764 - 12 784</b>		12 538 x 2	12 531 x 2
<b>12 768 - 12 788</b>		12 539 x 2	12 531 x 2
<b>12 772 - 12 792</b>		12 540 x 1	12 531 x 1 12 532 x 1
<b>12 774 - 12 794</b>		12 540 x 2	12 533 x 2
<b>12 776 - 12 796</b>		12 540 x 2	12 534 x 2
<b>12 778 - 12 798</b>		12 543 x 2	12 535 x 2

Terminal holders and terminal bars are supplied separately. In this way, by inserting one or two terminal bars into the terminal holder you can create the best terminal for your requirements, with the advantage of obtaining a terminal block that is cheap as well as personalised, due to the fact that you only need to use material that is really necessary.

Some standard configurations are illustrated in the table.

All the possible configurations that can be created for each type of consumer unit are given in the technical details.

### Terminal bars



Article	Description No. of holes x Ø holes (mm) + No. holes x Ø holes (mm)	Box/pack No. items
<b>12 531</b>	5x4.5	1/20
<b>12 532</b>	10x4.5 + 3x5.6	1/20
<b>12 533</b>	16x4.5 + 3x5.6	1/20
<b>12 534</b>	15x4.5 + 6x5.6	1/20
<b>12 535</b>	19x4.5 + 6x5.6	1/20

The terminal bars can be installed on any kind of terminal holder; they are snapped onto these with 2 clips per bar, through two holes made at the ends of the bar itself.

### Spare doors



Opaque RAL 7035 grey	Transparent smoky	For switchboards type	Box/pack No. items
<b>12 568</b>	<b>12 578</b>	12 764 - 12 784	1/8
<b>12 569</b>	<b>12 579</b>	12 768 - 12 788	1/10
<b>12 570</b>	<b>12 580</b>	12 772 - 12 792	1/8
<b>12 571</b>	<b>12 581</b>	12 774 - 12 794	1/5
<b>12 572</b>	<b>12 582</b>	12 776 - 12 796	1/10
<b>12 573</b>	<b>12 583</b>	12 778 - 12 798	1/8

### Plastic spacers



Article	Dimensions (mm)	Box/pack No. items
<b>12 851</b>	20 H 30 modules	10/60

### Spare flanges



Article	For switchboards type	Box/pack No. items
<b>12 600</b>	12 768 - 12 788	30/120
<b>12 601</b>	12 772 - 12 792 12 774 - 12 794 12 776 - 12 796	20/80
<b>12 602</b>	12 778 - 12 798	20/80

### Semi-flush-mounting



Article	For switchboards type	Box/pack No. items
<b>12 590</b>	12 764 - 12 784	5/20
<b>12 591</b>	12 768 - 12 788	5/20
<b>12 592</b>	12 772 - 12 792	5/20
<b>12 593</b>	12 774 - 12 794	5/20
<b>12 594</b>	12 776 - 12 796	5/5
<b>12 595</b>	12 778 - 12 798	5/5

Tertiary/Industrial application



F.LC09858



MQ mark  
in compliance with CEI 23-48 Standard

# Switchboards

## Switchboards for industrial applications with blank front

### Technical characteristics

- degree of protection IP 65
- insulation class II
- available in RAL 7035 grey
- available in the versions with transparent smoky doors
- in polycarbonate material, self-extinguishing and resistant to abnormal heat and fire up to 960°C (glow wire test) in compliance with IEC 695-2-1 Standard
- material with low halogen content
- dimensional stability under constant operating conditions from -25° to +115° C
- shock resistant 20 joules (IK 10 level)
- perfectly symmetrical switchboards with possibility of hinging the door onto the front (by means of the special articulated screws supplied) on the right or left with 140° opening
- doors designed to take lock with coded key, art. 12 866 (page 4/11)
- possibility of installation in environments with major risk in the event of fire (CEI 64-8 part 7 section 751 Standard) and in AD-FT environments (CEI 64-2 Standard, IV edition)
- all models (except for art. 13 200) are equipped with flanges for the facilitated insertion of conduits and cables
- switchboards made and produced in compliance with CEI 23-48, CEI 23-49 and IEC 670 Standards
- switchboards supplied complete with:
  - 4 screw-cover caps to guarantee
  - 1 self-adhesive label per row
  - accessories for hinging the front part
  - 1 certification plate
  - 1 semi-flush-mounting frame
  - instruction sheet



FLC08855

# Switchboards

## Switchboards for industrial applications with blank front

4 modules

12 modules

12 modules

### Transparent, smoky door

RAL 7035 grey



FLC09147



FLC09166



FLC09165

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>13 200</b>	136x540x140	1/8

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>13 204</b>	275x370x140	1/4

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>13 205</b>	275x455x140	1/3

12 modules

18 modules

### Transparent, smoky door

RAL 7035 grey



FLC09285



FLC09286

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>13 206</b>	275x570x140	1/3

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>13 208</b>	380x570x140	1/2

# Switchboards

## Accessories for switchboards for industrial applications with blank front

### Terminal holders



Article	Description	For switchboards type	Box/pack No. items
<b>12 540</b>	for 12 modules	13 204 - 13 205 - 13 206	12/144
<b>12 543</b>	for 18 modules	13 208	12/108

The terminal board is completed by combining the necessary terminal bars to the terminal holders, taking care to keep the terminal bars separate from each other.

#### Recommended configuration

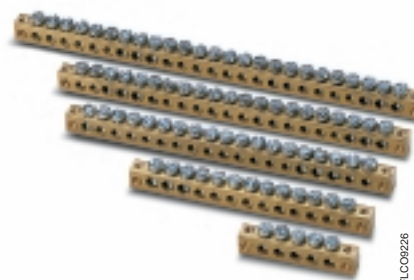
No. modules	Consumer unit	Terminal holders Articles x quantity	Terminal bars Articles x quantity
12	<b>13 204 - 13 205</b> <b>13 206</b>	12 540 x 1	12 531 x 1 12 532 x 1
18	<b>13 208</b>	12 543 x 1	12 531 x 1 12 535 x 1

Terminal holders and terminal bars are supplied separately. In this way, by inserting one or two terminal bars into the terminal holder you can create the best terminal for your requirements, with the advantage of obtaining a terminal block that is cheap as well as personalised, due to the fact that you only need to use material that is really necessary.

Some standard configurations are illustrated in the table.

All the possible configurations that can be created for each type of consumer unit are given in the technical details.

### Terminal bars



Article	Description	Box/pack No. items
<b>12 531</b>	No. of holes x Ø holes (mm) + No. holes x Ø holes 5x4,5	1/20
<b>12 532</b>	10x4.5 + 3x5.6	1/20
<b>12 533</b>	16x4.5 + 3x5.6	1/20
<b>12 534</b>	15x4.5 + 6x5.6	1/20
<b>12 535</b>	19x4.5 + 6x5.6	1/20

The terminal bars can be installed on any kind of terminal holder; they are snapped onto these with 2 clips per bar, through two holes made at the ends of the bar itself.

### Wall brackets



Article	Description	Box/pack No. items
<b>12 858</b>	in insulating material	1/20

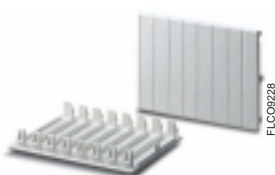
### Universal cutter for drill



Article	Description	Box/pack No. items
<b>12 894</b>		1/30

To be used for side branch connections

### Module covers



Article	Description	For switchboards type	Box/pack No. items
<b>12 861</b>	RAL 7035 grey	1	50/1500
<b>12 863</b>	RAL 7035 grey	4	50/600

### Lock with key



Article	Description	Box/pack No. items
<b>12 866</b>	tipo cifrato	1/10

### Spare flanges



Article	For switchboards type	Box/pack No. items
<b>12 601</b>	13 204/13 205/13 206	20/80
<b>12 602</b>	13 208	20/80



Tertiary/Industrial application



FLOOS808



IMQ mark  
in compliance with CEI 23-48 Standard

# Switchboards

## Marostica Series modular switchboards

### Technical characteristics

- degree of protection IP 65
- insulation class II
- available in the versions that can be fitted with sockets with sloped consumer unit and with vertical flush-mounting socket with locking switch
- available in RAL 7035 grey
- in polycarbonate material, self-extinguishing and resistant to abnormal heat and fire up to 960°C (glow wire test) in compliance with IEC 695-2-1 Standard
- material with low halogen content
- dimensional stability under constant operating conditions from -25° to +115° C
- shock resistant 20 joules (IK 10 level)
- high resistance to UV rays
- depth of socket compartment: 85 mm
- perfectly symmetrical switchboards with possibility of hinging the door onto the front (by means of the special articulated screws supplied) on the right or left with 140° opening
- doors designed to take lock with coded key, art. 12 866 (page 4/11)
- possibility of installation in environments with major risk in the event of fire (CEI 64-8 part 7 section 751 Standard) and in AD-FT environments (CEI 64-2 Standard, IV edition)
- designed to be mounted with the main sockets on the market complying with IEC 309-1 Standards through the use of universal plates
- all models (except for art. 13 210) are equipped with flanges for the facilitated insertion of conduits and cables
- switchboards made and produced in compliance with CEI 23-48, and IEC 670 Standards
- switchboards supplied complete with:
  - 4 screw-cover caps to guarantee
  - 1 self-adhesive label per row
  - accessories for attaching the hinge to the front part
  - 1 certification plate
  - 1 semi-flush-mounting frame
  - instruction sheet
- articles 13 224, 13 226 and 13 228 are specifically for sockets with locking switch, fixed directly without plates



FLPR8911

# Switchboards

## Accessories for Marostica Series modular switchboards

4 modules

Can be equipped with 3 plates

RAL 7035 grey



FLC09157

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>13 210</b>	136x540x140	1/8

12 modules

Can be equipped with 4 plates

RAL 7035 grey



FLC09154

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>13 215</b>	275x455x140	1/3

12 modules

Can be equipped with 6 plates

RAL 7035 grey



FLC09148

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>13 216</b>	275x570x140	1/3

18 modules

Can be equipped with 9 plates

RAL 7035 grey



FLC09153

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>13 218</b>	380x570x140	1/2

Dedicated switchboards for vertical flush-mounting sockets with block circuit breaker

12 modules

Can be equipped with 3 sockets

RAL 7035 grey



FLC09149

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>13 224</b>	275x370x140	1/4

12 modules

Can be equipped with 4 sockets

RAL 7035 grey



FLC09152

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>13 226</b>	275x570x140	1/3

18 modules

Can be equipped with 6 sockets

RAL 7035 grey



FLC09150

Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>13 228</b>	380x570x140	1/2

Fixed directly without plates

# Switchboards

## Accessories for Marostica Series modular switchboards

### Plates for switchboards

Plates for switchboards art. 13 210 – 13 215 – 13 216 – 13 218 suitable to take angled consumer unit sockets



Article	Type of plate	Description	Box/pack No. items
13 251	S	Blank	10/60
13 261	D	Blank	10/40
13 253	S	For 1 socket	10/60
13 263	D	For 2 sockets	10/40
13 255	S	For 1 socket	10/60
13 265	D	For 2 sockets	10/40
13 257	S	For 1 socket	10/60
13 267	D	For 2 sockets	10/40
13 245*	S	216R.../216RU... For 1 socket	10/60
13 246*	S	316R.../316RU.../416R.../416RU... For 1 socket	10/40
13 247*	S	232RU.../332RU.../432RU... For 1 socket	10/60

S = Single – suitable to take one IEC 309-1 16 A or 32 A socket  
D = Double – suitable to take 2 IEC 309-1 16A or 32 A sockets

\* ABB CEWE socket (snap-on fixing).  
For further information consult ABB CEWE catalogue (A114 Eng Feb 99)

### Plates for switchboards

Plates for switchboards art. 13 210 – 13 215 – 13 216 – 13 218 suitable to take vertical, flush-mounting sockets with block circuit breakers

Article	Type of plate	Make	Description	Box/pack No. items
13 273	D	ABB	Compact interlocked 16 A 113 x 226 mm	10/40
13 283	D	GEWISS	Compact interlocked 16 A – 32 A Without fuse-holder base Series 66 IB 103 x 220 mm	10/40
13 285	D	GEWISS	Compact interlocked 16 A – 32 A Without fuse-holder base Series 66 IB 155 x 115 mm	10/40
13 275	D	ILME	Compact interlocked 16 A – 32 A Series BK 113 x 226 mm	10/40
13 279	D	ILME	Compact interlocked 16 A – 32 A Series SQ 145 x 115 mm	10/40
13 281	D	SCAME	Compact interlocked 16 A – 32 A Series BK 115 x 45 mm	10/40
13 287	D	OVA	Horizontal interlocked 16 A 155 x 115 mm	10/40

D = Double – suitable for taking 1 IEC 309-1, flush-mounting socket with block circuit breaker

4

Table for selecting correct combination of angled consumer unit sockets

Rated cur. (In)	Type of socket			Type of plate						
	IP level	No. Poles	Type of plate	For sockets ABB	For sockets Gewiss	For sockets Scame	For sockets Ilme	For sockets Palazzoli	For sockets Legrand	For sockets ABB CEWE
16 A	IP44	2P+T	S	13 253	13 253	13 253	13 253		13 253	13 245
			D	13 263	13 263	13 263	13 263		13 263	
		3P+T	S	13 253	13 253	13 253	13 253		13 253	13 246
			D	13 263	13 263	13 263	13 263		13 263	
		3P+N+T	S	13 255	13 253	13 253	13 255		13 255	13 246
			D	13 265	13 263	13 263	13 265		13 265	
	IP67	2P+T	S	13 253	13 253	13 253	13 253	13 253		
			D	13 263	13 263	13 263	13 263	13 263		
		3P+T	S	13 255	13 253	13 253	13 253	13 253		
			D	13 265	13 263	13 263	13 263	13 263		
		3P+N+T	S	13 255	13 253	13 253	13 255	13 255		
			D	13 265	13 263	13 263	13 265	13 265		
32 A	IP44	2P+T	S	13 255	13 255	13 257	13 255			13 247
			D	13 265	13 265	13 267	13 265			
		3P+T	S	13 255	13 255	13 257	13 255			13 247
			D	13 265	13 265	13 267	13 265			
		3P+N+T	S	13 257	13 257	13 257	13 257			13 247
			D	13 267	13 267	13 267	13 267			
	IP67	2P+T	S	13 257	13 255	13 257	13 255	13 255		
			D	13 267	13 265	13 267	13 265	13 265		
		3P+T	S	13 257	13 255	13 257	13 255	13 255		
			D	13 267	13 265	13 267	13 265	13 265		
		3P+N+T	S	13 257	13 257	13 257	13 257	13 257		
			D	13 267	13 267	13 267	13 267	13 267		

S = Single - suitable to take one IEC 309-1 16 A or 32 A socket  
D = Double - suitable to take 2 IEC 309-1 16A or 32 A sockets

# Switchboards

## Accessories for Marostica Series modular switchboards

### Plates for switchboards

Plates for switchboards art. 13 210 – 13 215 – 13 216 – 13 218 suitable to take residential devices



Article	Type of plate	Description	Box/pack No. items
13 259	S	For 1 single or double sealed command	10/60
13 269	D	For 2 single or double sealed commands	10/40
13 271	D	For modular device supports with inter-axis of 83.5 mm	10/40

**S = Single** – suitable to take a single or double sealed command (see page 5/16 and 5/17)

**D = Double** – suitable to take two single or double sealed commands (see page 5/16 and 5/17) and supports for modular devices with inter-axis of 83.5 mm.

### Plates for switchboards

Plates for switchboards art.13 224 – 13 226 – 13 228



Article	Description	Box/pack No. items
13 240	Blank	10/60

### Terminal holders



Article	Description	For switchboards type	Box/pack No. items
12 540	for 12 modules	13 215 - 13 224 13 216 - 13 226	12/144
12 543	for 18 modules	13 218 - 13 228	12/108

The terminal board is completed by combining the necessary terminal bars to the terminal holders, taking care to keep the terminal bars separate from each other.

#### Recommended configuration

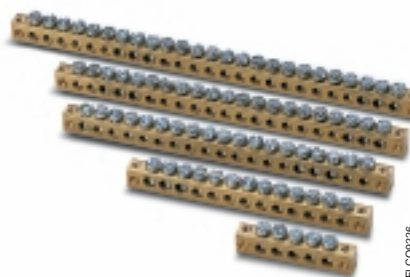
No. modules	Consumer unit	Terminal holders Articles x quantity	Terminal bars Articles x quantity
12	13 215 - 13 224	12 540 x 1	12 531 x 1
	13 216 - 13 226		12 532 x 1
18	13 218 - 13 228	12 543 x 1	12 531 x 1 12 535 x 1

Terminal holders and terminal bars are supplied separately. In this way, by inserting one or two terminal bars into the terminal holder you can create the best terminal for your requirements, with the advantage of obtaining a terminal block that is cheap as well as personalised, due to the fact that you only need to use material that is really necessary.

Some standard configurations are illustrated in the table.

All the possible configurations that can be created for each type of consumer unit are given in the technical details.

### Terminal bars



Article	Description No. of holes x Ø holes (mm) + No. holes x Ø holes (mm)	Box/pack No. items
12 531	5x4.5	1/20
12 532	10x4.5 + 3x5.6	1/20
12 533	16x4.5 + 3x5.6	1/20
12 534	15x4.5 + 6x5.6	1/20
12 535	19x4.5 + 6x5.6	1/20

The terminal bars can be installed on any kind of terminal holder; they are snapped onto these with 2 clips per bar, through two holes made at the ends of the bar itself.

# Switchboards

## Accessories for Marostica Series modular switchboards

### Spare flanges



FLCO9293

Article	For switchboards type	Box/pack No. items
<b>12 601</b>	13 244 - 13 216 - 13 226	20/80
<b>12 602</b>	13 218 - 13 228	20/80

### Lock with key



FLCO9240

Article	Description	Box/pack No. items
<b>12 866</b>	coded type	1/10

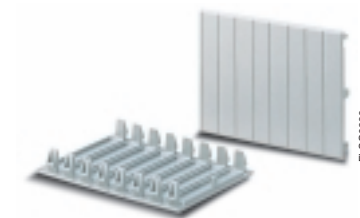
### Wall brackets



FLCO9235

Article	Description	Box/pack No. items
<b>12 858</b>	in insulating material	1/20

### Module covers



FLCO9238

Article	Colour	No. modules	Box/pack No. items
<b>12 861</b>	RAL 7035 grey	1	50/1500
<b>12 863</b>	RAL 7035 grey	4	50/600

Tertiary/Industrial application



FLP18800



# Switchboards

## Marostica Series cabled switchboards

### Technical characteristics

- degree of protection IP 44 and IP 55, depending on the version
- insulation class II
- available in RAL 7035 grey
- in polycarbonate material, self-extinguishing and resistant to abnormal heat and fire up to 960°C (glow wire test) in compliance with IEC 695-2-1 Standard
- material with low halogen content
- dimensional stability under constant operating conditions from -25° to +115° C
- shock resistant 20 joules (IK 10 level)
- high resistance to UV rays
- possibility of hinging the door onto the front (by means of the special articulated screws supplied) on the right or left with
  - 140° opening
- possibility of installation in environments with major risk in the event of fire (CEI 64-8 part 7 section 751 Standard) and in AD-FT environments (CEI 64-2 Standard, IV edition)
- made with IMQ mark sockets and circuit breakers
- other types of configurations available on request
- all models (except for art. 13 291 and 13 292) are equipped with flanges for the facilitated insertion of conduits and cables
- switchboards supplied complete with:
  - 4 screw-cover caps to guarantee
  - 1 self-adhesive label per row
  - accessories for hinging the front part
  - 1 cable clamp + 1 nut for cable clamp
  - 1 lock with coded key
  - 1 certification plate
  - instruction sheet



FLPR810



# Switchboards

## Marostica Series cabled switchboards

### IP 44



### IP 44 - IP 55



Article	Socket		6 KA MCBs		Box/pack No. items
	Q.ty	Type	Q.ty	Type	
<b>13 291</b>	1	16 A Bi-socket	1	2p 32 A	1/1
	1	16 A Schuko			
	1	2p+E 16 A 220 V			
<b>13 292</b>	1	16 A Bi-socket	1	4p 32 A	1/1
	1	16 A Schuko			
	1	3p+E 16 A 380 V			

#### IP44 switchboards

Article	Socket		6 KA MCBs		Box/pack No. items
	Q.ty	Type	Q.ty	Type	
<b>13 322</b>	1	Interlocked	1	1p+N 16 A	1/1
		2p+E 16 A 220 V	1	3p 16 A	
	1	Interlocked		3p+E 16 A 380 V	
<b>13 323</b>	1	Interlocked	1	1p+N 16 A	1/1
		2p+E 16 A 220 V	1	3p 32 A	
	1	Interlocked		3p+E 16 A 380 V	
<b>13 324</b>	2	Interlocked	2	1p+N 16 A	1/1
		2p+E 220 V			

#### IP55 switchboards

Article	Socket		6 KA MCBs		Box/pack No. items
	Q.ty	Type	Q.ty	Type	
<b>13 325</b>	1	Interlocked	1	1p+N 16 A	1/1
		2p+E 16 A 220 V	1	3p 16 A	
	1	Interlocked		3p+E 16 A 380 V	
<b>13 326</b>	1	Interlocked	1	1p+N 16 A	1/1
		2p+E 16 A 220 V	1	3p 32 A	
	1	Interlocked		3p+E 16 A 380 V	
<b>13 327</b>	2	Interlocked	2	1p+N 16 A	1/1
		2p+E 220 V			

Note: Other configurations are available on request

# Switchboards

## Marostica Series cabled switchboards

### IP 44



Article Box/pack	Socket		6 KA MCBs		No. items
	Q.ty	Type	Q.ty	Type	
<b>13 328</b>	1	16 A Schuko	1	1p+N 16 A	1/1
	1	16 A Schuko	1	3p 16 A	
	1	2p+E 16 A 220 V	1	4p 16 A	
	1	3p+E 16 A 220 V			
	1	3p+N+E 16 A 380 A			

### IP 44 - IP 55



#### IP44 switchboards

Article	Socket		6 KA MCBs		Box/pack No. items
	Q.ty	Type	Q.ty	Type	
<b>13 329</b>	1	2p+E 16 A 220 V	1	1p+N 16 A	1/1
	2	3p+E 16 A 380 V	1	3p 16 A	
	1	3p+N+E 16 A 380 A	1	4p 16 A	
<b>13 330</b>	1	2p + E 16 A 380 V	1	1p+N 16 A	1/1
	1	3p+E 16 A 380 V	1	3p 16 A	
	1	3p+N+E 16 A 380 A	1	4p 16 A	
	1	3p + E 32 A 380 V	1	3p 32 A	

#### IP55 switchboards

Article	Socket		6 KA MCBs		Box/pack No. items
	Q.ty	Type	Q.ty	Type	
<b>13 335</b>	1	2p+E 16 A 220 V	1	1p+N 16 A	1/1
	1	3p+E 16 A 380 V	1	3p 16 A	
	1	3p+N+E 16 A 380 A	1	4p 16 A	
	1	3p + E 32 A 380 V	1	3p 32 A	

### IP 55



Article	Socket		6 KA MCBs		Box/pack No. items
	Q.ty	Type	Q.ty	Type	
<b>13 350</b>	1	Schuko 16 A	1	1p+N 16 A	1/1
	2	2p+E 16 A 220 V	2	3p 16 A	
	3	3p+E 16 A 380 V	1	4p 16 A	
	1	3p+N+E 16 A 380 A	1	3p 32 A	
	2	3p+E 32 A 380 V			

### IP 55



Article	Socket		6 KA MCBs		Box/pack No. items
	Q.ty	Type	Q.ty	Type	
<b>13 356</b>	1	Interlocked	1	1p+N 16 A	1/1
		2p+E 16 A 220 V	1	3p 16 A	
	1	Interlocked			
<b>13 357</b>	1	Interlocked	1	3p 16 A	1/1
		3p+E 16 A 380 V	1	4p 16 A	
	1	Interlocked	1	3p 32 A	
	1	Interlocked			
	3p+N+E 16 A 380 V				
	3p+E 32 A 380 V				



## Index

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Tertiary/Industrial application



FLO09811




IMQ mark  
in compliance with CEI 23-48 Standards

Type approval  
Italian Naval Register ELE/8998/2

# Boxes, equipment and various components

## IP 44 and IP 55 junction boxes in thermoplastic material

### Technical characteristics

- degree of protection:
  - IP 44 for press-on lid boxes
  - IP 55 for screw-on lid boxes
- insulation class II 
- available in RAL 7035 grey
- boxes with press-on lids in thermoplastic material, self-extinguishing in compliance with UL 94 HB Standard and resistant to abnormal heat and fire up to 650° C (glow wire test) in compliance with IEC 695-2-1 Standard
- boxes with opaque screw-on lids in thermoplastic material, self-extinguishing in compliance with UL 94 V-0 Standard and resistant to abnormal heat and fire up to 960° C (glow wire test) in compliance with IEC 695-2-1 Standard
- boxes with screw-on lids in transparent polycarbonate material, self-extinguishing in compliance with UL 94 V-2 Standard and resistant to abnormal heat and fire up to 960° C (glow wire test) in compliance with IEC 695-2-1 Standard
- dimensional stability under operating conditions from -25° to +75° C
- shock resistant 6 joules
- high resistance to heat and chemical and atmospheric agents
- wide range with press on lids, lids with stainless steel screws and lids with rapid-pitch, safety screws in thermoplastic insulating material
- boxes IP 55 degree of protection are composed of a patented lid produced in a single pressing phase together with its seal
- all the boxes with cable-way inlets are suitable to be installed with mini-trunkings by using special connectors (articles in catalogue 604212)
- when fitted with special housings, the base of the box can be equipped with terminals and various accessories
- boxes measuring 160x135, 220x170 and 310x240 mm can be mounted on the wall with brackets art. 12 858
- junction boxes made in compliance with CEI 23-48 and IEC 670 Standards



FLC09841

# Boxes, equipment and various components

## IP 44 and IP 55 junction boxes in thermoplastic material

### IP 44 boxes

With cable glands and press-on lid



FLCO9199

Article	Internal dimensions (mm)	Box/pack No. items
<b>00 800</b>	Ø 60 - H 35	6/240
<b>00 802</b>	Ø 80 - H 40	6/144

Also available, on request, in self-extinguishing version in compliance with UL 94 VO Standard and resistant to abnormal heat and to fire up to 960°C in compliance with IEC 695-2-1

### IP 44 boxes

With cable glands and press-on lid



FLCO9200

Article	Internal dimensions (mm)	Box/pack No. items
<b>00 808</b>	65x65x32	3/168
<b>00 810</b>	80x80x40	5/100

Also available, on request, in self-extinguishing version in compliance with UL 94 VO Standard and resistant to abnormal heat and to fire up to 960°C in compliance with IEC 695-2-1

### IP 55 boxes

With cable glands and low screw-on lid



FLCO9198

Article	Internal dimensions (mm)	Screws	Box/pack No. items
<b>00 816</b>	100x100x50	in steel	1/54
<b>00 820</b>	105x70x50	in steel	1/70
<b>00 821</b>	100x100x80	in steel	1/40

### IP 55 boxes

With smooth walls and low screw-on lid



FLCO9204

Article	Internal dimensions (mm)	Screws	Box/pack No. items
<b>00 846</b>	100x100x50	in steel	1/60
<b>00 850</b>	105x70x50	in steel	1/100
<b>00 851</b>	100x100x80	in steel	1/40

# Boxes, equipment and various components

## IP 44 and IP 55 junction boxes in thermoplastic material

### IP 55 boxes

With cable glands and low screw-on lid



FLC09102

Article	Internal dimensions (mm)	Screws	Box/pack No. items
<b>00 822</b>	153x110x66	in steel	1/32
<b>00 824<sup>(1)</sup></b>	160x135x77	in steel	1/18
<b>00 826<sup>(1)</sup></b>	220x170x80 in therm. material		1/12
<b>00 828<sup>(1)</sup></b>	310x240x110 in therm. material		1/6

<sup>(1)</sup> can be wall-mounted using wall brackets art. 12 858

### IP 55 boxes

With cable glands walls and high screw-on lid



FLC09202

Article	Internal dimensions (mm)	Screws	Box/pack No. items
<b>00 830</b>	160x135x150	in steel	1/16
<b>00 832</b>	220x170x150 in therm. material		1/8
<b>00 834</b>	310x240x160 in therm. material		1/4

can be wall-mounted using wall brackets art. 12 858

### IP 55 boxes

With smooth walls and transparent low screw-on lid



FLC09203

Article	Internal dimensions (mm)	Screws	Box/pack No. items
<b>00 872</b>	153x110x66	in steel	1/34
<b>00 874<sup>(1)</sup></b>	160x135x77	In steel	1/24
<b>00 876<sup>(1)</sup></b>	220x170x80 in therm. material		1/12
<b>00 878<sup>(1)</sup></b>	310x240x110 in therm. material		1/6

<sup>(1)</sup> can be wall-mounted using wall brackets art. 12 858

5

### IP 55 boxes

With smooth walls and low screw-on lid



FLC09205

Article	Internal dimensions (mm)	Screws	Box/pack No. items
<b>00 852</b>	153x110x66	in steel	1/34
<b>00 854<sup>(1)</sup></b>	160x135x77	in steel	1/24
<b>00 856<sup>(1)</sup></b>	220x170x80 in therm. material		1/12
<b>00 858<sup>(1)</sup></b>	310x240x110 in therm. material		1/6

<sup>(1)</sup> can be wall-mounted using wall brackets art. 12 858

### IP 55 boxes

With smooth walls and high screw-on lid



FLC09206

Article	Internal dimensions (mm)	Screws	Box/pack No. items
<b>00 860</b>	160x135x150	in steel	1/16
<b>00 862</b>	220x170x150 in therm. material		1/8
<b>00 864</b>	310x240x160 in therm. material		1/4

can be wall-mounted using wall brackets art. 12 858

### IP 55 boxes

With smooth walls and transparent high screw-on lid



FLC09207

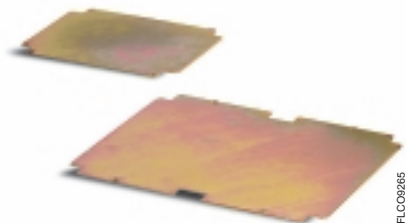
Article	Internal dimensions (mm)	Screws	Box/pack No. items
<b>00 880</b>	160x135x150	in steel	1/16
<b>00 882</b>	220x170x150 in therm. material		1/8
<b>00 884</b>	310x240x160 in therm. material		1/4

can be wall-mounted using wall brackets art. 12 858

## Boxes, equipment and various components

### Accessories for IP 44 and IP 55 junction boxes in thermoplastic material

#### Metal base plates



FLC09285

#### Cable clamps



FLC09286

Article	For boxes type	Box/pack No. items
<b>00 900</b>	00 824 - 00 830 - 00 874 00 854 - 00 860 - 00 880	1/10
<b>00 902</b>	00 826 - 00 832 - 00 876 00 856 - 00 862 - 00 882	1/5
<b>00 904</b>	00 828 - 00 834 - 00 878 00 858 - 00 864 - 00 884	1/5

Article	For conduit Ø (mm)	Box/pack No. items
<b>00 908</b>	20	100/1000
<b>00 910</b>	25	100/1000
<b>00 912</b>	32	50/300

#### Cable clamps and nuts for cable clamps



FLC09291



FLC09287

Article		Pitch Pg	Cable clamp Box/pack No. items	For cables diameter		Nuts x cable clamps Box/pack No. items
cable clamp	nut x cable clamp			Min. (mm)	Max. (mm)	
<b>00 931</b>	<b>00 941</b>	9	100/500	5	8	100/3000
<b>00 932</b>	<b>00 942</b>	11	100/500	7	10	100/3000
<b>00 933</b>	<b>00 943</b>	13,5	50/500	9	13	50/1500
<b>00 934</b>	<b>00 944</b>	16	50/250	13	16	50/1500
<b>00 935</b>	<b>00 945</b>	21	50/250	17	20	50/1500
<b>00 936</b>	<b>00 946</b>	29	25/150	21	26	50/500
<b>00 937</b>	<b>00 947</b>	36	25/75	30	34	25/300
<b>00 938</b>	<b>00 948</b>	42	15/60	40	43	25/300



# Boxes, equipment and various components

## Accessories for IP 44 and IP 55 junction boxes in thermoplastic material

### Conduit box connectors



Article	For conduit Ø (mm)	Box/pack No. items
<b>00 420</b>	16	50/1500
<b>00 421</b>	20	50/300
<b>00 422</b>	25	25/150
<b>00 423</b>	32	25/100
<b>00 424</b>	40	10/50
<b>00 425</b>	50	5/50

### Conduit clamps



Article	For conduit Ø (mm)	Box/pack No. items
<b>00 430</b>	16	50/1500
<b>00 431</b>	20	50/300
<b>00 432</b>	25	25/150
<b>00 433</b>	32	25/100
<b>00 434</b>	40	10/50
<b>00 435</b>	50	5/50

### Unions



Article	Ø (mm)	Box/pack No. items
<b>13 874</b>	23	50/1500
<b>13 875</b>	28.5	50/300
<b>13 876</b>	37	25/150

Tertiary/Industrial application



FLD0812





IMQ mark  
in compliance with CEI 23-48 Standard

# Boxes, equipment and various components

## IP 65 junction boxes in polycarbonate

### Technical characteristics

- degree of protection IP 65
- insulation class II 
- available in RAL 7035 grey
- in polycarbonate material, self-extinguishing and resistant to abnormal heat and fire up to 960° C (glow wire test) in compliance with IEC 695-2-1 Standard
- material with low halogen content
- dimensional stability under constant operating conditions from -25° to +115° C
- shock resistant 20 joules (IK 10 level)
- high resistance to UV rays
- perfectly symmetrical junction boxes with possibility of attaching the lid hinges, (using the special articulated screws supplied) on the right or left with 140° opening
- possibility of installation in environments with major risk in the event of fire (CEI 64-8 part 7 section 751 Standard) and in AD-FT environments (CEI 64-2 Standard, IV edition)
- boxes art. 12 808, 12 812, 12 814, 12 816 and 12 818 equipped with flanges for facilitated input of conduits and cables
- junction boxes produced in compliance with CEI 23-48 and IEC 670 Standards
- boxes supplied complete with:
  - 4 screw-cover caps to guarantee 
  - accessories for attaching the hinges on the front
  - 1 certification plate
  - instruction sheet



FLCOM42

## Boxes, equipment and various components

### IP 65 junction boxes in polycarbonate

**140x220x140 (mm)**



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 804</b>	140x220x140	1/14

**205x220x140 (mm)**



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 808</b>	205x220x140	1/9

**275x220x140 (mm)**



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 812</b>	275x220x140	1/6

**5**

**275x370x140 (mm)**



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 814</b>	275x370x140	1/4

**275x570x140 (mm)**



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 816</b>	275x570x140	1/2

**380x570x140 (mm)**



Article	Dimensions (mm) WxHxD	Box/pack No. items
<b>12 818</b>	380x570x140	1/2

# Boxes, equipment and various components

## Accessories for IP 65 junction boxes in polycarbonate

### Base plates

In aluminium-plated metal



Article	For boxes type	Box/pack No. items
<b>12 842</b>	12 804	1/10
<b>12 844</b>	12 808	1/10
<b>12 845</b>	12 812	1/10
<b>12 846</b>	12 814	1/5
<b>12 847</b>	12 816	1/5
<b>12 848</b>	12 818	1/5

### Base plates

In insulating material

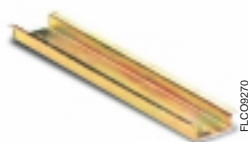


Article	For boxes type	Box/pack No. items
<b>12 832</b>	12 804	1/10
<b>12 834</b>	12 808	1/10
<b>12 835</b>	12 812	1/10
<b>12 836</b>	12 814	1/5
<b>12 837</b>	12 816	1/5
<b>12 838</b>	12 818	1/5

5

### DIN metal section bars

Complete with screws



Article	For boxes type	Box/pack No. items
<b>12 852</b>	12 804	50/600
<b>12 854</b>	12 808	30/360
<b>12 855</b>	12 812 – 12 814 – 12 816	50/200
<b>12 856</b>	12 818	50/200

### Wall brackets



Article	Description	Box/pack No. items
<b>12 858</b>	in insulating material	1/20

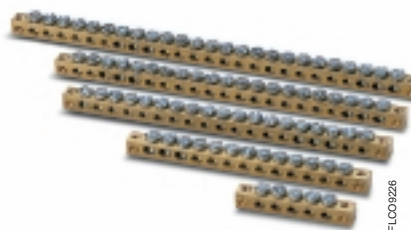
# Boxes, equipment and various components

## Accessories for IP 65 junction boxes in polycarbonate

### Terminal holders



### Terminal bars



Article	For boxes type	Box/pack No. items
<b>12 538</b>	12 804	12/360
<b>12 539</b>	12 808	12/360
<b>12 540</b>	12 812 – 12 814 – 12 816	12/144
<b>12 543</b>	12 818	12/108

The terminal board is completed by combining the necessary terminal bars to the terminal holders, taking care to keep the terminal bars separated from each other.

Article	Description N° of holes x Ø holes (mm) + N° holes x Ø holes (mm)	Box/pack No. items
<b>12 531</b>	5x4.5	1/20
<b>12 532</b>	10x4.5 + 3x5.6	1/20
<b>12 533</b>	16x4.5 + 3x5.6	1/20
<b>12 534</b>	15x4.5 + 6x5.6	1/20
<b>12 535</b>	19x4.5 + 6x5.6	1/20

The terminal bars can be installed on any kind of terminal holder; they are snapped onto these with 2 clips per bar, through two holes made at the ends of the bar itself.

### Recommended configuration

Boxes	Terminal holders Articles x quantity	Terminal bars Articles x quantity
12 804	12 538 x 2	12 531 x 2
12 808	12 539 x 2	12 531 x 2
12 812	12 540 x 1	12 531 x 1 12 532 x 1
12 814	12 540 x 2	12 533 x 2
12 816	12 540 x 2	12 534 x 2
12 818	12 543 x 2	12 535 x 2

Terminal holders and terminal bars are supplied separately. In this way, by inserting one or two terminal bars into the terminal holder you can create the best terminal for your requirements, with the advantage of obtaining a terminal block that is cheap as well as personalised, due to the fact that you only need to use material that is really necessary.

Some standard configurations are illustrated in the table.

All the possible configurations that can be created for each type of switchboard are given in the technical details.

# Boxes, equipment and various components

## Accessories for IP 65 junction boxes in polycarbonate

### Spare flanges



Article	For boxes type	Box/pack No. items
<b>12 600</b>	12 808	30/120
<b>12 601</b>	12 812 - 12 814 - 12 816	20/80
<b>12 602</b>	12 818	20/80

### Semi-flush-mounting frames



Article	For boxes type	Box/pack No. items
<b>12 590</b>	12 804	5/20
<b>12 591</b>	12 808	5/20
<b>12 592</b>	12 812	5/20
<b>12 593</b>	12 814	5/20
<b>12 594</b>	12 816	5/5
<b>12 595</b>	12 818	5/5

### Universal cutter

For drill



Article	Box/pack No. items
<b>12 894</b>	1/30

to be used for side branch connections

Residential/tertiary/industrial application



IMQ mark  
in compliance with CEI 23-48 Standards



# Boxes, equipment and various components

## IP 40 and IP 55 equipment and empty enclosures

### IP 40 equipment and empty enclosures

#### Technical characteristics

- IP 40 equipment and empty enclosures composed of base and cover, joined with safety screws with bivalent slotted head in stainless steel
- equipment and empty enclosures with cableway on the top
- equipment and enclosures designed to be installed with conduits and, using special accessories, with mini-trunkings (described in the Catalogue 604212)
- empty enclosures suitable for:
  - wiring accessories in the 8000 Vimar and Magic Bticino series
  - wiring accessories in the Idea Vimar and Living Bticino series
- IP 40 degree of protection
- insulation class II
- enclosures available in RAL 7035 grey
- in thermoplastic material, self-extinguishing and resistant to abnormal heat and fire up to 650°C (glow wire test) in compliance with IEC 695-2-1 Standard
- dimensional stability under operating conditions from -20° to +85°C
- high resistance to UV rays
- high resistance to shocks heat and chemical and atmospheric agents
- empty enclosures made in compliance with CEI 23-48 and IEC 670 Standards
- enclosures equipped with control equipment made in compliance with CEI 23-9 Standard
- enclosures equipped with bypass sockets made in compliance with CEI 23-16 Standard
- enclosures equipped with Schuko sockets made in compliance with CEI 23-5 Standard

### IP 55 equipment and empty enclosures

#### Technical characteristics

- IP 55 equipment and empty enclosures composed of base and cover, joined with safety screws with bivalent slotted head in stainless steel
- equipment and empty enclosures fitted with seal between the base and the cover; lid with transparent elastic membrane so than controls can be used even when the lid is closed
- equipment and empty enclosures with cableway on the top
- equipment and enclosures designed to be installed with conduits and, using special accessories, with mini-trunkings (described in the Catalogue 604212)
- empty enclosures suitable for:
  - wiring accessories in the 8000 Vimar and Magic Bticino series
  - wiring accessories in the Idea Vimar and Living Bticino series
- IP 55 degree of protection
- insulation class II
- enclosures available in RAL 7035 grey
- in thermoplastic material, self-extinguishing and resistant to abnormal heat and fire up to 650°C (glow wire test) in compliance with IEC 695-2-1 Standard
- dimensional stability under operating conditions from -20° to +85°C
- high resistance to UV rays
- high resistance to shocks, heat and chemical and atmospheric agents
- empty enclosures made in compliance with CEI 23-48 and IEC 670 Standards 5/15
- enclosures equipped with control equipment made in compliance with CEI 23-9 Standard
- enclosures equipped with bypass sockets made in compliance with CEI 23-16 Standard
- enclosures equipped with Schuko sockets made in compliance with CEI 23-5 Standard



FLC09847

# Boxes, equipment and various components

## IP 40 equipment and empty enclosures

### IP 40 equipment

Equipped with Vimar 8000 series wiring accessories



Article	Description	Box/pack No. items
00 500	10 A circuit breaker	10/40
00 501	10 A switch	10/40
00 502	10 A inverter	10/40
00 503	16 A bi-polar circuit breaker	10/40
00 504	10 A NO push button	10/40
00 505	10 A double switch	10/40

Article	Description	Box/pack No. items
00 510	bypass socket 2x16 A + earth	10/40
00 511	double bypass socket 2x16 A + earth	10/40
00 512	bipolar circuit breaker + bypass socket 2x16 A + earth	10/40
00 513	Schuko socket 10/16 A + side earth	10/40

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### IP 40 empty enclosures

For Vimar 8000 series and Magic Bticino (\*) wiring accessories



Article	Description	Box/pack No. items
00 541	1 compartment	10/40
00 542	2 compartments	10/40
00 543	3 compartments	10/30
00 544	4 compartments	10/20
00 546	6 compartments	10/20

(\*) can be equipped with Magic Bticino wiring accessories using the adapter supplied

### IP 40 empty enclosures

For Vimar 8000 series and Living Bticino (\*) wiring accessories



Article	Description	Box/pack No. items
00 641	1 compartment	10/40
00 642	2 compartments	10/40
00 643	3 compartments	10/30
00 644	4 compartments	10/20
00 646	6 compartments	10/20

(\*) can be equipped with Living Bticino wiring accessories using the adapter supplied

# Boxes, equipment and various components

## IP 55 equipment and empty enclosures

### IP 55 equipment

Equipped with Vimar 8000 series wiring accessories



FLCO9176



FLCO9177

Article	Description	Box/pack No. items
00 520	10 A circuit breaker	10/40
00 521	10 A switch	10/40
00 522	10 A inverter	10/40
00 523	16 A bi-polar circuit breaker	10/40
00 524	10 A NO push button	10/40
00 525	10 A double switch	10/40

Article	Description	Box/pack No. items
00 530	bypass socket 2x16 A + earth	10/40
00 531	double bypass socket 2x16 A + earth	10/40
00 532	bipolar circuit breaker + bypass socket 2x16 A + earth	10/40
00 533	Schuko socket 10/16 A + side earth	10/40

### IP 55 empty enclosures

For Vimar 8000 series and Magic Bticino (\*) wiring accessories



FLCO9178

FLCO9179

FLCO9180



FLCO9181

FLCO9182

Article	Description	Box/pack No. items
00 551	1 compartment	10/40
00 552	2 compartments	10/40
00 553	3 compartments	10/30
00 554	4 compartments	10/20
00 556	6 compartments	10/20

(\*) can be equipped with Magic Bticino wiring accessories using the adapter supplied

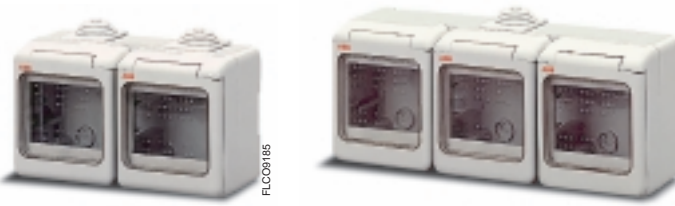
### IP 55 empty enclosures

For Vimar 8000 series and Living Bticino (\*) wiring accessories



FLCO9183

FLCO9184



FLCO9185

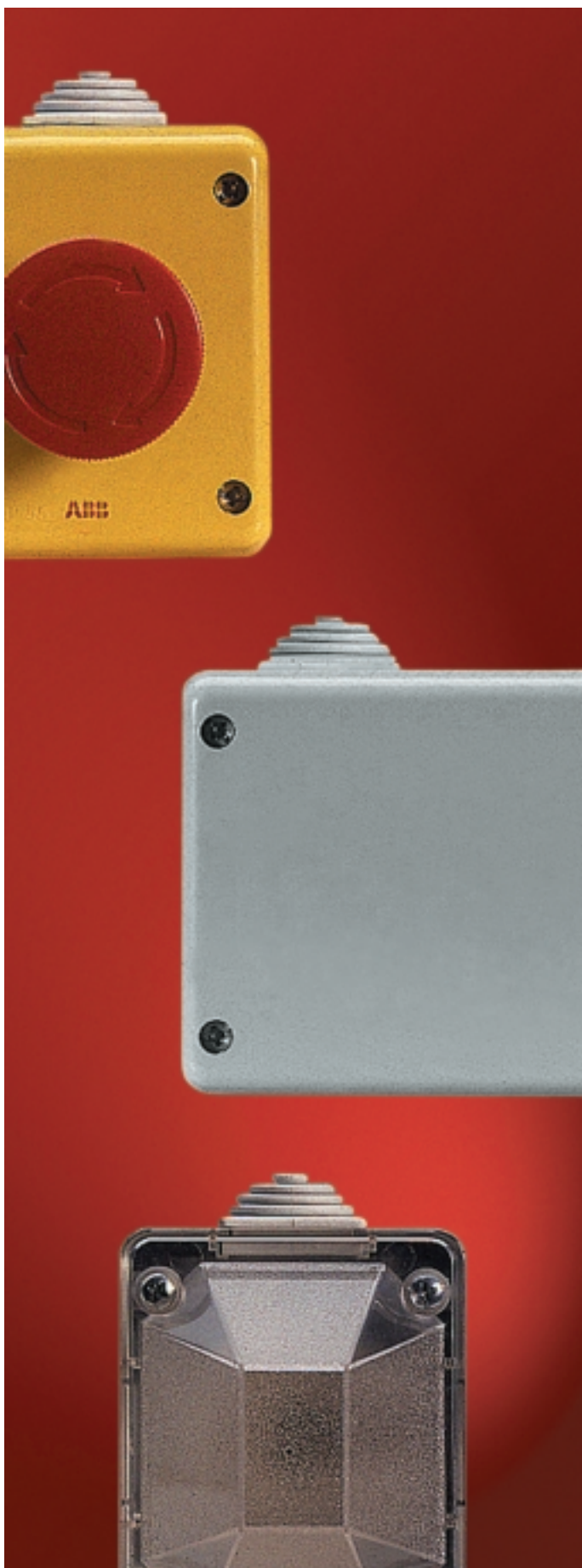
FLCO9186

Article	Description	Box/pack No. items
00 651	1 compartment	10/40
00 652	2 compartments	10/40
00 654	4 compartments	10/20
00 656	6 compartments	10/20

(\*) can be equipped with Living Bticino wiring accessories using the adapter supplied

# Boxes, equipment and various components

## Various equipment and components



### Technical characteristics

ABB ensures a complete and varied supply of useful components to complete the installation of circuits. Some of the available components are:

- wall sockets
- mushroom push buttons
- warning lights
- flush-mounting enclosures and boxes

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Overall dimensions ..... page 10/36

### IP 44 wall sockets in compliance with IEC 309-1 Standard



Article	Description	Box/pack No. items
00 562	2p+T 16 A 220 V	12/36
00 564	2p+T 16 A 220 V	12/36

# Boxes, equipment and various components

## Various equipment and components

### IP 40 warning lights



FLCO9183



FLCO9183

Article	Description	Box/pack No. items
00 570	transparent diffuser	10/30
00 572	red diffuser	10/30
00 573	green diffuser	10/30

### IP 55 mushroom push buttons



FLCO9188



FLCO9182

Article	Description	Box/pack No. items
00 770	red mushroom push button on grey flange	8/32
00 771	red mushroom push button on yellow flange with rotating reset	8/32

Contacts : 1NO+1NC  
 Rated current (In) : 10 A  
 Rated voltage(Vn) : 380 V  
 Dimensions : 80x65x88 mm

### IP 55 junction boxes



FLCO9190



FLCO9194

Article	Dimensions (mm) WxHxD	Box/pack No. items
00 580	63 x 78 x 55	10/40
00 581	128 x 78 x 55	10/20

### IP 55 empty, flush-mounting enclosures

For Vimar 8000 series and Magic Bticino wiring accessories



FLCO9196

Article	Colour	Description	Box/pack No. items
00 578	grey	3 compartments	10/40
00 579	white	3 compartments	10/40

IMQ mark in compliance with CEI 23-48 Standard

### Flush-mounting boxes

For IP40 and IP55 equipment and empty enclosures



FLCO9197

Article	Description	Box/pack No. items
00 583	2 compartments	10/60

### Connector elements



FLCO9284

FLCO9117

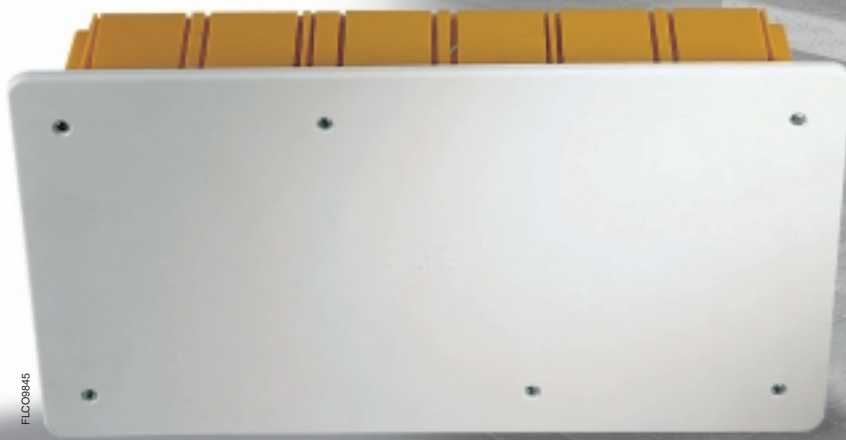
Article	Colour	Description	Box/pack No. items
00 585	grey	cableway x conduits ø 16-20 mm	100/600
00 587	grey	adapter x conduit clamp ø 16-20 mm	100/600
00 591	grey	union joint	100/600
00 592	-	earth terminal	100/6000
00 595	grey	threaded connector M16x1.5	100/600
00 596	grey	threaded connector M20x1.5	100/60



## Index

Wiring accessories and junction boxes in thermoplastic material	6/3
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Residential/tertiary application



FLO0845



IMQ mark  
in compliance with CEI 23-48 Standards

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## Wiring accessories and junction boxes

### Wiring accessories and junction boxes in thermoplastic material

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#### Technical characteristics

- in thermoplastic material, self-extinguishing and resistant to abnormal heat and fire up to 650° C (glow wire test) in compliance with IEC 695-2-1 Standard
- large push-in windows
- lid in RAL 9010 with self-threaded screws included in the supply
- wiring accessories and junction boxes made in compliance with CEI 23-48 and IEC 670 Standards



F.LC0915



## Wiring accessories and junction boxes

### Wiring accessories and junction boxes in thermoplastic material

#### Truncated-conical box for wiring accessories



FLCO08214

Article	Description	Box/pack No. items
00 050	truncated-conical box Ø 65 mm	- /350

#### Round box for wiring accessories



FLCO08215

Article	Description	Box/pack No. items
00 051	Round box Ø 85 mm	- /230

#### Rectangular box for wiring accessories



FLCO08216

Article	Description	Box/pack No. items
00 052	rectangular box 3 wiring accessories inter. 83.5 mm	- /500
00 053	rectangular box 4 wiring accessories inter. 108 mm	- /150

#### Box for telephone jack



FLCO08217

Article	Description	Box/pack No. items
00 054 (*)	box for telephone jacks	- /189

(\*) complete with lid

#### Junction boxes



FLCO08220



FLCO08221



FLCO08222



FLCO08223



FLCO08224



FLCO08225

Article	Dimensions (mm) WxHxD	Box/pack No. items
00 070	92x92x45	- /105
00 071	120x100x50	- /72
00 072	120x100x70	- /48
00 073	152x100x70	- /42
00 074	160x130x70	- /32

Article	Dimensions (mm) WxHxD	Box/pack No. items
00 075	196x152x70	- /19
00 076	294x152x70	- /15
00 077	392x152x70	- /11
00 078	480x160x70	- /10

the separator art. 00 090 can be inserted  
for all articles 00 090

## Wiring accessories and junction boxes

### Wiring accessories and junction boxes in thermoplastic material

#### Spare lids for wiring accessories boxes



FL009218

Article	Description	Box/pack No. items
00 055	lid with clips for Ø 65 mm	25/250
00 056	lid with clips for Ø 85 mm	20/160



FL009219

Article	Description	Box/pack No. items
00 059	rectangular lid for box inter. 83.5 mm	20/300

#### Spare lids for junction boxes



FL009272

Article	For boxes type	Box/pack No. items
00 091	00 070	20/200
00 092	00 071 – 00 072	20/140
00 093	00 073	10/100
00 094	00 074	10/80
00 095	00 075	10/40
00 096	00 076	10/40
00 097	00 077	10/40
00 098	00 078	10/40

all articles complete with self-tapping screws

#### Separator for junction boxes



FL009271

Article	Box/Pack No. items
00 090	100/400



## Index

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### Safety sockets in compliance with IEC 309-1 Standard

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# Sockets and plugs in compliance with IEC 309-1 Standard

## Summary table

Rated current	Poles	Rated voltage	Position of earth contact (reference hours)	Movable plugs	Movable angled plugs	Movable sockets	Angled switch-board sockets
				IP 44	IP 44	IP 44	IP 44
16 A	2p+E	110 V	4 h	13 559	-	13 539	13 499
	3p+E	110 V	4 h	13 562	-	13 542	13 502
	2p+E	220 V	6 h	13 561	13 901	13 541	13 501
	3p+E	220 V	9 h	13 563	13 903	13 543	13 503
	3p+E	380 V	6 h	13 564	13 904	13 544	13 504
	3p+N+E	380 V	6 h	13 567	-	13 547	13 507
	3p+E	500 V	7 h	13 571	-	13 551	13 511
	3p+N+E	500 V	7 h	13 572	-	13 552	13 512
32 A	2p+E	110 V	4 h	13 573	-	13 553	13 513
	3p+E	110 V	4 h	13 574	-	13 554	13 514
	2p+E	220 V	6 h	13 565	-	13 545	13 505
	3p+E	220 V	9 h	13 568	-	13 548	13 508
	3p+E	380 V	6 h	13 569	-	13 549	13 509
	3p+N+E	380 V	6 h	13 570	-	13 550	13 510
	3p+E	500 V	7 h	13 575	-	13 555	13 515
	3p+N+E	500 V	7 h	13 576	-	13 556	13 516
63 A	2p+E	110 V	4 h	-	-	-	-
	2p+E	220 V	6 h	-	-	-	-
	3p+E	380 V	6 h	-	-	-	-
	3p+N+E	380 V	6 h	-	-	-	-
	3p+E	500 V	7 h	-	-	-	-
	3p+N+E	500 V	7 h	-	-	-	-
16 A	2p	24 V	w/ref	13 400	-	13 410	13 420
	3p	24 V	w/ref	13 401	-	13 411	13 421
	2p	48 V	12 h	13 402	-	13 412	13 422
	3p	48 V	12 h	13 403	-	13 413	13 423
32 A	2p	24 V	w/ref	13 404	-	13 414	13 424
	3p	24 V	w/ref	13 405	-	13 415	13 425
	2p	48 V	12 h	13 406	-	13 416	13 426
	3p	48 V	12 h	13 407	-	13 417	13 427

Movable plugs

Movable angled plugs

Movable sockets

Angled switch-board sockets

IP 44

IP 44

IP 44

IP 44



FLPR9001



FLPR9002



FLPR9003



FLPR9004

7

# Sockets and plugs in compliance with IEC 309-1 Standard

## Summary table

Angled wall sockets IP 44	Horizontal wall sockets IP 44	Movable plugs IP 67	Movable sockets IP 67	Angled switch-board sockets IP 67	Angled wall sockets IP 67
					
13 451	-	13 577	13 599	13 517	13 477
13 452	-	13 578	13 600	13 518	13 478
13 461	00 562	13 581	13 601	13 521	13 481
13 463	-	13 583	13 603	13 523	13 483
13 464	00 564	13 584	13 604	13 524	13 484
13 467	-	13 587	13 607	13 527	13 487
13 453	-	13 579	13 619	13 519	13 479
13 454	-	13 580	13 620	13 520	13 480
13 455	-	13 582	13 602	13 522	13 482
13 456	-	13 586	13 606	13 526	13 486
13 465	-	13 585	13 605	13 525	13 485
13 468	-	13 588	13 608	13 528	13 488
13 469	-	13 589	13 609	13 529	13 489
13 470	-	13 590	13 610	13 530	13 490
13 457	-	13 591	13 611	13 531	13 491
13 458	-	13 592	13 612	13 532	13 492
-	-	-	-	-	-
-	-	13 594	13 614	13 534	13 494
-	-	13 595	13 615	13 535	13 495
-	-	13 596	13 616	13 536	13 496
-	-	13 597	13 617	13 537	13 497
-	-	13 598	13 618	13 538	13 498
13 430	-	-	-	-	-
13 431	-	-	-	-	-
13 432	-	-	-	-	-
13 433	-	-	-	-	-
13 434	-	-	-	-	-
13 435	-	-	-	-	-
13 436	-	-	-	-	-
13 437	-	-	-	-	-

Tertiary/Industrial application

FLPR801



IMQ mark  
in compliance with CEI 23-12 Standards

# Sockets and plugs in compliance with IEC 309-1 Standard

## IP 44 sockets and plugs

### Technical characteristics

- degree of protection IP 44
- distinguishing colour according to usage
- made in self-extinguishing techno-polymer, resistant to abnormal heat and fire up to 850°C (glow wire test) in compliance with IEC 695-2-1 Standard
- dimensional stability under constant operating conditions from -20° to +85°C
- shock resistant 6 joules (IK08 level)
- resistant to chemical agents (water, saline solutions, acids, mineral bases and oils), atmospheric agents
- possibility of installation in environments with major risk of fire (Standard CEI 64-8 part 7, section 751) and in AD-FT environments (Standard CEI 64-2, IV edition)
- versions not included in the list can be supplied on request
- sockets and plugs made in compliance with Standards CEI 23-12 and CEI EN 60309-1 and 2
- movable sockets and plugs complete with cableway



FLPR812

# Sockets and plugs in compliance with IEC 309-1 Standard

## IP 44 sockets and plugs

### Movable plugs



### Movable sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 559</b>	2p+E	110 V	4 h	10/30
	<b>13 562</b>	3p+E	110 V	4 h	10/30
	<b>13 561</b>	2p+E	220 V	6 h	10/30
	<b>13 563</b>	3p+E	220 V	9 h	10/30
	<b>13 564</b>	3p+E	380 V	6 h	10/30
	<b>13 567</b>	3p+N+E	380 V	6 h	10/30
	<b>13 571</b>	3p+E	500 V	7 h	10/20
	<b>13 572</b>	3p+N+E	500 V	7 h	10/20
<b>32 A</b>	<b>13 573</b>	2p+E	110 V	4 h	10/30
	<b>13 574</b>	3p+E	110 V	4 h	10/30
	<b>13 565</b>	2p+E	220 V	6 h	10/30
	<b>13 568</b>	3p+E	220 V	9 h	10/30
	<b>13 569</b>	3p+E	380 V	6 h	10/30
	<b>13 570</b>	3p+N+E	380 V	6 h	10/20
	<b>13 575</b>	3p+E	500 V	7 h	10/20
	<b>13 576</b>	3p+N+E	500 V	7 h	10/20

	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 539</b>	2p+E	110 V	4 h	10/30
	<b>13 542</b>	3p+E	110 V	4 h	10/30
	<b>13 541</b>	2p+E	220 V	6 h	10/30
	<b>13 543</b>	3p+E	220 V	9 h	10/30
	<b>13 544</b>	3p+E	380 V	6 h	10/30
	<b>13 547</b>	3p+N+E	380 V	6 h	10/30
	<b>13 551</b>	3p+E	500 V	7 h	10/20
	<b>13 552</b>	3p+N+E	500 V	7 h	10/20
<b>32 A</b>	<b>13 553</b>	2p+E	110 V	4 h	10/20
	<b>13 554</b>	3p+E	110 V	4 h	10/20
	<b>13 545</b>	2p+E	220 V	6 h	10/20
	<b>13 548</b>	3p+E	220 V	9 h	10/20
	<b>13 549</b>	3p+E	380 V	6 h	10/20
	<b>13 550</b>	3p+N+E	380 V	6 h	5/10
	<b>13 555</b>	3p+E	500 V	7 h	10/20
	<b>13 556</b>	3p+N+E	500 V	7 h	5/10

### Horizontal wall sockets

220 V – 16 A



### Horizontal wall sockets

380 V – 16 A



Article	Poles	Rated voltage	Box/pack No. items
<b>00 562</b>	2p+E	220 V	12/36

Article	Poles	Rated voltage	Box/pack No. items
<b>00 564</b>	3p+E	380 V	12/36



# Sockets and plugs in compliance with IEC 309-1 Standard

## IP 44 sockets and plugs

### Angled switchboard sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
16 A	13 499	2p+E	110 V	4 h	10/30
	13 502	3p+E	110 V	4 h	10/30
	13 501	2p+E	220 V	6 h	10/30
	13 503	3p+E	220 V	9 h	10/30
	13 504	3p+E	380 V	6 h	10/30
	13 507	3p+N+E	380 V	6 h	10/20
	13 511	3p+E	500 V	7 h	10/30
	13 512	3p+N+E	500 V	7 h	10/20
32 A	13 513	2p+E	110 V	4 h	5/15
	13 514	3p+E	110 V	4 h	5/15
	13 505	2p+E	220 V	6 h	5/15
	13 508	3p+E	220 V	9 h	5/15
	13 509	3p+E	380 V	6 h	5/15
	13 510	3p+N+E	380 V	6 h	5/15
	13 515	3p+E	500 V	7 h	5/15
	13 516	3p+N+E	500 V	7 h	5/15

### Angled wall sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
16 A	13 451	2p+E	110 V	4 h	10/20
	13 452	3p+E	110 V	4 h	10/20
	13 461	2p+E	220 V	6 h	10/20
	13 463	3p+E	220 V	9 h	10/20
	13 464	3p+E	380 V	6 h	10/20
	13 467	3p+N+E	380 V	6 h	5/10
	13 453	3p+E	500 V	7 h	10/20
	13 454	3p+N+E	500 V	7 h	5/10
32 A	13 455	2p+E	110 V	4 h	5/10
	13 456	3p+E	110 V	4 h	5/10
	13 465	2p+E	220 V	6 h	5/10
	13 468	3p+E	220 V	9 h	5/10
	13 469	3p+E	380 V	6 h	5/10
	13 470	3p+N+E	380 V	6 h	5/10
	13 457	3p+E	500 V	4 h	5/10
	13 458	3p+N+E	500 V	4 h	5/10

### Movable angled plugs

16 A



Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
13 901	2p+E	220 V	6 h	15/45
13 903	3p+E	220 V	9 h	10/30
13 904	3p+E	380 V	6 h	10/30

### Residential-industrial adapters



Article	Description		Box/pack No. items
	IEC 309 plug side	Residential plug side	
13 908	16A 2p+E 220V 6h	1 bypass socket 10/16 A 2p+E	10/30
13 909	16A 2p+E 220V 6h	2 bypass sockets 10/16 A 2p+E	10/30
13 910	16A 2p+E 220V 6h	1 schuko type socket 10/16 A 2p+E	10/30

Tertiary/Industrial application

FLPR8002



IMQ mark  
in compliance with CEI 23-12 Standards

# Sockets and plugs in compliance with IEC 309-1 Standard

## IP 67 sockets and plugs

### Technical characteristics

- degree of protection IP 67
- distinctive colour according to usage
- made in self-extinguishing techno-polymer, resistant to abnormal heat and fire up to 850°C (glow wire test) in compliance with IEC 695-2-1 Standard
- dimensional stability under constant operating conditions from -20° to +85°C
- shock resistant 6 joules (IK08 level)
- resistant to chemical agents (water, saline solutions, acids, mineral bases and oils) and atmospheric agents
- possibility of installation in environments with major risk of fire (Standard CEI 64-8 part 7, section 751) and in AD-FT environments (Standard CEI 64-2, IV edition)
- versions not included in the list can be supplied on request
- sockets and plugs made in compliance with Standards CEI 23-12 and CEI EN 60309-1 and 2
- movable sockets and plugs complete with cableway



ELPR0813

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# Sockets and plugs in compliance with IEC 309-1 Standard

## IP 67 sockets and plugs

### Movable plugs



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 577</b>	2p+E	110 V	4 h	10/30
	<b>13 578</b>	3p+E	110 V	4 h	10/30
	<b>13 581</b>	2p+E	220 V	6 h	10/30
	<b>13 583</b>	3p+E	220 V	9 h	10/30
	<b>13 584</b>	3p+E	380 V	6 h	10/30
	<b>13 587</b>	3p+N+E	380 V	6 h	5/10
	<b>13 579</b>	3p+E	500 V	7 h	5/10
	<b>13 580</b>	3p+N+E	500 V	7 h	5/10
<b>32 A</b>	<b>13 582</b>	2p+E	110 V	4 h	5/10
	<b>13 586</b>	3p+E	110 V	4 h	5/10
	<b>13 585</b>	2p+E	220 V	6 h	5/10
	<b>13 588</b>	3p+E	220 V	9 h	5/10
	<b>13 589</b>	3p+E	380 V	6 h	5/10
	<b>13 590</b>	3p+N+E	380 V	6 h	5/10
	<b>13 591</b>	3p+E	500 V	7 h	5/10
	<b>13 592</b>	3p+N+E	500 V	7 h	5/10

### Movable sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 599</b>	2p+E	110 V	4 h	10/30
	<b>13 600</b>	3p+E	110 V	4 h	10/30
	<b>13 601</b>	2p+E	220 V	6 h	10/30
	<b>13 603</b>	3p+E	220 V	9 h	10/20
	<b>13 604</b>	3p+E	380 V	6 h	10/20
	<b>13 607</b>	3p+N+E	380 V	6 h	5/10
	<b>13 619</b>	3p+E	500 V	7 h	10/20
	<b>13 620</b>	3p+N+E	500 V	7 h	5/10
<b>32 A</b>	<b>13 602</b>	2p+E	110 V	4 h	5/10
	<b>13 606</b>	3p+E	110 V	4 h	5/10
	<b>13 605</b>	2p+E	220 V	6 h	5/10
	<b>13 608</b>	3p+E	220 V	9 h	5/10
	<b>13 609</b>	3p+E	380 V	6 h	5/10
	<b>13 610</b>	3p+N+E	380 V	6 h	5/10
	<b>13 611</b>	3p+E	500 V	7 h	5/10
	<b>13 612</b>	3p+N+E	500 V	7 h	5/10

### Movable plugs



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>63A</b>	<b>13 594</b>	2p+E	220 V	6 h	1-/8
	<b>13 595</b>	3p+E	380 V	6 h	1-/8
	<b>13 596</b>	3p+N+E	380 V	6 h	1-/8
	<b>13 597</b>	3p+E	500 V	7 h	1-/8
	<b>13 598</b>	3p+N+E	500 V	7 h	1-/8

### Movable sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>63 A</b>	<b>13 614</b>	2p+E	220 V	6 h	1/8
	<b>13 615</b>	3p+E	380 V	6 h	1/8
	<b>13 616</b>	3p+N+E	380 V	6 h	1/8
	<b>13 617</b>	3p+E	500 V	7 h	1/8
	<b>13 618</b>	3p+N+E	500 V	7 h	1/8

# Sockets and plugs in compliance with IEC 309-1 Standard IP 67 sockets and plugs

## Angled switchboard sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 517</b>	2p+E	110 V	4 h	10/30
	<b>13 518</b>	3p+E	110 V	4 h	10/30
	<b>13 521</b>	2p+E	220 V	6 h	10/30
	<b>13 523</b>	3p+E	220 V	9 h	10/30
	<b>13 524</b>	3p+E	380 V	6 h	10/30
	<b>13 527</b>	3p+N+E	380 V	6 h	10/29
	<b>13 519</b>	3p+E	500 V	7 h	10/20
	<b>13 520</b>	3p+N+E	500 V	7 h	10/20
<b>32 A</b>	<b>13 522</b>	2p+E	110 V	4 h	5/10
	<b>13 526</b>	3p+E	110 V	4 h	5/10
	<b>13 525</b>	2p+E	220 V	6 h	5/10
	<b>13 528</b>	3p+E	220 V	9 h	5/10
	<b>13 529</b>	3p+E	380 V	6 h	5/10
	<b>13 530</b>	3p+N+E	380 V	6 h	5/10
	<b>13 531</b>	3p+E	500 V	4 h	5/10
	<b>13 532</b>	3p+N+E	500 V	4 h	5/10

## Angled wall sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items	
<b>16 A</b>	<b>13 477</b>	2p+E	110 V	4 h	10/20	
	<b>13 478</b>	3p+E	110 V	4 h	10/20	
	<b>13 481</b>	2p+E	220 V	6 h	10/20	
	<b>13 483</b>	3p+E	220 V	9 h	10/20	
	<b>13 484</b>	3p+E	380 V	6 h	10/20	
	<b>13 487</b>	3p+N+E	380 V	6 h	5/10	
	<b>13 479</b>	3p+E	500 V	7 h	10/20	
	<b>13 480</b>	3p+N+E	500 V	7 h	5/10	
	<b>32 A</b>	<b>13 482</b>	2p+E	110 V	4 h	5/10
		<b>13 486</b>	3p+E	110 V	4 h	5/10
<b>13 485</b>		2p+E	220 V	6 h	5/10	
<b>13 488</b>		3p+E	220 V	9 h	5/10	
<b>13 489</b>		3p+E	380 V	6 h	5/10	
<b>13 490</b>		3p+N+E	380 V	6 h	5/10	
<b>13 491</b>		3p+E	500 V	7 h	5/10	
<b>13 492</b>		3p+N+E	500 V	7 h	5/10	

## Angled switchboard sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>63 A</b>	<b>13 534</b>	2p+E	220 V	6 h	1/15
	<b>13 535</b>	3p+E	380 V	6 h	1/15
	<b>13 536</b>	3p+N+E	380 V	6 h	1/15
	<b>13 537</b>	3p+E	500 V	7 h	1/15
	<b>13 538</b>	3p+N+E	500 V	7 h	1/15

## Angled wall sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>63 A</b>	<b>13 494</b>	2p+E	220 V	6 h	1/4
	<b>13 495</b>	3p+E	380 V	6 h	1/4
	<b>13 496</b>	3p+N+E	380 V	6 h	1/4
	<b>13 497</b>	3p+E	500 V	7 h	1/4
	<b>13 498</b>	3p+N+E	500 V	7 h	1/4

Tertiary/Industrial application



# Sockets and plugs in compliance with IEC 309-1 Standard

## IP 44 ultra-low voltage sockets and plugs

### Technical characteristics

- degree of protection IP 44
- distinctive colour according to usage
- made in self-extinguishing techno-polymer, resistant to abnormal heat and fire up to 850°C (glow wire test) in compliance with IEC 695-2-1 Standard
- dimensional stability under constant operating conditions from -20° to +85°C
- shock resistant 6 joules (IK08 level)
- resistant to chemical agents (water, saline solutions, acids, mineral bases and oils) atmospheric agents
- possibility of installation in environments with major risk of fire (Standard CEI 64-8 part 7, section 751) and in AD-FT environments (Standard CEI 64-2, IV edition)
- sockets and plugs made in compliance with Standards CEI 23-12 and CEI EN 60309-1 and 2
- movable sockets and plugs complete with cableway



FLJPR3814

# Sockets and plugs in compliance with IEC 309-1 Standard

## IP 44 ultra-low voltage sockets and plugs

### Movable plugs



### Movable sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 400</b>	2p	24 V	without reference	10/30
	<b>13 401</b>	3p	24 V	without reference	10/30
	<b>13 402</b>	2p	42 V	12 h	10/30
	<b>13 403</b>	3p	42 V	12 h	10/30
<b>32 A</b>	<b>13 404</b>	2p	24 V	without reference	10/30
	<b>13 405</b>	3p	24 V	without reference	10/30
	<b>13 406</b>	2p	42 V	12 h	10/30
	<b>13 407</b>	3p	42 V	12 h	10/30

	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 410</b>	2p	24 V	without reference	10/30
	<b>13 411</b>	3p	24 V	without reference	10/30
	<b>13 412</b>	2p	42 V	12 h	10/30
	<b>13 413</b>	3p	42 V	12 h	10/30
<b>32 A</b>	<b>13 414</b>	2p	24 V	without reference	10/30
	<b>13 415</b>	3p	24 V	without reference	10/30
	<b>13 416</b>	2p	42 V	12 h	10/30
	<b>13 417</b>	3p	42 V	12 h	10/30



# Sockets and plugs in compliance with IEC 309-1 Standard

## IP 44 ultra-low voltage sockets and plugs

### Angled switchboard sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 420</b>	2p	24 V	without reference	10/30
	<b>13 421</b>	3p	24 V	without reference	10/30
	<b>13 422</b>	2p	42 V	12 h	10/30
	<b>13 423</b>	3p	42 V	12 h	10/30
<b>32 A</b>	<b>13 424</b>	2p	24 V	without reference	10/30
	<b>13 425</b>	3p	24 V	without reference	10/30
	<b>13 426</b>	2p	42 V	12 h	10/30
	<b>13 427</b>	3p	42 V	12 h	10/30





### Angled wall sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 430</b>	2p	24 V	without reference	10/20
	<b>13 431</b>	3p	24 V	without reference	10/20
	<b>13 432</b>	2p	42 V	12 h	10/20
	<b>13 433</b>	3p	42 V	12 h	10/20
	<b>32 A</b>	<b>13 434</b>	2p	24 V	without reference
<b>32 A</b>	<b>13 435</b>	3p	24 V	without reference	10/20
	<b>13 436</b>	2p	42 V	12 h	10/20
	<b>13 437</b>	3p	42 V	12 h	10/20







## Safety sockets in compliance with IEC 309-1 Standard

### Summary table

Rated current	Poles	Rated voltage	Position earth contact (reference hours)	Vertical flush-mounting sockets with locking switch	Vertical wall-mounting sockets with locking switch	Vertical flush-mounting sockets with locking switch	Vertical wall-mounting sockets with locking switch	Horizontal wall-mounting sockets with locking switch
				IP 44	IP 44	IP 66	IP 66	IP 44
16 A	2p+E	220 V	6 h					
	3p+E		9 h	13 621	13 641	13 661	13 681	13 642
	3p+E	380 V	6 h	13 624	13 644	13 664	13 684	13 645
	3p+N+E		6 h	13 627	13 647	13 667	13 687	13 648
			6 h	13 629	13 649	13 669	13 689	13 650
32 A	2p+E	220 V	6 h					
	3p+E		9 h	13 631	13 651	13 671	13 691	13 652
	3p+E	380 V	6 h	13 634	13 654	13 674	13 694	13 655
	3p+N+E		6 h	13 637	13 657	13 677	13 697	13 658
			6 h	13 639	13 659	13 679	13 699	13 660
63 A	2p+E	380 V	6 h	-	-	-	-	-
	3p+E		6 h	-	-	-	-	-
	3p+N+E		6 h	-	-	-	-	-

## Safety sockets in compliance with IEC 309-1 Standard

### Summary table

Horizontal wall-mounting sockets with locking switch and fuse-holder IP 44	Horizontal wall-mounting sockets with locking switch IP 55	Horizontal wall-mounting sockets with locking switch and fuse-holder IP 55	Wall-mounting sockets with locking switch and fuse-holder IP 44	Wall-mounting sockets with locking switch and fuse-holder IP 55	Wall-mounting sockets with locking switch and DIN EN 50022 rail IP 55
					
13 702	13 682	13 732	13 701	13 731	13 761
13 705	13 685	13 735	13 704	13 734	13 764
13 708	13 688	13 738	13 707	13 737	13 767
13 710	13 690	13 740	13 709	13 739	13 769
13 712	13 692	13 742	13 711	13 741	13 771
13 715	13 695	13 745	13 714	13 744	13 774
13 718	13 698	13 748	13 717	13 747	13 777
13 720	13 700	13 750	13 719	13 749	13 779
-	-	-	13 721	13 724	13 727
-	-	-	13 722	13 725	13 728
-	-	-	13 723	13 726	13 729

Tertiary/Industrial application



FLPR8804




IMQ mark  
in compliance with CEI 23-12 Standards

# Safety sockets in compliance with IEC 309-1 Standard

## Vertical sockets with locking switch

### Technical characteristics

- degree of protection IP 44 and IP 66, depending on the version
- supplied in the following versions:
  - flush-mounting
  - wall-mounting
- available in RAL 7035 grey
- made in self-extinguishing techno-polymer, resistant to abnormal heat and fire up to 850°C (glow wire test) in compliance with IEC 695-2-1 Standard
- dimensional stability under constant operating conditions from -20° to +85°C
- shock resistant 6 joules (IK08 level)
- mechanical interlocking so that the circuit breaker can be used only when the plug is pushed in completely
- the plug can be pulled out only when the locking switch is in the "0" position
- locking switch can be padlocked in the "0" position
- possibility of installation in environments with major risk of fire (Standard CEI 64-8 part 7, section 751) and in AD-FT environments (Standard CEI 64-2, IV edition)
- sockets made in compliance with Standards CEI 23-12
- flush-mounting sockets supplied with:
  - 1 seal
  - 1 drilling template
- wall-mounting sockets supplied with:
  - 1 cableway (IP44 versions)
  - 1 cable clamp (IP66 versions)
  - 4 screw cover caps to guarantee 



FLO08852

# Safety sockets in compliance with IEC 309-1 Standard

## Vertical sockets with locking switch

### Vertical IP 44 flush-mounting sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 621</b>	2p+E	220 V	6 h	1/7
	<b>13 624</b>	3p+E	220 V	9 h	1/7
	<b>13 627</b>	3p+E	380 V	6 h	1/7
	<b>13 629</b>	3p+N+E	380 V	6 h	1/7
<b>32 A</b>	<b>13 631</b>	2p+E	220 V	6 h	1/7
	<b>13 634</b>	3p+E	220 V	9 h	1/7
	<b>13 637</b>	3p+E	380 V	6 h	1/7
	<b>13 639</b>	3p+N+E	380 V	6 h	1/7

### Vertical IP 44 wall-mounting sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 641</b>	2p+E	220 V	6 h	1/7
	<b>13 644</b>	3p+E	220 V	9 h	1/7
	<b>13 647</b>	3p+E	380 V	6 h	1/7
	<b>13 649</b>	3p+N+E	380 V	6 h	1/7
	<b>32 A</b>	<b>13 651</b>	2p+E	220 V	6 h
	<b>13 654</b>	3p+E	220 V	9 h	1/7
	<b>13 657</b>	3p+E	380 V	6 h	1/7
	<b>13 659</b>	3p+N+E	380 V	6 h	1/7

### Vertical IP 66 flush-mounting sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 661</b>	2p+E	220 V	6 h	1/7
	<b>13 664</b>	3p+E	220 V	9 h	1/7
	<b>13 667</b>	3p+E	380 V	6 h	1/7
	<b>13 669</b>	3p+N+E	380 V	6 h	1/7
<b>32 A</b>	<b>13 671</b>	2p+E	220 V	6 h	1/7
	<b>13 674</b>	3p+E	220 V	9 h	1/7
	<b>13 677</b>	3p+E	380 V	6 h	1/7
	<b>13 679</b>	3p+N+E	380 V	6 h	1/7

### Vertical IP 66 wall-mounting sockets



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 681</b>	2p+E	220 V	6 h	1/7
	<b>13 684</b>	3p+E	220 V	9 h	1/7
	<b>13 687</b>	3p+E	380 V	6 h	1/7
	<b>13 689</b>	3p+N+E	380 V	6 h	1/7
	<b>32 A</b>	<b>13 691</b>	2p+E	220 V	6 h
	<b>13 694</b>	3p+E	220 V	9 h	1/7
	<b>13 697</b>	3p+E	380 V	6 h	1/7
	<b>13 699</b>	3p+N+E	380 V	6 h	1/7

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# Safety sockets in compliance with IEC 309-1 Standard

## Accessories for vertical sockets with locking switch

### IP 55 distribution box



Article	Description	Box/pack No. items
<b>13 878</b>	8 Pg 21 inlets + 2 holes on the back Ø 28.5 mm	1/12

Suitable for combining 2 vertical wall-mounting sockets one side by side

### Flush-mounting box



Article	Description	Box/pack No. items
<b>13 881</b>	8 Pg 21 inlets + 2 holes on the back Ø 28.5 mm	1/18

Suitable for installing vertical flush-mounting boxes on the wall

### Union



Article	Dimensions (mm)			Box/pack No. items
	Ø	d	L max	
<b>13 874</b>	23	18	7	100/500
<b>13 875</b>	28,5	22	7	100/400
<b>13 876</b>	37,5	30	10	100/200

For union in box and socket battery

Ø = threaded diameter.

d = internal diameter


L max = maximum thickness that can be joined

# Safety sockets in compliance with IEC 309-1 Standard

## Horizontal sockets with locking switch

Tertiary/industrial application

### Technical characteristics

- degree of protection IP 44 and IP 55, depending on the version
- available in RAL 7035 grey
- available in two versions:
  - with fuse-holder
  - without fuse-holder
- made in self-extinguishing techno-polymer, resistant to abnormal heat and fire up to 850°C (incandescent wire test) in compliance with IEC 695-2-1 Standard
- dimensional stability under constant operating conditions from -20° to +85°C
- shock resistant 6 joules (IK08 level)
- mechanical interlocking so that the locking switch can be used only when the plug is pushed in completely
- the plug can be pulled out only when the locking switch is in the "0" position
- locking switch can be padlocked in the "0" position
- front parts produced with a bi-material pressing system to make it possible to produce the cover and the seal in a single pressing phase, guaranteeing the degree of protection and making sure that it will be impossible to lose the seal
- the version with fuse-holder is designed for the installation of the following fuses:
  - NEOZED K  $\phi$  1 for 16 A models
  - NEOZED K  $\phi$  2 for 32 A models
- possibility of installation in environments with major risk of fire (Standard CEI 64-8 part 7, section 751) and in AD-FT environments (Standard CEI 64-2, IV edition)
- sockets made in compliance with Standards CEI 23-12
- sockets supplied without fuses
- sockets supplied with:
  - 4 screw cover caps to guarantee 



IMQ mark  
in compliance with CEI 23-12 Standards





# Safety sockets in compliance with IEC 309-1 Standard

## Horizontal sockets with locking switch

### Horizontal IP 44 wall-mounting sockets with locking switch



FLPR8023

	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 642</b>	2p+E	220 V	6 h	1/4
	<b>13 645</b>	3p+E	220 V	9 h	1/4
	<b>13 648</b>	3p+E	380 V	6 h	1/4
	<b>13 650</b>	3p+N+E	380 V	6 h	1/4
<b>32 A</b>	<b>13 652</b>	2p+E	220 V	6 h	1/4
	<b>13 655</b>	3p+E	220 V	9 h	1/4
	<b>13 658</b>	3p+E	380 V	6 h	1/4
	<b>13 660</b>	3p+N+E	380 V	6 h	1/4

### Horizontal IP 55 wall-mounting sockets with locking switch



FLPR8025

	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 682</b>	2p+E	220 V	6 h	1/4
	<b>13 685</b>	3p+E	220 V	9 h	1/4
	<b>13 688</b>	3p+E	380 V	6 h	1/4
	<b>13 690</b>	3p+N+E	380 V	6 h	1/4
	<b>13 692</b>	2p+E	220 V	6 h	1/4
<b>32 A</b>	<b>13 695</b>	3p+E	220 V	9 h	1/4
	<b>13 698</b>	3p+E	380 V	6 h	1/4
	<b>13 700</b>	3p+N+E	380 V	6 h	1/4

### Horizontal IP 44 wall-mounting sockets with locking switch and fuse-holder



FLPR8024

	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 702</b>	2p+E	220 V	6 h	1/4
	<b>13 705</b>	3p+E	220 V	9 h	1/4
	<b>13 708</b>	3p+E	380 V	6 h	1/4
	<b>13 710</b>	3p+N+E	380 V	6 h	1/4
<b>32 A</b>	<b>13 712</b>	2p+E	220 V	6 h	1/4
	<b>13 715</b>	3p+E	220 V	9 h	1/4
	<b>13 718</b>	3p+E	380 V	6 h	1/4
	<b>13 720</b>	3p+N+E	380 V	6 h	1/4

### Horizontal IP 55 wall-mounting sockets with locking switch and fuse-holder



FLPR8026

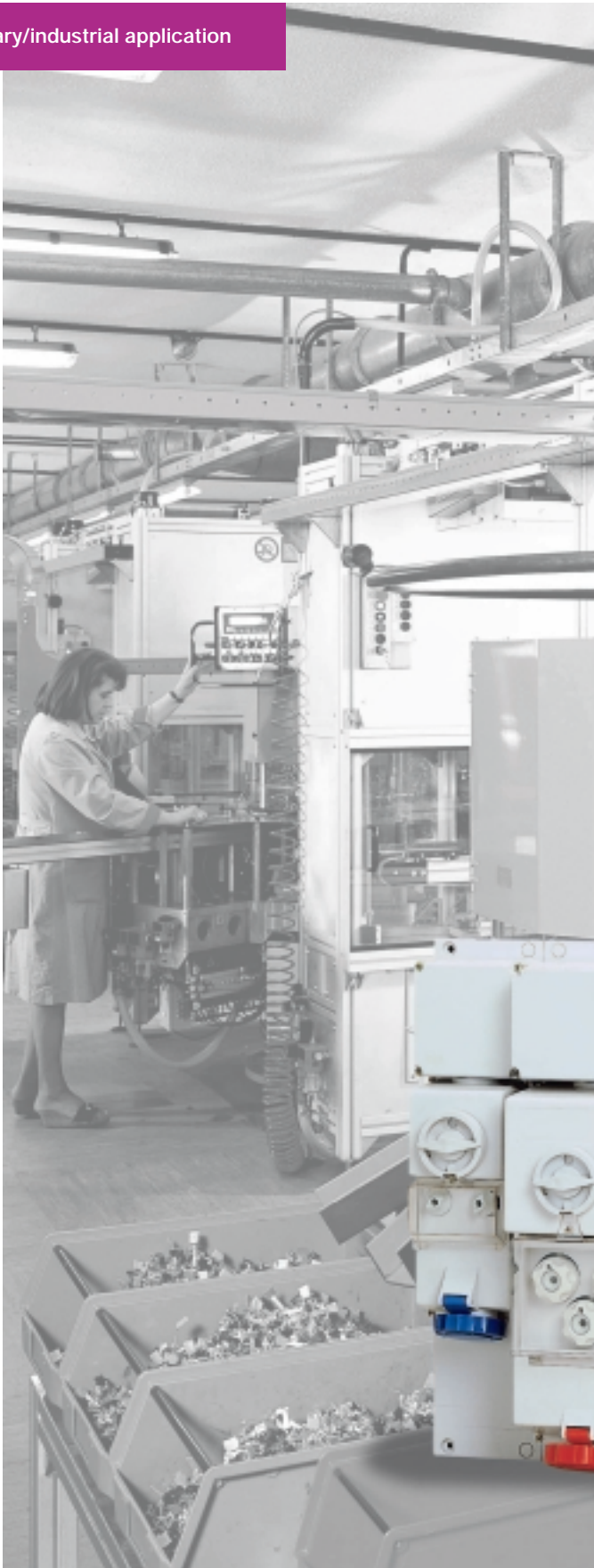
	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 732</b>	2p+E	220 V	6 h	1/4
	<b>13 735</b>	3p+E	220 V	9 h	1/4
	<b>13 738</b>	3p+E	380 V	6 h	1/4
	<b>13 740</b>	3p+N+E	380 V	6 h	1/4
	<b>13 742</b>	2p+E	220 V	6 h	1/4
<b>32 A</b>	<b>13 745</b>	3p+E	220 V	9 h	1/4
	<b>13 748</b>	3p+E	380 V	6 h	1/4
	<b>13 750</b>	3p+N+E	380 V	6 h	1/4

7

# Safety sockets in compliance with IEC 309-1 Standard

## Sockets with locking switch and fuse-holders

Tertiary/industrial application



### Technical characteristics

- degree of protection IP 44 and IP 55, depending on the version
- available in RAL 7035 grey
- made in self-extinguishing techno-polymer, resistant to abnormal heat and fire up to 850°C (glow wire test) in compliance with IEC 695-2-1 Standard
- dimensional stability under constant operating conditions from -20° to +85°C
- shock resistant 6 joules (IK08 level)
- mechanical interlocking so that the locking switch can be used only when the plug is pushed in completely
- the plug can be pulled out only when the circuit breaker is in the "0" position
- fuse-holder cap for the following fuses:
  - 16 A NDZ 25 A E16
  - 32 A DIII 63 A E33
  - 63 A DIII 63 A E33
- access door to valves can be opened only when the locking switch is in the "0" position
- locking switch can be padlocked in the "0" position
- cable inlet at the top:
  - for versions with degree of protection IP 44 via cableway
  - for versions with degree of protection IP 55 via Pg pitch cable clamp
- possibility of installation in environments with major risk of fire (Standard CEI 64-8 part 7, section 751) and in AD-FT environments (Standard CEI 64-2, IV edition)
- sockets made in compliance with Standards CEI 23-12
- sockets supplied without fuses
- sockets supplied with:
  - 1 cableway (IP 44 versions)
  - 1 cable clamp (IP 55 versions)
  - 4 screw cover caps to guarantee



in compliance with CEI 23-12 Standards

# Safety sockets in compliance with IEC 309-1 Standard

## Sockets with locking switch and fuse-holders

### IP 44



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 701</b>	2p+E	220 V	6 h	1/6
	<b>13 704</b>	3p+E	220 V	9 h	1/6
	<b>13 707</b>	3p+E	380 V	6 h	1/6
	<b>13 709</b>	3p+N+E	380 V	6 h	1/6
<b>32 A</b>	<b>13 711</b>	2p+E	220 V	6 h	1/6
	<b>13 714</b>	3p+E	220 V	9 h	1/6
	<b>13 717</b>	3p+E	380 V	6 h	1/6
	<b>13 719</b>	3p+N+E	380 V	6 h	1/6
<b>63 A</b>	<b>13 721</b>	2p+E	220 V	6 h	1/6
	<b>13 722</b>	3p+E	380 V	6 h	1/6
	<b>13 723</b>	3p+N+E	380 V	6 h	1/6

### IP 55



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 731</b>	2p+E	220 V	6 h	1/6
	<b>13 734</b>	3p+E	220 V	9 h	1/6
	<b>13 737</b>	3p+E	380 V	6 h	1/6
	<b>13 739</b>	3p+N+E	380 V	6 h	1/6
	<b>13 741</b>	2p+E	220 V	6 h	1/6
<b>32 A</b>	<b>13 744</b>	3p+E	220 V	9 h	1/6
	<b>13 747</b>	3p+E	380 V	6 h	1/6
	<b>13 749</b>	3p+N+E	380 V	6 h	1/6
	<b>13 724</b>	2p+E	220 V	6 h	1/6
<b>63 A</b>	<b>13 725</b>	3p+E	380 V	6 h	1/6
	<b>13 726</b>	3p+N+E	380 V	6 h	1/6


# Safety sockets in compliance with IEC 309-1 Standard

## Sockets with locking switch and DIN EN 50022 rail

Tertiary/industrial application



### Technical characteristics

- degree of protection IP 44 and IP 55, depending on the version
- available in RAL 7035 grey
- available in the versions:
  - 16 A with the possibility of holding up to 4.5 17.5 mm modules
  - 32 A with the possibility of holding up to 6 17.5 mm modules
  - 63 A with the possibility of holding up to 6 17.5 mm modules
- made in self-extinguishing techno-polymer, resistant to abnormal heat and fire up to 850°C (glow wire test) in compliance with IEC 695-2-1 Standard
- dimensional stability under constant operating conditions from -20° to +85°C
- shock resistant 6 joules (IK08 level)
- mechanical interlocking so that the circuit breaker can be used only when the plug is completely pushed in
- the plug can be pulled out only when the locking switch is in the "0" position
- locking switch can be padlocked in the "0" position
- cable inlet at the top through Pg pitch cable clamp
- possibility of installation in environments with major risk of fire (Standard CEI 64-8 part 7, section 751) and in AD-FT environments (Standard CEI 64-2, IV edition)
- sockets made in compliance with Standards CEI 23-12
- sockets supplied with:
  - 1 cable clamp
  - 4 screw cover caps to guarantee 



in compliance with CEI 23-12 Standards

## Safety sockets in compliance with IEC 309-1 Standard

### Sockets with locking switch and DIN EN 50022 rail

IP 55



	Article	Poles	Rated voltage	Pos. earth contact (ref. hours)	Box/pack No. items
<b>16 A</b>	<b>13 761</b>	2p+E	220 V	6 h	1/4
	<b>13 764</b>	3p+E	220 V	9 h	1/4
	<b>13 767</b>	3p+E	380 V	6 h	1/4
	<b>13 769</b>	3p+N+E	380 V	6 h	1/4
<b>32 A</b>	<b>13 771</b>	2p+E	220 V	6 h	1/6
	<b>13 774</b>	3p+E	220 V	9 h	1/6
	<b>13 777</b>	3p+E	380 V	6 h	1/6
	<b>13 779</b>	3p+N+E	380 V	6 h	1/6
<b>63 A</b>	<b>13 727</b>	2p+E	220 V	6 h	1/6
	<b>13 728</b>	3p+E	380 V	6 h	1/6
	<b>13 729</b>	3p+N+E	380 V	6 h	1/6

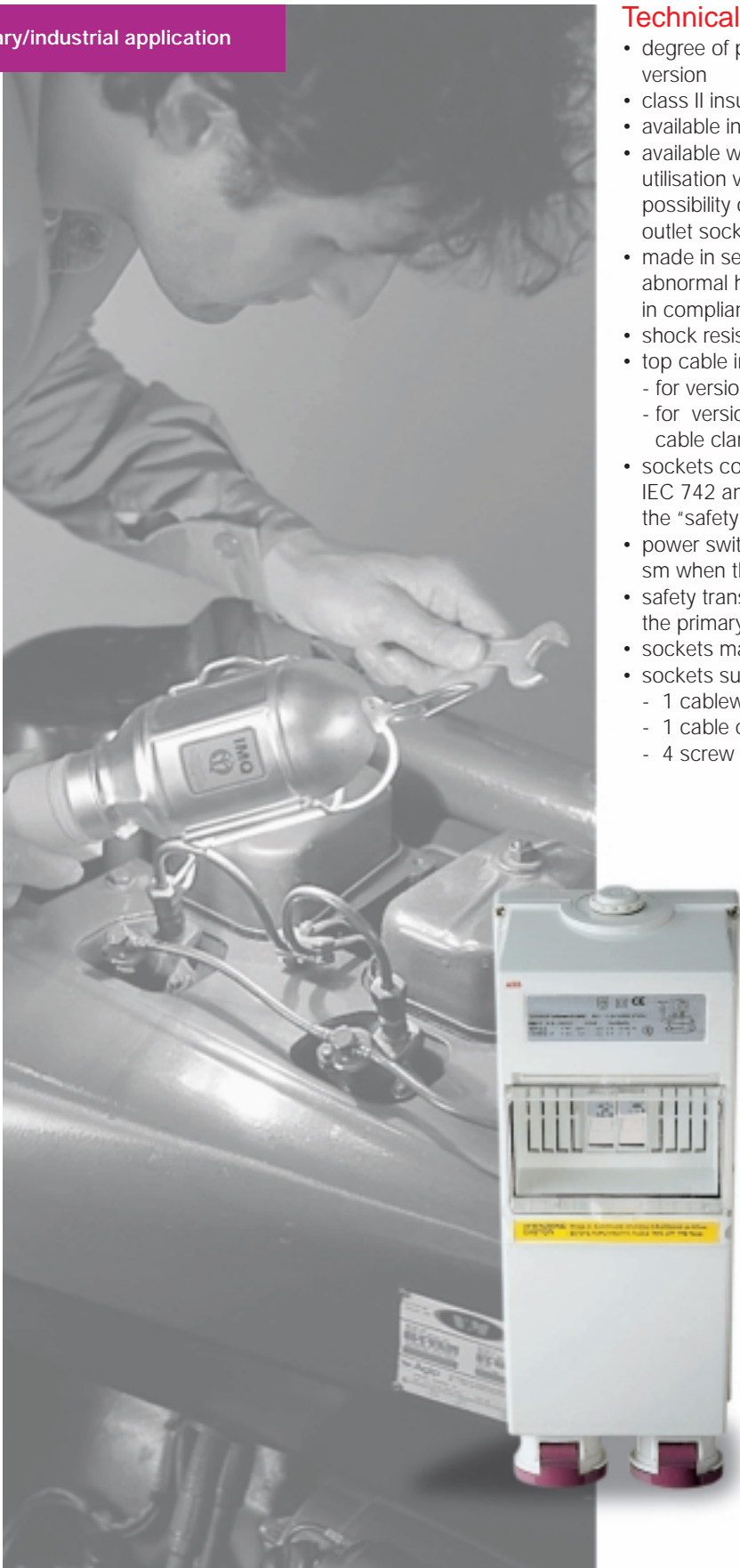
# Safety sockets in compliance with IEC 309-1 Standard

## Ultra-low voltage sockets with safety transformer (SELV)

Tertiary/industrial application

### Technical characteristics

- degree of protection IP 44 and IP 55, depending on the version
- class II insulation □
- available in RAL 7035 grey
- available with rated power of 160 V in continuous use, utilisation voltages of 220/24 V and 380/24 V with the possibility of having one or two ultra-low voltage IEC 309 outlet sockets
- made in self-extinguishing techno-polymer, resistant to abnormal heat and fire up to 850°C (glow wire test) in compliance with IEC 695-2-1 Standard
- shock resistant 6 joules (IK08 level)
- top cable inlet:
  - for versions with IP 44 degree of protection via cableway
  - for versions with IP 55 degree of protection via Pg pitch cable clamp
- sockets complete with safety transformers in compliance with IEC 742 and CEI EN 60742 Standards and designed to satisfy the "safety source" requirement
- power switch on primary socket operated by special mechanism when the plug is inserted
- safety transformer protected against short circuits by fuses on the primary and secondary
- sockets made in compliance with Standards CEI 23-12
- sockets supplied with:
  - 1 cableway (IP 44 versions)
  - 1 cable clamp (IP 55 versions)
  - 4 screw cover caps to guarantee □



in compliance with CEI 23-12 Standards

# Safety sockets in compliance with IEC 309-1 Standard

## Ultra-low voltage sockets with safety transformer (SELV)

### IP 44 - IP 55



#### IP 44

Article	Description	Voltage used	Rated current	No. Poles	Box/pack No. items
<b>13 921</b>	1 socket	220/24 V ac	16 A	2p	1/6
<b>13 922</b>	2 sockets	220/24 V ac	16 A	2p	1/6
<b>13 923</b>	1 socket	400/24 V ac	16 A	2p	1/6
<b>13 924</b>	2 sockets	400/24 V ac	16 A	2p	1/6

#### IP 55

Article	Description	Voltage used	Rated current	No. Poles	Box/pack No. items
<b>13 927</b>	1 socket	220/24 V ac	16 A	2p	1/6
<b>13 928</b>	2 sockets	220/24 V ac	16 A	2p	1/6
<b>13 929</b>	1 socket	400/24 V ac	16 A	2p	1/6
<b>13 930</b>	2 sockets	400/24 V ac	16 A	2p	1/6

# Safety sockets in compliance with IEC 309-1 Standard

## Modular panels and boxes



### Technical characteristics

#### Modular panels

- available in RAL 7035 grey
- made in self-extinguishing techno-polymer, resistant to abnormal heat and fire up to 850°C (glow wire test) in compliance with IEC 695-2-1 Standard
- shock resistant 6 joules (IK08 level)
- material without halogens and reduced optical density of fumes
- available in three different sizes
- suitable for creating multiple bases
- panels supplied complete with:
  - self-tapping screws
  - insulating protection caps
  - couplers

#### Junction boxes

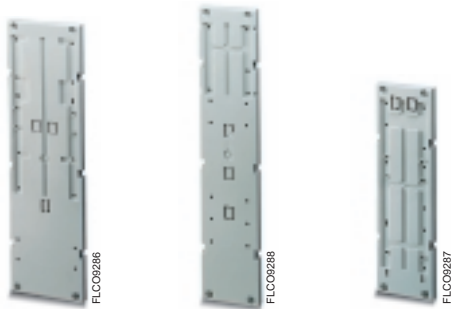
- degree of protection IP 55
- insulation class II
- available in RAL 7035 grey
- made in self-extinguishing techno-polymer, resistant to abnormal heat and fire up to 950°C (glow wire test) in compliance with IEC 695-2-1 Standard
- dimensional stability under constant operating conditions from -20° to +90°C
- shock resistant 6 joules (IK 08 level)
- available in five different sizes
- walls made with pre-cut holes for connection to safety sockets or between boxes (using special connectors)
- boxes supplied with:
  - 4 screw cover caps to guarantee



# Safety sockets in compliance with IEC 309-1 Standard

## Modular panels and boxes

### Modular panels



Article	Type	Dimensions (mm)		Box/pack No. items
		W	H	
<b>13 800</b>	A	111	388	1/65
<b>13 802</b>	B	111	535	1/48
<b>13 804</b>	C	151	535	1/30

### Junction boxes for modular panels

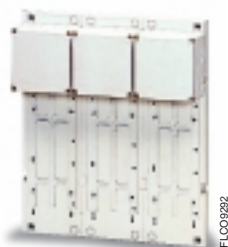


Article	Type	Dimensions (mm)			Push-in inlets	Box/pack No. items
		W	H	D		
<b>13 860</b>	V	110	75	65	4 x Pg21	1/39
<b>13 861</b>	X	110	110	65	6 x Pg21	1/24
<b>13 862</b>	Y	110	150	100	4 x Pg21	1/10
<b>13 863</b>	W	150	110	100	1 x Pg21/29 1 x Pg29	1/8
<b>13 864</b>	Z	150	150	100	4 x Pg21 2 x Pg21/29	1/8

# Safety sockets in compliance with IEC 309-1 Standard

## Modular panels and boxes

### Panels with boxes



Article	Description	Box/pack No. items
13 840	1 panel type A + 1 box type W	1/20
13 841	1 panel type B + 1 box type W	1/12
13 842	1 panel type C + 1 box type Y	1/6
13 845	2 panels type A + 2 cassette tipo W	1/10
13 846	3 panels type A + 3 boxes type W	1/10
13 850	2 panel types B + 2 boxes type W 1 panel types C + 1 box type Y	1/4
13 851	2 panel types B + 2 boxes type W 2 panel types C + 2 boxes type Y	1/2

Complete with connections and seals for connecting between boxes and sockets

### Guide to combining sockets, panels and boxes

Sockets	Panel type	Box type
16 A	A	X
	B	X or Y
16 A with modular compartment	A	V
	B	X or Y
16 A with ultra-low voltage	C	W or Z
32 A	C	W or Z
32 A	C	W or Z
63 A with modular compartment	C	W or Z
63 A with modular compartment	C	W or Z

This table indicates the existing possible combination.

For example: a 16 A socket with a modular compartment can be fitted on a type A or type B panel, but not on a type C; also, if it is mounted on a type A panel it can be combined with a type V box only. Obviously, by combining more than one correctly mounted panel all the necessary configurations can be obtained.

N.B. Junction boxes can be connected horizontally (side by side) only if they are the same size.

# Safety sockets in compliance with IEC 309-1 Standard

## Accessories for modular panels and boxes

### "C" section bars



Article	Description	Box/pack meters
<b>13 871</b>	2m bars in zinc-plated tropicalised iron	2/40

### Set of parts for fixing panels



Article	Description	Box/pack No. items
<b>13 872</b>	Screws, nuts and plastic supports	1/30

### Unions



Article	Dimensions (mm)			Box/pack No. items
	Ø	d	L max	
<b>13 874</b>	23	18	7	100/500
<b>13 875</b>	28.5	22	7	100/400
<b>13 876</b>	37.5	30	10	100/200

For union in box and socket battery

Ø = threaded diameter

d = internal diameter

L max = maximum thickness that can be joined



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Cable-ties and spirals .....	8/4
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# Installation material

## Metal rails

### Technical characteristics

- made from cold-rolled steel strips
- electric zinc plated with subsequent passivation and tropicalisation with a minimum thickness of zinc (6/8 microns) deposited over the entire surface
- axial dimples on the rails without holes, to facilitate the drilling of installation holes
- strict control of the dimensions as required by the standards EN 50035, DIN 46277/1 and EN 50022, DIN 46277/2
- application area: industrial

Accessories ..... page 8/3

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### CENELEC-EN 50022 rail

H 7,5



FLM18002

Article	Dimensions (mm) BxbxHxD *	Length (m)	Box/pack (m)
<b>12 839</b>	35x27x7.5x1	2	20/40

### CENELEC-EN 50022 rail

H 15



FLM18003

Article	Dimensions (mm) BxbxHxD *	Length (m)	Box/pack (m)
<b>12 840</b>	35x27x15x1.5	2	20/20

### CENELEC-EN 50035 rail

H 15



FLM18004

Article	Dimensions (mm) BxbxHxD *	Length (m)	Box/pack (m)
<b>12 841</b>	32x16.5x15x1.5	2	20/20

### CENELEC-EN 50022 rail with holes

H 7,5



FLM18005

Article	Dimensions (mm) BxbxHxD *	Length (m)	Box/pack (m)
<b>12 849</b>	35x27x7.5x1	2	40/40

### CENELEC-EN 50022 rail

H 15



FLM18006

Article	Dimensions (mm) BxbxHxD *	Length (m)	Box/pack (m)
<b>12 850</b>	35x27x15x1.5	2	20/20

### CENELEC-EN 50035 rail with holes

H 15



FLM18007

Article	Dimensions (mm) BxbxHxD *	Length (m)	Box/pack (m)
<b>12 853</b>	32x16.5x15x1.5	2	20/20

\* B = external base; b = internal base; H = height of rail; D = thickness of rail

# Installation material

## Accessories for metal rails

### Supporting bracket for metal rails



Article	Box/pack No. items
<b>12 892</b>	50/250

### Plastic base for wiring ducts



Article	Box/pack No. items
<b>05 210</b>	100/200

### Universal plastic connector



Article	Box/pack No. items
<b>12 893</b>	50/3000

### Universal metal connector



Article	Box/pack No. items
<b>12 828</b>	50/1500
<b>12 829</b>	50/1500

# Installation material

## Cable-ties and spirals

### Technical characteristics

#### Polyamide cable-ties 6/6

- Available in two versions:
  - transparent
  - carbon black, UV resistant
- operating temperatures from -20 to +110°C
- made in self-extinguishing thermo-plastic
- softening point VICAT VST/B/50-DIN 53460 greater than 200°C
- dielectric rigidity 50.000 V/mm
- strong resistance to bases, greases, hydrocarbons, acetone and chlorates
- limited resistance to concentrated acids
- soluble in phenolic and formic acids
- flexing resistance according to DIN 53452: 110 MPa
- traction module according to DIN 53457: 12800 MPa
- resilience to 20°C according to DIN 53453: 6-8 kJ/m<sup>2</sup>
- yield strength according to DIN 53455: 80 MPa
- elongation to breaking according to DIN 53455: 35%
- hardness according to DIN 53456: 125 N/mm
- **particularly suited to the cabling of control panels**
- cable-ties made according to regulations MIL-S-23190 and IEC 92-101
- tightening is easy without tearing thanks to the special pitch of the indentations
- **the side edges have anti-scratching protection so as not to damage the hands of the operator and not to nick the cable insulation**
- **rounded point to ease insertion in the countersunk head**
- application area: tertiary/industrial

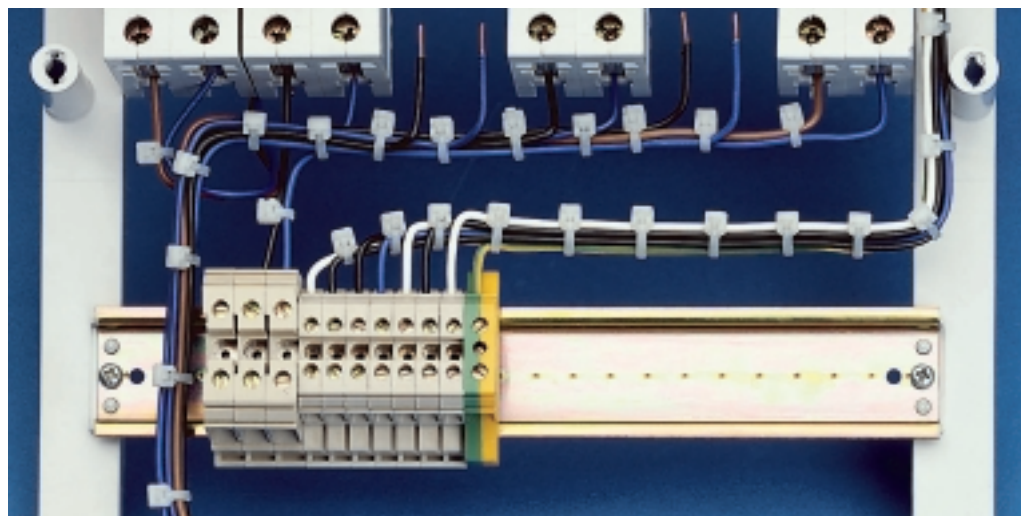
#### Polyamide cable-ties 12

- Available in black, UV resistant
- Absorption of humidity less than 1%

- operating temperatures from -30° to +80°C
- made in self-extinguishing thermo-plastic
- dielectric rigidity 28.000 V/mm
- strong resistance to bases, greases, hydrocarbons, acetone and chlorates
- limited resistance to nitric and chromic acids
- flexing resistance according to DIN 53452: 20 MPa
- traction module according to DIN 53457: 420 Mpa
- ultimate tensile tearing strenght to DIN 53455: 61 Mpa
- resilience to 20°C according to DIN 53453: did not break
- yield strength according to DIN 53455: 24 MPa
- elongation at break according to DIN 53455: 370%
- hardness according to 62 SHORE D
- **particularly suited to external use**
- cable-ties made according to regulation MIL-S-23190
- high resistance to tearing thanks to the special tightening mechanism
- **the side edges have anti-scratching protection so as not to damage the hands of the operator and not to nick the cable insulation**
- **rounded point to ease the insertion in the countersunk head**
- application area: tertiary/industrial

### Spirals

- available in two versions:
  - transparent polyethylene
  - self-extinguishing polyethylene
- suitable for forming bundles of cables and for making cabling look neat and tidy
- they mechanically protect the conductors allowing them to exit from any point through the coils
- application area: tertiary/industrial



Type approval  
Italian Naval Register  
ELE/8998/1

FLM18012

# Installation material

## Cable-ties and spirals

### 6/6 transparent polyamide cable-ties



Article	Dimensions (mm) WxL	Resistance to tensile strength (N)	Ø tightening *min.(mm)max.(mm)		Box/pack No. items
18 010	100x2.5	82	2	24	100/8000
18 011	135x2.5	82	2	35	100/6000
18 013	160x2.5	82	2	42	100/5000
18 012	140x3.5	135	2,5	36	100/5000
18 014	200x3.5	135	2,5	55	100/4000
18 017	280x3.5	135	2,5	80	100/3000
18 015	180x4.5	225	3	45	100/3000
18 018	280x4.5	225	5	76	100/2500
18 020	360x4.5	225	5	101	100/1500
18 024	200x7.5	533	5	51	100/2000
18 026	280x7.5	533	5	76	100/1000
18 028	360x7.5	533	5	102	100/2000
18 034	430x9.0	781	5	110	100/2000
18 036	550x9.0	781	5	140	100/2000
18 038	780x9.0	781	5	190	100/800
18 060	100x2.5	82	2	24	1000/15000
18 061	135x2.5	82	2	35	1000/15000
18 063	160x2.5	82	2	42	1000/10000
18 062	140x3.5	135	2,5	36	1000/10000
18 064	200x3.5	135	2,5	55	1000/5000

\* N=[Newton]

### 12 black polyamide cable-ties



Article	Dimensions (mm) WxL	Resistance to tensile strength (N)	Ø tightening *min.(mm)max.(mm)		Box/pack No. items
18 210	115x6	240	5	20	100/3000
18 212	175x6	280	10	40	100/2000
18 218	115x9	350	5	20	100/2000
18 220	190x9	350	10	45	100/2000
18 222	265x9	510	15	70	100/1000
18 224	360x9	510	25	100	100/800

\* N = [Newton]

### 6/6 black polyamide cable-ties



Article	Dimensions (mm) WxL	Resistance to tensile strength (N)	Ø tightening *min.(mm)max.(mm)		Box/pack No. items
18 110	100x2.5	82	2	24	100/8000
18 111	135x2.5	82	2	35	100/6000
18 113	160x2.5	82	2	42	100/5000
18 112	140x3.5	135	2,5	36	100/5000
18 114	200x3.5	135	2,5	55	100/4000
18 117	280x3.5	135	2,5	80	100/3000
18 115	180x4.5	225	3	45	100/3000
18 118	280x4.5	225	5	76	100/2500
18 120	360x4.5	225	5	101	100/1500
18 124	200x7.5	533	5	51	100/2000
18 126	280x7.5	533	5	76	100/1000
18 128	360x7.5	533	5	102	100/2000
18 134	430x9.0	781	5	110	100/200
18 136	550x9.0	781	5	140	100/2000
18 138	780x9.0	781	5	190	100/800
18 160	100x2.5	82	2	24	1000/15000
18 161	135x2.5	82	2	35	1000/15000
18 163	160x2.5	82	2	42	1000/10000
18 162	140x3.5	135	2,5	36	1000/10000
18 164	200x3.5	135	2,5	55	1000/5000

\* N = [Newton]

### Spirals



Article	Dimensions (mm) * Ø x a	For bundle of cables Ø min. (mm) max. (mm)		Box/pack meter
In transparent polyethylene				
18 370	3x5	2	12	50/500
18 372	6x8	5	56	25/300
18 374	10x11	12	100	25/100
18 376	12x13	14	130	25/100
In self-extinguishing polyethylene				
18 380	3x5	2	12	50/500
18 382	6x8	5	56	25/300
18 384	10x11	12	100	25/100
18 386	12x13	14	130	25/100

Ø = diameter  
a = width of spiral



# Installation material

## Accessories for cable-ties

### Self-adhesive supports for cable-ties



Article	Description	Box/pack No. items
<b>18 250</b>	transparent plate	50/1500
<b>18 251</b>	black plate	50/1500

- for cable-ties 2.4 – 4.8 mm wide.
- made in 6/6 transparent or black polyamide.
- fast to mount due to its self-adhesive snap on base or it can be fixed with a central 4mm screw.

### Screw supports for cable-ties



Article	Description	Box/pack No. items
<b>18 252</b>	transparent plate	100/6000
<b>18 253</b>	black plate	100/6000

- for cable-ties 2.4 – 4.8 mm wide.
- made in 6/6 transparent or black polyamide.
- fix with Ø 4 mm screw or Ø 2 mm nail.

### Pincers for cable-ties



Article	Box/pack No. items
<b>18 270</b>	1/10

- for tightening and cutting cable-ties 2.4 – 4.8 mm wide.
- made in thermoplastic, shock proof material with internal steel mechanism.
- tightening tension can be adjusted by a special nut above the handle.

### Screw supports for external cable-ties



Article	Description	Box/pack No. items
<b>18 280</b>	black plate	25/1500

- for cable-ties 6-9 mm wide.
- made in 6/6 black polyamide.
- fix with screw wall-plug max Ø 8 mm or with a nail

## Installation material

### Accessories for cable-ties

#### Pivot support for external cable-ties



Article	Description	Box/pack No. items
<b>18 282</b>	black plate	25/1500

- for cable-ties 6 - 9 mm wide
- made in 6/6 black polyamide

#### Pincers for external cable-ties



Article	Box/pack No. items
<b>18 290</b>	1/10

- for tightening and cutting cable-ties 6 - 9 mm wide.
- made in painted metal.

# Installation material

## Polyamide wall plugs

### Technical characteristics

- wall-plugs made in 6/6 polyamide
- available in RAL 7035 grey and RAL 9001 white
- wall plugs with nickel-plated steel Allen screws
- resistant to atmospheric agents, gas and ageing
- don't change in temperatures ranging from -30° and +90°C
- suitable for use with various materials (from cement to wood) with a high holding level

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Overall dimensions ..... page 10/46

### Wall plugs



Article	Colour	Dimensions (mm) ØxL	Box/pack No. items
<b>18 405</b>	grey	5x25	200/12000
<b>18 406</b>	grey	6x30	100/6000
<b>18 408</b>	grey	8x40	100/3000
<b>18 410</b>	grey	10x50	50/1500

### Wall plugs with screws



Article	Colour	Wall plug diam.	Dimensions (mm) Screws ØxL	Box/pack No. items
<b>18 415</b>	grey	5	3.5 x 25	100/3000
<b>18 416</b>	grey	6	4 x 30	100/3000
<b>18 418</b>	grey	8	5 x 40	50/1500
<b>18 420</b>	grey	10	6 x 50	50/1500

### Wall plugs with nail/screw



Article	Colour	Wall plug Ø	Dimensions (mm) Screws ØxL	Box/pack No. items
<b>18 430</b>	white	5	3.5 x 27	100/3000
<b>18 432</b>	white	6	4 x 35	100/3000
<b>18 434</b>	white	6	4 x 55	50/1500
<b>18 436</b>	white	8	5 x 70	50/1500
<b>18 440</b>	white	8	5 x 72	50/1500

- for quick fixing
- expansion with hammering of the nail/screw, can be unscrewed
- with a neck to hold the element to be fastened

### Wall plugs with hooks



Article	Colour	Description	Box/pack No. items
<b>18 450</b>	grey	screw M4	50/1500
<b>18 452</b>	grey	short angled hook M4	50/1500
<b>18 454</b>	grey	medium angled hook M4	50/1500
<b>18 456</b>	grey	open angled hook M4	50/600
<b>18 458</b>	grey	closed angled hook M4	50/600

- hooks nickel-plated steel
- thread M4 – hole Ø 9x36 mm

# Installation material

## Steel wall plugs

### Technical characteristics

- screw anchors made in burnished passivated zinc
- Thread M4 – hole Ø 8x42 mm
- Thread M5 – hole Ø 10x50 mm
- suitable for use with masonry (in cement, tiles etc.)

Technical details ..... page 9/1

Overall dimensions ..... page 10/46

### Wall plugs with hooks

With washer



FLM18028

Article	Description	Box/pack No. items
<b>18 460</b>	screw with M4 Philips countersunk head	50/1500
<b>18 461</b>	screw with M5 Philips countersunk head	50/1500
<b>18 464</b>	short angled hook M4	50/1500
<b>18 465</b>	short angled hook M5	25/750
<b>18 466</b>	medium angled hook M4	50/1500
<b>18 467</b>	medium angled hook M5	25/750
<b>18 470</b>	hook with open eyelet M4	50/1500
<b>18 471</b>	open angled hook M5	25/750
<b>18 472</b>	hook with closed eyelet M4	50/1500
<b>18 473</b>	hook with closed eyelet M5	25/750

### Wall plugs with hooks

With washer



FLM18029

Article	Description	Box/pack No. items
<b>18 476</b>	flat hook M4	50/1500
<b>18 477</b>	flat hook M5	25/750
<b>18 478</b>	medium angled hook M4	25/750
<b>18 479</b>	medium angled hook M5	25/750

### Wall anchors

Thread M4 – hole Ø14



FLM18030

Article	Description	Box/pack No. items
<b>18 490</b>	screw with M4 Philips countersunk head	10/300
<b>18 492</b>	M4 head	10/300
<b>18 494</b>	hook with open eyelet M4	10/300
<b>18 496</b>	hook with closed eyelet M4	10/300

### Screws with wall plugs



FLM18031

Article	Description	Box/pack No. items
<b>18 486</b>	screw with hexagonal head M6x50	20/600
<b>18 487</b>	screw with hexagonal head M8x55	10/300
<b>18 488</b>	screw with hexagonal head M10x60	10/300
<b>18 489</b>	screw with hexagonal head M10x70	5/150

# Installation material

## Fastening elements

### Technical characteristics

In order to simplify and speed up the laying of conduits and cables in any situation, the following products are available:

- thermo-plastic **snap-on** and **collar conduit holders**
- thermo-plastic U-bolt conduit holders
- **conduit holder guides**
- thermo-plastic **strap holders**
- thermo-plastic **cable holders**
- steel conduit holders
- thermo-plastic and steel collar conduit holders

- self-extinguishing insulated poly-carbonate cable-clamps
- thermo-plastic fastening elements resistant to abnormal heat and fire up to 650°C (glow wire test) in compliance with the IEC 695-2-1 Standard
- thermo-plastic fastening elements with dimensional stability under operating conditions from -30° to +70°C
- application area: tertiary/residential

Technical details ..... page 9/1

Overall dimensions ..... page 10/46

### Snap-on conduit holders



Article	Colour	For conduits Ø (mm)	Box/pack No. items
05 700	grey	16	100/1200
05 701	grey	20	100/1200
05 702	grey	25	50/600
05 703	grey	32	25/300
05 704	grey	40	25/300

- self-extinguishing thermo-plastic
- fixed to the wall using a wall-plug or a suitable guide

### Collar conduit holders



Article	Colour	For conduits Ø (mm)	Box/pack No. items
05 720	grey	16	100/1200
05 721	grey	20	50/600
05 722	grey	25	50/600
05 723	grey	32	25/300

- self-extinguishing thermo-plastic
- fixed to the wall using a wall-plug or a suitable guide

### U-bolt conduit holders



Article (mm)	Colour	For conduits Ø (mm)	Box/pack No. items
05 694	grey	12-16	50/600
05 695	grey	16-25	30/360
05 696	grey	25-32	20/240
05 697	grey	32-40	15/180
05 698	grey	40-50	10/180

- self-extinguishing thermo-plastic
- fixed to the wall using a wall-plug or a suitable guide

### Strap holders



Article	Colour	For straps WxL (mm)	Box/pack No. items
05 760	grey	6x3.5	200/12000
05 761	grey	8x3.5	200/12000
05 762	grey	11x5	100/6000
05 763	white	6x3.5	200/12000
05 764	white	8x3.5	200/12000
05 765	white	11x5	100/6000

- self-extinguishing thermo plastic

# Installation material

## Fastening elements

### Conduit clamps



Article	For conduits Ø (mm)	Box/pack No. items
05 730	10	100/3000
05 731	12	100/3000
05 732	13	100/3000
05 733	14	100/3000
05 734	16	50/1500
05 735	19-20	50/1500
05 736	22	50/1500
05 737	25-26	50/600
05 738	32	50/600
05 739	38	25/300
05 740	40	25/300
05 741	50	25/300

- in galvanised steel

### Conduit clamp collars



Article	For conduits Ø (mm)	Box/pack No. items
05 745	10	50/1500
05 746	12	50/1500
05 747	13	50/1500
05 748	14	50/1500
05 749	16	50/1500
05 750	19-20	25/750
05 751	22	25/750
05 752	25-26	25/750
05 753	32	25/300
05 754	38	25/300
05 755	40	25/300
05 756	50	25/300

- in galvanised steel

### Guide for conduit-clamps



Article	Box/pack No. items
05 727	- /400

- self-extinguishing thermoplastic
- supplied in sections from 200mm

### Insulated cable-clamps



Article	Clamping capacity (mm <sup>2</sup> )	Box/pack No. items
05 950	4	100/3000
05 951	10	50/1500
05 952	16	25/750

- self-extinguishing polycarbonate
- dimensional stability from -30° to +85° C
- brass clamps

### Cable holders



Article	Colour	For conduits and cables Ø (mm)	Box/pack No. items
05 770	grey	4	200/12000
05 771	grey	5	200/12000
05 772	grey	6	200/12000
05 773	grey	7	100/6000
05 774	grey	8	100/6000
05 775	grey	9	100/6000
05 776	grey	10	100/3000
05 777	grey	12	100/3000
05 778	grey	13	100/3000
05 779	grey	14	100/3000
05 780	grey	16	50/1500
05 781	grey	19-20	25/750
05 782	grey	22	25/750
05 783	grey	25-26	25/300
05 784	grey	32	25/300
05 788	white	4	200/12000
05 789	white	5	200/12000
05 790	white	6	200/12000
05 791	white	7	100/6000
05 792	white	8	100/6000
05 793	white	9	100/6000
05 794	white	10	100/3000
05 795	white	12	100/3000
05 796	white	13	100/3000

- self-extinguishing thermoplastic



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## Further technical information and applications

### Definition of IP degree of protection, IK degree of mechanical shock protection and self-extinguishing degree of protection

#### IP degrees of protection

##### 1<sup>st</sup> DIGIT: PROTECTION AGAINST SOLID BODIES

IP	
<b>0</b>	No protection
<b>1</b>	Protected against solid bodies larger than 50 mm (unintentional contact with the hands)
<b>2</b>	Protected against solid bodies larger than 12 mm (finger of the hand)
<b>3</b>	Protected against solid bodies larger than 2.5 mm (tools, wires)
<b>4</b>	Protected against solid bodies larger than 1 mm
<b>5</b>	Dust proof (no harmful deposit)
<b>6</b>	Totally dust proof

1<sup>st</sup> digit defined by CEI 70-1 and IEC 529 Standards

##### 2<sup>nd</sup> DIGIT: PROTECTION AGAINST LIQUIDS

IP	
<b>0</b>	No protection
<b>1</b>	Protected against vertical drops of water (condensation)
<b>2</b>	Protected against drops of water falling at a maximum of 15° from vertical
<b>3</b>	Protected against a shower of water falling at a maximum of 60° from vertical
<b>4</b>	Protected from sprays of water from any direction
<b>5</b>	Protected against jets of water from all directions from a hose pipe
<b>6</b>	Protected against jets of water similar to sea waves
<b>7</b>	Protected against the effect of temporary immersion
<b>8</b>	Protected against the effects of continuous immersion

2<sup>nd</sup> digit defined by CEI 70-1 and IEC 529 Standards

VLCO0051

#### Degrees of mechanical shock protection IK conforming to the CEI EN 50102 Standard

9

Code IK	Shock energy (Joule)
00	not protected
01	0.15 Joule
02	0.2 Joule
03	0.35 Joule
04	0.5 Joule
05	0.7 Joule
06	1 Joule
07	2 Joule
08	5 Joule
09	10 Joule
10	20 Joule

Note: test equipment used includes a spring hammer, a pendulum hammer and a vertical hammer.



# Further technical information and applications

## Definition of IP degree of protection, IK degree of mechanical shock protection and self-extinguishing degree of protection

### Double insulation



This symbol shown on the consumer units/switchboards/boxes/enclosures indicates that they have been constructed so that they will provide protection against indirect contacts by means of complete insulation. To this end they must be installed correctly, following the instructions that accompany the product and using the accessories supplied (screw covering caps).

### IP 40 degree of protection

In a consumer unit, degree of protection IP 40 (it is impossible to introduce a wire with a diameter of 1 mm) is obtained by installing equipment with IP40 degree of protection and by using the relative accessories (module covers).

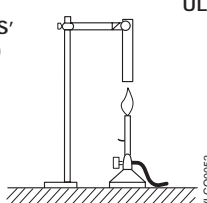
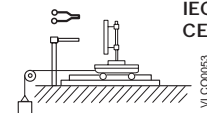
### PROTECTION AGAINST THE PENETRATION OF SOLID BODIES

1 <sup>st</sup> characteristic digit	Brief description	Full description
0	Unprotected	No particular protection is provided
1	Protected against solid bodies larger than 50 mm	It must be impossible for a large surface area, for example, the hand, to penetrate (voluntary protection is not provided, however) or solid bodies larger than 50 mm in diameter
2	Protected against solid bodies larger than 12 mm	It must be impossible for the fingers or similar objects with a maximum length of 80 mm or solid bodies with a diameter greater than 12 mm, to penetrate
3	Protected against solid bodies larger than 2.5 mm	It must be impossible for tools, wires, etc. with a diameter or thickness greater than 2.5 mm or solid bodies with a diameter greater than 2.5 mm, to penetrate
4	Protected against solid bodies larger than 1.0 mm	It must not be possible for wires or plates with a thickness greater than 1.0 mm or solid bodies with a diameter greater than 1.0, to penetrate
5	Dust proof	Not totally dust proof, but the quantity that penetrates is not such to prevent the material from functioning well
6	Totally dust proof	No dust can penetrate

### PROTECTION AGAINST WATER PENETRATION

2 <sup>nd</sup> characteristic digit	Brief description	Full description
0	Unprotected	No protection is provided
1	Protected against drops of water	Vertically-falling drops of water must not cause damage
2	Protected against drops of water falling with a maximum angle of 15°	Vertically-falling drops of water will not cause damage when angled at a maximum of 15° from vertical
3	Rain proof	Rain water falling from a direction creating a maximum angle of 60° from vertical must not cause damage
4	Protected against sprays of water	Water sprayed onto the covering from any direction must not cause damage
5	Protected against jets of water	Water projected with a nozzle from all directions must not cause damage
6	Protected against waves	In the case of waves or powerful water jets must not penetrate the covering in harmful quantities
7	Protected against the effects of temporary immersion	Harmful quantities of water must not penetrate inside the immersed covering in specific conditions of pressure or duration
8	Protected against the effect of continuous immersion	The material is suitable to remain constantly immersed in water in the conditions specified by the manufacturer

### Self-extinguishing degree of protection

Test	Test equipment	Compliance to standards	Purpose of the test	Results of the test	Heat source	Test conditions	Characteristic elements
UL (UNDERWRITERS' LABORATORIES)		UL 94	A classification is given to the various types of behaviour that the materials may have following contact with the Bunsen flame	V0 if the test specimen burns for less than 5 seconds before going out. V1 if it burns for less than 25 seconds V2 if it burns for less than 25 seconds, dripping glowing material HB if it burns for more than 25 seconds (horizontal test specimen with a maximum burning speed of 38 mm per minute) Can be assimilated with ASTM D-635	Bunsen burner flame	Flame applied for 10 seconds and for two consecutive times	Duration of combustion
GLOW-WIRE TEST		IEC 695-2-1 CEI 50-11	Simulates the types of thermal stress that may be produced by the sources of heat or ignition (glowing elements or overcharged resistors for short periods) in order to assess the danger of fire using this simulation	Any manifestation of a flame must stop within 30 seconds of removing the glow-wire. TEST TEMPERATURES 650°C 750°C 850°C 960°C	Glow-wire 4 mm in diameter	Wire applied for 30 seconds	Time it takes the flame to extinguish

# Further technical information and applications

## Consumer units for modular circuit breakers – summarised technical data

### Flush-mounting consumer units IP 40 Estetica Series without door

ARTICLE	12 004	12 008	12 012	12 013	12 014	12 016
NUMBER OF MODULES	4	8 12	18 24	36		
COLOUR	RAL 9001 white	RAL 9001 white	RAL 9001 white	RAL 9001 white	RAL 9001 white	RAL 9001 white
WITHOUT DOOR	YES	YES	YES	YES	YES	YES
WITH TRANSPARENT DOOR	-	-	-	-	-	-
WITH OPAQUE DOOR	-	-	-	-	-	-
DOUBLE INSULATION	YES	YES	YES	YES	YES	YES
RESISTANCE TO HEAT	white GWT 960°C	white GWT 960°C	white GWT 960°C	white GWT 960°C	white GWT 960°C	white GWT 960°C
TYPE OF MATERIAL	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
MECHANICAL RESISTANCE	6 JOULE	6 JOULE	6 JOULE	6 JOULE	6 JOULE	6 JOULE
DIMENSIONAL STABILITY	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C
DEGREE OF PROTECTION	IP 40	IP 40	IP 40	IP 40	IP 40	IP 40
MAX DISSIPATION POWER <sup>(1)</sup>	25 W	37 W	40 W	55 W	72 W	96 W
EXTRACTABLE FRAME	-	YES	YES	YES	YES	YES
DESIGNED FOR RAPID CABLING	-	UNIFIX SL	UNIFIX SL	UNIFIX SL	UNIFIX SL	UNIFIX SL

(1): data concerning dissipation power have been obtained by following the instructions in CEI 23-49 Standard, with a temperature difference of Dt= 30°C

### Flush-mounting consumer units IP 40 Estetica Series with door and Europa Series consumer units

ARTICLE	12 024 – 12 037	12 028 – 12 038 12 040 – 12 026 12 057 – 12 058	12 032 – 12 042 12 041 – 12 027 12 061 – 12 062	12 033 – 12 043	12 034 – 12 044 12 045 – 12 030 12 063 – 12 064	12 036 – 12 046 12 048 – 12 031 12 065 – 12 066	12 052 – 12 035 12 067 – 12 068
NUMBER OF MODULES	4	8	12	18	24	36	54
COLOUR	RAL 9001 white RAL 7024 grey	RAL 9001 white RAL 7024 grey RAL 7035 grey	RAL 9001 white RAL 7024 grey RAL 7035 grey	RAL 9001 white RAL 7024 grey	RAL 9001 white RAL 7024 grey RAL 7035 grey	RAL 9001 white RAL 7024 grey RAL 7035 grey	RAL 9001 white RAL 7035 grey
WITHOUT DOOR	-	-	-	-	-	-	-
WITH TRANSPARENT DOOR	YES	YES	YES	YES	YES	YES	YES
WITH OPAQUE DOOR	-	YES	YES	-	YES	YES	YES
DOUBLE INSULATION	YES	YES	YES	YES	YES	YES	YES
RESISTANCE TO HEAT	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C
TYPE OF MATERIAL	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
MECHANICAL RESISTANCE	6 JOULE	6 JOULE	6 JOULE	6 JOULE	6 JOULE	6 JOULE	6 JOULE
DIMENSIONAL STABILITY	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C
DEGREE OF PROTECTION	IP 40	IP 40	IP 40	IP 40	IP 40	IP 40	IP 40
MAX DISSIPATION POWER <sup>(1)</sup>	19 W	25 W	29 W	40 W	45 W	68 W	85 W
EXTRACTABLE FRAME	-	YES	YES	YES	YES	YES	YES
DESIGNED FOR RAPID CABLING	-	UNIFIX SL	UNIFIX SL	UNIFIX SL	UNIFIX SL	UNIFIX SL	UNIFIX SL

(1): data concerning dissipation power have been obtained by following the instructions of CEI 23-49 Standard, with a temperature difference of Dt= 30°C

### 9 Reaction to chemical agents\*

Chemical Agent	IP 40 Estetica and Europa Series wall-mounting consumer units
Cold water	■
Hot water	■
Sulphuric acid 40%	▲
Hydrochloric acid 35%	▲
Acetic acid 10%	●
Benzole	●
Oil	●
Acetone	●
Ethyl-alcohol	▲
Ammonia, liquid	■
Dichloromethane	●
Diesel oil	■
Mineral oils and fats	■
Food oils and fats	■
Perchlorate ethylene	●
Trichoroethylene	●
Ethylether	■
Ozone	■
Toluene	●
Methanol	▲
Spirits	■
Milk	■
Fruit Juice	■
Fluorine hydrocarbons	●
Lye-washes	■
Cleansings	■
Water solution	■

\* Indications concerning the resistance of the products to chemical agents must be considered as an indication only, and refer to standard conditions (40°C, integral product).

## Further technical information and applications

### Consumer units for modular circuit breakers – summarised technical data

#### Flush-mounting consumer units IP 40 Unibox Series without door

ARTICLE	12 208 – 12 228	12 212 – 12 232	12 214 – 12 234	12 216 – 12 236	12 217 – 12 237
NUMBER OF MODULES <sup>(1)</sup>	8 + 1	12 + 1 24 + 2	36 + 3 54 + 3		
COLOUR	RAL 9016 white RAL 7035 grey	RAL 9016 white RAL 7035 grey	RAL 9016 white RAL 7035 grey	RAL 9016 white RAL 7035 grey	RAL 9016 white RAL 7035 grey
WITHOUT DOOR	YES	YES	YES	YES	YES
WITH TRANSPARENT DOOR	-	-	-	-	-
WITH OPAQUE DOOR	-	-	-	-	-
DOUBLE INSULATION	YES	YES	YES	YES	YES
RESISTANCE TO HEAT	white GWT 750°C grey GWT 750°C	white GWT 750°C grey GWT 750°C	white GWT 750°C grey GWT 750°C	white GWT 750°C grey GWT 750°C	white GWT 750°C grey GWT 750°C
TYPE OF MATERIAL	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
MECHANICAL RESISTANCE	10 JOULE (IK 09)	10 JOULE (IK 09)	10 JOULE (IK 09)	10 JOULE (IK 09)	10 JOULE (IK 09)
DIMENSIONAL STABILITY	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C
DEGREE OF PROTECTION	IP 40	IP 40	IP 40	IP 40	IP 40
MAX DISSIPATION POWER <sup>(2)</sup>	22 W	34 W	58 W	70 W	83 W
CABLE HOLDING SYSTEM	YES	YES	YES	YES	YES
DESIGNED FOR INPUT	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm
EXTRACTABLE FRAME	-	-	YES	YES	YES
DESIGNED FOR RAPID CABLING	UNIFIX SL	UNIFIX SL	UNIFIX SL	UNIFIX SL	UNIFIX SL

(1): extra module see characteristics on page 2/17

(2): data concerning dissipation power have been obtained by following the instructions in CEI 23-49 Standard, with a temperature difference of Dt= 30°C

#### Flush-mounting consumer units IP 40 Unibox Series with door

ARTICLE	12 238 – 12 248 12 258 – 12 268	12 242 – 12 252 12 262 – 12 272	12 244 – 12 254 12 264 – 12 274	12 246 – 12 256 12 266 – 12 276	12 247 – 12 257 12 267 – 12 277
NUMBER OF MODULES	8 + 1	12 + 1	24 + 2	36 + 3	54 + 3
COLOUR	RAL 9016 white RAL 7035 grey	RAL 9016 white RAL 7035 grey	RAL 9016 white RAL 7035 grey	RAL 9016 white RAL 7035 grey	RAL 9016 white RAL 7035 grey
WITHOUT DOOR	-	-	-	-	-
WITH TRANSPARENT DOOR	YES	YES	YES	YES	YES
WITH OPAQUE DOOR	YES	YES	YES	YES	YES
DOUBLE INSULATION	YES	YES	YES	YES	YES
RESISTANCE TO HEAT	white GWT 750°C grey GWT 750°C	white GWT 750°C grey GWT 750°C	white GWT 750°C grey GWT 750°C	white GWT 750°C grey GWT 750°C	white GWT 750°C grey GWT 750°C
TYPE OF MATERIAL	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
MECHANICAL RESISTANCE	10 JOULE (IK 09)	10 JOULE (IK 09)	10 JOULE (IK 09)	10 JOULE (IK 09)	10 JOULE (IK 09)
DIMENSIONAL STABILITY	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C
DEGREE OF PROTECTION	IP 40	IP 40	IP 40	IP 40	IP 40
MAX DISSIPATION POWER <sup>(1)</sup>	20 W	30 W	40 W	45 W	54 W
CABLE HOLDING SYSTEM	YES	YES	YES	YES	YES
DESIGNED FOR INPUT	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm
EXTRACTABLE FRAME	-	-	YES	YES	YES
DESIGNED FOR RAPID CABLING	UNIFIX SL	UNIFIX SL	UNIFIX SL	UNIFIX SL	UNIFIX SL

(1): data concerning dissipative power have been obtained by following the instructions in CEI 23-49 Standard, with a temperature difference of Dt= 30°C

## Further technical information and applications

### Consumer units for modular circuit breakers – summarised technical data

#### Covers and wall-mounting consumer units IP 40 Europa Series without door

ARTICLE	12 402 12 422	12 404 12 424	12 406 12 426	12 408 12 428	12 412 12 432	12 414 12 434	12 416 12 436	12 417 12 437
NUMBER OF MODULES	2	4	6	8	12	24	36	54
COLOUR	RAL 9001 white RAL 7035 grey	RAL 9001 white RAL 7035 grey	RAL 9001 white RAL 7035 grey	RAL 9001 white RAL 7035 grey	RAL 9001 white RAL 7035 grey	RAL 9001 white RAL 7035 grey	RAL 9001 white RAL 7035 grey	RAL 9001 white RAL 7035 grey
WITHOUT DOOR	YES	YES	YES	YES	YES	YES	YES	YES
WITH TRANSPARENT DOOR	-	-	-	-	-	-	-	-
WITH OPAQUE DOOR	-	-	-	-	-	-	-	-
DOUBLE INSULATION	YES	YES	YES	YES	YES	YES	YES	YES
RESISTANCE TO HEAT	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C
TYPE OF MATERIAL	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
MECHANICAL RESISTANCE	6 JOULE	6 JOULE	6 JOULE	6 JOULE	6 JOULE	6 JOULE	6 JOULE	6 JOULE
DIMENSIONAL STABILITY	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C
DEGREE OF PROTECTION	IP 40	IP 40	IP 40	IP 40	IP 40	IP 40	IP 40	IP 40
MAX DISSIPATION POWER <sup>(1)</sup>	10 W	14 W	16 W	22 W	28 W	50 W	72 W	96 W
DESIGNED FOR INPUT	-	-	-	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	Direct branch connection Conduits Ø5+35 mm
DESIGNED FOR MOULDED-CASE CIRCUIT BREAKERS	-	-	-	-	-	-	YES	YES
DESIGNED FOR RAPID CABLING	-	-	-	UNIFIX SL	UNIFIX SL	UNIFIX SL	UNIFIX SL	UNIFIX L

(1): data concerning dissipation power have been obtained by following the instructions in CEI 23-49 Standard, with a temperature difference of Dt= 30°C

#### Wall-mounted consumer units IP 40 Europa Series with door

ARTICLE	12 438 – 12 448 12 458 – 12 468	12 442 – 12 452 12 462 – 12 472	12 444 – 12 454 12 464 – 12 474	12 446 – 12 456 12 466 – 12 476	12 447 – 12 457 12 467 – 12 477
NUMBER OF MODULES	8	12	24	36	54
COLOUR	RAL 9001 white RAL 7035 grey	RAL 9001 white RAL 7035 grey	RAL 9001 white RAL 7035 grey	RAL 9001 white RAL 7035 grey	RAL 9001 white RAL 7035 grey
WITHOUT DOOR	-	-	-	-	-
WITH TRANSPARENT DOOR	YES	YES	YES	YES	YES
WITH OPAQUE DOOR	YES	YES	YES	YES	YES
DOUBLE INSULATION	YES	YES	YES	YES	YES
RESISTANCE TO HEAT	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C	white GWT 960°C grey GWT 650°C
TYPE OF MATERIAL	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
MECHANICAL RESISTANCE	6 JOULE	6 JOULE	6 JOULE	6 JOULE	6 JOULE
DIMENSIONAL STABILITY	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C
DEGREE OF PROTECTION	IP 40	IP 40	IP 40	IP 40	IP 40
MAX DISSIPATION POWER <sup>(1)</sup>	19 W	27 W	31 W	45 W	56 W
DESIGNED FOR INPUT	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	CONDUITS ø25+32 mm TRUNKINGS up to 200X60 mm	Direct branch connection Conduits Ø5+35 mm
DESIGNED FOR MOULDED-CASE CIRCUIT BREAKERS	-	-	-	YES	YES
DESIGNED FOR RAPID CABLING	UNIFIX SL	UNIFIX SL	UNIFIX SL	UNIFIX SL	UNIFIX L

(1): data concerning dissipation power have been obtained by following the instructions of CEI 23-49 Standard, with a temperature difference of Dt= 30°C

#### Reaction to chemical agents\*

Chemical agent	Resistance
Cold water	resistant
Hot water	resistant
Sulphuric acid 40%	partially resistant
Hydrochloric acid 35%	partially resistant
Acetic acid 10%	resistant
Benzole	not resistant
Oil	resistant
Acetone	resistant
Ethyl-alcohol	resistant
Ammonia, liquid	resistant
Dichloromethane	resistant
Diesel oil	resistant
Mineral oils and fats	resistant
Food oils and fats	resistant
Perchlorate ethylene	resistant
Trichloroethylene	resistant
Ethylether	resistant
Ozone	resistant
Toluene	resistant
Methanol	resistant
Spirits	resistant
Milk	resistant
Fruit juice	resistant
Fluorine hydrocarbons	resistant
Lye-washes	resistant
Cleansings	resistant
Water solution	resistant

IP 40 Unibox and Europa Series wall-mounting consumer units and IP 40 wall-mounting covers

VLCC0065

■ resistant ▲ partially resistant ● not resistant

\* Indications concerning the resistance of the products to chemical agents must be considered as an indication only and refer to standard conditions (40°C, integral product).

## Further technical information and applications

### Consumer units for modular circuit breakers – summarised technical data

#### Polycarbonate wall-mounting consumer units IP 40 Europa Series

ARTICLE	12 702	12 704	12 708	12 712	12 714	12 716	12 718
NUMBER OF MODULES	2	4	8	12	24	36	54
COLOUR	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey
WITHOUT DOOR	YES	YES	YES	YES	YES	YES	YES
WITH TRANSPARENT DOOR	-	-	-	-	-	-	-
WITH OPAQUE DOOR	-	-	-	-	-	-	-
DOUBLE INSULATION	YES	YES	YES	YES	YES	YES	YES
RESISTANCE TO HEAT	grey GWT 960°C	grey GWT 960°C	grey GWT 960°C	grey GWT 960°C	grey GWT 960°C	grey GWT 960°C	grey GWT 960°C
TYPE OF MATERIAL	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate
MECHANICAL RESISTANCE	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)
DIMENSIONAL STABILITY	-25° + +115°C	-25° + +115°C	-25° + +115°C	-25° + +115°C	-25° + +115°C	-25° + +115°C	-25° + +115°C
DEGREE OF PROTECTION	IP 40	IP 40	IP 40	IP 40	IP 40	IP 40	IP 40
MAX DISSIPATION POWER <sup>(1)</sup>	15 W	17 W	25 W	40 W	55 W	75 W	96 W
FLANGE FOR DIRECT BRANCH	-	-	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm
EXTRACTABLE FRAME	-	YES	YES	YES	YES	YES	YES
DESIGNED FOR MOULDED-CASE CIRCUIT BREAKERS	-	YES	YES	YES	YES	YES	YES
DESIGNED FOR RAPID CABLING	-	-	UNIFIX L	UNIFIX L	UNIFIX L	UNIFIX L	UNIFIX L

(1): data concerning dissipation power have been obtained by following the instructions in CEI 23-49 Standard, with a temperature difference of Dt= 30°C

#### IP 65 Marostica Series switchboards for industrial applications with blank front

ARTICLE	13 200	13 204	13 205	13 206	13 208
NUMBER OF MODULES	4	12	12	12	18
DIMENSIONS (mm)	136x540x140	275x370x140	275x455x140	275x570x140	380x570x140
COLOUR	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey
WITHOUT DOOR	-	-	-	-	-
WITH TRANSPARENT DOOR	YES	YES	YES	YES	YES
WITH OPAQUE DOOR	-	-	-	-	-
DOUBLE INSULATION	YES	YES	YES	YES	YES
RESISTANCE TO HEAT	GWT 960°C	GWT 960°C	GWT 960°C	GWT 960°C	GWT 960°C
TYPE OF MATERIAL	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate
MECHANICAL RESISTANCE	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)
DIMENSIONAL STABILITY	-25° + +115°C	-25° + +115°C	-25° + +115°C	-25° + +115°C	-25° + +115°C
DEGREE OF PROTECTION	IP 65	IP 65	IP 65	IP 65	IP 65
MAX DISSIPATION POWER <sup>(1)</sup>	13 W	24 W	23 W	27 W	37 W
FLANGE FOR DIRECT BRANCH	-	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm

(1): data concerning dissipation power have been obtained by following the instructions in CEI 23-49 Standard, with a temperature difference of Dt= 30°C

#### Reaction to chemical agents\*

IP 40 Polycarbonate Europa Series wall-mounting consumer units	Cold water	Hot water	Sulphuric acid 40%	Hydrochloric acid 35%	Acetic acid 10%	Benzole	Oil	Acetone	Ethyl-alcohol	Ammonia, liquid	Dichloromethane	Diesel oil	Mineral oils and fats	Food oils and fats	Perchlorate ethylene	Trichoroethylene	Ethylether	Ozone	Toluene	Methanol	Spirits	Milk	Fruit juice	Fluorine hydrocarbons	Lye-washes	Cleansings	Water solution
	■	▲	■	▲	■	●	■	■	■	●	●	■	■	■	●	●	●	■	●	●	■	■	■	●	▲	▲	■

■ resistant   
▲ partially resistant   
● not resistant

VLC00065

\* Indications concerning the resistance of the products to chemical agents must be considered as an indication only and refer to standard conditions (40°C, integral product).

## Further technical information and applications

### Consumer units for modular circuit breakers – summarised technical data

#### Wall-mounting consumer units IP 55 Europa Series

ARTICLE	12 644 – 12 684	12 646 – 12 686	12 650 – 12 690	12 652 – 12 692
NUMBER OF MODULES	4	6	10	20
COLOUR	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey
WITHOUT DOOR	-	-	-	-
WITH TRANSPARENT DOOR	YES	YES	YES	YES
WITH OPAQUE DOOR	-	-	-	-
DOUBLE INSULATION	YES	YES	YES	YES
RESISTANCE TO HEAT	grey GWT 650°C	grey GWT 650°C	grey GWT 650°C	grey GWT 650°C
TYPE OF MATERIAL	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
MECHANICAL RESISTANCE	6 JOULE	6 JOULE	6 JOULE	6 JOULE
DIMENSIONAL STABILITY	-20° + +85°C	-20° + +85°C	-20° + +85°C	-20° + +85°C
DEGREE OF PROTECTION	IP 55	IP 55	IP 55	IP 55
MAX DISSIPATION POWER <sup>(1)</sup>	13 W	17 W	20 W	35 W
DESIGNED FOR INLETS	ø16 + 40 mm	ø16 + 40 mm	ø16 + 40 mm	ø16 + 40 mm

(1): data concerning dissipation power have been obtained by following the instructions of CEI 23-49 Standard, with a temperature difference of  $\Delta t = 30^\circ\text{C}$

#### IP 65 Europa Series switchboards for industrial applications

ARTICLE	12 764-12 784	12 768-12 788	12 772-12 792	12 774-12 794	12 776-12796	12 778-12 796
DIMENSIONS (mm)	140x220x140	205x220x140	275x220x140	275x370x140	275x570x140	380x570x140
COLOUR	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey
WITHOUT DOOR	-	-	-	-	-	-
WITH TRANSPARENT DOOR	YES	YES	YES	YES	YES	YES
WITH OPAQUE DOOR	YES	YES	YES	YES	YES	YES
DOUBLE INSULATION	YES	YES	YES	YES	YES	YES
RESISTANCE TO HEAT	GWT 960°C	GWT 960°C	GWT 960°C	GWT 960°C	GWT 960°C	GWT 960°C
TYPE OF MATERIAL	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate
MECHANICAL RESISTANCE	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)
DIMENSIONAL STABILITY	-25° + +115°C	-25° + +115°C	-25° + +115°C	-25° + +115°C	-25° + +115°C	-25° + +115°C
DEGREE OF PROTECTION	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65
FLANGE FOR DIRECT BRANCH	-	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm
FIT FOR INSTALLING MCBs						
MOUNTING KITS	-	-	-	YES	YES	YES
FIT FOR INSTALLING BASE PLATES	YES	YES	YES	YES	YES	YES
FIT FOR INSTALLING FIXED COUNTER-DOORS	-	-	-	YES	YES	YES

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### Reaction to chemical agents\*

	Cold water	Hot water	Sulphuric acid 40%	Hydrochloric acid 35%	Acetic acid 10%	Benzole	Oil	Acetone	Ethyl-alcohol	Ammonia, liquid	Dichloromethane	Diesel oil	Mineral oils and fats	Food oils and fats	Perchlorate ethylene	Trichloroethylene	Ethylether	Ozone	Toluene	Methanol	Spirits	Milk	Fruit juice	Fluorine hydrocarbons	Lye-washes	Cleanings	Water solution
IP 55 Europa Series wall-mounting consumer units	■	■	▲	▲	■	●	■	●	▲	■	●	■	■	■	●	●	■	●	●	▲	■	■	■	●	■	■	■

■ resistant    ▲ partially resistant    ● not resistant

\* Indications concerning the resistance of the products to chemical agents must be considered as an indication only, and refer to standard conditions (40°C, integral product).

# Further technical information and applications

## Consumer units for modular circuit breakers – summarised technical data

### Polycarbonate wall-mounting consumer units IP 65 Fly Series

ARTICLE	12 722 – 12 742	12 743	12 745	12 746	12 747
NUMBER OF MODULES	2/4	8	12	24	36
COLOUR	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey
WITHOUT DOOR	-	-	-	-	-
WITH TRANSPARENT DOOR	YES	YES	YES	YES	YES
WITH OPAQUE DOOR	YES	-	-	-	-
DOUBLE INSULATION	YES	YES	YES	YES	YES
RESISTANCE TO HEAT	grey GWT 960°C	grey GWT 960°C	grey GWT 960°C	grey GWT 960°C	grey GWT 960°C
TYPE OF MATERIAL	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate
MECHANICAL RESISTANCE	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)
DIMENSIONAL STABILITY	-25° + +115°C	-25° + +115°C	-25° + +115°C	-25° + +115°C	-25° + +115°C
DEGREE OF PROTECTION	IP 65	IP 65	IP 65	IP 65	IP 65
MAX DISSIPATION POWER <sup>(1)</sup>	11 W	15 W	19 W	31 W	45 W
FLANGE FOR DIRECT BRANCH CONNECTIONS	-	CONDUITS AND TRUNKINGS ø5+35 mm	CONDUITS AND TRUNKINGS ø5+35 mm	CONDUITS AND TRUNKINGS ø5+35 mm	CONDUITS AND TRUNKINGS ø5+35 mm
EXTRACTABLE FRAME	-	YES	YES	YES	YES
DESIGNED FOR MOULDED-CASE CIRCUIT BREAKERS	-	YES	YES	YES	YES
DESIGNED FOR RAPID CABLING	-	UNIFIX L	UNIFIX L	UNIFIX L	UNIFIX L

(1): data concerning dissipation power have been obtained by following the instructions of CEI 23-49 Standard, with a temperature difference of Dt= 30°C

### Polycarbonate wall-mounted consumer units IP 40 Europa Series

ARTICLE	12 724 – 12 744	12 728 – 12 748	12 732 – 12 752	12 733 – 12 753	12 734 – 12 754	12 735 – 12 755 12 736 – 12 756	12 738 – 12 758
NUMBER OF MODULES	4	8	12	18	24	36	54
COLOUR	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey	RAL 7035 grey
WITHOUT DOOR	-	-	-	-	-	-	-
WITH TRANSPARENT DOOR	YES	YES	YES	YES	YES	YES	YES
WITH OPAQUE DOOR	YES	YES	YES	YES	YES	YES	YES
DOUBLE INSULATION	YES	YES	YES	YES	YES	YES	YES
RESISTANCE TO HEAT	grey GWT 960°C	grey GWT 960°C	grey GWT 960°C	grey GWT 960°C	grey GWT 960°C	grey GWT 960°C	grey GWT 960°C
TYPE OF MATERIAL	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate
MECHANICAL RESISTANCE	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)	20 JOULE (IK 10)
DIMENSIONAL STABILITY	-25° + +115°C	-25° + +115°C	-25° + +115°C	-25° + +115°C	-25° + +115°C	-25° + +115°C	-25° + +115°C
DEGREE OF PROTECTION	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65
MAX DISSIPATION POWER <sup>(1)</sup>	15 W	20 W	30 W	32 W	34 W	45 W	56 W
FLANGE FOR DIRECT BRANCH CONNECTIONS	-	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm	COND. AND TRUNK. ø5+35 mm
EXTRACTABLE FRAME	YES	YES	YES	YES	YES	YES	YES
DESIGNED FOR MOULDED-CASE CIRCUIT BREAKERS	YES	YES	YES	YES	YES	YES	YES
DESIGNED FOR RAPID CABLING	-	UNIFIX L	UNIFIX L	UNIFIX L	UNIFIX L	UNIFIX L	UNIFIX L

(1): data concerning dissipation power have been obtained by following the instructions of CEI 23-49 Standard, with a temperature difference of Dt= 30°C

#### Reaction to chemical agents\*

Chemical Agent	Reaction
Cold water	resistant
Hot water	partially resistant
Sulphuric acid 40%	resistant
Hydrochloric acid 35%	resistant
Acetic acid 10%	resistant
Benzole	not resistant
Oil	resistant
Acetone	resistant
Ethyl-alcohol	resistant
Ammonia, liquid	resistant
Dichloromethane	resistant
Diesel oil	resistant
Mineral oils and fats	resistant
Food oils and fats	resistant
Perchlorate ethylene	resistant
Trichloroethylene	resistant
Ethylether	resistant
Ozone	resistant
Toluene	resistant
Methanol	resistant
Spirits	resistant
Milk	resistant
Fruit juice	resistant
Fluorine hydrocarbons	resistant
Lye-washes	partially resistant
Cleansings	partially resistant
Water solution	resistant

IP 65 Polycarbonate Fly and Europa Series wall-mounting consumer units

■ resistant ▲ partially resistant ● not resistant

VILCO0658

\* Indications concerning the resistance of the products to chemical agents must be considered as an indication only and refer to standard conditions (40°C, integral product).

## Further technical information and applications

### Switchboards and boxes – reaction to chemical agents

Reaction to chemical agents\*

	Cold water	Hot water	Sulphuric acid 40%	Hydrochloric acid 35%	Acetic acid 10%	Benzole	Oil	Acetone	Ethyl-alcohol	Ammonia, liquid	Dichloromethane	Diesel oil	Mineral oils and fats	Food oils and fats	Perchlorate ethylene	Trichloroethylene	Ethylether	Ozone	Toluene	Methanol	Spirits	Milk	Fruit juice	Fluorine hydrocarbons	Lye-washes	Cleansings	Water solution
IP 65 Europa Series and blank front switchboards	■	▲	■	▲	■	●	■	●	■	●	●	▲	■	■	●	●	●	■	●	●	■	■	■	●	▲	▲	■
IP 65 Marostica Series switchboards	■	▲	■	▲	■	●	■	●	■	●	●	▲	■	■	●	●	●	■	●	●	■	■	■	●	▲	▲	■
IP 44 junction boxes with press-on lid	■	■	▲	▲	■	▲	▲	■	■	■	▲	■	■	■	●	●	▲	▲	●	■	■	■	■	▲	■	■	■
IP 55 junction boxes with screw-on lid	■	▲	■	■	■	●	■	●	■	■	●	■	■	■	●	●	●	▲	●	■	■	■	■	●	■	■	■
IP 65 Polycarbonate junction boxes	■	▲	■	▲	■	●	■	●	■	●	●	▲	■	■	●	●	●	■	●	●	■	■	■	●	▲	▲	■
Wiring accessories boxes	■	■	▲	▲	■	●	●	●	■	■	●	▲	▲	■	●	●	●	■	●	■	■	■	■	●	■	■	■

■ resistant   ▲ partially resistant   ● not resistant

\* Indications concerning the resistance of the products to chemical agents must be considered as an indication only and refer to standard conditions (40°C, integral product).

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## Further technical information and applications

### Possible configurations of terminal holders – terminal bars for consumer units

Terminal holders and bars are supplied separately; in this way, by inserting one or two terminal bars in the terminal holders, you can create the best terminal for your requirements. All the possible configurations for creating each type of consumer unit

are given in the table below. Not only do you have the advantage of being able to create a personalised terminal but clearly there will be an economic advantage from using only that which is really necessary.

#### IP 40 Estetica Series flush-mounting consumer units

#### IP 40 Europa Series flush-mounting consumer units

#### IP 40 Unibox Series wall-mounting consumer units

For consumer units Number of modules	Terminal holder Article	Terminal bars Article x q.ty	
8	12 540	12 531x1	
	12 540	12 531x2	
	12 540	12 531x1 with 12 532x1	
	12 540	12 532x1	
	12 540	12 533x1	
	12 540	12 534x1	
12	12 541	12 531x1	
	12 541	12 531x2	
	12 541	12 531x1 with 12 532x1	
	12 541	12 531x1 with 12 533x1	
24	12 541	12 531x1 with 12 534x1	
	12 541	12 531x1 with 12 535x1	
36 (12 mod.x3 rows)	12 541	12 532x1	
	12 541	12 532x2	
	12 541	12 533x1	
	12 541	12 534x1	
	12 541	12 535x1	
18	12 542	12 531x1	
	12 542	12 531x2	
	12 542	12 531x1 with 12 532x1	
	12 542	12 531x1 with 12 533x1	
	12 542	12 531x1 with 12 534x1	
	12 542	12 531x1 with 12 535x1	
	12 542	12 532x1	
	54	12 542	12 532x2
		12 542	12 532x1 with 12 533x1
		12 542	12 532x1 with 12 534x1
12 542		12 533x1	
12 542		12 534x1	
12 542		12 535x1	
12 542		12 531x1	
12 542		12 531x2	

#### IP 40 Europa Series wall-mounting consumer units

For consumer units Number of modules	Terminal holder Article	Terminal bars Article x q.ty
8	12 540	12 531x1
	12 540	12 531x2
	12 540	12 531x1 with 12 532x1
	12 540	12 532x1
	12 540	12 533x1
	12 540	12 534x1
12	12 541	12 531x1
	12 541	12 531x2
	12 541	12 531x1 with 12 532x1
	12 541	12 531x1 with 12 533x1
24	12 541	12 531x1 with 12 534x1
	12 541	12 531x1 with 12 535x1
36 (12 mod.x3 rows)	12 541	12 532x1
	12 541	12 532x2
	12 541	12 533x1
	12 541	12 534x1
	12 541	12 535x1
54	12 543	12 531x1
	12 543	12 531x2
	12 543	12 531x1 with 12 532x1
	12 543	12 531x1 with 12 533x1
	12 543	12 531x1 with 12 534x1
	12 543	12 531x1 with 12 535x1
	12 543	12 532x1
	12 543	12 532x2
	12 543	12 532x1 with 12 533x1
	12 543	12 532x1 with 12 534x1
	12 543	12 532x1 with 12 535x1
	12 543	12 533x1
	12 543	12 533x2
	12 543	12 533x1 with 12 534x1
	12 543	12 534x1
	12 543	12 534x2
12 543	12 535x1	

## Further technical information and applications

### Possible configurations of terminal holders – terminal bars for consumer units

IP 40 Polycarbonate Europa Series wall-mounting consumer units  
 IP 65 Polycarbonate Europa Series wall-mounting consumer units  
 IP 65 Polycarbonate Fly Series wall-mounting consumer units

Europa Series consumer units for industrial applications

For consumer units Number of modules	Terminal holder Article	Terminal bars Article x q.ty	
4	12538	12531x1	
8	12539	12531x1	
12	12540	12531x1	
	12540	12531x2	
24	12540	12531x1 with 12532x1	
36 (12 mod.x3 rows)	12540	12532x1	
	12540	12533x1	
12	12540	12534x1	
	12543	12531x1	
	12543	12531x2	
	12543	12531x1 with 12532x1	
	12543	12531x1 with 12533x1	
	12543	12531x1 with 12534x1	
	12543	12531xx1 with 12535x1	
	12543	12532x1	
	12543	12532x2	
	36 (18 mod.x2 rows)	12543	12532x1 with 12533x1
		12543	12532x1 with 12534x1
	54	12543	12532x1 with 12535x1
		12543	12533x1
		12543	12533x2
12543		12533x1 with 12534x1	
12543		12534x1	
12543		12534x2	
12543	12535x1		

For boxes Dimensions	Terminal holder Article	Terminal bars Article x q.ty
140x220x140	12 538	12 531x1
205x220x140	12 539	12 531x1
275x220x140	12 540	12 531x1
	12 540	12 531x2
275x370x140	12 540	12 531x1 with 12 532x1
275x570x140	12 540	12 532x1
	12 540	12 533x1
380x570x140	12 540	12 534x1
	12 543	12 531x1
	12 543	12 531x2
	12 543	12 531x1 with 12 532x1
	12 543	12 531x1 with 12 533x1
	12 543	12 531x1 with 12 534x1
	12 543	12 531x1 with 12 535x1
	12 543	12 532x1
	12 543	12 532x2
	12 543	12 532x1 with 12 533x1
	12 543	12 532x1 with 12 534x1
	12 543	12 532x1 with 12 535x1
	12 543	12 533x1
	12 543	12 533x2
12 543	12 533x1 with 12 534x1	
12 543	12 534x1	
12 543	12 534x2	
12 543	12 535x1	

IP 65 Polycarbonate junction boxes

For boxes Dimensions	Terminal holder Article	Terminal bars Article x q.ty
140x220x140	12 538	12 531x1
205x220x140	12 539	12 531x1
275x220x140	12 540	12 531x1
	12 540	12 531x2
275x370x140	12 540	12 531x1 with 12 532x1
275x570x140	12 540	12 532x1
	12 540	12 533x1
380x570x140	12 540	12 534x1
	12 543	12 531x1
	12 543	12 531x2
	12 543	12 531x1 with 12 532x1
	12 543	12 531x1 with 12 533x1
	12 543	12 531x1 with 12 534x1
	12 543	12 531x1 with 12 535x1
	12 543	12 532x1
	12 543	12 532x2
	12 543	12 532x1 with 12 533x1
	12 543	12 532x1 with 12 534x1
	12 543	12 532x1 with 12 535x1
	12 543	12 533x1
	12 543	12 533x2
12 543	12 533x1 with 12 534x1	
12 543	12 534x1	
12 543	12 534x2	
12 543	12 535x1	

9

## Further technical information and applications

### Possible configurations of terminal-holders – terminal bars for consumer units

#### Switchboards with blank front for industrial applications

For boxes Dimensions	Terminal holder Article	Terminal bars Article x q.ty
<b>275x370x140</b>	12 540	12 531x1
	12 540	12 531x2
	12 540	12 531x1 with 12 532x1
<b>275x455x140</b>	12 540	12 532x1
<b>275x570x140</b>	12 540	12 533x1
	12 540	12 534x1
<b>380x570x140</b>	12 543	12 531x1
	12 543	12 531x2
	12 543	12 531x1 with 12 532x1
	12 543	12 531x1 with 12 533x1
	12 543	12 531x1 with 12 534x1
	12 543	12 531x1 with 12 535x1
	12 543	12 532x1
	12 543	12 532x1 with 12 533x1
	12 543	12 532x1 with 12 534x1
	12 543	12 532x1 with 12 535x1
	12 543	12 533x1
	12 543	12 533x2
	12 543	12 533x1 with 12 534x1
	12 543	12 534x1
	12 543	12 534x2
12 543	12 535x1	

#### Marostica Series modular switchboards

For boxes Dimensions	Terminal holder Article	Terminal bars Article x q.ty
<b>275x370x140</b>	12 540	12 531x1
	12 540	12 531x2
	12 540	12 531x1 with 12 532x1
<b>275x455x140</b>	12 540	12 532x1
<b>275x570x140</b>	12 540	12 533x1
	12 540	12 534x1
<b>380x570x140</b>	12 543	12 531x1
	12 543	12 531x2
	12 543	12 531x1 with 12 532x1
	12 543	12 531x1 with 12 533x1
	12 543	12 531x1 with 12 534x1
	12 543	12 531x1 with 12 535x1
	12 543	12 532x1
	12 543	12 532x1 with 12 533x1
	12 543	12 532x1 with 12 534x1
	12 543	12 532x1 with 12 535x1
	12 543	12 533x1
	12 543	12 533x2
	12 543	12 533x1 with 12 534x1
	12 543	12 534x1
	12 543	12 534x2
12 543	12 535x1	

# Further technical information and applications

## Mounting examples and functional details

### Flush-mounting Europa and Estetica Series



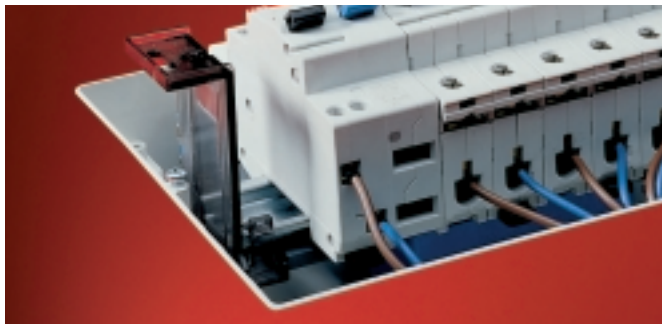
FLCO9866

▲ By combining the copper terminal bars to the corresponding plastic terminal holders, according to the configuration, the consumer unit terminal can be fitted with Neutral (N) or Earth (E).

► The fact that the unit has been designed to use the rapid Unifix SL cabling system means that there is a considerable saving in terms of time and installation costs.



FLCO9870



FLCO9867

▲ An extractable frame is available also in the single row version, making bench cabling operations easier.



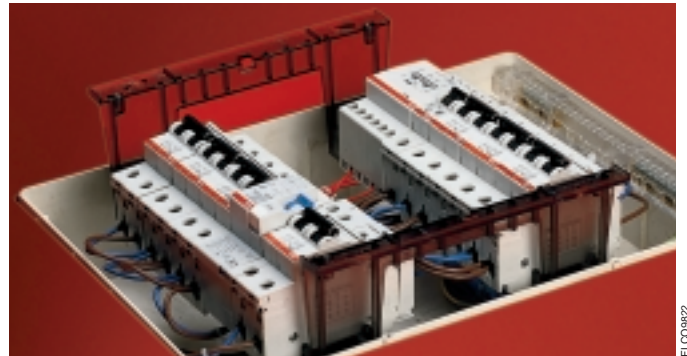
FLCO9871

▲ The handy slots made to attach the unit to the frame guarantee correct alignment even when the flush-mounting box has not been installed on perfectly flat surfaces.

# Further technical information and applications

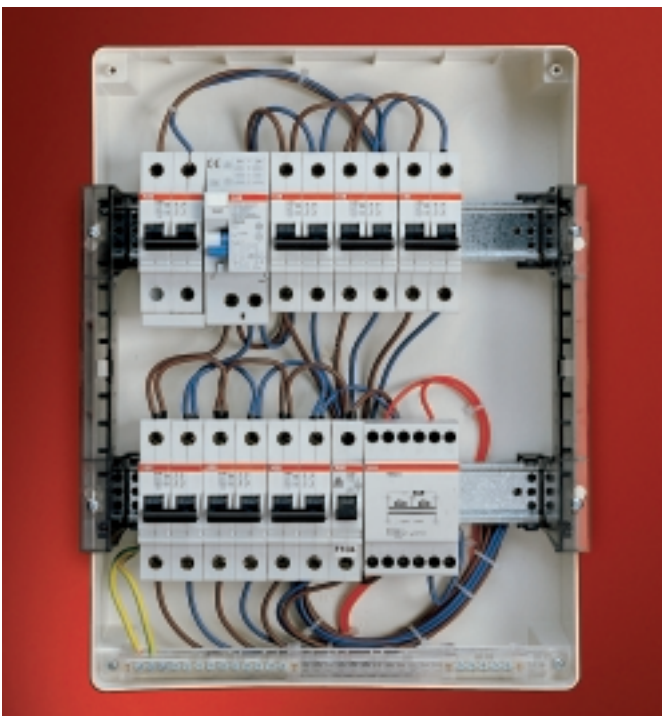
## Mounting examples and functional details

### Flush-mounting Europa Series



▲ The extractable DIN rail frame makes bench cabling easy.

◀ The door has been designed to take a pin lock, satisfying any requirement to protect access to the consumer unit.



▲ The two housings on the sides of the front ensure that the door is completely reversible and therefore it can be mounted on the right or on the left according to specific requirements.

◀ The roomy interiors make cabling easy and simple.

# Further technical information and applications

## Mounting examples and functional details

### Unibox Series



FLCO881

▲ The knockout cut halfway down the module on both sides makes it possible to fit an extra module corresponding to each row of circuit breakers.

The cover is fitted using rapid pitch ▶ screws in insulating thermo-plastic that can be lead-sealed if necessary.



FLCO8910



FLCO8840

▲ The push-pull mechanism means that the door can be closed easily.



FLCO8874

▲ The door can be fitted with a lock with a coded key.



FLCO8876

▲ The knockouts in the cover give maximum flexibility in trunking branch connections.



FLCO8877

▲ The accurate alignment system engraved on the top and bottom of the base of the consumer unit makes it easy to position the branch connection trunking.



FLCO8838

▲ The consumer unit is designed with a flange so that it can be used for branch connection using a conduit; the knockouts make it possible to make branch connections with conduits with a maximum diameter of 40 mm.



FLCO8879

# Further technical information and applications

## Mounting examples and functional details

### Unibox Series



FLC09819



FLC09839

▲ Thanks to plenty of room under the DIN rail it is possible to install the cables tidily and rationalise their paths.



FLC09872

▲ Consumer units in the Unibox Series have been designed to optimise the use of the Unifix SL rapid cabling system. Another characteristic is the frame, which can be kept in an angled position thanks to practical wires, making it easier to work on the connection cables .



FLC09873

▲ The modular, snap-on frame is easy to extract and is therefore ideal for bench cabling.



FLC09837

▲ The special caps used to cover the holes for attaching to the wall ensure that the consumer unit is double insulated.



FLC09875

▲ The base, on which push-in inlets have been made, is specially designed for the installation of corrugated conduits coming from the wall.



FLC09880

▲ The practical holding system secures the incoming and outgoing cables to a special comb accessory which not only keeps the cables tidy but also protects the devices' terminals from any direct mechanical contact.

# Further technical information and applications

## Mounting examples and functional details

### Polycarbonate Fly and Europa Series



FLC09823



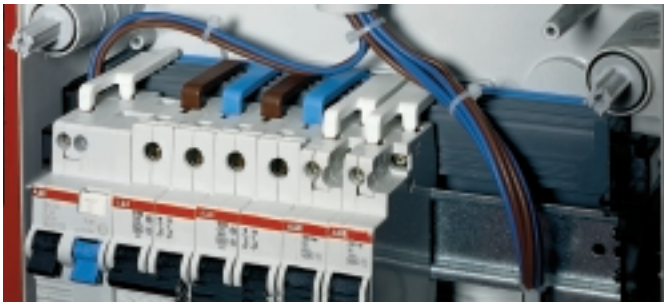
FLC09824

▲ Thanks to the expanded polyurethane seal inserted between the door and the front of the consumer unit, using the continuous casting process, the IP 65 degree of protection is guaranteed, also making it impossible to lose the seal itself.

▲ The door is designed so that a lock with a coded key can be fitted.



FLC09828

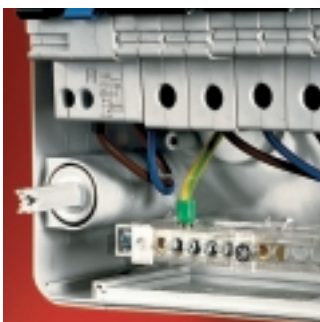


FLC09821

▲ Models with 8 modules and more have been designed to use the Unifix rapid cabling system.



FLC09826



FLC09825

◀ By combining the copper terminal bars to the corresponding plastic terminal holders, according to the configuration, the consumer unit terminal can be fitted with Neutral (N) or Earth (E).

The push-in flange makes it ▶ possible to carry out direct conduit and cable branch connections without having to use cable clamps, conduit clamps or connectors, with an obvious saving in terms of time and cabling costs.



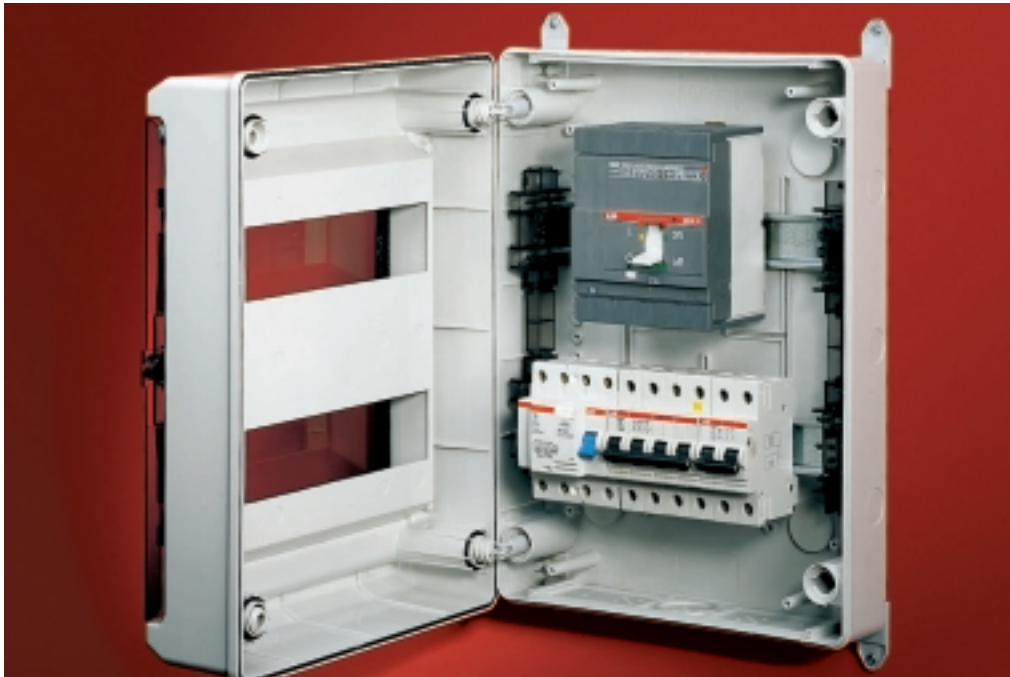
FLC09820



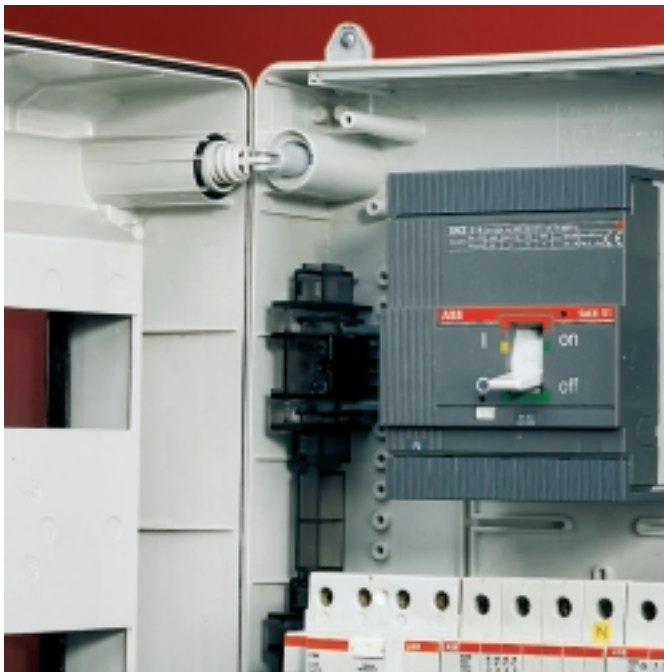
# Further technical information and applications

## Mounting examples and functional details

### Polycarbonate Fly and Europa Series



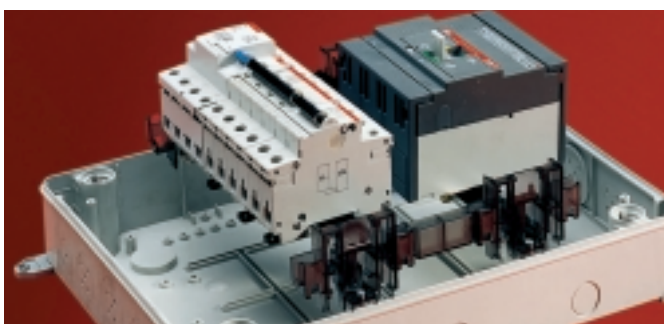
▲ When fixing the unit to the wall from the inside, the special hole caps ensure double insulation is maintained.



▲ Using the brackets it is easy to fix the consumer unit in any environment.



▲ The frame which can be fitted onto the consumer unit makes semi-flush-mounting possible, guaranteeing an attractive finish.



◀ Using the special hinges supplied the cover can be secured to the frame to make maintenance work easier.

◀ The snap-on, pullout DIN rail holder frame simplifies and speeds up bench cabling operations.

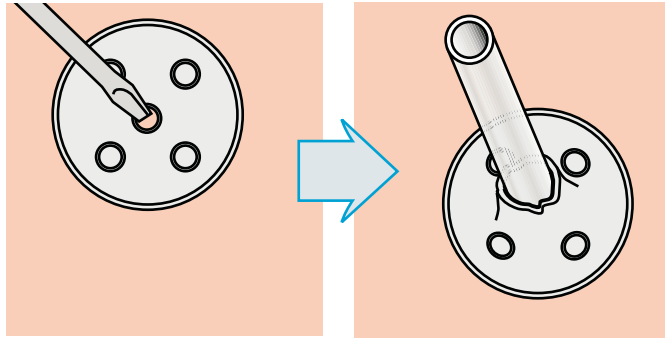
## Further technical information and applications

### Branch connections using the bi-material flange

DIRECT APPLICATION WITH CONDUIT OR CABLE

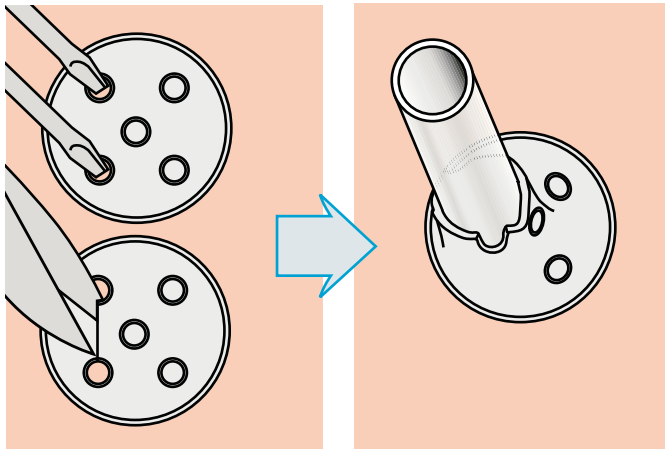
#### from 5 to 16 mm

Make a hole where indicated using a screw driver to insert cables or conduits with a diameter of from 5 to 16 mm



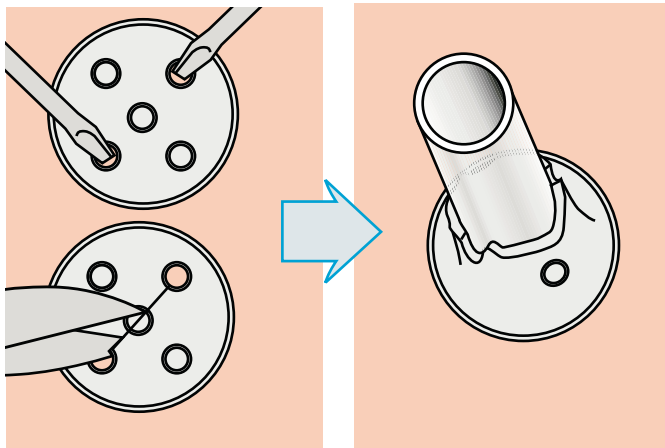
#### from 17 to 20 mm

To insert cables or conduits with a 20 mm diameter, make holes in the points indicated using a screwdriver and cut the rubber using scissors



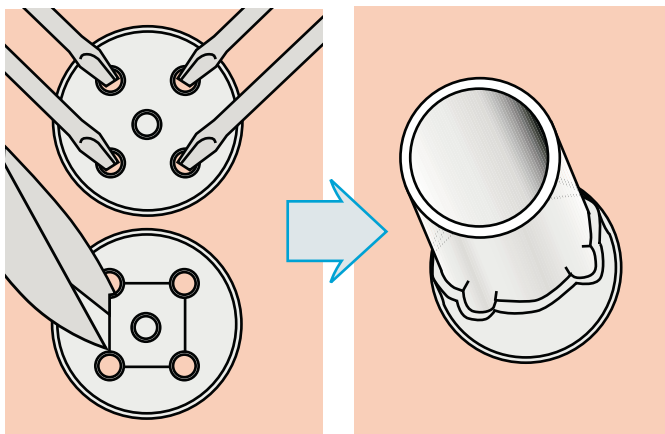
#### from 21 to 24 mm

To insert cables or conduits with a 24 mm diameter, make holes in the points indicated using a screwdriver and cut the rubber using scissors

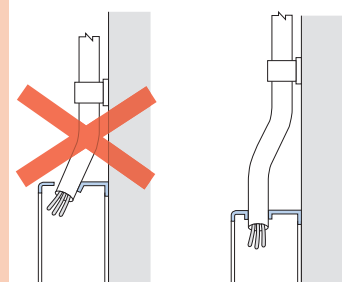


#### from 25 to 35 mm

To insert cables with a diameter up to 35 mm and conduits with a 32 mm diameter, make holes in the points indicated using a screwdriver and cut the rubber using scissors



How to insert cables or conduits



9

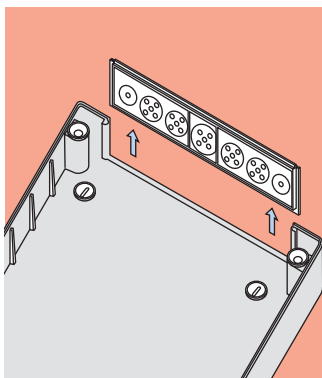
# Further technical information and applications

## Branch connections using the bi-material flange

### APPLICATION WITH CONDUIT OR CABLE CLAMPS

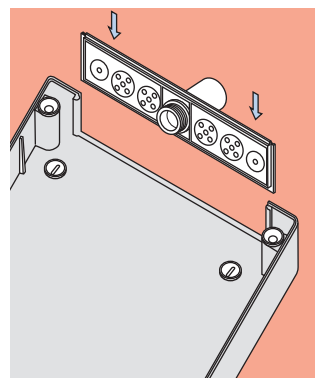
# 1

Possible extraction of the flange



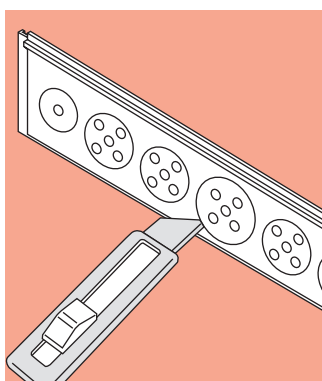
# 4

Inserting the flange into the base of the container



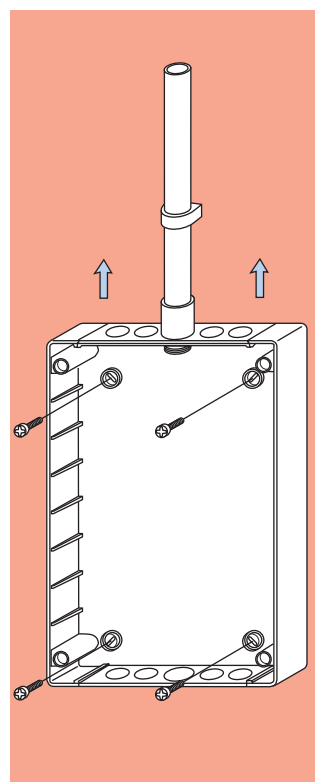
# 2

Identification and cutting of the suitable inlet (you must remove all the soft part)



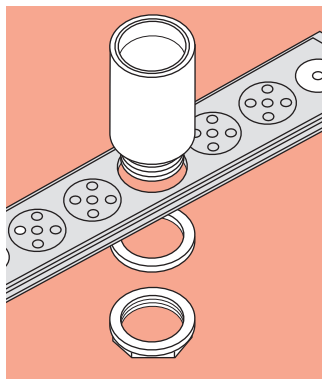
# 5

Fixing the base of the container to the wall



# 3

Branch connection using the conduit/cable clamp or the conduit box connector



### Suitable ABB article for branch connection with flange in bi-material

Inlets for flange [mm]	Cable-clamp [mm]	Conduit box connector [mm]	Conduit clamp [mm]
Ø 23,5	<b>00 934</b> - <b>00 944</b> PG 16 (Ø 13/16)	<b>00 421</b> Ø 20	<b>00 431</b> Ø 20
Ø 30	<b>00 935</b> - <b>00 945</b> PG 21 (Ø 17/29)	<b>00 422</b> Ø 25	<b>00 432</b> Ø 25
Ø 37,5	<b>00 936</b> - <b>00 946</b> PG 29 (Ø 21/26)	<b>00 423</b> Ø 32	<b>00 433</b> Ø 32



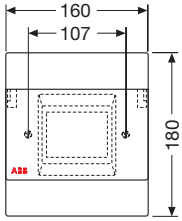
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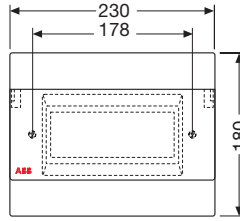
# Overall dimensions

## IP 40 Estetica Series flush-mounting consumer units

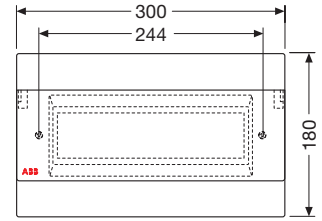
### Front view



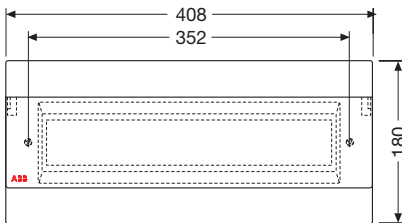
4 modules



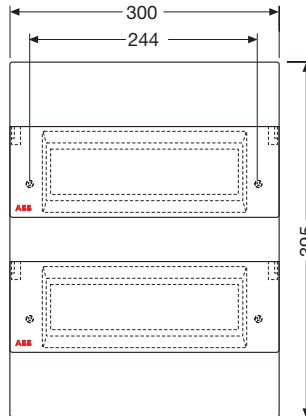
8 modules



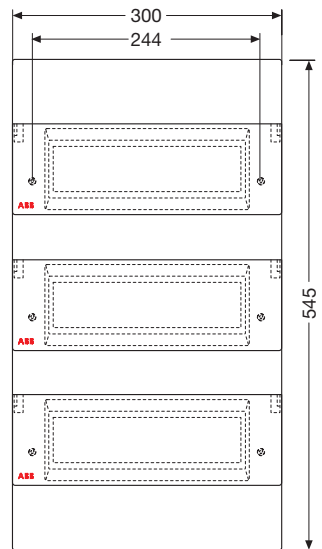
12 modules



18 modules

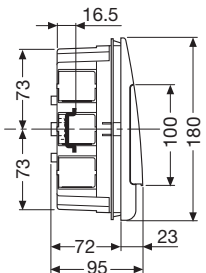


24 modules

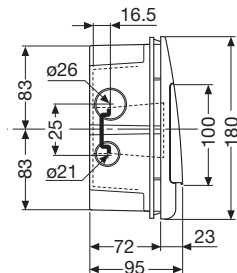


36 modules

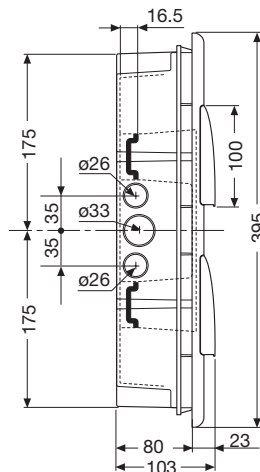
### Side view



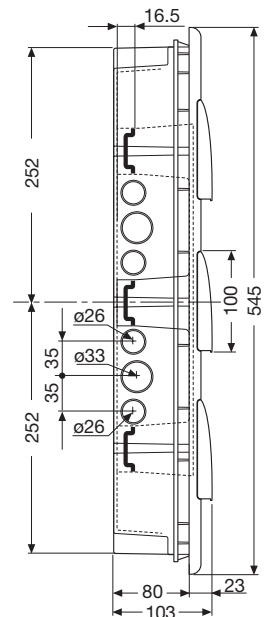
4 modules



8/12/18 modules



24 modules

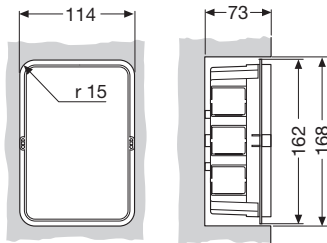


36 modules

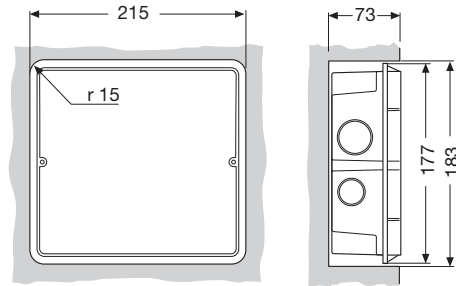
# Overall dimensions

## IP 40 Estetica Series flush-mounting consumer units

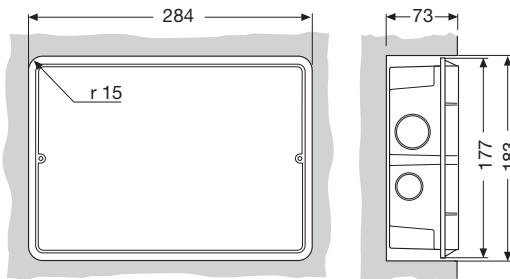
### Drilling sheets



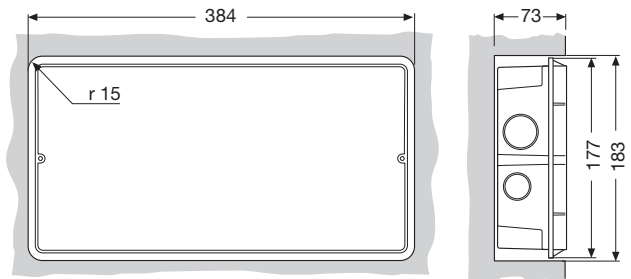
4 modules



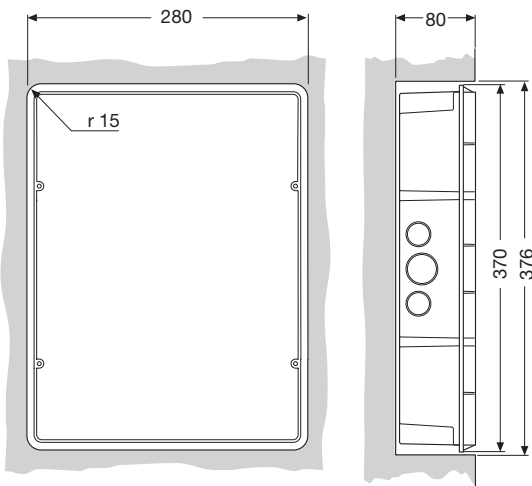
8 modules



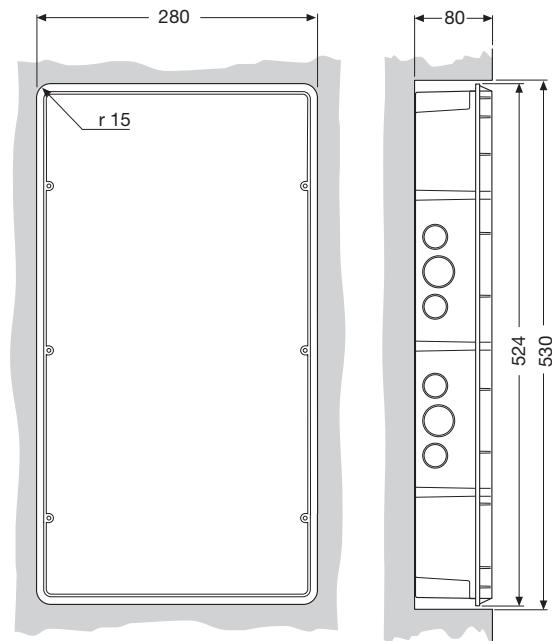
12 modules



18 modules



24 modules



36 modules

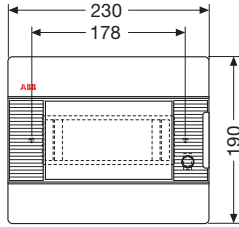
modules	article
4 modules	12 004 - 12 024 - 12 037
8 modules	12 008 - 12 028 - 12 038
12 modules	12 012 - 12 032 - 12 042
18 modules	12 013 - 12 033 - 12 043
24 modules	12 014 - 12 034 - 12 044
36 modules	12 016 - 12 036 - 12 046

VLCC0002

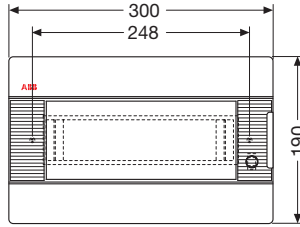
# Overall dimensions

## IP 40 Europa Series flush-mounting consumer units

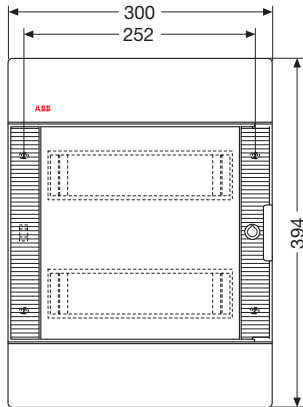
### Front view



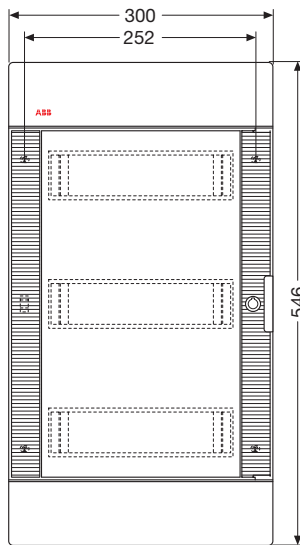
8 modules



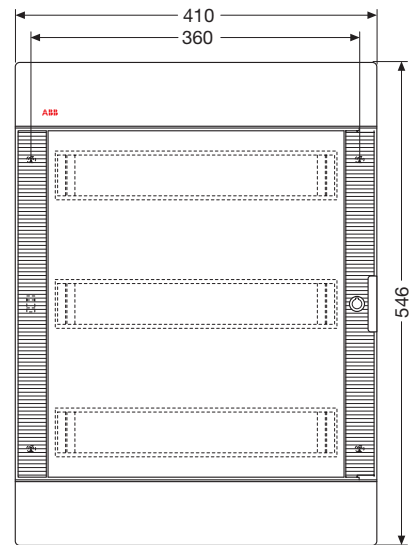
12 modules



24 modules

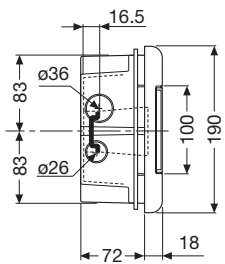


36 modules

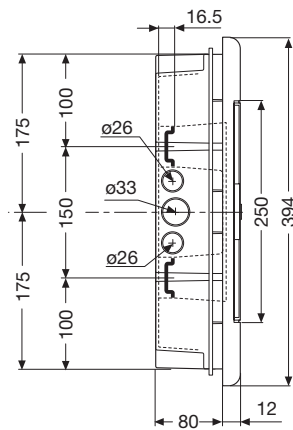


54 modules

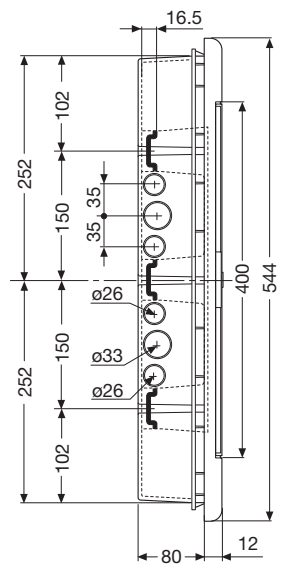
### Side view



8/12 modules



24 modules



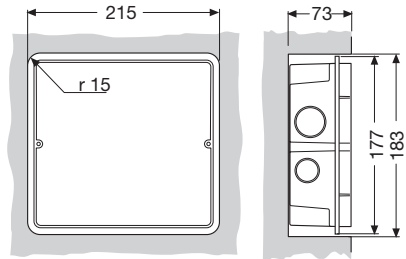
36/54 modules

VLC000003

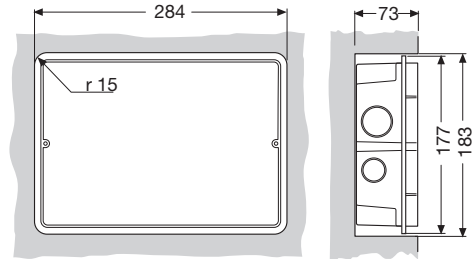
# Overall dimensions

## IP 40 Europa Series flush-mounting consumer units

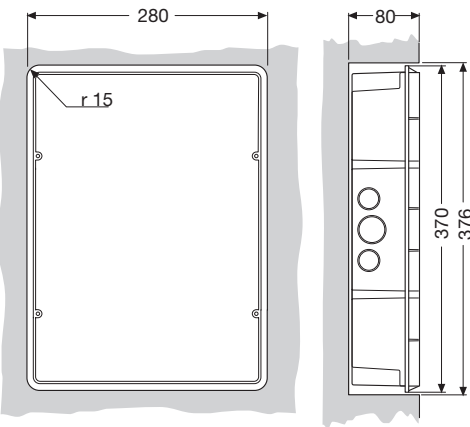
### Drilling sheets



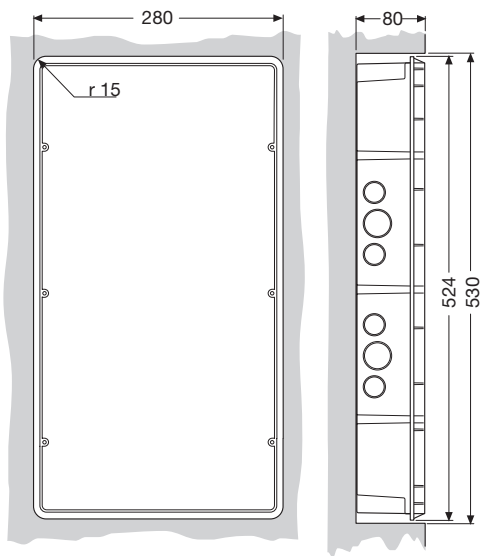
8 modules



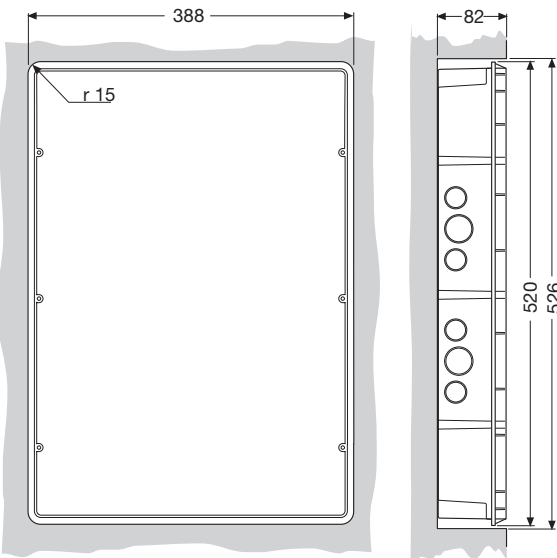
12 modules



24 modules



36 modules



54 modules

modules	article
8 modules	12 040 - 12 026 - 12 057 - 12 058
12 modules	12 041 - 12 027 - 12 061 - 12 062
24 modules	12 045 - 12 030 - 12 063 - 12 064
36 modules	12 048 - 12 031 - 12 065 - 12 066
54 modules	12 052 - 12 035 - 12 067 - 12 068

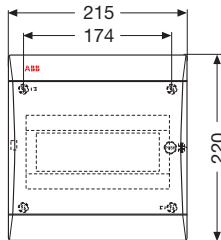
11C000004



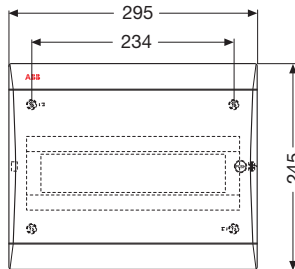
# Overall dimensions

## IP 40 Unibox Series wall-mounting consumer units

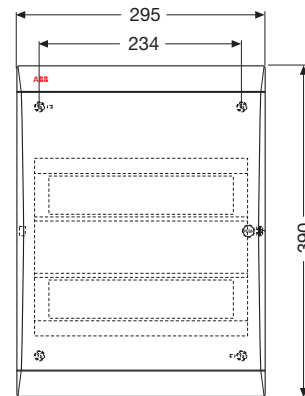
### Front view



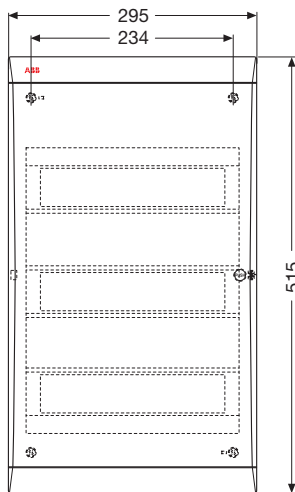
8 modules



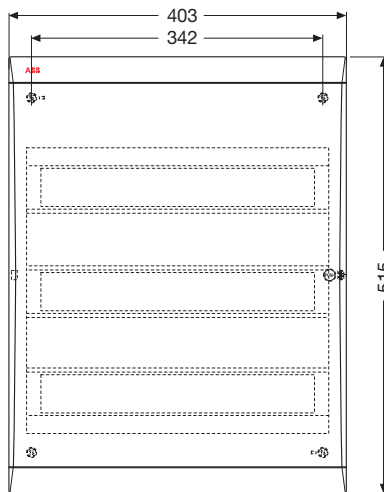
12 modules



24 modules

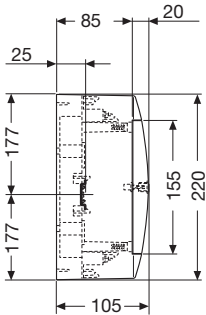


36 modules

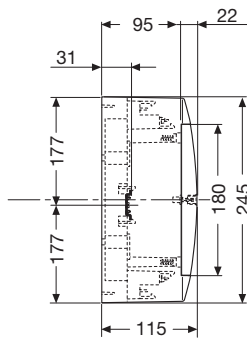


54 modules

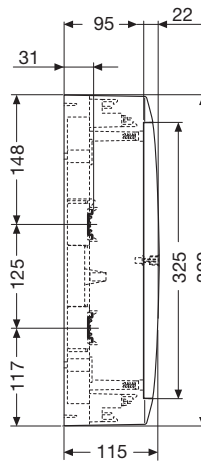
### Side view



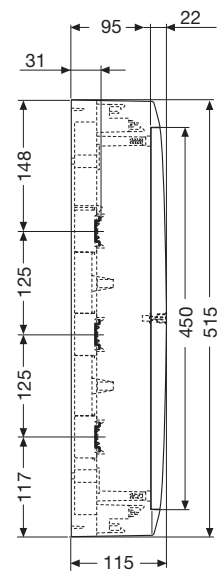
8 modules



12 modules



24 modules



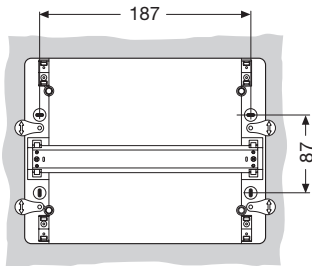
36-54 modules

VLECO0035

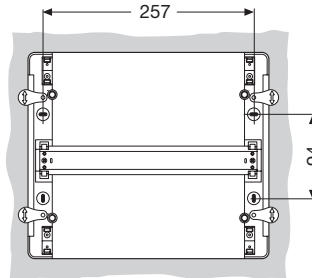
# Overall dimensions

## IP 40 Unibox Series wall-mounting consumer units

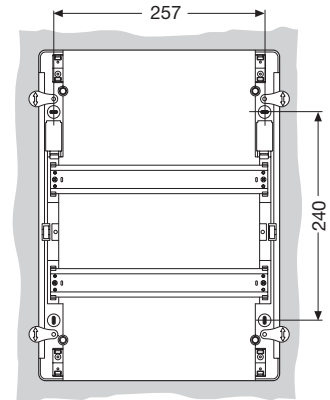
### Drilling sheets



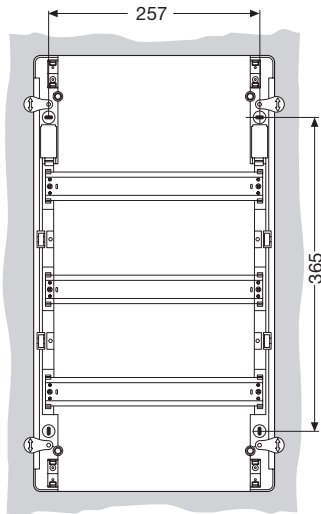
8 modules



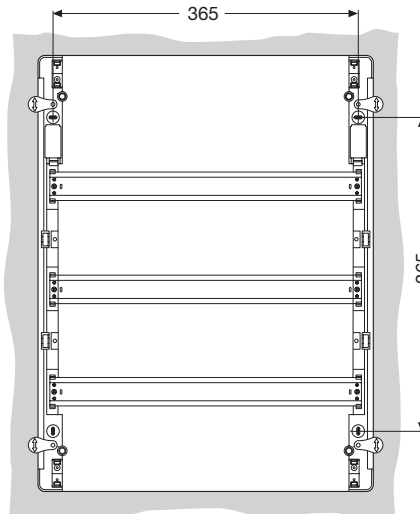
12 modules



24 modules



36 modules



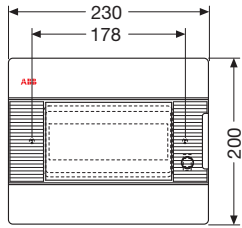
54 modules

modules	article
8 modules	12 208 - 12 228 - 12 238 - 12 248 - 12 258 - 12 268
12 modules	12 212 - 12 232 - 12 242 - 12 252 - 12 262 - 12 272
24 modules	12 214 - 12 234 - 12 244 - 12 254 - 12 264 - 12 274
36 modules	12 216 - 12 236 - 12 246 - 12 256 - 12 266 - 12 276
54 modules	12 217 - 12 237 - 12 247 - 12 257 - 12 267 - 12 277

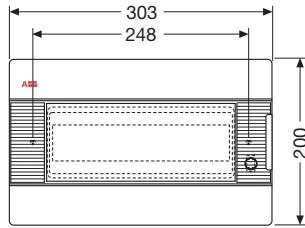
# Overall dimensions

## IP 40 Europa Series wall-mounting consumer units

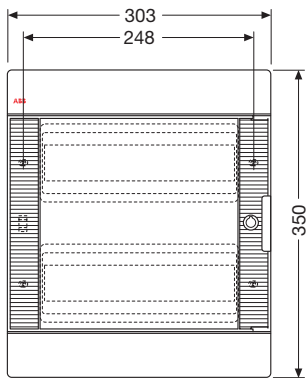
### Front view



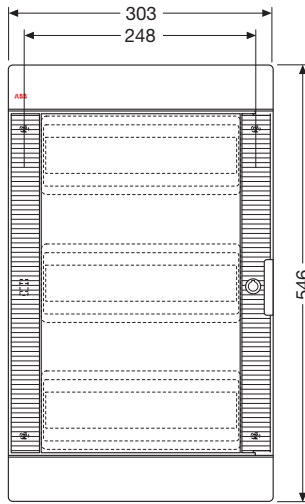
8 modules



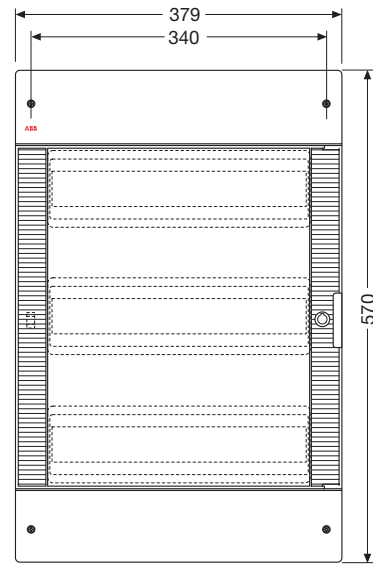
12 modules



24 modules

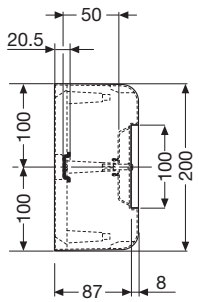


36 modules

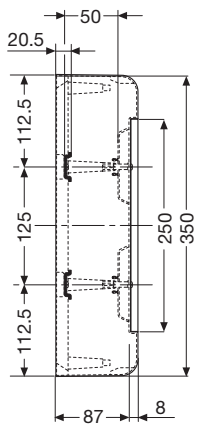


54 modules

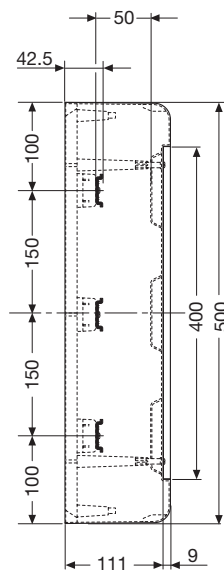
### Side view



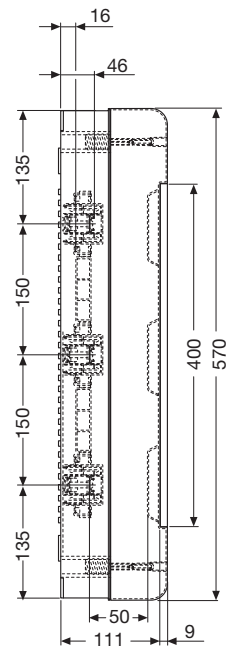
8/12 modules



24 modules



36 modules

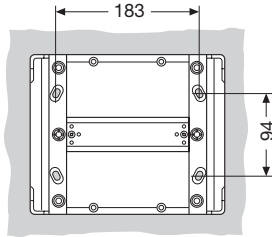


54 modules

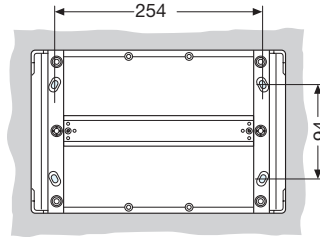
# Overall dimensions

## IP 40 Europa Series wall-mounting consumer units

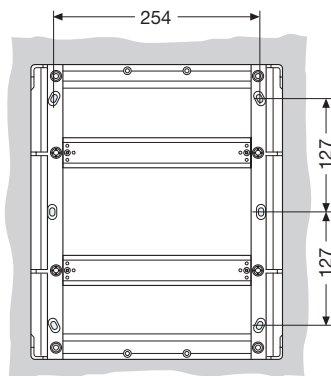
### Drilling sheets



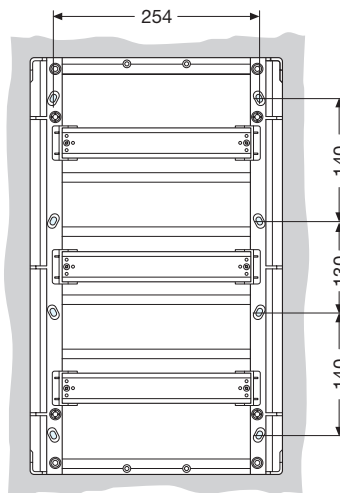
8 modules



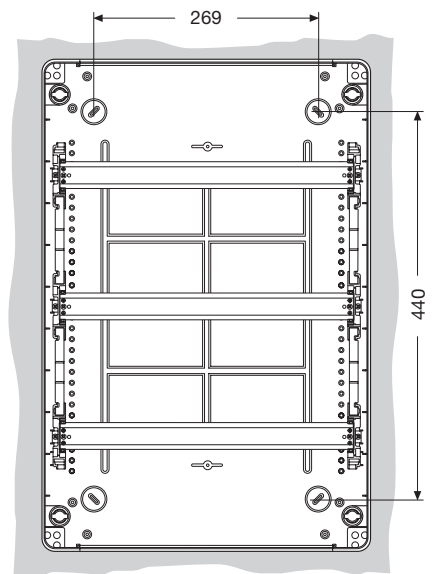
12 modules



24 modules



36 modules



54 modules

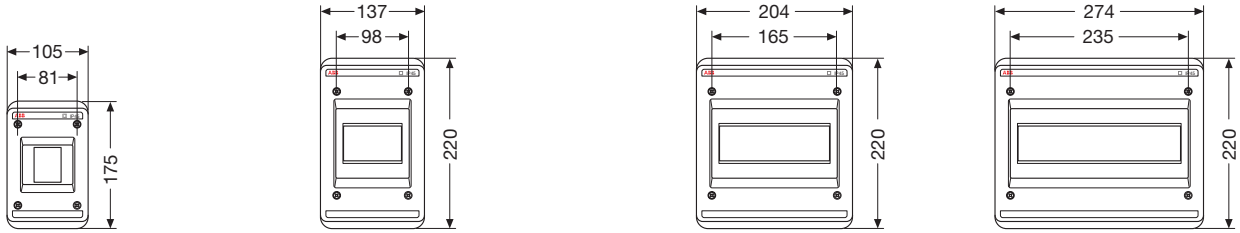
VLCC0008

modules	article
8 modules	12 408 - 12 428 - 12 438 - 12 448 - 12 458 - 12 468
12 modules	12 412 - 12 432 - 12 442 - 12 452 - 12 462 - 12 472
24 modules	12 414 - 12 434 - 12 444 - 12 454 - 12 464 - 12 474
36 modules	12 416 - 12 436 - 12 446 - 12 456 - 12 466 - 12 476
54 modules	12 417 - 12 437 - 12 447 - 12 457 - 12 467 - 12 477

# Overall dimensions

## IP 40 Polycarbonate Europa Series wall-mounting consumer units

### Front view

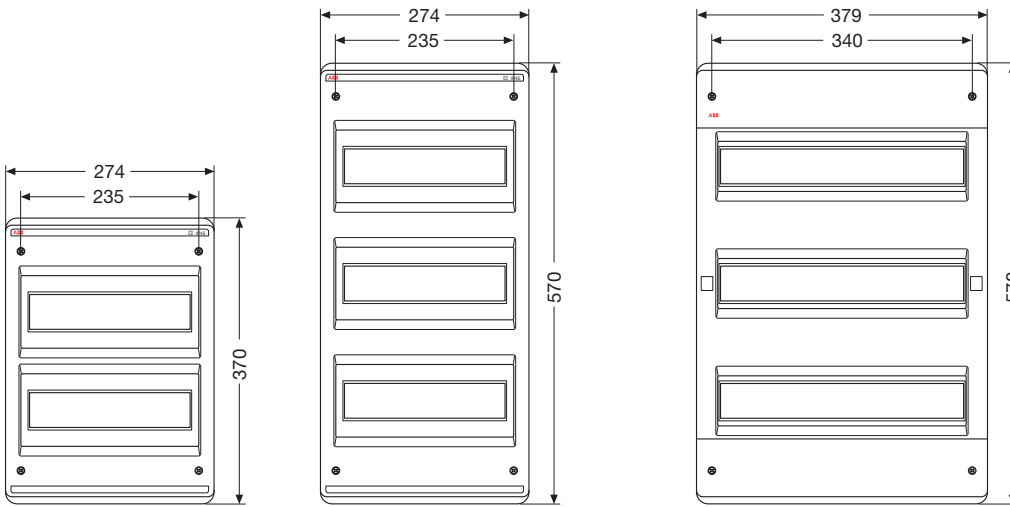


2-4 modules

4 modules

8 modules

12 modules

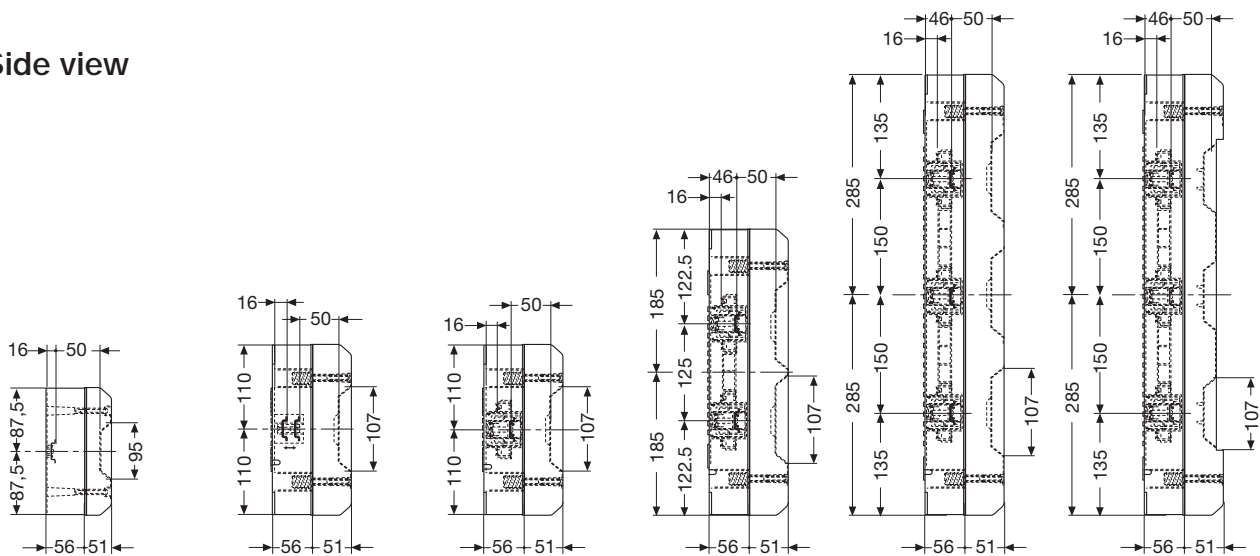


24 modules

36 modules

54 modules

### Side view



2-4 modules

4 modules

8-12 modules

24 modules

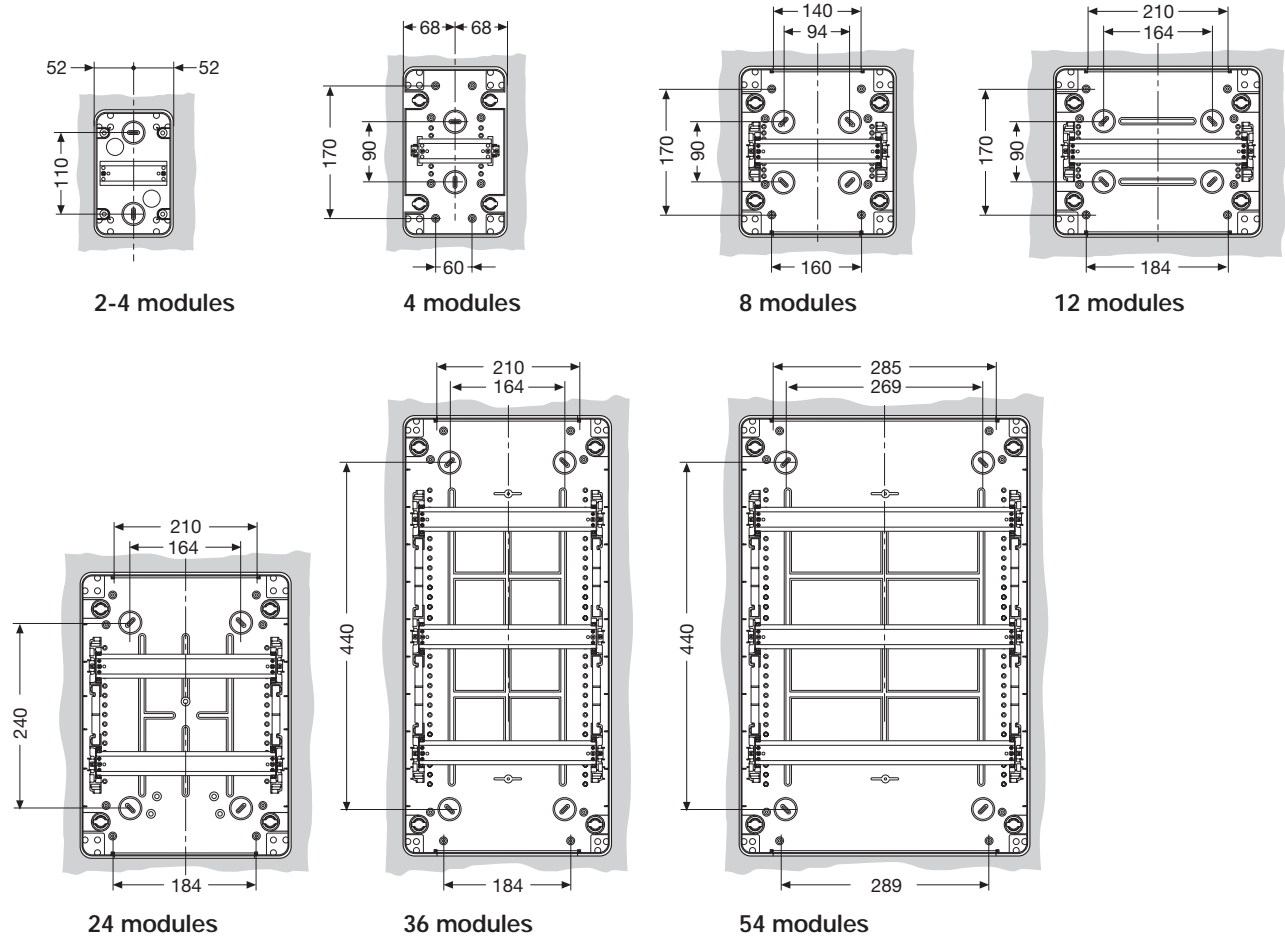
36 modules

54 modules

## Overall dimensions

### IP 40 Polycarbonate Europa Series wall-mounting consumer units

#### Drilling sheets



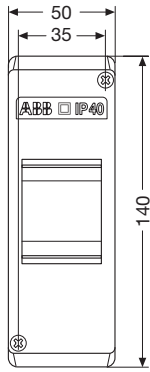
modules	article
2-4 modules	12 702
4 modules	12 704
8 modules	12 708
12 modules	12 712
24 modules	12 714
36 modules	12 716
54 modules	12 718

VLC00010

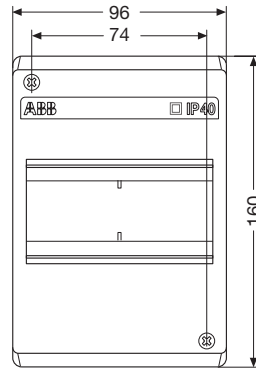
# Overall dimensions

## IP 40 wall-mounting covers

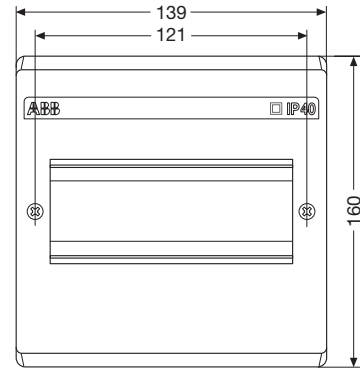
### Front view



2 modules

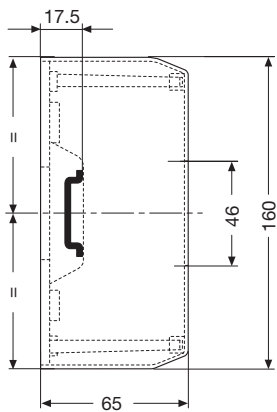


4 modules

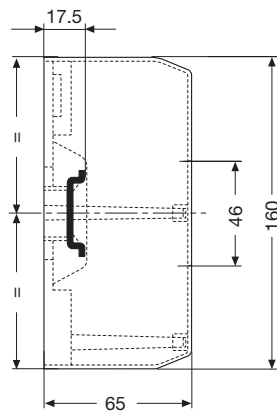


6 modules

### Side view



2 modules

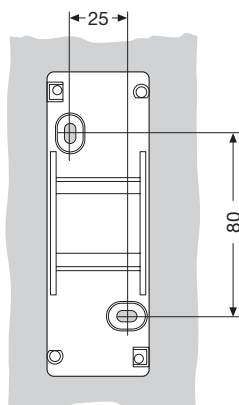


4-6 modules

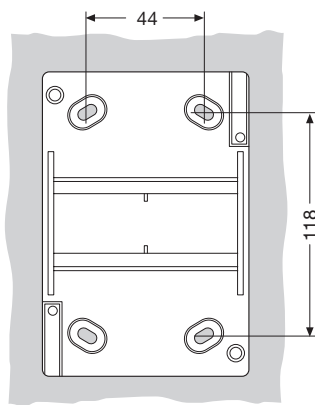
# Overall dimensions

## IP 40 wall-mounting covers

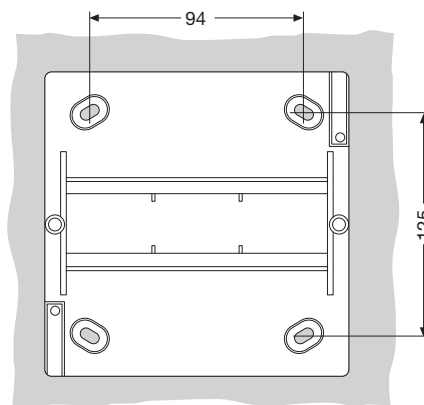
### Drilling sheets



2 modules



4 modules



6 modules

modules	article
2 modules	12 402-12 422
3 modules	12 404-12 424
4 modules	12 406-12 426

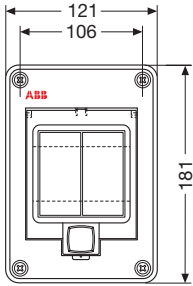
VIC00012



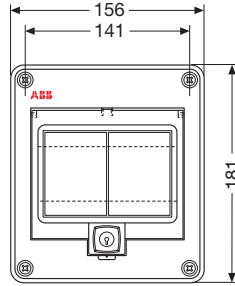
# Overall dimensions

## IP 55 Europa Series wall-mounting consumer units

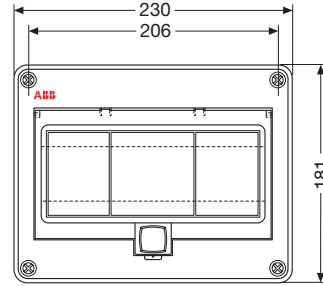
### Front view



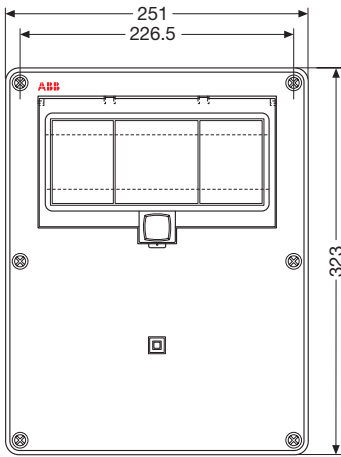
4 modules



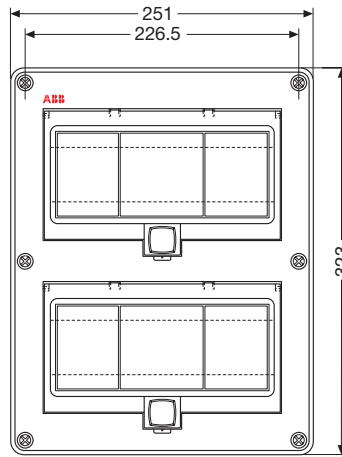
6 modules



10 modules

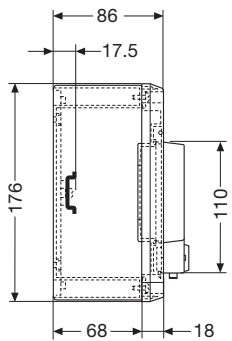


10 modules special

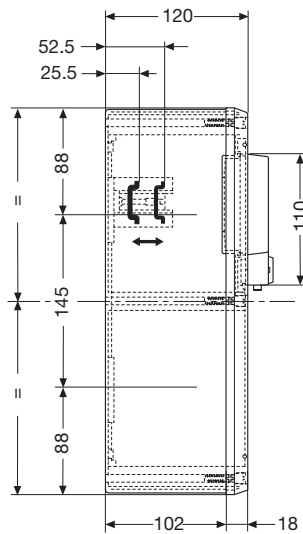


20 modules

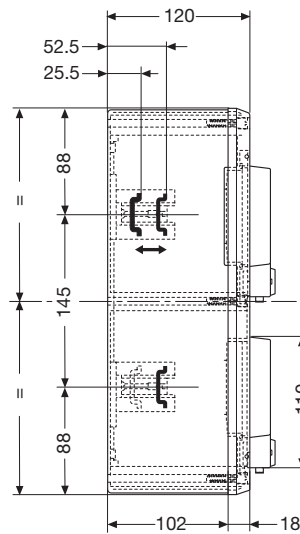
### Side view



4-6-10 modules



10 modules



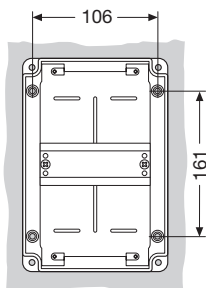
20 modules

VLCO0013

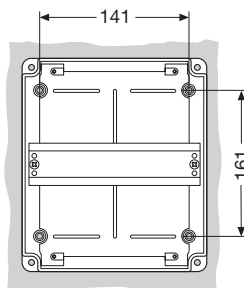
# Overall dimensions

## IP 55 Europa Series wall-mounting consumer units

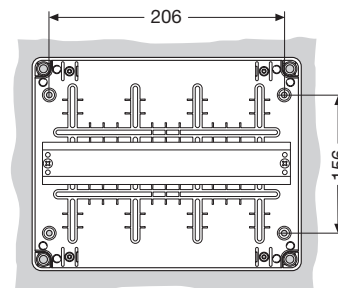
### Drilling sheets



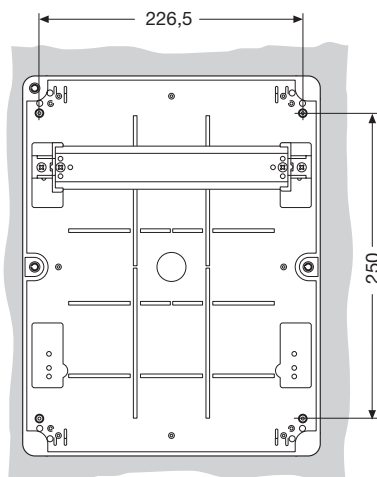
4 modules



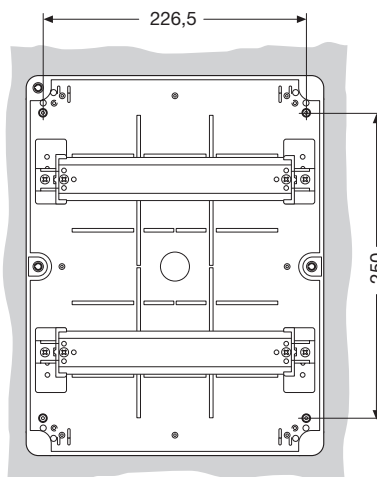
6 modules



10 modules



10 modules



20 modules

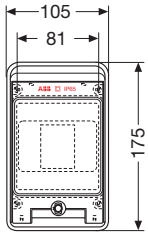
modules	article
4 modules	12 664 - 12 684
6 modules	12 646 - 12 686
10 modules	12 650 - 12 690 - 12 654
20 modules	12 652 - 12 692

VLC00014

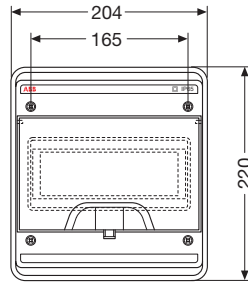
# Overall dimensions

## IP 65 Polycarbonate Fly Series wall-mounting consumer units

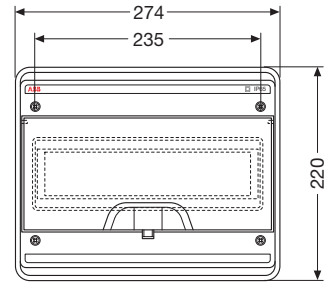
### Front view



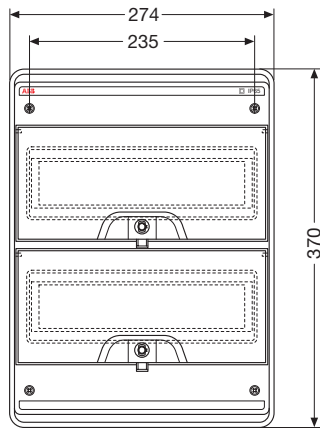
2-4 modules



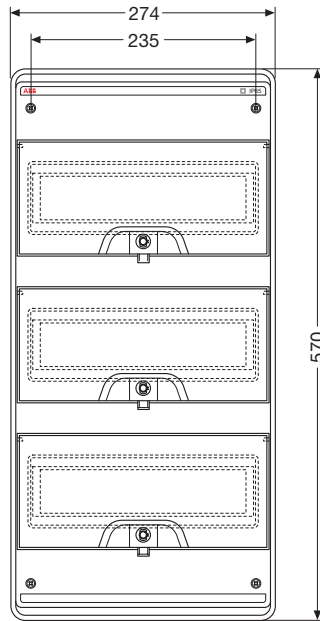
8 modules



12 modules

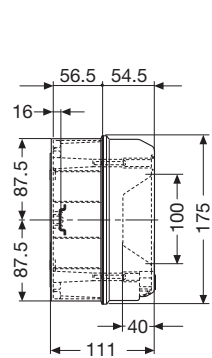


24 modules

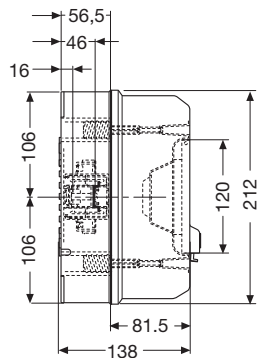


36 modules

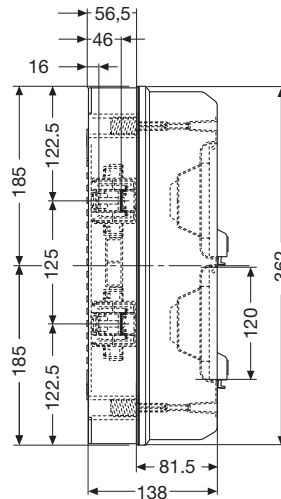
### Side view



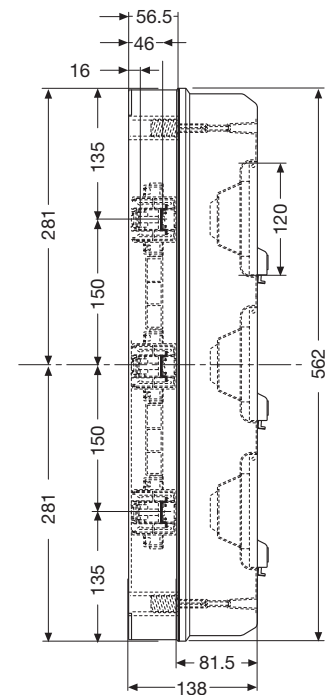
2-4 modules



8-12 modules



24 modules



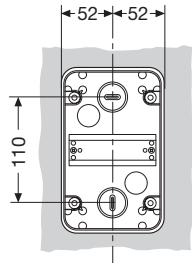
36 modules

VLC00015

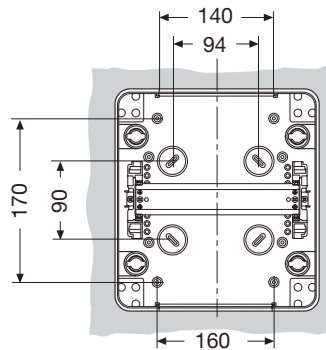
## Overall dimensions

### IP 65 Polycarbonate Fly Series wall-mounting consumer units

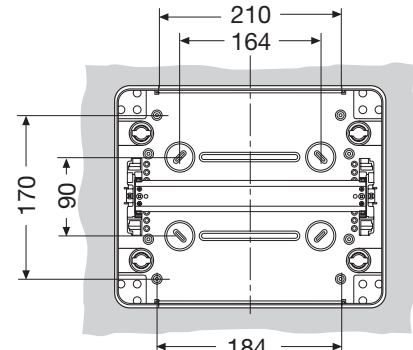
#### Drilling sheets



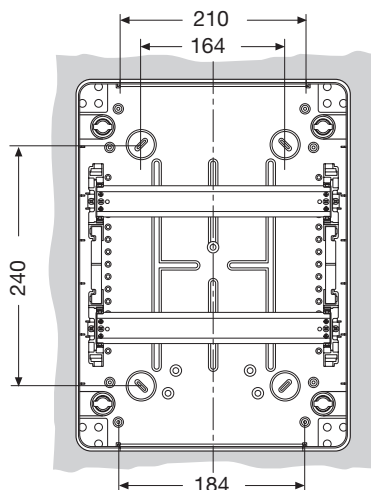
2-4 modules



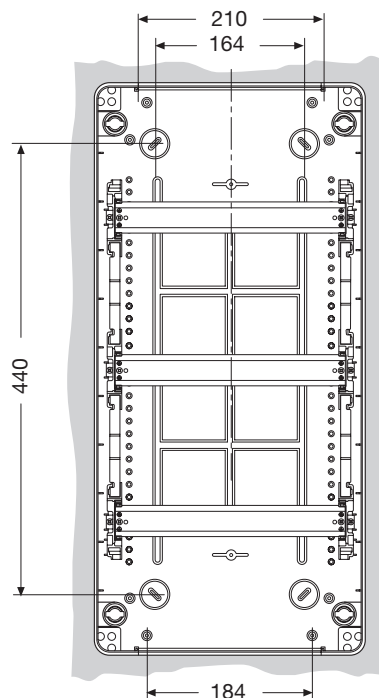
8 modules



12 modules



24 modules



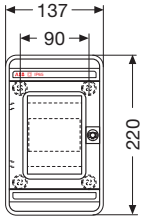
36 modules

modules	article
2-4 modules	12 742 - 12 722
8 modules	12 743
12 modules	12 745
24 modules	12 746
36 modules	12 747

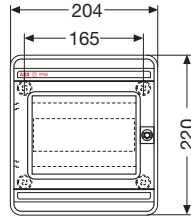
# Overall dimensions

## IP 65 Polycarbonate Europa Series wall-mounting consumer units

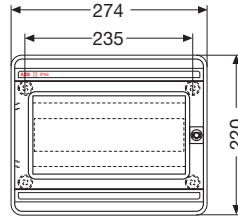
### Front view



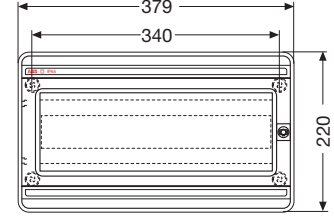
4 modules



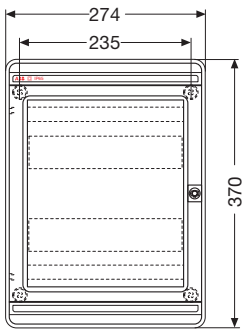
8 modules



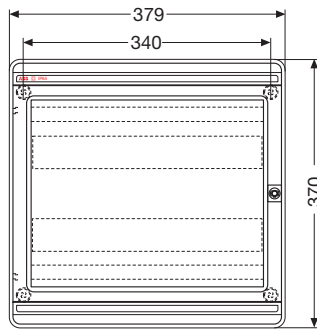
12 modules



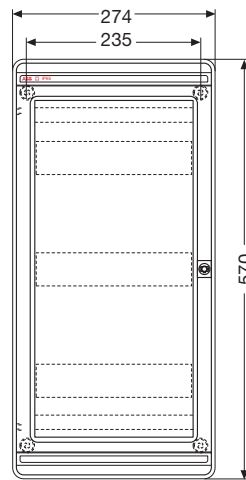
18 modules



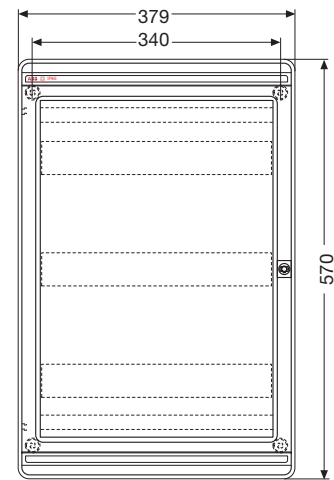
24 modules



36 modules

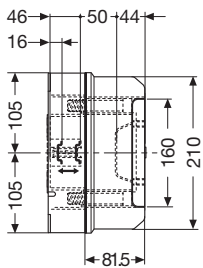


36 modules

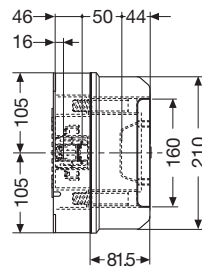


54 modules

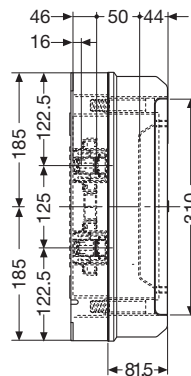
### Side view



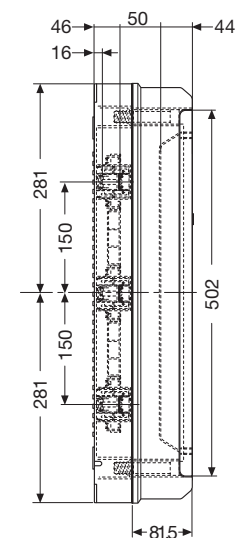
4-8-12 modules



18 modules



24 modules

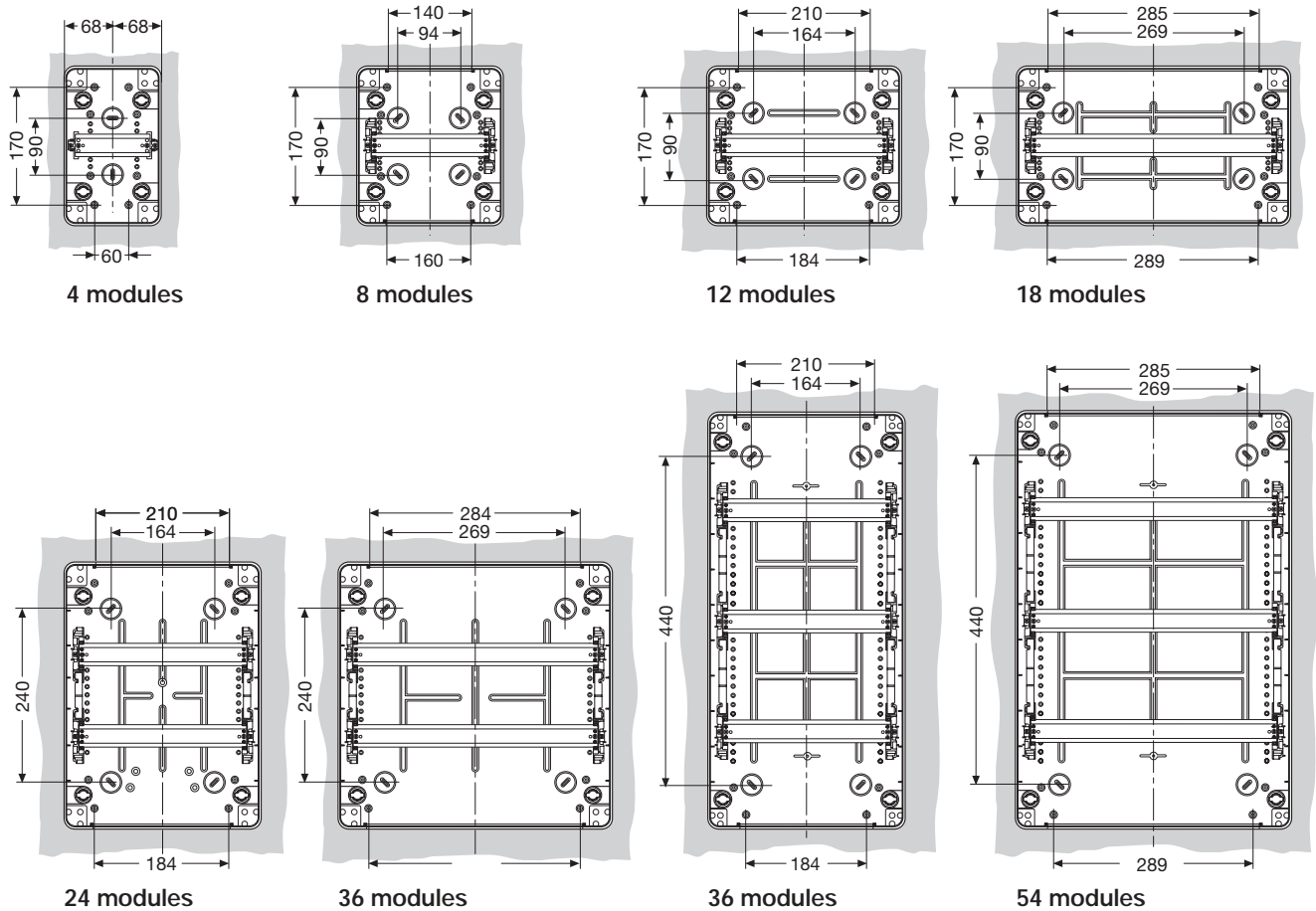


36-54 modules

## Overall dimensions

### IP 65 Polycarbonate Europa Series wall-mounting consumer units

#### Drilling sheets



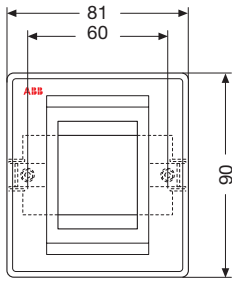
modules	article
4 modules	12 724 - 12 744
8 modules	12 728 - 12 748
12 modules	12 732 - 12 752
18 modules	12 733 - 12 753
24 modules	12 734 - 12 754
36 modules	12 735 - 12 755
36 modules	12 736 - 12 756
54 modules	12 738 - 12 758

11.CC0018

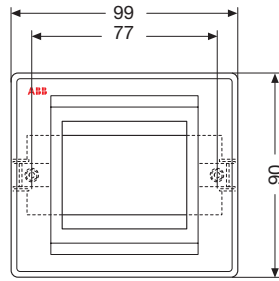
# Overall dimensions

## IP 40 panel fronts

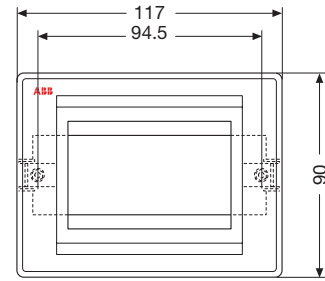
### Front view



2 modules

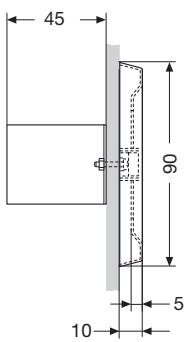


3 modules

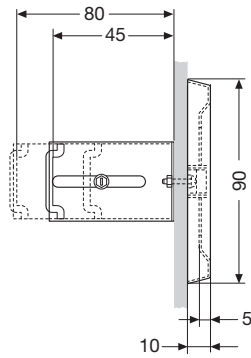


4 modules

### Side view

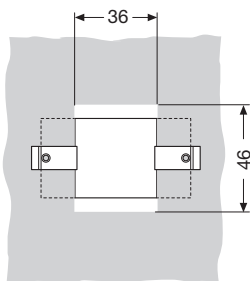


2-3 modules

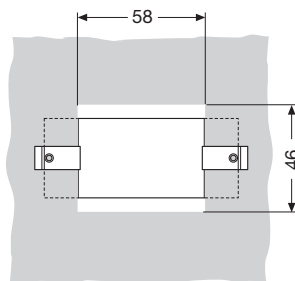


4 modules

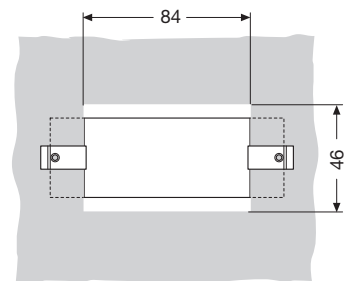
### Drilling sheets



2 modules



3 modules



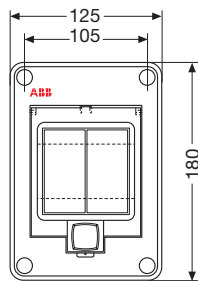
4 modules

modules	article
2 modules	12 362
3 modules	12 363
4 modules	12 364

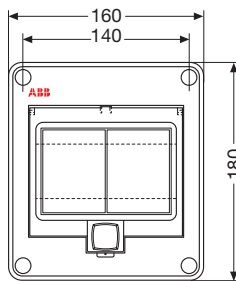
# Overall dimensions

## IP 55 panel fronts

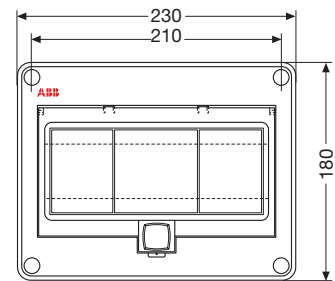
### Front view



4 modules

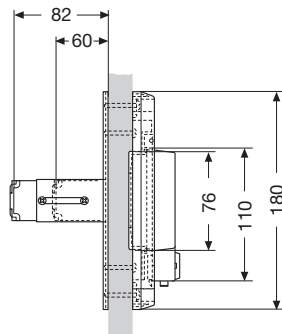


6 modules



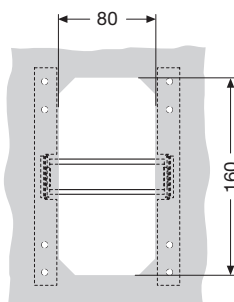
10 modules

### Side view

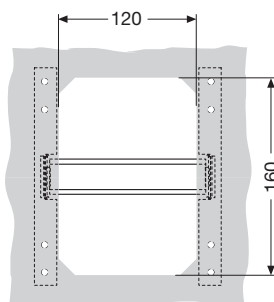


4-6-10 modules

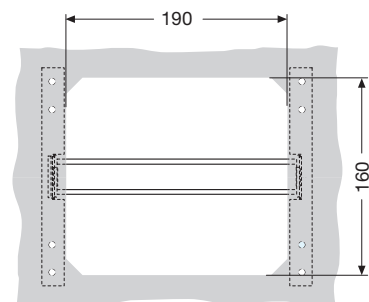
### Drilling sheets



4 modules



6 modules



10 modules

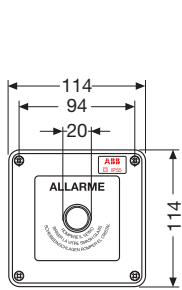
modules	article
4 modules	12 658
6 modules	12 659
10 modules	12 660



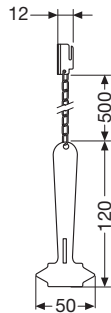
# Overall dimensions

## Flush and wall-mounting Livorno Series emergency switchboards

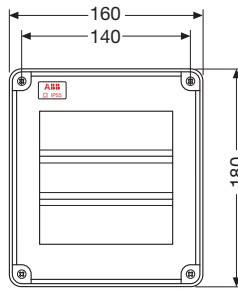
### Front view



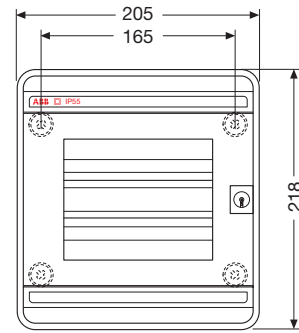
13 180 - 13 183



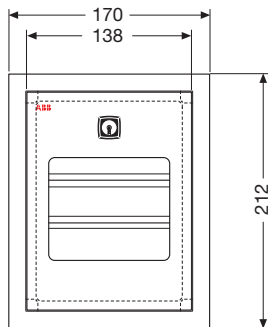
13 186



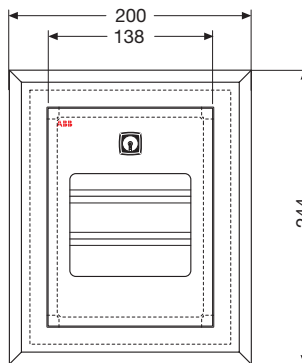
13 161 - 13 165  
13 160 - 13 164



13 171 - 13 175  
13 170 - 13 174

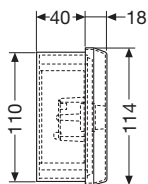


13 141 - 13 151  
13 140 - 13 150

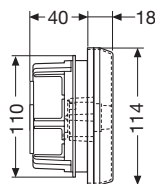


13 144 - 13 154  
13 143 - 13 153

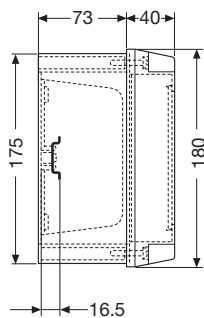
### Side view



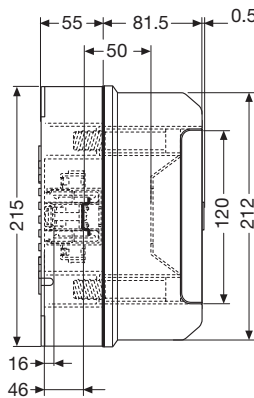
13 180



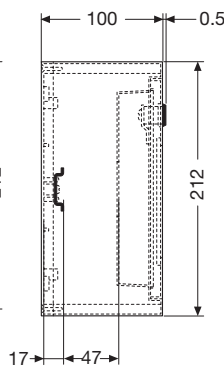
13 183



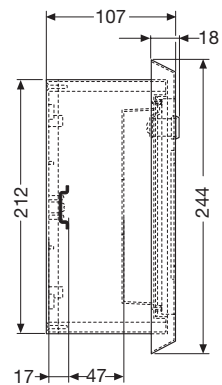
13 161 - 13 165  
13 160 - 13 164



13 171 - 13 175  
13 170 - 13 174



13 141 - 13 151  
13 140 - 13 150

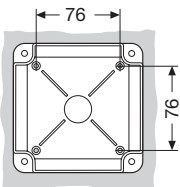


13 144 - 13 154  
13 143 - 13 153

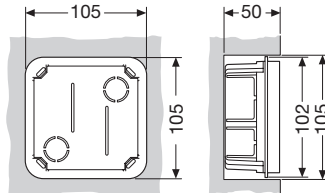
## Overall dimensions

### Flush and wall-mounting Livorno Series emergency switchboards

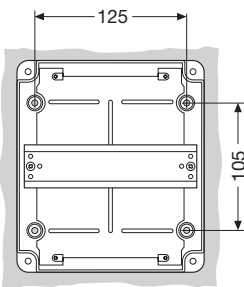
#### Drilling sheets



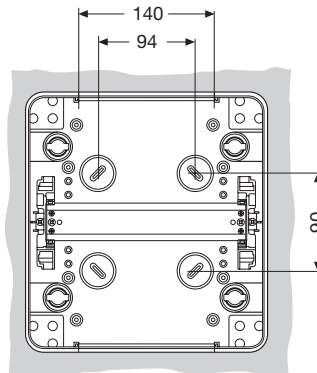
13 180



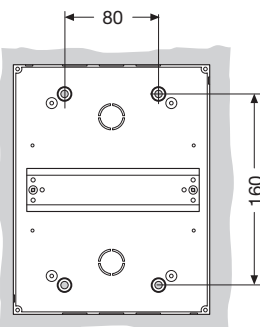
13 183



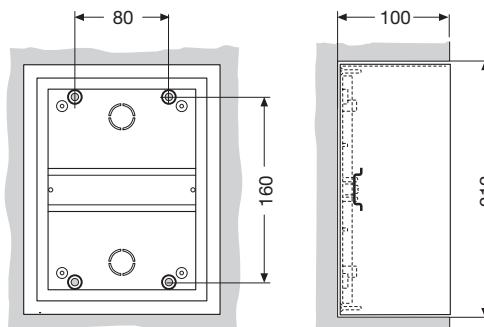
13 161 - 13 165  
13 160 - 13 164



13 171 - 13 175  
13 170 - 13 174



13 141 - 13 151  
13 140 - 13 150

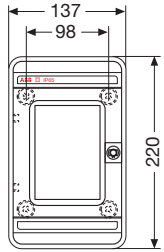


13 144 - 13 154  
13 143 - 13 153

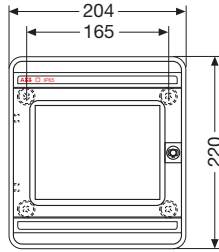
# Overall dimensions

## IP 65 Europa Series switchboards for industrial applications

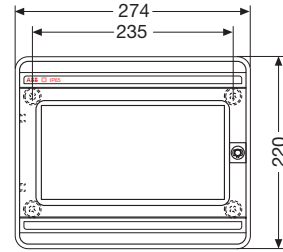
### Front view



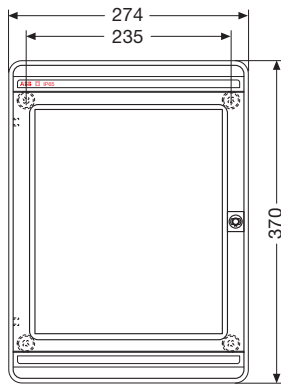
12 764 - 12 784



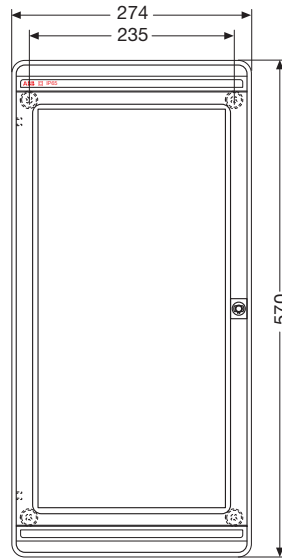
12 768 - 12 788



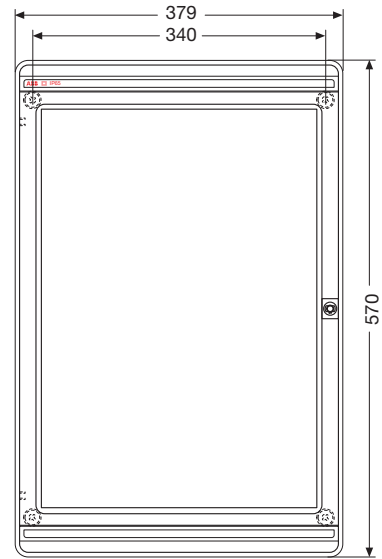
12 772 - 12 792



12 774 - 12 794

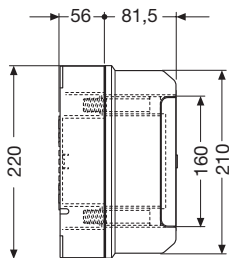


12 776 - 12 796

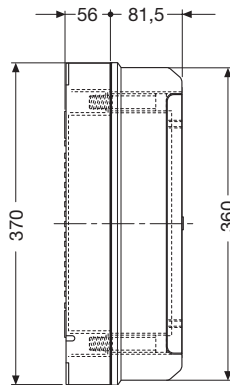


12 778 - 12 798

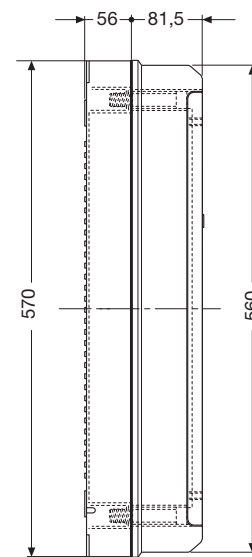
### Side view



12 768 - 12 788  
12 764 - 12 784  
12 772 - 12 792



12 776 - 12 796

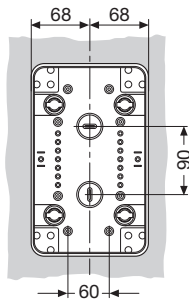


12 778 - 12 798

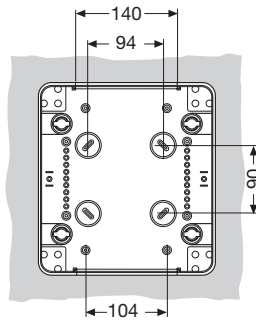
# Overall dimensions

## IP 65 Europa Series switchboards for industrial applications

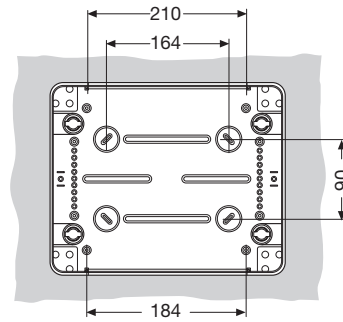
### Drilling sheets



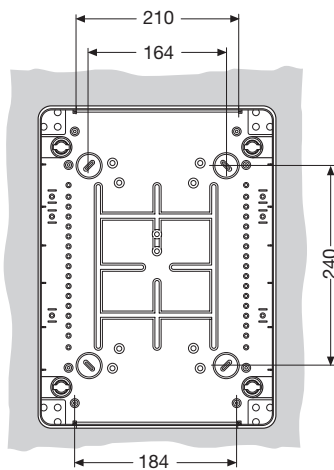
12 764 - 12 784



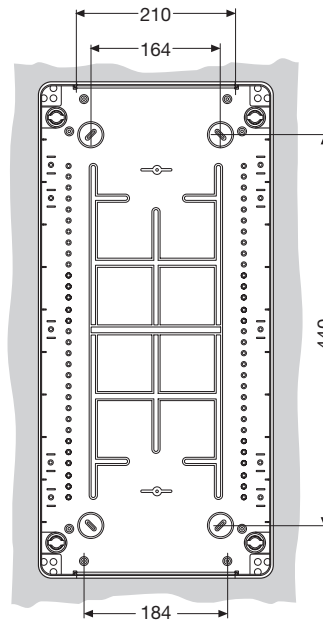
12 768 - 12 788



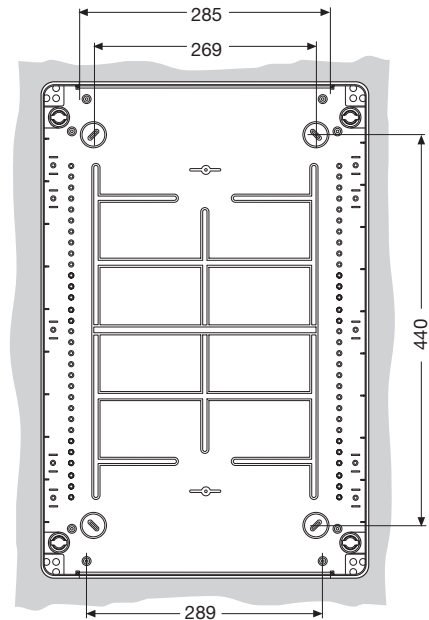
12 772 - 12 792



12 774 - 12 794



12 776 - 12 796

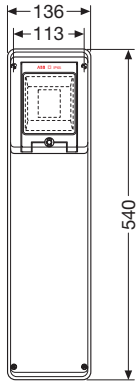


12 778 - 12 798

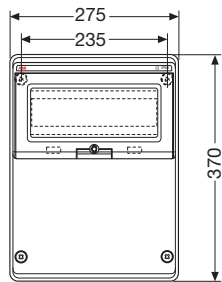
# Overall dimensions

## Switchboards for industrial applications with blank front

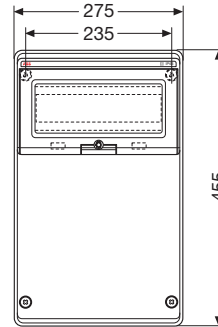
### Front view



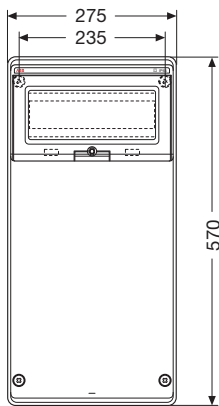
13 200



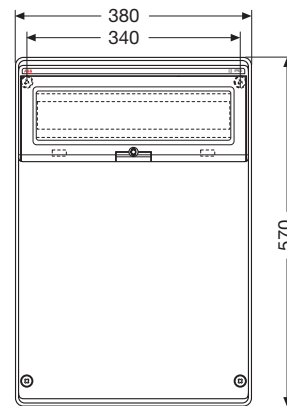
13 204



13 205

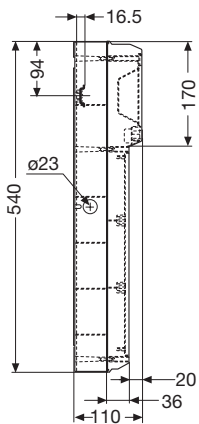


13 206

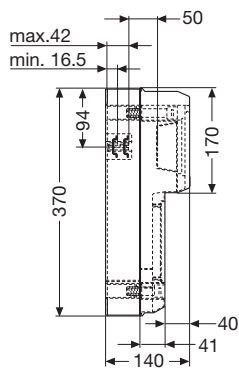


13 208

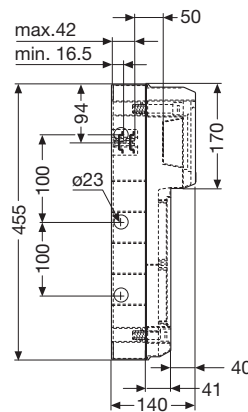
### Side view



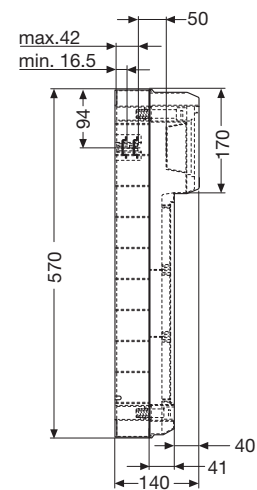
13 200



13 204



13 205

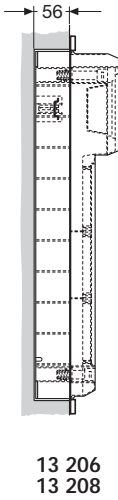
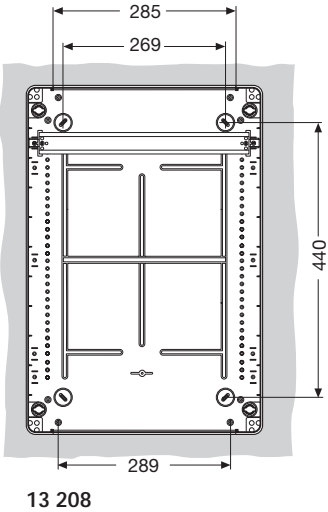
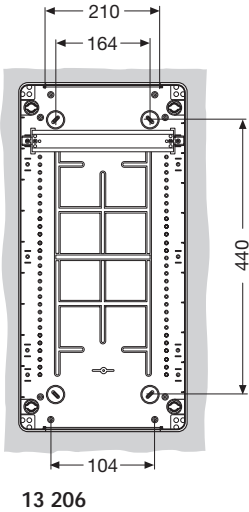
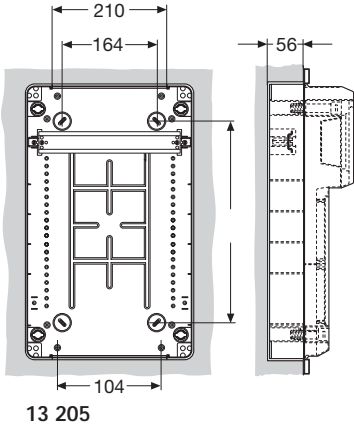
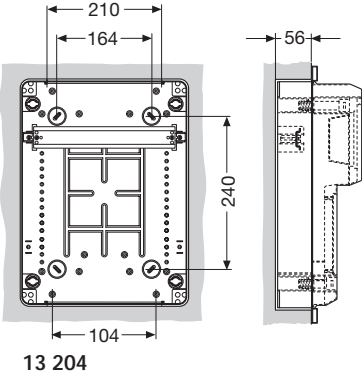
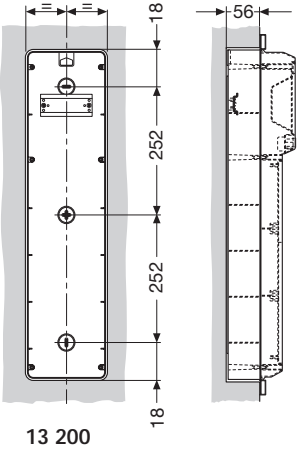


13 206 - 13 208

# Overall dimensions

## Switchboards for industrial applications with blank front

### Drilling sheets

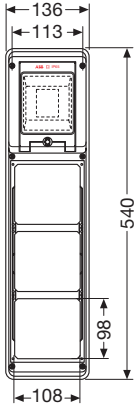


VIC00026

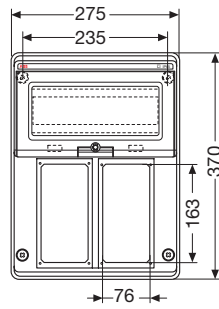
# Overall dimensions

## Marostica Series modular switchboards

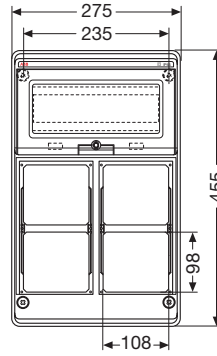
### Front view



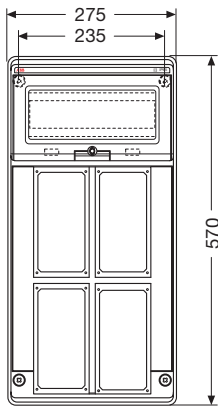
13 210



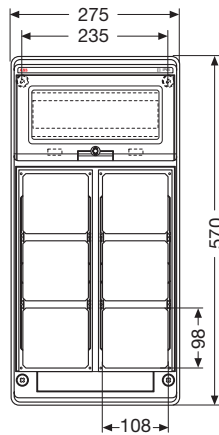
13 224



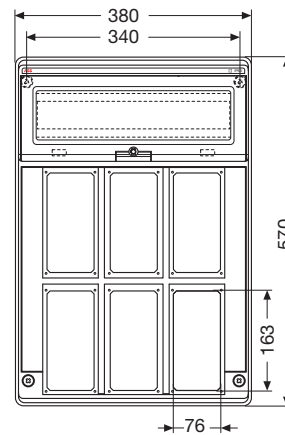
13 215



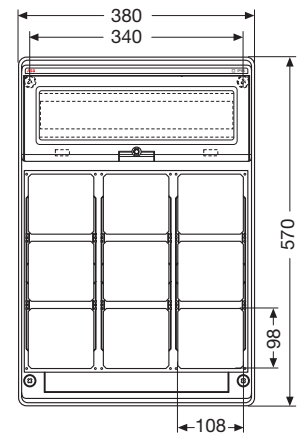
13 226



13 216

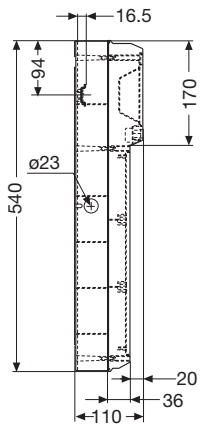


13 228

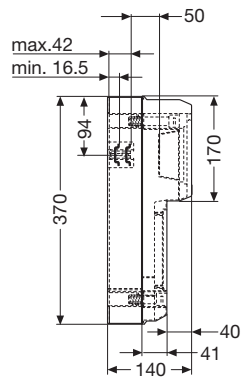


13 218

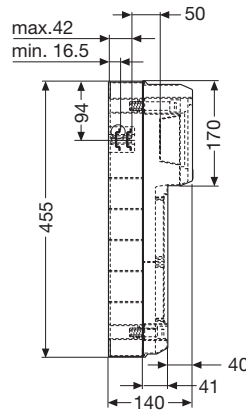
### Side view



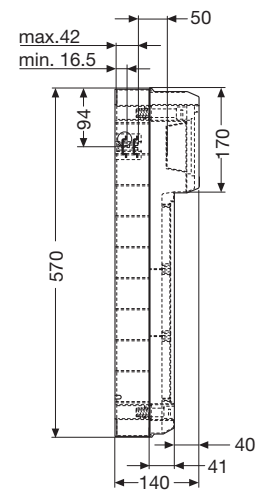
13 210



13 224



13 215



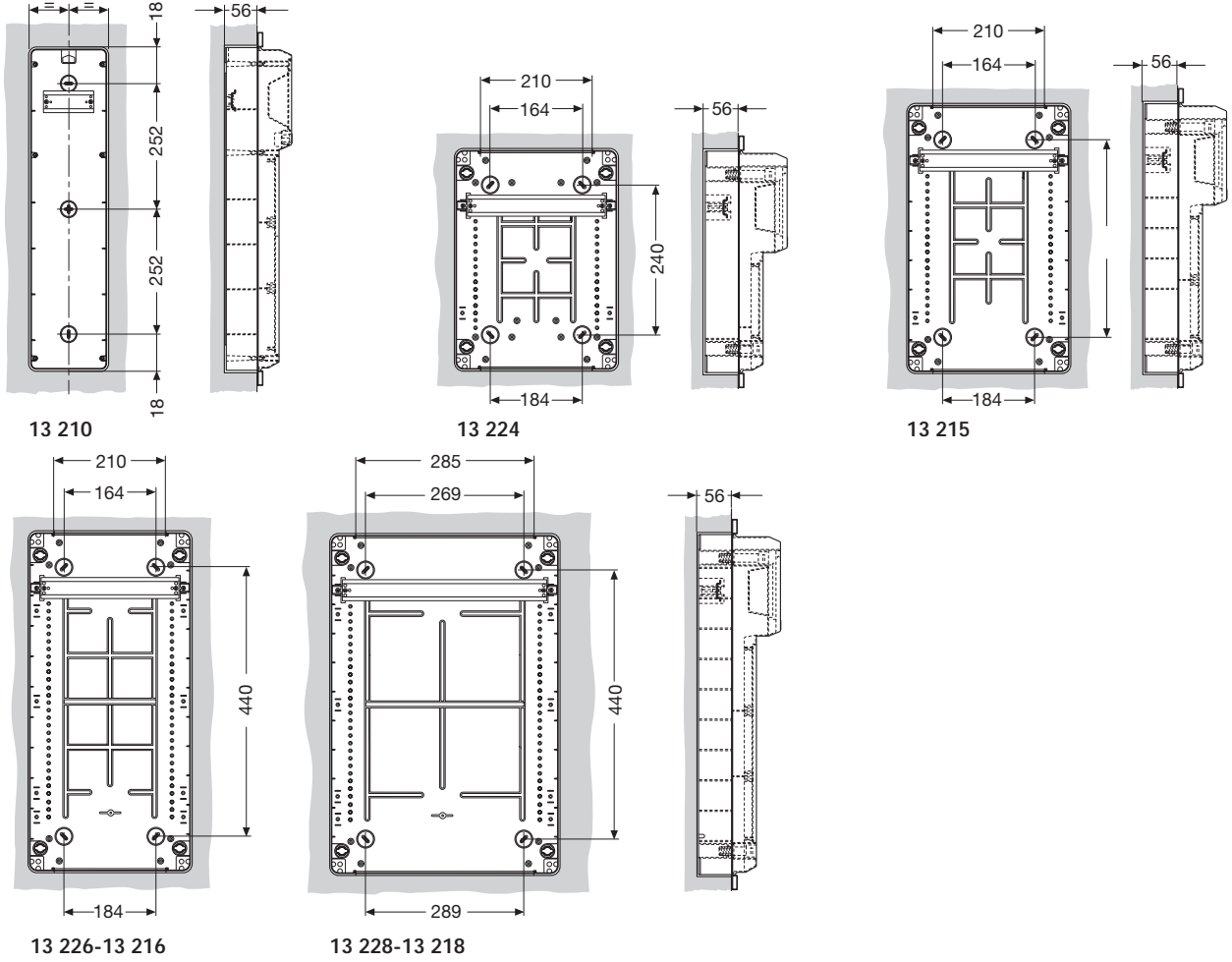
13 226-13 216  
13 228-13 218

VLCC0027

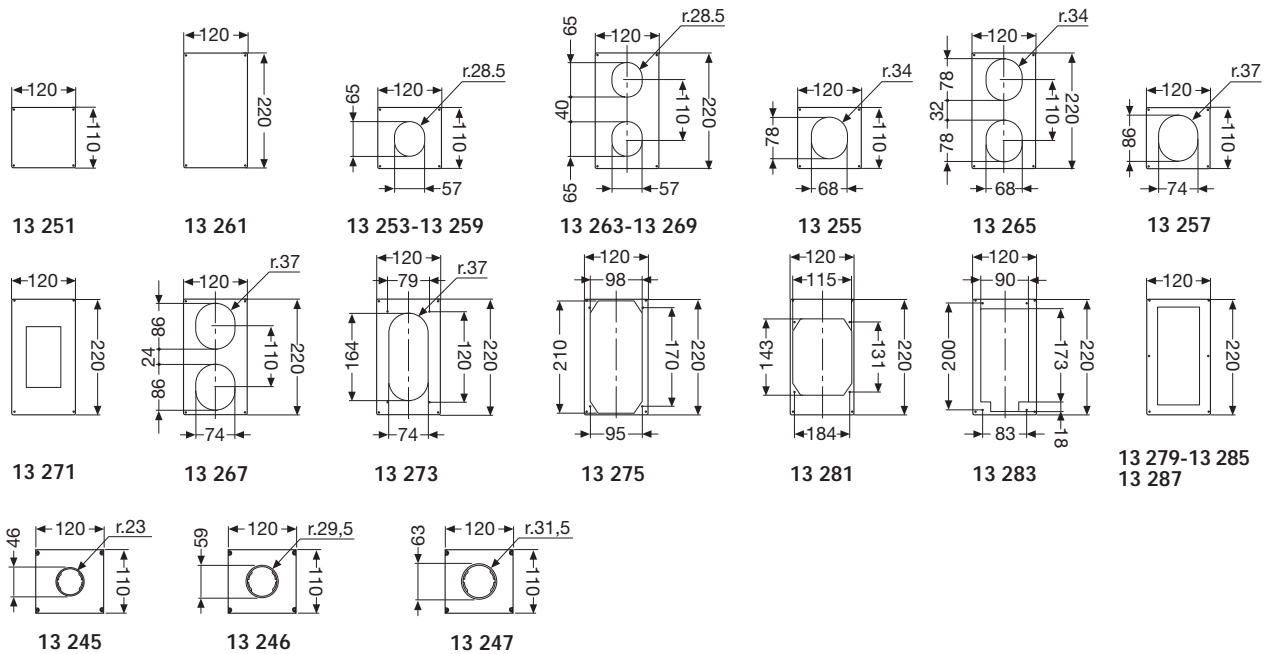
# Overall dimensions

## Marostica Series modular switchboards

### Drilling sheets



### Plates for switchboards

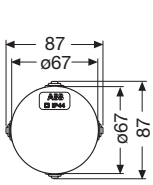




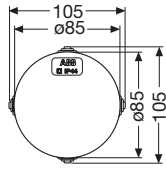
# Overall dimensions

## IP 44 and IP 55 junction boxes

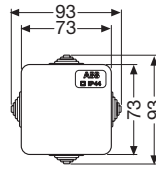
### Front view



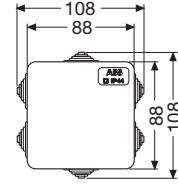
00 800



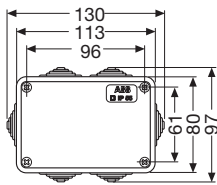
00 802



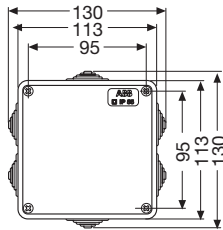
00 808



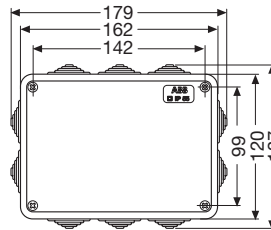
00 810



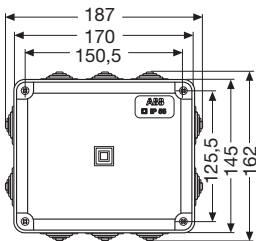
00 820 - 00 850



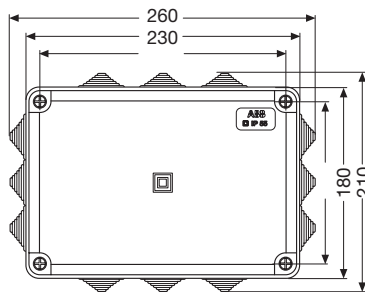
00 816 - 00 821  
00 846 - 00 851



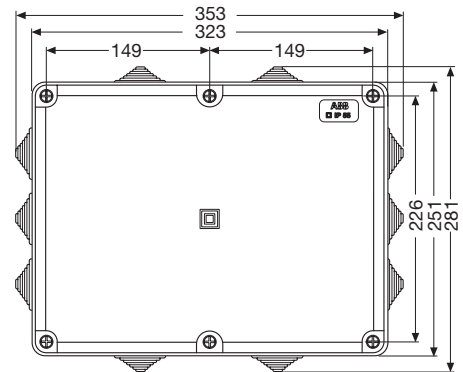
00 822 - 00 852 - 00 872



00 830 - 00 874 - 00 874  
00 854 - 00 860 - 00 880

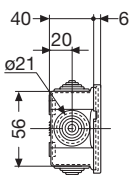


00 826 - 00 832 - 00 876  
00 856 - 00 862 - 00 884

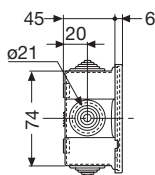


00 828 - 00 834 - 00 878  
00 858 - 00 864 - 00 884

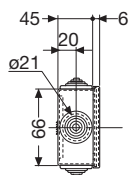
### Side view



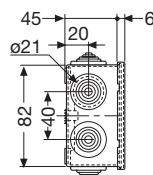
00 800



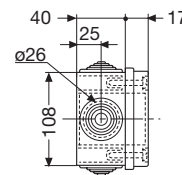
00 802



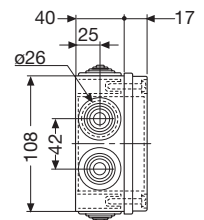
00 808



00 810



00 820 - 00 850



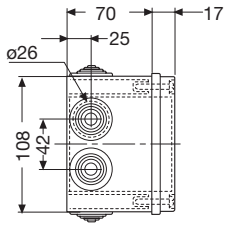
00 816 - 00 846

VL000029

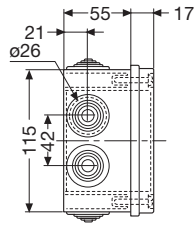
# Overall dimensions

## IP 44 and IP 55 junction boxes

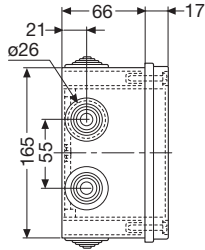
### Side view



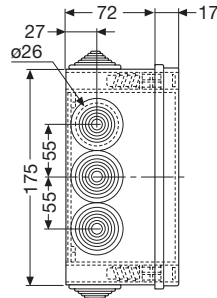
00 821 - 00 851



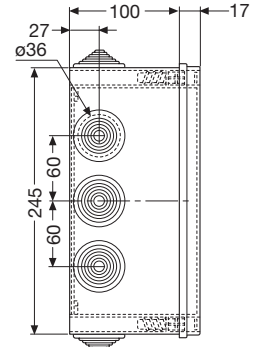
00 822 - 00 852  
00 872



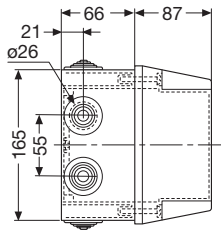
00 824 - 00 584  
00 874



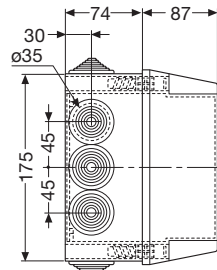
00 826 - 00 856  
00 876



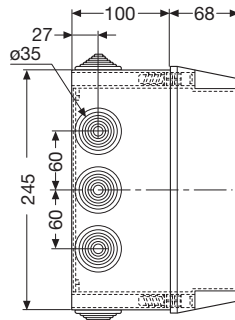
00 828 - 00 858  
00 878



00 830 - 00 860  
00 880

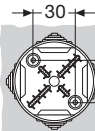


00 832 - 00 862  
00 882

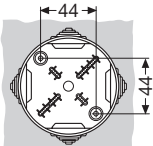


00 834 - 00 864  
00 884

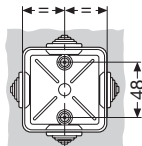
### Drilling sheets



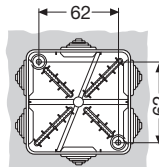
00 800 - 00 581



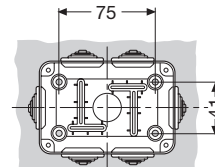
00 802



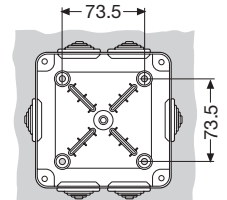
00 808



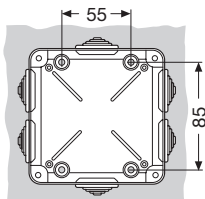
00 810



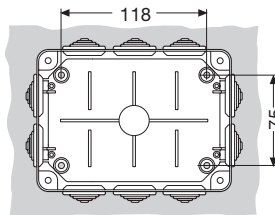
00 820 - 00 850



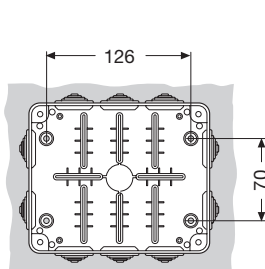
00 816 - 00 846



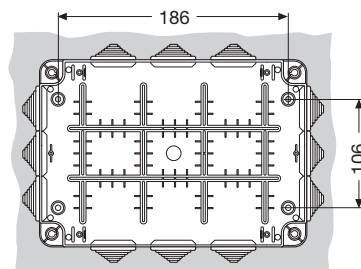
00 821 - 00 851



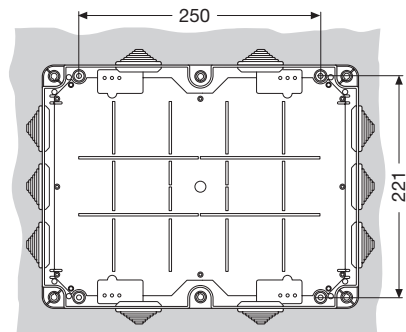
00 822 - 00 852 - 00 872



00 824 - 00 830 - 00 874  
00 854 - 00 860 - 00 880



00 826 - 00 832 - 00 876  
00 856 - 00 862 - 00 884



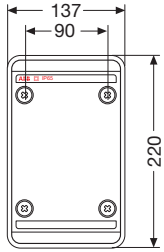
00 828 - 00 834 - 00 878  
00 858 - 00 864 - 00 884

VLCO0030

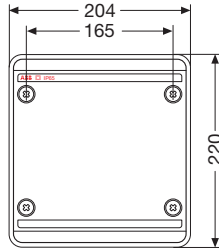
# Overall dimensions

## IP 65 polycarbonate junction boxes

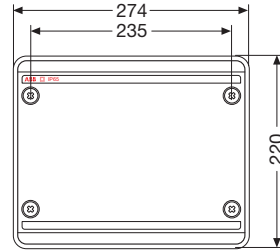
### Front view



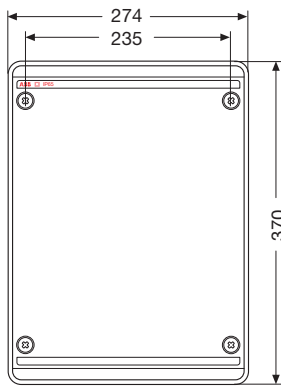
12 804



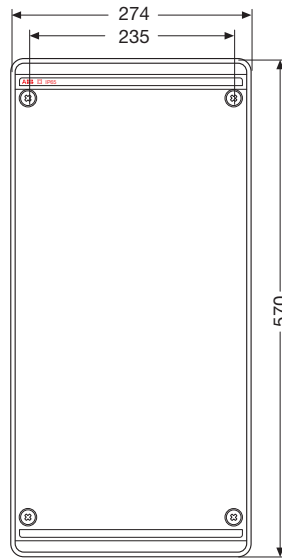
12 808



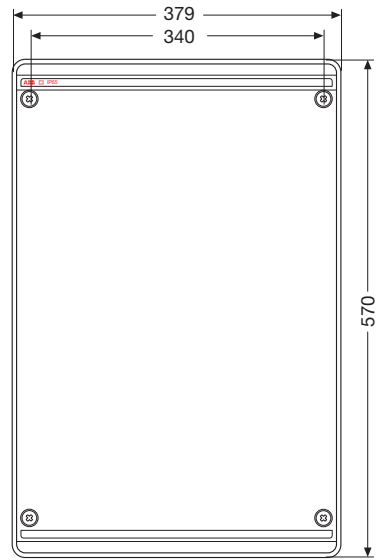
12 812



12 814

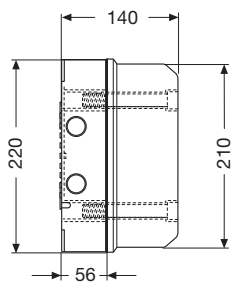


12 816

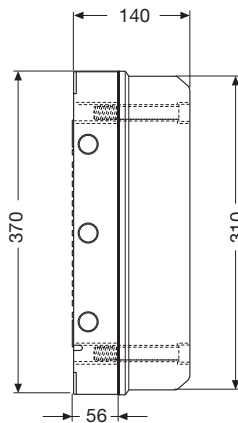


12 818

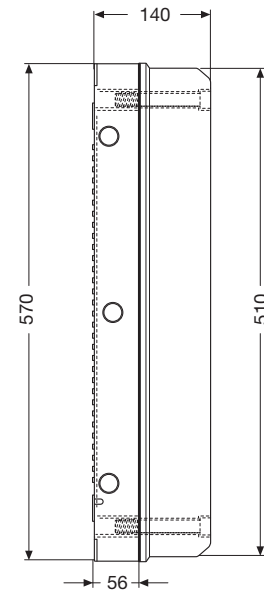
### Side view



12 804-12 808-12 812



12 814



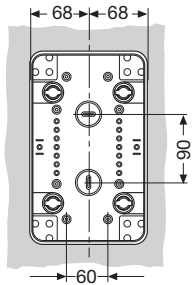
12 816-12 818

VLCO0031

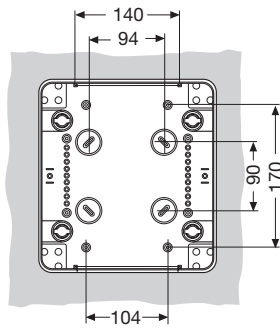
# Overall dimensions

## IP 65 polycarbonate junction boxes

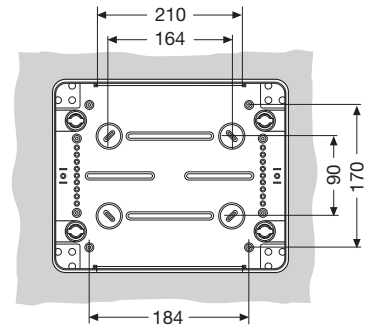
### Drilling sheets



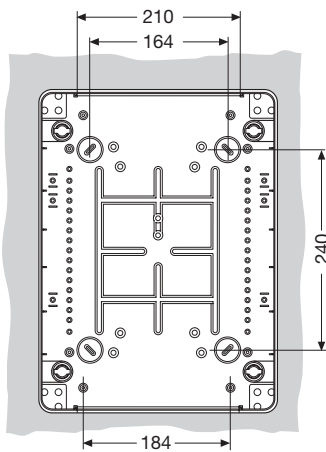
12 804



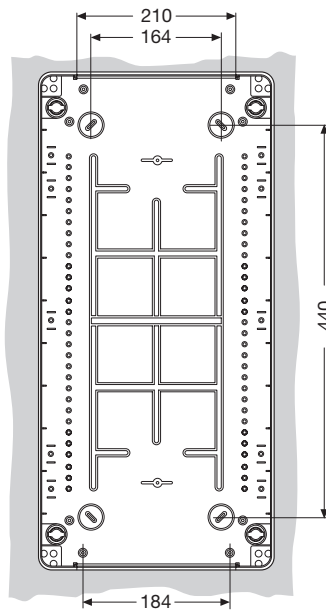
12 808



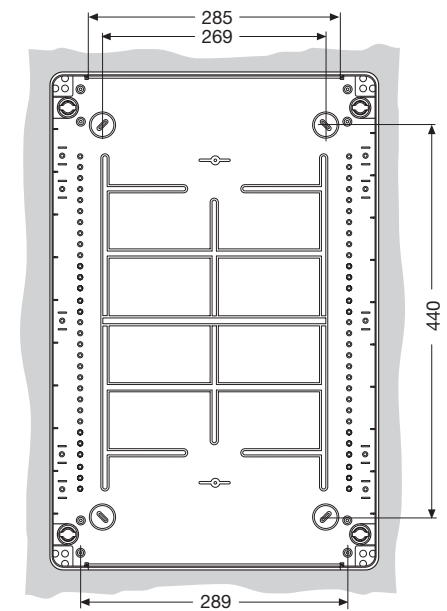
12 812



12 814



12 816

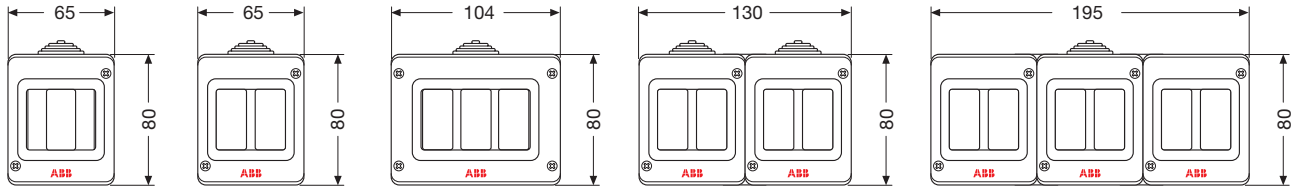


12 818

## Overall dimensions

### IP 40 and IP 55 equipment and empty enclosures

#### Front view



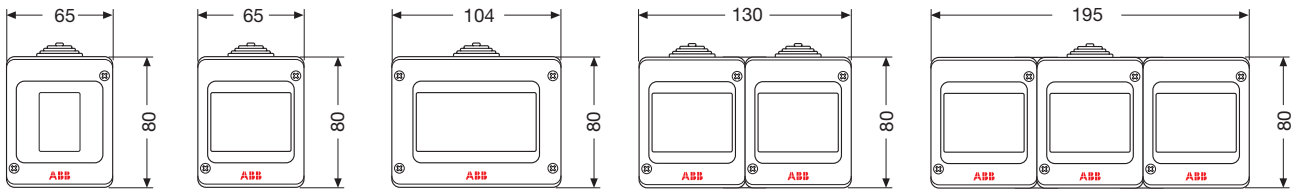
00 541

00 542

00 543

00 544

00 546



00 641

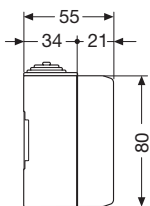
00 642

00 643

00 644

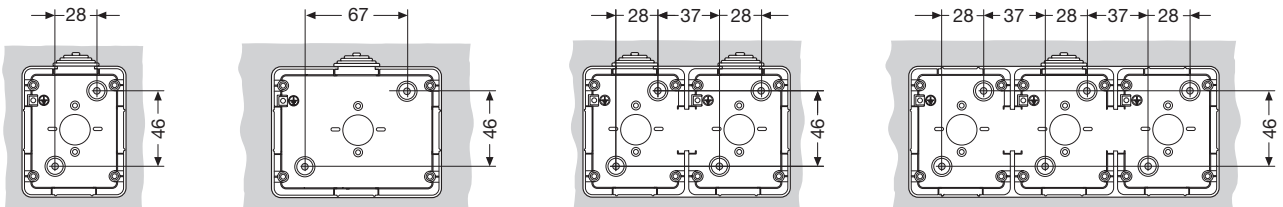
00 646

#### Side view



00 541 - 00 542  
00 543 - 00 544  
00 546 - 00 641  
00 642 - 00 643  
00 644 - 00 646

#### Drilling sheets



00 541 - 00 542  
00 641 - 00 642

00 543 - 00 643

00 544 - 00 644

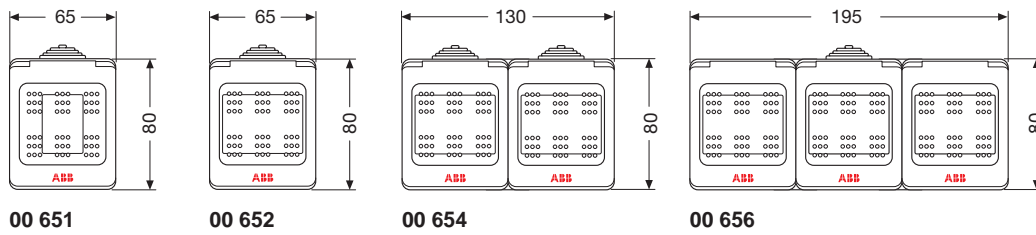
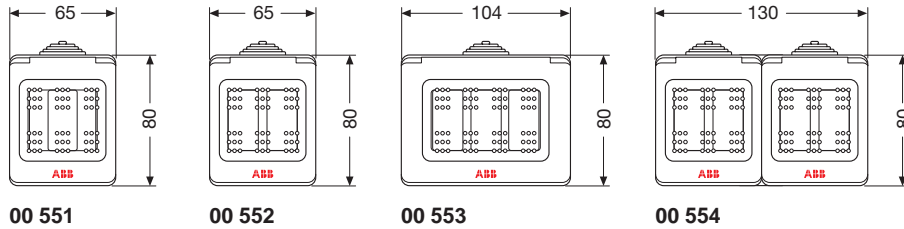
00 546 - 00 646

N.B. IP 40 - 00 500 - 00 501 - 00 502 - 00 503 - 00 504 - 00 505 - 00 510 - 00 511 - 00 512 - 00 513 articles are composed of Vimar wiring accessories installed in 1/2 compartment empty enclosures.

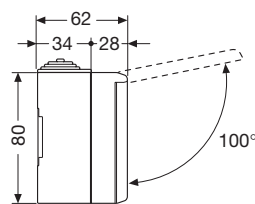
# Overall dimensions

## IP 40 and IP 55 equipment and empty enclosures

### Front view

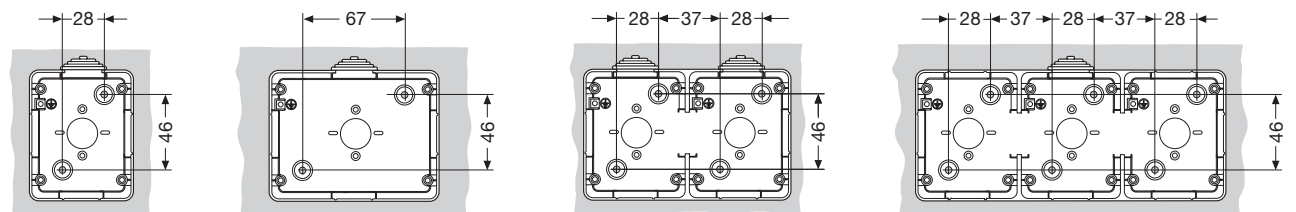


### Side view



00 551 - 00 552  
 00 553 - 00 554  
 00 651 - 00 652  
 00 654 - 00 656

### Drilling sheets



00 551 - 00 552  
 00 651 - 00 652

00 553

00 554 - 00 654

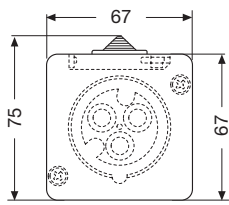
00 656

N.B. IP 55 - 00 520 - 00 521 - 00 522 - 00 523 - 00 524 - 00 525 - 00 530 - 00 531 - 00 532 - 00 533 articles are composed of Vimar wiring accessories installed in 1/2 compartment empty enclosures.

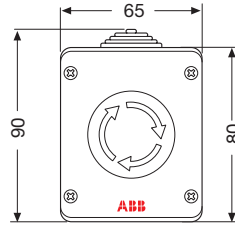
# Overall dimensions

## Various components

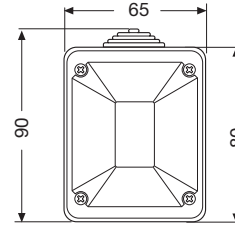
### Front view



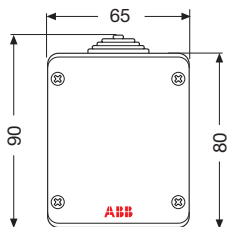
00 562 - 00 564



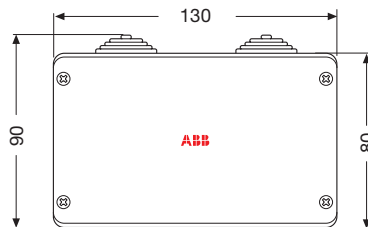
00 770 - 00 771



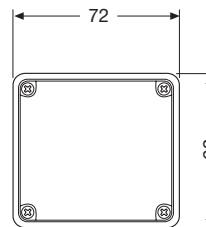
00 570 - 00 572  
00 573



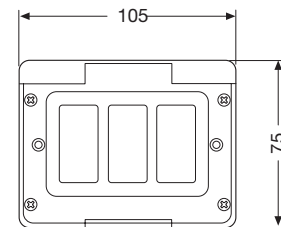
00 580



00 581

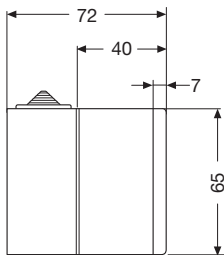


00 583

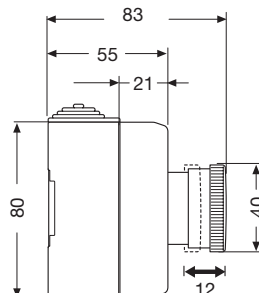


00 578 - 00 579

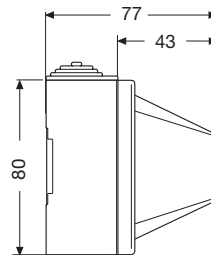
### Side view



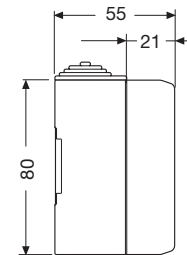
00 562 - 00 564



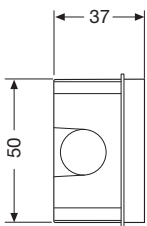
00 770 - 00 771



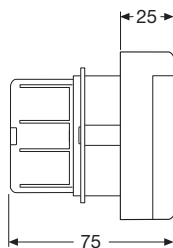
00 570 - 00 572  
00 573



00 580 - 00 581



00 583

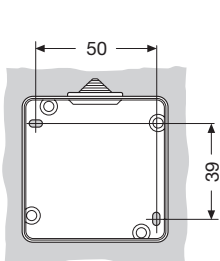


00 578 - 00 579

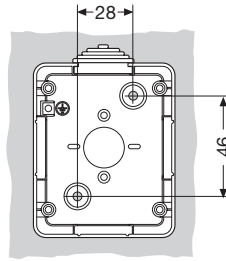
# Overall dimensions

## Various components

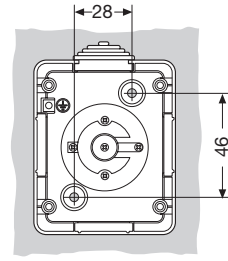
### Drilling sheets



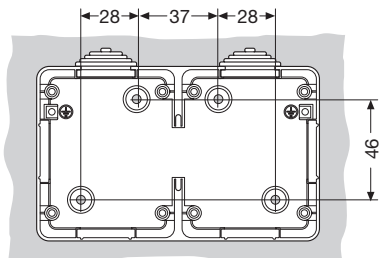
00 562 - 00 564



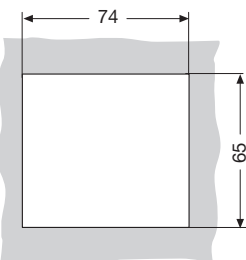
00 770 - 00 771  
00 580



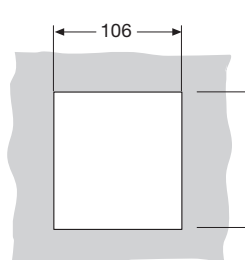
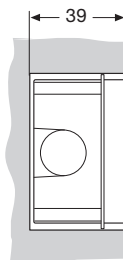
00 570 - 00 572  
00 573



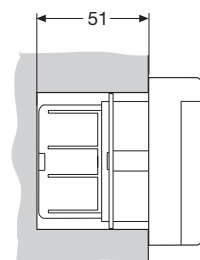
00 581



00 583



00 578 - 00 579

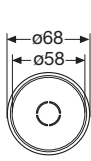




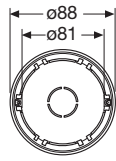
# Overall dimensions

Wiring accessories and junction boxes in thermoplastic material

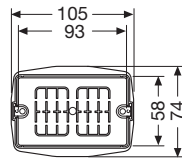
## Front view



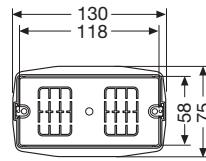
00 050



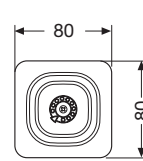
00 051



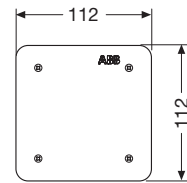
00 052



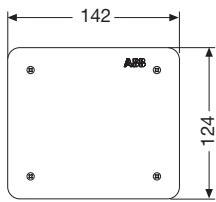
00 053



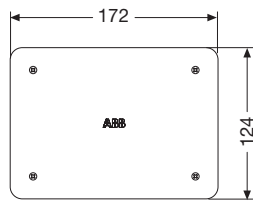
00 054



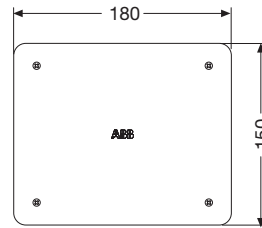
00 070



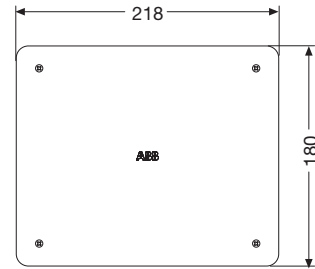
00 071 - 00 072



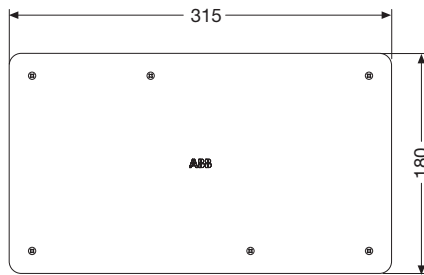
00 073



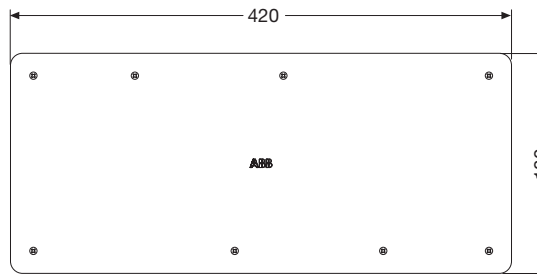
00 074



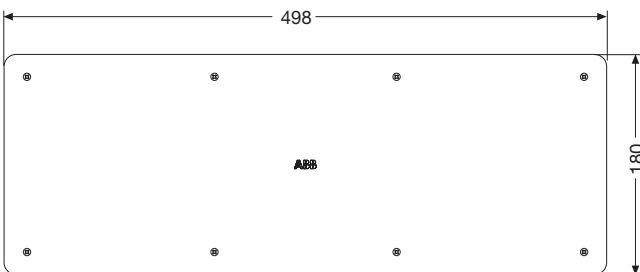
00 075



00 076

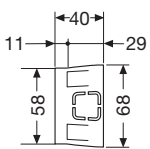


00 077

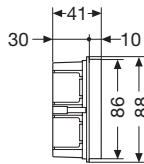


00 078

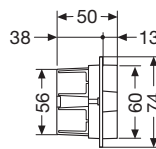
## Side view



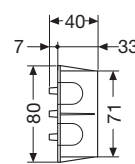
00 050



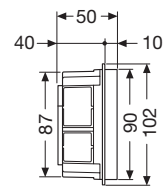
00 051



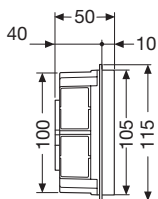
00 052  
00 053



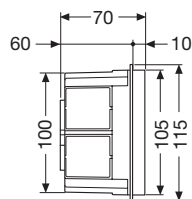
00 054



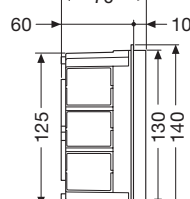
00 070



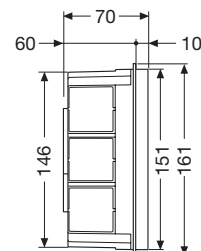
00 071



00 072  
00 073



00 074



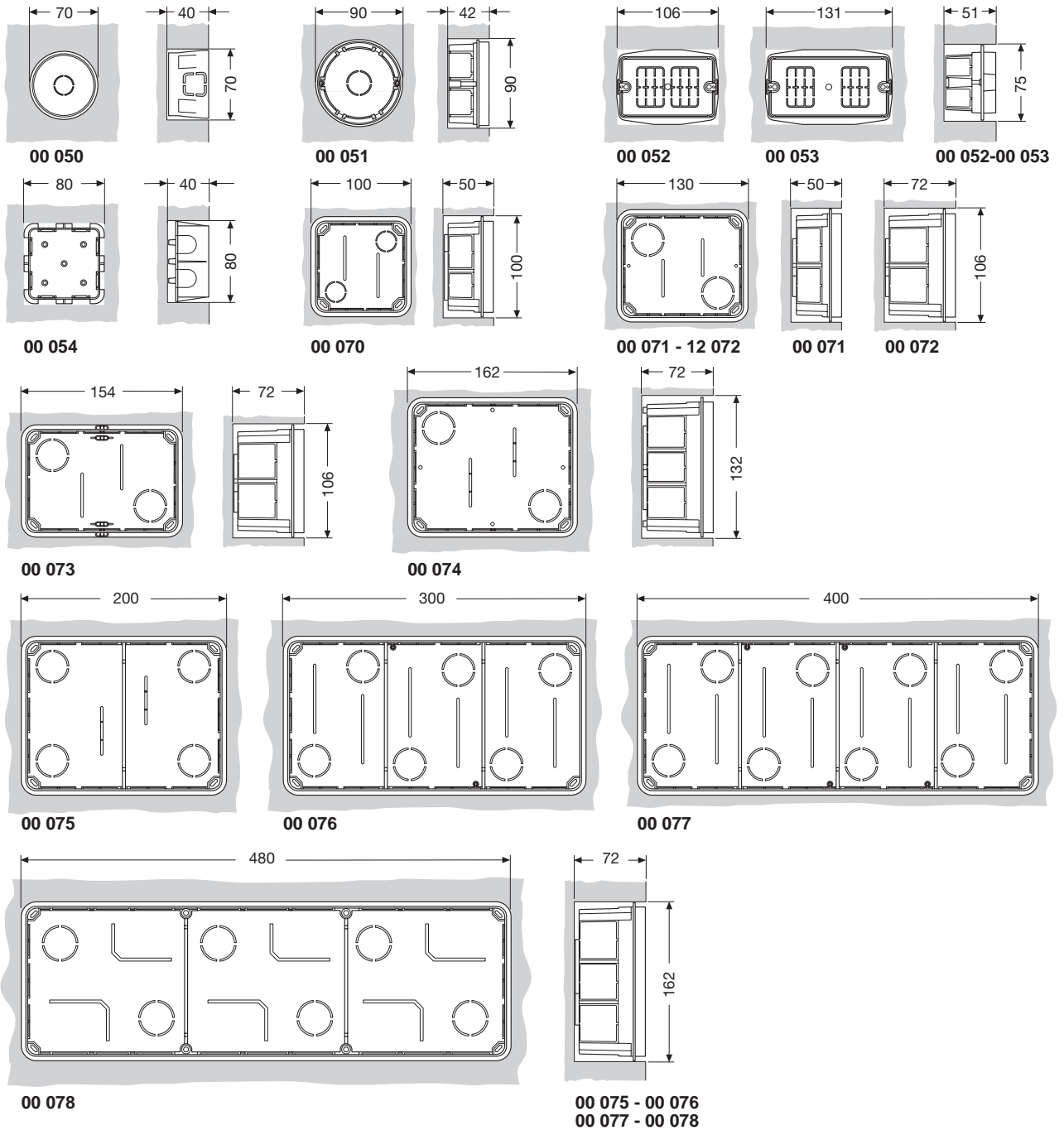
00 075 - 00 076  
00 077 - 00 078

VLCC0037

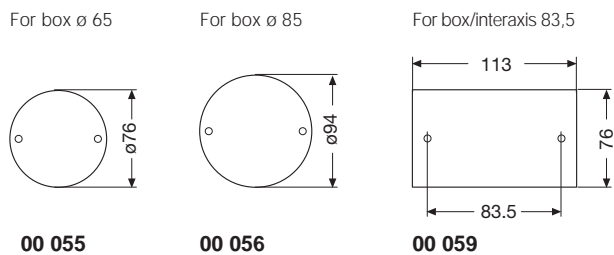
# Overall dimensions

## Wiring accessories and junction boxes in thermoplastic material

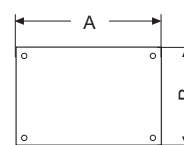
### Drilling sheets



### Covers



### Spare covers



article	A	B
00 091	110	110
00 092	140	125
00 093	170	125
00 094	180	150
00 095	220	182
00 096	320	182
00 097	425	182
00 098	500	182

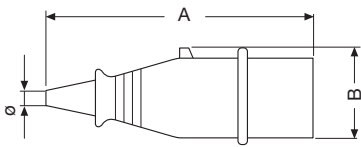
VLC00088

# Overall dimensions

## Sockets and plugs in compliance with IEC 309-1 Standard

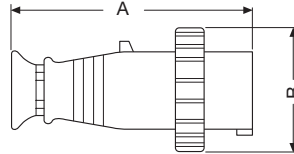
### Movable plugs

#### IP 44



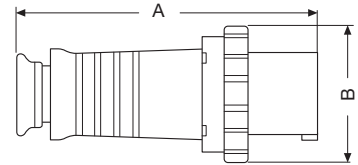
16 A		A	B	Ø
13 559-13 561	(1)	139	59	10
13 562-13 563	(2)	145	66,5	10
13 564-13 571				
13 567-13 572	(3)	163	74,5	13
32 A		A	B	Ø
13 573-13 565	(1)	185	78,5	13
13 574-13 568	(2)	185	78,5	13
13 561-13 575				
13 570-13 576	(3)	185	87	13

#### IP 67



16 A		A	B
13 577-13 581	(1)	133	70
13 578-13 583	(2)	139	77
13 584-13 579			
13 587-13 580	(3)	147,5	87
32 A		A	B
13 582-13 585	(1)	169,5	93
13 586-13 588	(2)	169,5	93
13 589-13 591			
13 590-13 592	(3)	169,5	100

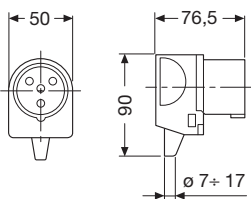
#### IP 67



63 A		A	B
13 594	(1)	248	114
13 595-13 597	(2)	248	114
13 596-13 598	(3)	248	114

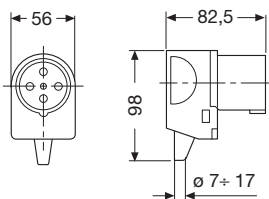
### Movable angled plugs

#### 2P+T



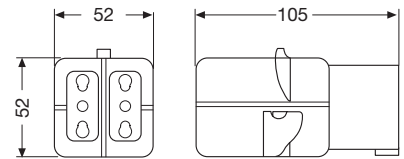
13 901

#### 3P+T



13 903-13 904

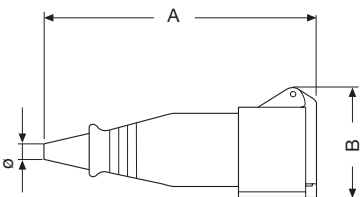
### Industrial/residential adapters



13 908-13 909-13 910

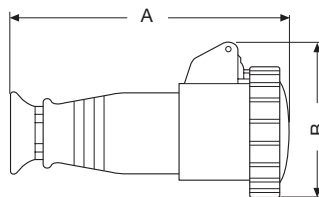
### Movable sockets

#### IP 44



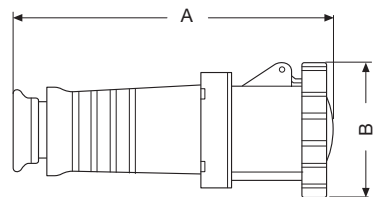
16 A		A	B	Ø
13 539-13 541	(1)	149	69,5	10
13 542-13 543	(2)	155,5	76	10
13 544-13 551				
13 547-13 552	(3)	174	83,5	13
32 A		A	B	Ø
13 553-13 545	(1)	196	86	13
13 555				
13 554-13 548	(2)	196	86	13
13 549				
13 550-13 556	(3)	196	92,5	13

#### IP 67



16 A		A	B
13 599-13 601	(1)	149	82
13 600-13 603	(2)	155,5	85
13 604-13 619			
13 607-13 620	(3)	164,5	94
32 A		A	B
13 602-13 605	(1)	184	97
13 606-13 608	(2)	184	97
13 609-13 611			
13 610-13 612	(3)	184	102

#### IP 67



63 A		A	B
13 614	(1)	265	110
13 615-13 617	(2)	265	110
13 616-13 618	(3)	265	110

#### Note:

- (1) = 2 poles + earth
- (2) = 3 poles + earth
- (3) = 3 poles + neutral + earth

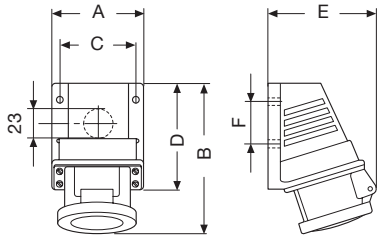
VLC00039

# Overall dimensions

## Sockets and plugs in compliance with IEC 309-1 Standard

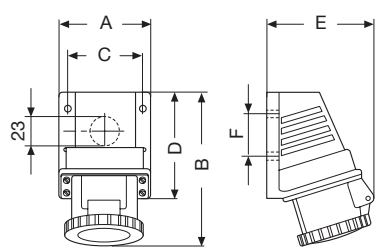
### Angled wall sockets

#### IP 44

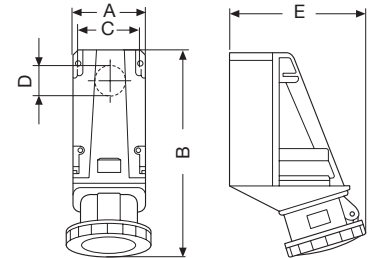


16 A	A	B	C	D	E	F
13 451-13 461 (1)	70	131	59	82	92	33
13 452-13 463 (2)	70	131	59	82	92	33
13 464-13 453						
13 467-13 454 (3)	81	150	69	100	101	47
32 A	A	B	C	D	E	F
13 455-13 465 (1)	70	131	59	82	92	33
13 456-13 468 (2)	70	131	59	82	92	33
13 469-13 457						
13 470-13 458 (3)	81	150	69	100	101	47

#### IP 67



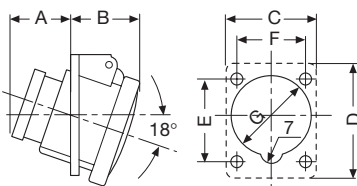
16 A	A	B	C	D	E	F
13 477-13 481 (1)	70	132	59	82	92	33
13 478-13 483 (2)	70	132	59	82	92	33
13 484-13 479						
13 487-13 480 (3)	81	152	69	100	101	47
32 A	A	B	C	D	E	F
13 482-13 485 (1)	81	161	69	100	104	47
13 486-13 488 (2)	81	161	69	100	104	47
13 489-13 491						
13 490-13 492 (3)	81	162	69	100	106	47



63 A	A	B	C	D	E
13 494 (1)	104	255	88	38	180
13 495-13 497 (2)	104	255	88	38	180
13 496-13 498 (3)	104	255	88	38	180

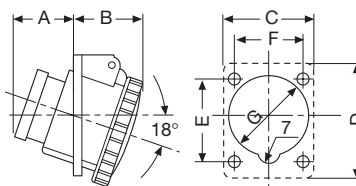
### Angled switchboard sockets

#### IP 44

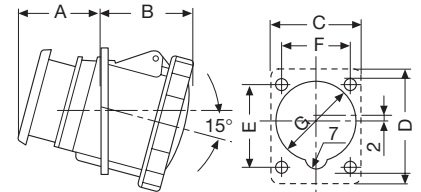


16 A	A	B	C	D	E	F	G
13 499-13 501 (1)	36	45	65	85	60	52	54
13 502-13 503 (2)	36	47	65	85	60	52	58
13 504-13 511							
13 507-13 512 (3)	36	49	90	100	85	77	70
32 A	A	B	C	D	E	F	G
13 513-13 505 (1)	47	54	90	100	85	77	70
13 514-13 508 (2)	47	54	90	100	85	77	70
13 509-13 515							
13 510-13 516 (3)	47	58	90	100	85	77	75

#### IP 67



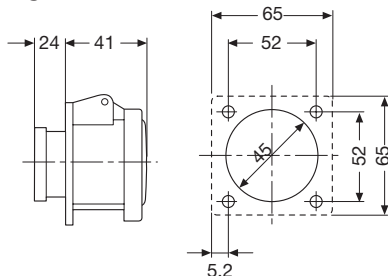
16 A	A	B	C	D	E	F	G
13 517-13 521 (1)	36	45	65	85	60	52	54
13 518-13 523 (2)	36	47	65	85	60	52	58
13 524-13 519							
13 527-13 520 (3)	36	49	90	100	85	77	70
32 A	A	B	C	D	E	F	G
13 522-13 525 (1)	47	54	90	100	85	77	70
13 526-13 528 (2)	47	54	90	100	85	77	70
13 529-13 531							
13 530-13 532 (3)	47	58	90	100	85	77	75



63 A	A	B	C	D	E	F	G
13 534 (1)	56	73	100	107	85	77	82
13 535-13 537 (2)	56	73	100	107	85	77	82
13 536-13 538 (3)	56	73	100	107	85	77	82

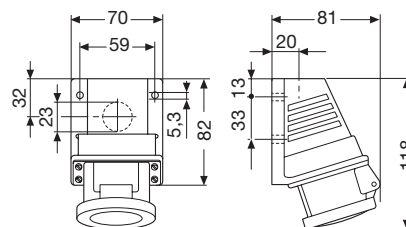
### Ultra-low voltage sockets and plugs

#### Angled switchboard sockets



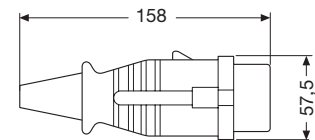
13 420-13 421-13 422-13 423
13 424-13 425-13 426-13 427

#### Angled wall sockets



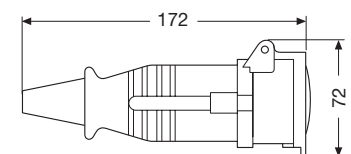
13 430-13 431-13 432-13 433
13 434-13 435-13 436-13 437

#### Movable plugs



13 400-13 401-13 402-13 403
13 404-13 405-13 406-13 407

#### Movable sockets



13 410-13 411-13 412-13 413
13 414-13 415-13 416-13 417

#### Note:

- (1) = 2 poles + earth
- (2) = 3 poles + earth
- (3) = 3 poles + neutral + earth

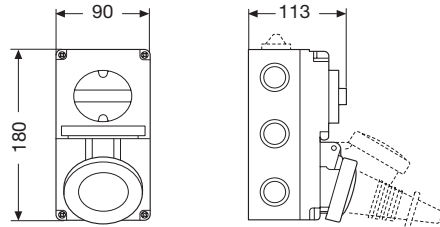
VLCO0040

# Overall dimensions

## Safety sockets in compliance with IEC 309-1 Standard

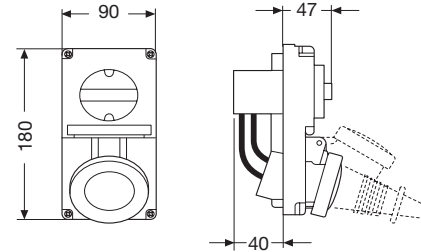
### IP 44 and IP 66 vertical sockets with locking switch

#### External sockets



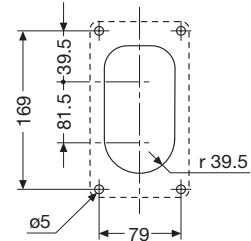
13 641-13 644-13 647-13 649  
 13 651-13 654-13 657-13 659  
 13 681-13 684-13 687-13 689  
 13 691-13 694-13 697-13 699

#### Flush-mounting sockets



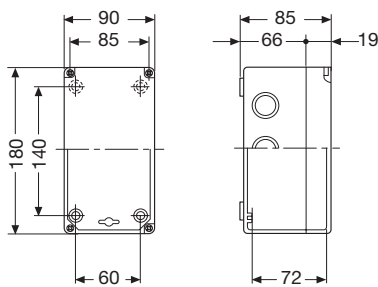
13 621-13 624-13 627-13 629  
 13 631-13 634-13 637-13 639  
 13 661-13 664-13 667-13 669  
 13 671-13 674 13 677- 13 679

#### Drilling sheet



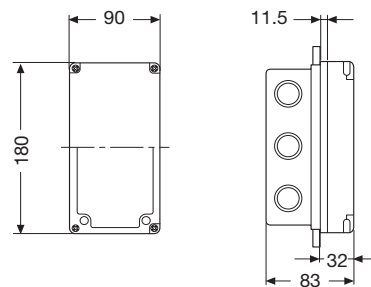
### Accessories for IP 44 and IP 66 vertical sockets with locking switch

#### IP 55 junction box



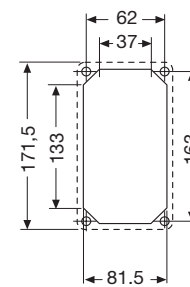
13 878

#### Flush-mounting box

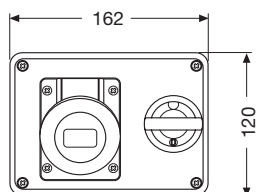


13 881

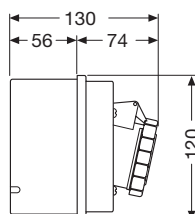
#### Drilling sheet



### Horizontal sockets with locking switch

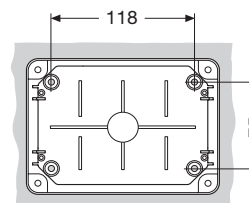


**IP 44**  
 13 642 - 13 645 - 13 648 - 13 650  
 13 652 - 13 655 - 13 658 - 13 660



**IP 55**  
 13 682 - 13 685 - 13 688 - 13 690  
 13 692 - 13 695 - 13 698 - 13 700

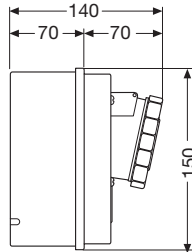
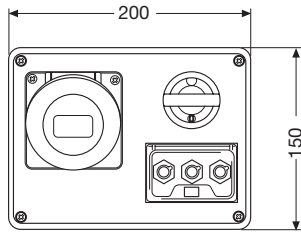
#### Drilling sheet



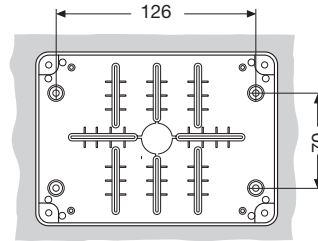
# Overall dimensions

## Safety sockets in compliance with IEC 309-1 Standard

### Horizontal sockets with locking switch and fuse-holder



Drilling sheet



#### IP 44

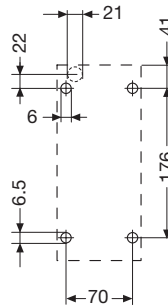
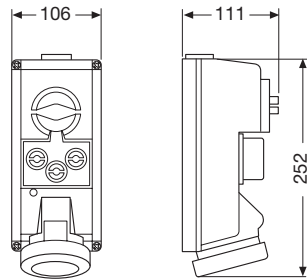
13 702 - 13 705 - 13 708 - 13 710  
13 712 - 13 715 - 13 718 - 13 720

#### IP 55

13 732 - 13 735 - 13 738 - 13 740  
13 742 - 13 745 - 13 748 - 13 750

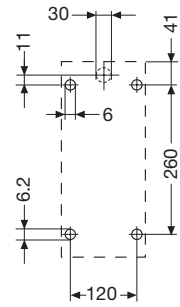
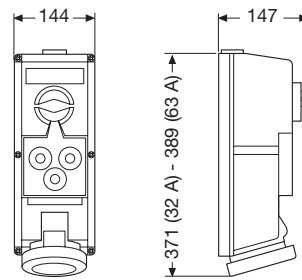
### IP 44 and IP 65 sockets with locking switch and fuse-holder

#### IP 44 - (16 A)



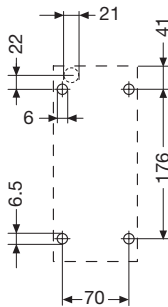
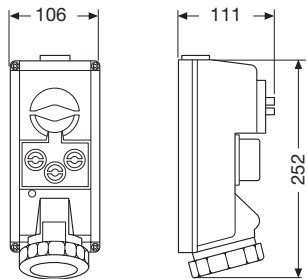
13 701 - 13 704  
13 707 - 13 709

#### IP 44 - (32 A - 36 A)



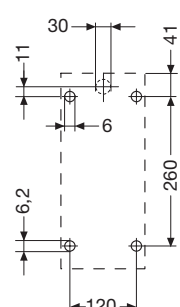
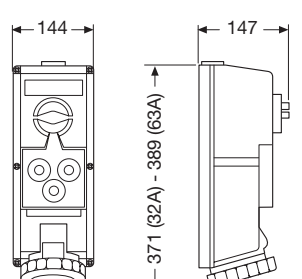
13 711 - 13 714 - 13 717 - 13 719  
13 721 - 13 722 - 13 723

#### IP 55 - (16 A)



13 731 - 13 734  
13 737 - 13 739

#### IP 55 - (32 A - 63 A)



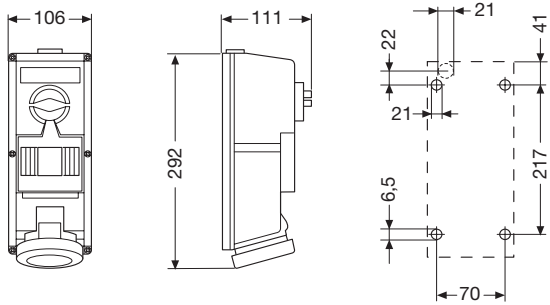
13 741 - 13 744 - 13 747 - 13 749  
13 724 - 13 725 - 13 726

# Overall dimensions

## Safety sockets in compliance with IEC 309-1 Standard

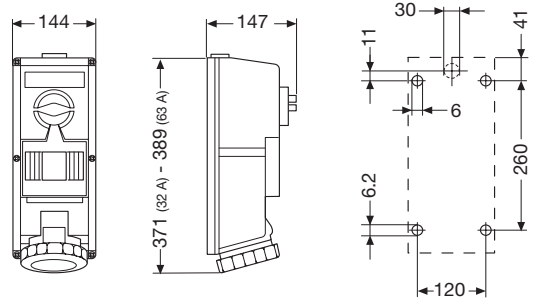
### IP 44 and IP 65 sockets with locking switch and DIN EN 50022 rail

#### IP 55 - (16 A)



13 761 - 13 764  
13 767 - 13 769

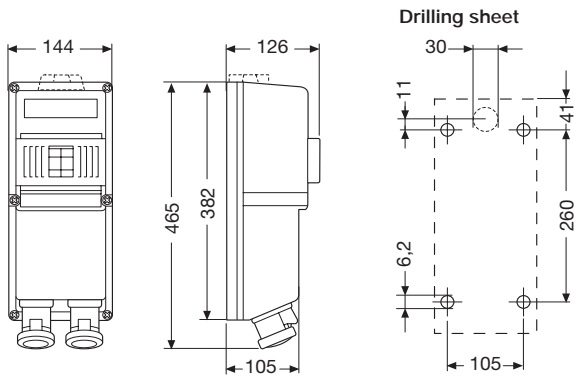
#### IP 55 - (32 A - 63 A)



13 771 - 13 774 - 13 777 - 13 779  
13 727 - 13 728 - 13 729

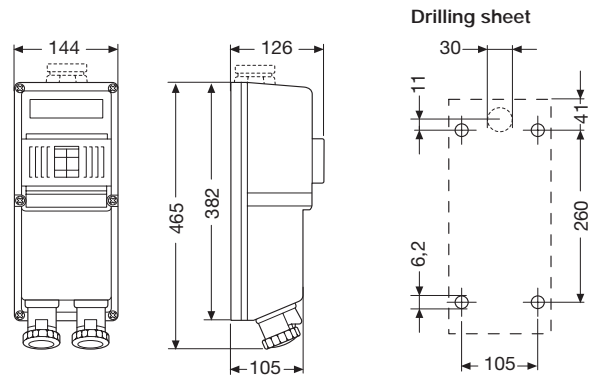
### Ultra-low voltage sockets with safety transformer

#### IP 44



13 921 - 13 922 - 13 923 - 13 924

#### IP 55

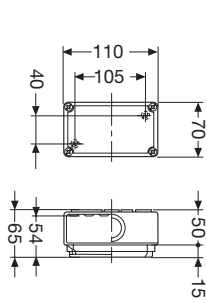


13 927 - 13 928 - 13 929 - 13 930

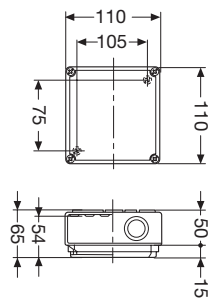
# Overall dimensions

## Safety sockets in compliance with IEC 309-1 Standard

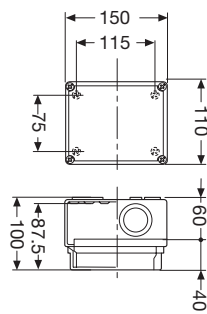
### Junction boxes for modular panels



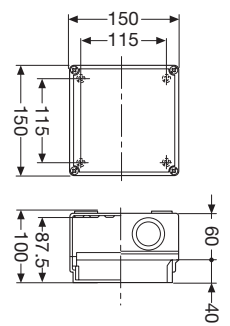
13 860



13 861

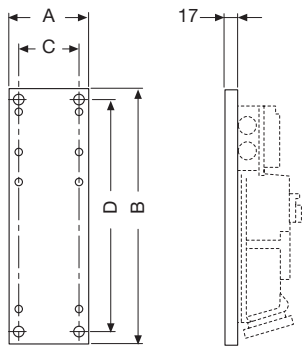


13 862 - 13 863



13 864

### Modular panels



	A	B	C
13 800	388	81	367
13 801	535	81	514
13 802	535	121	514

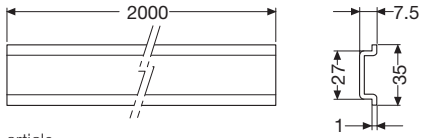


# Overall dimensions

## Installation material

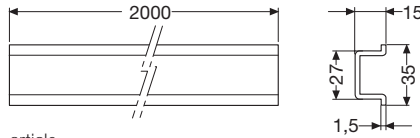
### Metal rails

CENELEC-EN 50022 h7.5 rail



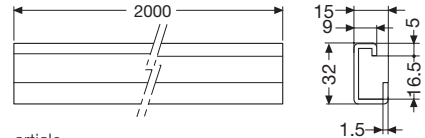
article  
12 839

CENELEC-EN 50022 h15 rail



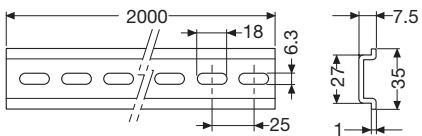
article  
12 840

CENELEC-EN 50035 rail



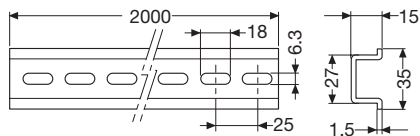
article  
12 841

CENELEC-EN 50022 h7.5 rail with holes



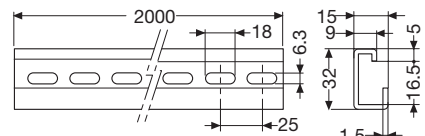
article  
12 849

CENELEC-EN 50022 h15 rail with holes



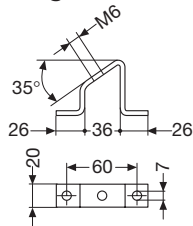
article  
12 850

CENELEC-EN 50035 rail with holes



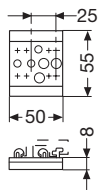
article  
12 853

### Supporting bracket for metal rails



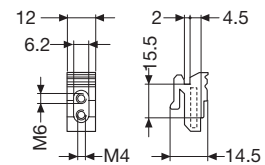
article  
12 892

### Plastic base for wiring ducts



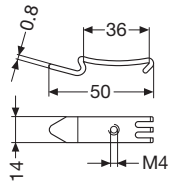
article  
05 210

### Universal plastic connector

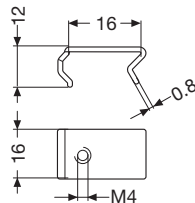


article  
12 893

### Universal metal connectors

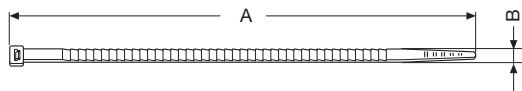


article  
12 828

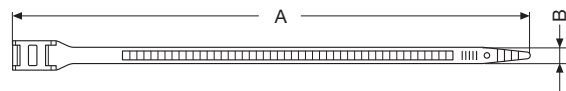


article  
12 829

### Polyamide cable-ties



transparent polyamide	black polyamide	A	B	ø tightening	
				min.	max.
18 010	18 110	100	2,5	2	24
18 013	18 113	160	2,5	2	42
18 012	18 112	140	3,5	2,5	36
18 011	18 111	135	2,5	2	35
18 014	18 114	200	3,5	2,5	55
18 015	18 115	180	4,5	3	45
18 017	18 117	280	3,5	2,5	80
18 018	18 118	280	4,5	5	76
18 020	18 120	360	4,5	5	101
18 024	18 124	200	7,5	5	51
18 026	18 126	280	7,5	5	76
18 034	18 134	430	9	5	110



transparent polyamide	black polyamide	A	B	ø tightening	
				min.	max.
18 036	18 136	550	9	5	140
18 038	18 138	780	9	5	190
18 028	18 128	360	7,5	5	102

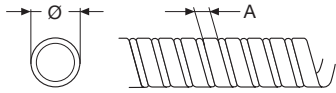
  

black polyamide	A	B	ø tightening	
			min.	max.
18 210	115	6	5	20
18 212	175	6	10	40
18 218	115	9	5	20
18 220	180	9	10	45
18 222	265	9	15	70
18 224	360	9	25	100

# Overall dimensions

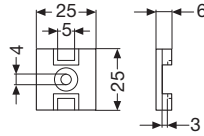
## Installation material

### Spirals



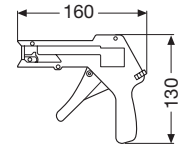
transparent polyethylene	self-extinguishing polyethylene	Ø	x	A
18 370	18 380	3	x	5
18 372	18 382	6	x	8
18 374	18 384	10	x	11
18 376	18 386	12	x	13

### Self-adhesive supports for cable-ties



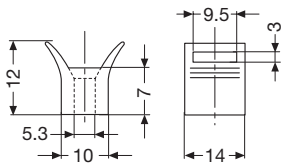
transparent base	black base
18 250	18 251

### Pincer for cable-ties



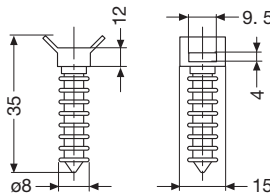
article
18 270

### Screw support for external cable-ties



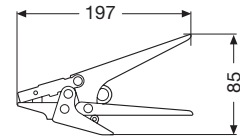
article
18 280

### Pivot support for external cable-ties



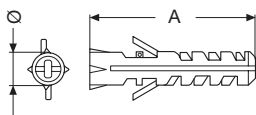
article
18 282

### Pincer for external cable-ties



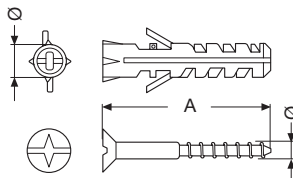
article
18 290

### Wall plugs



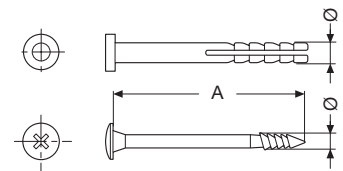
article	Ø	x	A
18 405	5	x	25
18 406	6	x	30
18 408	8	x	40
18 410	10	x	50

### Wall plugs with screws



article	wall plug Ø	screw Ø x A
18 415	5	3,5 x 25
18 416	6	4 x 30
18 418	8	5 x 40
18 420	10	6 x 50

### Wall plugs with nail/screw

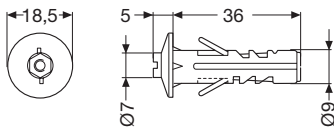


article	wall plug Ø	nail/screw Ø x A
18 430	5	3,5 x 27
18 432	6	4 x 35
18 434	6	4 x 55
18 436	8	5 x 70
18 440	8	5 x 72

# Overall dimensions

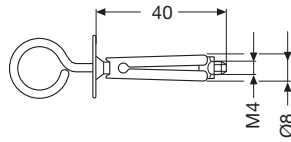
## Installation material

### Wall plugs with hooks



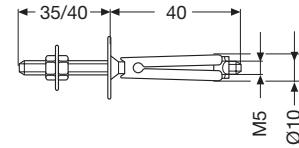
article  
18 450 - 18 452 - 18 454 - 18 456 - 18 548

### Stainless-steel wall plugs with hooks



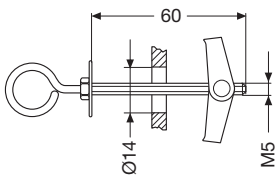
article  
18 460 - 18 461 - 18 464 - 18 465 - 18 466  
18 467 - 18 470 - 18 471 - 18 472 - 18 473

### Stainless-steel wall plugs with hooks



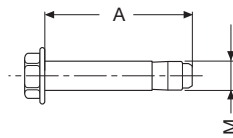
article  
18 476 - 18 477 - 17 478 - 18 479

### Stainless-steel wall anchors



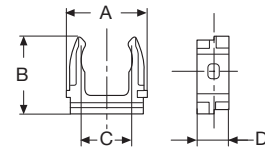
article  
18 490 - 18 492 - 17 494 - 18 496

### Screws with stainless-steel wall plugs



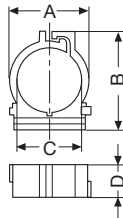
article	M	x	A
18 486	6		50
18 487	8		55
18 488	10		60
18 489	10		70

### Snap-on conduit holders



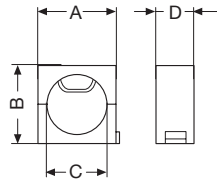
article	A	B	C	D
05 700	29	26	16	10
05 701	33	28	20	12
05 702	35	32	25	12
05 703	50	42	32	14
05 704	55	50	40	14

### Collar conduit holders



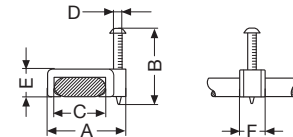
article	A	B	C	D
05 720	29	26	16	10
05 721	33	28	20	12
05 722	35	32	25	12
05 723	50	42	32	14

### U-bolt conduit holders



article	A	B	C	D
05 694	28	29	12-16	17
05 695	35	35	16-25	17
05 696	47	47	25-32	17
05 697	56	56	32-40	17
05 698	70	70	40-50	17

### Strap holders

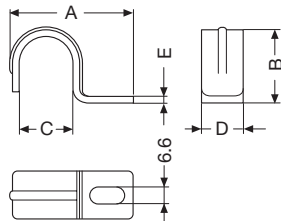


article	A	B	C	D	E	F
05 760	11	18	6	2	3.5	5.5
05 761	14	18	8	2	3.5	7
05 762	17	18	11	2	5	7.5
05 763	11	18	6	2	3.5	5.5
05 764	14	18	8	2	3.5	7
05 765	17	18	11	2	5	7.5

# Overall dimensions

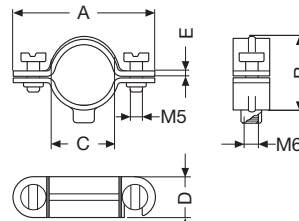
## Installation material

### Conduit clamps



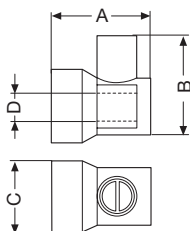
article	A	B	C	D	E
05 730	31	11,5	10	14	1.2
05 731	35	13	12	15	1.5
05 732	35	14	13	15	1.5
05 733	36	16	14	15	1.5
05 734	38	17	16	15	1.5
05 735	42	21	19-20	15	1.5
05 736	44	24	22	16	1.5
05 737	50	27	15-26	16	1.5
05 738	58	27	32	16	1.5
05 739	67	40	38	16	2
05 740	69	42	40	16	2
05 741	82	53	50	17	2

### Conduit clamp collars



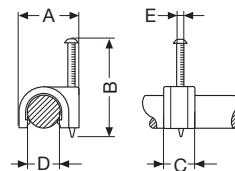
article	A	B	C	D	E
05 745	34	15	10	12	0.8
05 746	37	18	12	12	0.8
05 747	38	19	13	12	0.8
05 748	38	19	14	12	0.8
05 749	42	22	16	13	1.2
05 750	45	26	19-20	13	1.2
05 751	48	29	22	14	1.2
05 752	51	32	25-26	14	1.2
05 753	58	40	32	16	1.5
05 754	67	45	38	16	1.5
05 755	64	48	40	16	1.5
05 756	78	55	50	16	1.5

### Insulated cable clamps



article	A	B	C	D
05 950	19.5	18.5	13.5	4.5
05 951	24	24	16.5	6.5
05 952	29	31	20.5	8

### Cable holders

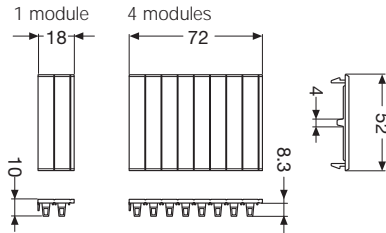


article	A	B	C	D	E
05 770-05 788	9.5	18	6	4	2
05 771-05 789	11.5	18	6	5	2
05 772-05 790	12	18	6	6	2
05 773-05 791	12	24	7.5	7	2
05 774-05 792	14	24	8.5	8	2
05 775-05 793	15	29	9.5	9	2
05 776-05 794	17	29	10	10	2
05 777-05 795	20	29	10	12	2
05 778-05 796	21	29	11	13	2
05 779	22	29	11	14	2
05 780	24	35	12	16	2
05 781	27	45	14	19-20	2.5
05 782	30	45	15	22	2.5
05 783	37	60	20	25-26	2.7
04 784	43	60	25,6	32	2.7

# Overall dimensions

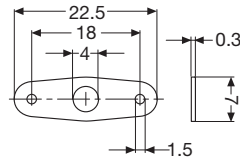
## Accessories

### Module covers



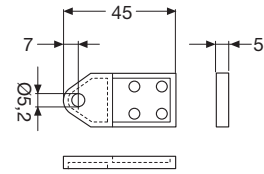
article	N. modules
12 857 - 12 895 - 12 861	1
12 859 - 12 896 - 12 893	4

### Screw lead sealing accessory



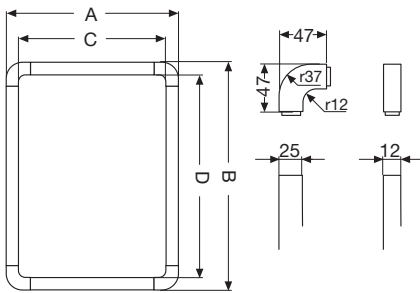
article
12 860

### Brackets



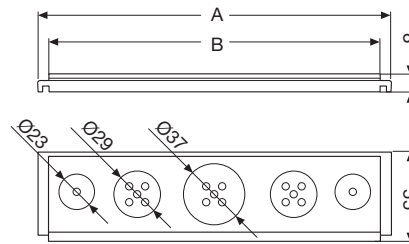
article
12 858

### Semi-flush-mounting frame



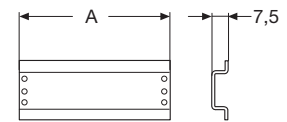
article	A	B	C	D
12 590	187	270	137	220
12 591	254	270	204	220
12 592	325	270	275	220
12 593	325	420	275	370
12 594	325	622	275	572
12 595	430	622	380	572
12 596	430	270	380	220
12 597	430	420	380	370

### Bi-material flanges



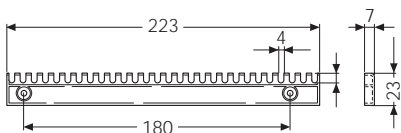
article	A	B
12 600	140	146
12 601	216	210
12 602	292	285

### DIN rail



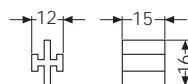
article	A
12 852	86
12 854	453
12 855	224
12 856	330

### Unibox Series cable holder accessory



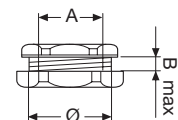
article
12 530

### Unibox Series coupling element



article
12 556

### Unions

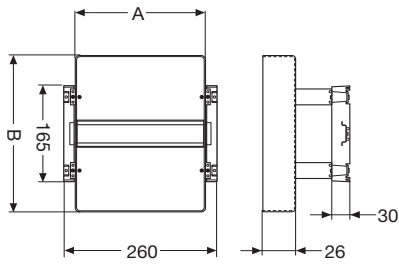


article	Ø	A	B
13 874	23	18	7
13 875	28.5	22	7
13 876	37	30	10

# Overall dimensions

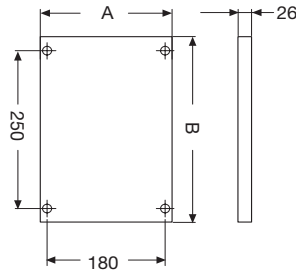
## Accessories

### Kit for MCBs



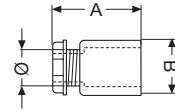
article	A	B
12 820	217	273
12 821	217	474
12 822	321	474

### Fixed counter-doors



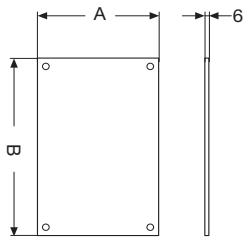
article	A	B
12 825	217	273
12 826	217	474
12 827	827	321

### IP 65 conduit/box connectors



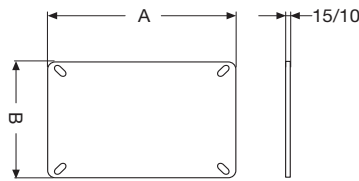
article	Ø	A	B
00 420	15.5	46	12.5
00 421	20	46	16
00 422	24.5	46	20
00 423	32	48	27
00 424	39.5	66.5	34.5
00 425	49.5	66.5	44.5

### Insulating material base plates



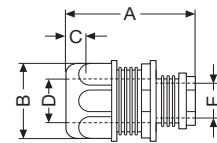
article	A	B
12 832	80	116
12 834	147	116
12 835	217	116
12 836	217	266
12 837	217	466
12 838	322	466

### Metal base plates



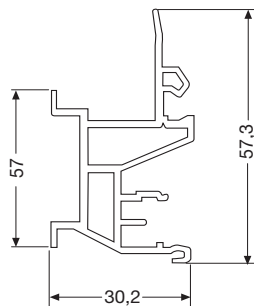
article	A	B
12 842	80	116
12 844	179	198
12 845	195	249
12 846	249	345
12 847	249	545
12 848	354	545

### Conduit clamps



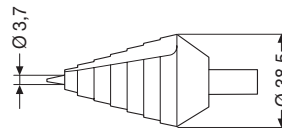
article	A	B	C	D	E
00 430	37	28	4.8	16.5	11.9
00 431	37	33.4	4.9	20.8	15.9
00 432	37.7	38.9	5	25.5	19.8
00 433	46.6	51	5.5	32.1	20.2
00 434	49.6	56.2	5.5	40.4	33.5
00 435	49.9	67.4	5.5	50.5	44

### Plastic spacer



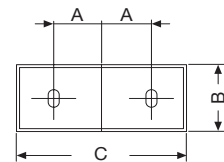
article
12 851

### Universal cutter



article
12 894

### Module covers



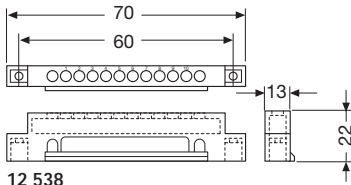
article	A	B	C
12 868	35	36	100.5
12 869	35	36	100.5

VLCO0060

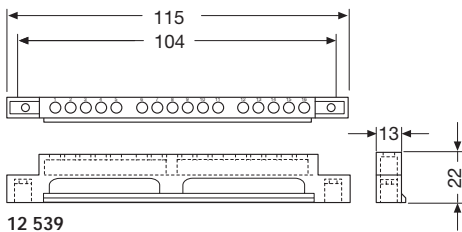
# Overall dimensions

## Accessories

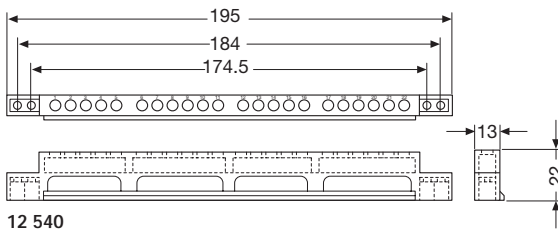
### Terminal holders



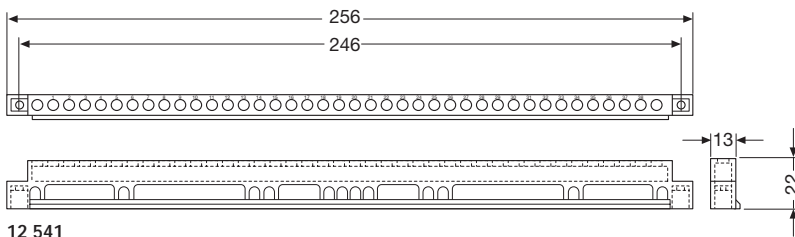
12 538



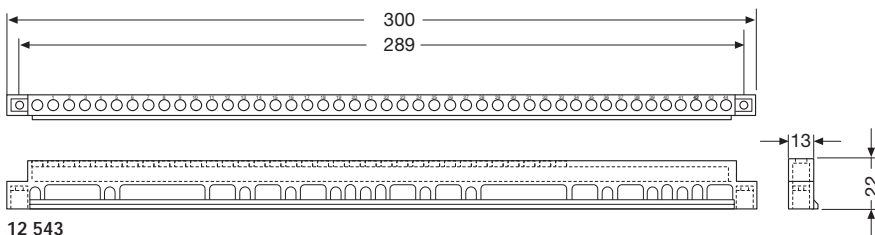
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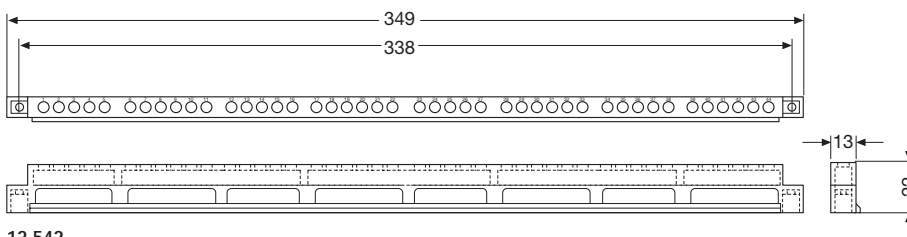
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12 543



12 542

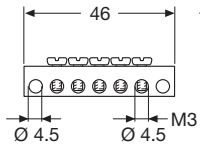
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VLC00060

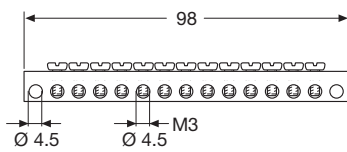
# Overall dimensions

## Accessories

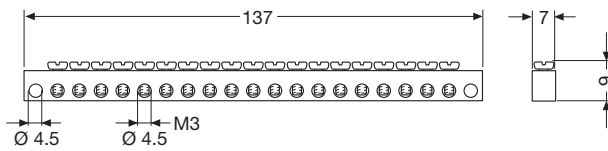
### Terminal bars



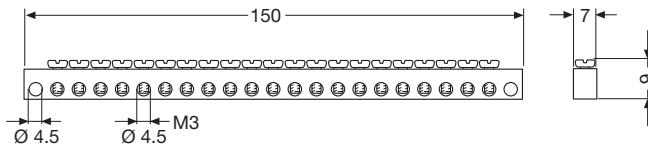
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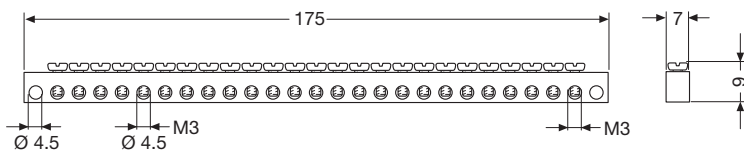
12 532



12 533



12 534



12 535