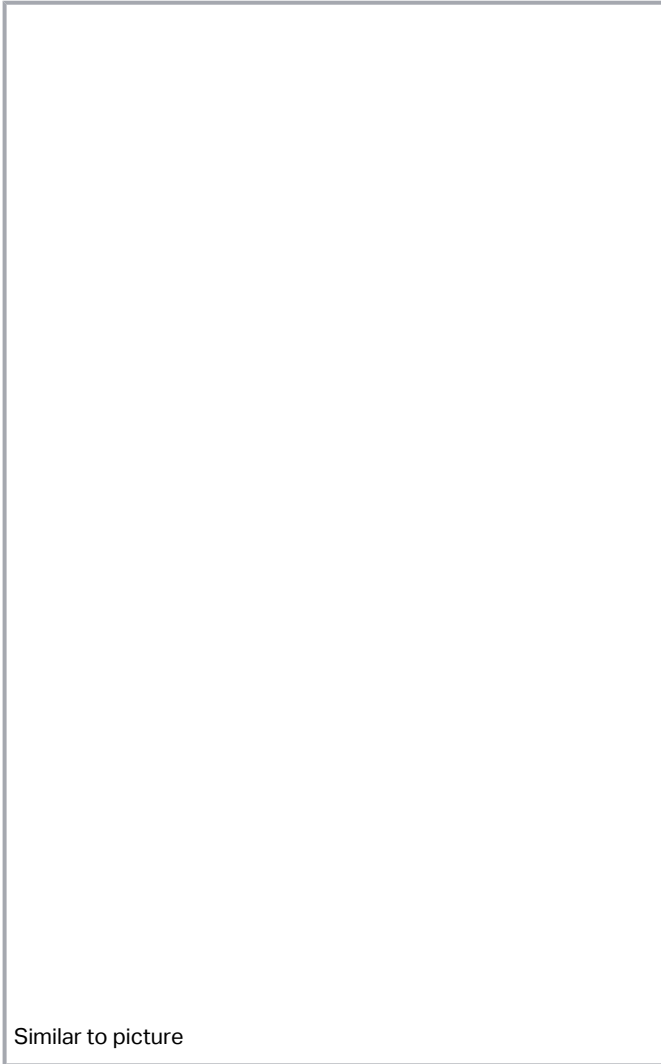


Data sheet | Item number: 787-1606

Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 2 A output current; NEC Class 2; DC OK signal



www.wago.com/787-1606



Similar to picture

Subject to changes. Please also observe the further product documentation!

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Item description

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Limited Power Source (LPS) per NEC Class 2
- Bounce-free switching signal (DC OK)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- GL approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module

Subject to changes. Please also observe the further product documentation!

Data

Technical data

Input

Phases	1
Nominal input voltage $U_{i\text{ nom}}$	1 x AC 100 ... 240 V
Input voltage range	1 x AC 85 ... 264 V; DC 120 ... 300 V
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current I_i	≤ 0.48 A (240 VAC); ≤ 0.82 A (100 VAC)
Discharge current	≤ 0.25 mA
Inrush current	≤ 30 A
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 120 ms (230 VAC); ≥ 20 ms (100 VAC)

Output

Nominal output voltage $U_{o\text{ nom}}$	DC 24 V (SELV)
Output voltage range	DC 23 ... 28.5 V (adjustable)
Default setting	DC 24 V
Nominal output current $I_{o\text{ nom}}$	2 A (24 VDC); 2.2 A (< 40 °C)
Nominal output power	48 W
Deviation	≤ 1 %
Residual ripple	≤ 20 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o\text{ nom}}$ (typ.)
Overload behavior	Constant current

Signaling and communication

Signaling	1 x LED DC OK (green) 1 x Active signal output DC OK (24 VDC; 20 mA)
Operation status indicator	Green LED (U_o)

Efficiency/power losses

Power loss P_l	≤ 1 W; ≤ 6 W (230 VAC; nominal load)
Power loss (max.) $P_{l\text{ (max.)}}$	7 W (100 VAC / 24 VDC; 2 A)

Subject to changes. Please also observe the further product documentation!



Efficiency (typ.)	89 %
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Circuit protection

Internal fuse	T 4 A / 250 VAC
Required backup fusing	An external DC fuse is required for the DC input voltage.
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and protection

Isolation voltage (pri.-sec.)	DC 4.242 kV
Protection class	II
Protection type	IP20
Note on protection type	Per EN 60529
Resistance to reverse feed	≤ DC 35 V
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit ≤ 37 VDC (in the event of a fault)
Short-circuit-protected	Yes
Open-circuit-proof	Yes
Parallel operation	Yes
Series operation	Yes
MTBF	> 500,000 h (per IEC 61709)

Connection data

Connection type 1	Input/Output/Signaling
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 721 Series
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data

Width	45 mm / 1.772 inches
Height	90 mm / 3.543 inches
Depth from upper-edge of DIN-rail	107.5 mm / 4.232 inches

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Mechanical data

Mounting type	DIN-35 rail
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Material data

Weight	210 g
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Environmental requirements

Ambient temperature (operation)	-25 ... +70 °C (Device starts at -40 °C (type-tested))
Surrounding air temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Standards and specifications

Conformity marking	CE
Standards/specifications	EN 61010-1 EN 61010-2-201 EN 61204-3 EN 60335-1 UL 60950-1 UL 508 DNV GL

Commercial data

Product Group	6 (Interface Electronics)
eCl@ss 10.0	27-04-07-01
eCl@ss 9.0	27-04-07-01
ETIM 8.0	EC002540
ETIM 7.0	EC002540
PU (SPU)	1 Stück
Packaging type	box
Country of origin VKOrg Germany	DE
GTIN	4055143060431
Customs tariff number VKOrg Germany	85044082900

Approvals / Certificates


Country specific Approvals

Certificate

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Logo	Approval	Additional Approval Text	name
	EAC Brjansker Zertifizierungsstelle	TP TC 004/2011,TP TC 020/2011	EAC RU C-DE.AM02. B. 00089_19

Ship Approvals


Logo	Approval	Additional Approval Text	Certificate name
	DNV DNV Germany GmbH	DNVGL-CG-339,Dec.2019	TAA00002YC

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 60950-1	E255815
	UL Underwriters Laboratories Inc.	UL 508	E255817

Compatible products

Marking accessories

Marking strip		
	Item no.: 2009-110 Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white	www.wago.com/2009-110
	Item no.: 210-831 Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white	www.wago.com/210-831
	Item no.: 210-832 Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white	www.wago.com/210-832
Marker		
	Item no.: 2009-115 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/2009-115
	Item no.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type; white	www.wago.com/793-501
	Item no.: 793-5501 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on	www.wago.com/793-5501

Subject to changes. Please also observe the further product documentation!



type; white

Ferrule		
Ferrule		
Item no.: 216-203	Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
Item no.: 216-202	Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
Item no.: 216-204	Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
Item no.: 216-201	Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
Item no.: 216-223	Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-223
Item no.: 216-241	Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	www.wago.com/216-241
Item no.: 216-242	Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-242
Item no.: 216-222	Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-222
Item no.: 216-221	Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-221
Item no.: 216-224	Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-224
Item no.: 216-243	Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-243
Item no.: 216-244	Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-244
Item no.: 216-263	Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-263
Item no.: 216-264	Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-264
Item no.: 216-284	Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-284
Item no.: 216-262	Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight	www.wago.com/216-262

Subject to changes. Please also observe the further product documentation!

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crimped; acc. to DIN 46228, Part 4/09.90; gray

Item no.: 216-301

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

www.wago.com/216-301

Item no.: 216-321

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

www.wago.com/216-321

Item no.: 216-322

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

www.wago.com/216-322

Item no.: 216-302

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

www.wago.com/216-302

Tool

Operating tool

Item no.: 210-769

SCREWDRIVER; green

www.wago.com/210-769

Item no.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

www.wago.com/210-720

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787-1606 docx - Datei	2019 年6月4日	docx 21.0 kB	Download

Instruction Leaflet

Primär getaktete Stromversorgungen CLASSIC DC 24 V, 2 A	2021 年5月17日	pdf 1.7 MB	Download
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Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
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CAD/CAE-Data**CAD data**

2D/3D Models 787-1606	URL	Download
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CAE data

ZUKEN Portal 787-1606	URL	Download
EPLAN Data Portal 787-1606	URL	Download
WSCAD Universe 787-1606	URL	Download

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-1606 Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 2 A output current; NEC Class 2; DC OK signal	URL	Download
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Installation Notes

Product family

Classic

EPSITRON® CLASSIC POWER: The Robust Power Supply – with Integrated TopBoost (Optional)

[Show all products from the family](#)

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