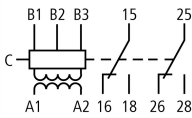




## Current monitoring relay, 2 W, 0,3 - 1,5 A, 1 - 5 A, 3 - 15 A

**Part no.** EMR4-115-1-A  
**Article no.** 106943  
**Catalog No.** EMR4-115-1-A

### Delivery programme

Product range			EMR4+EMR5 measuring and monitoring relays
Basic function			Current monitoring relays Monitoring of single-phase DC and AC networks Switching hysteresis adjustable from 3 – 30 % On delay: None = 0 or adjustable from 0.1 to 30 s Extension of the measurement range possible with current transformers
Monitoring of			Overcurrent Undercurrent
Current measuring range	$I_{\sim} / I_{=}$	A	0.3 - 1.5 A 1 - 5 A 3 - 15 A
Contact sequence			
Supply voltage			24 - 240 V AC, 50/60 Hz 24 - 240 V DC
Width		mm	22.5

### Technical data

#### Technical data in sheet catalogue

Other technical data (sheet catalogue)			Current monitoring relays
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### Design verification as per IEC/EN 61439

Technical data for design verification			
Heat dissipation capacity	$P_{diss}$	W	0
Operating ambient temperature min.		°C	-20
Operating ambient temperature max.		°C	60
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			
Meets the product standard's requirements.			
10.2.3.1 Verification of thermal stability of enclosures			
Meets the product standard's requirements.			
10.2.3.2 Verification of resistance of insulating materials to normal heat			
Meets the product standard's requirements.			
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			
Meets the product standard's requirements.			
10.2.4 Resistance to ultra-violet (UV) radiation			
Meets the product standard's requirements.			
10.2.5 Lifting			
Does not apply, since the entire switchgear needs to be evaluated.			
10.2.6 Mechanical impact			
Does not apply, since the entire switchgear needs to be evaluated.			
10.2.7 Inscriptions			
Meets the product standard's requirements.			
10.3 Degree of protection of ASSEMBLIES			
Does not apply, since the entire switchgear needs to be evaluated.			
10.4 Clearances and creepage distances			
Meets the product standard's requirements.			
10.5 Protection against electric shock			
Does not apply, since the entire switchgear needs to be evaluated.			
10.6 Incorporation of switching devices and components			
Does not apply, since the entire switchgear needs to be evaluated.			
10.7 Internal electrical circuits and connections			
Is the panel builder's responsibility.			
10.8 Connections for external conductors			
Is the panel builder's responsibility.			
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			
Is the panel builder's responsibility.			
10.9.3 Impulse withstand voltage			
Is the panel builder's responsibility.			
10.9.4 Testing of enclosures made of insulating material			
Is the panel builder's responsibility.			

10.10 Temperature rise		The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating		Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility		Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function		The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

## Technical data ETIM 6.0

Relays (EG000019) / Current monitoring relay (EC001440)

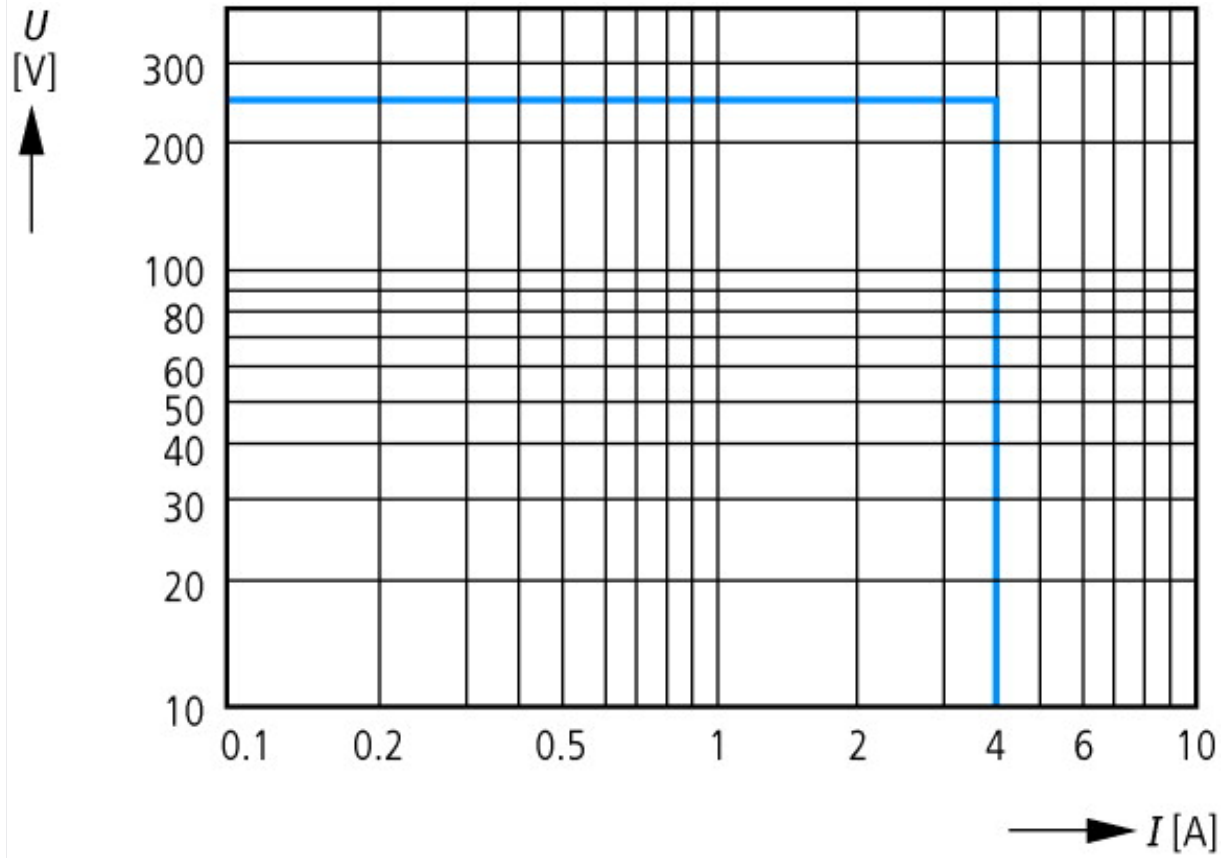
Electric engineering, automation, process control engineering / Low-voltage switch technology / Monitoring equipment (low-voltage switch technology) / Current monitoring equipment (ec1@ss8.1-27-37-18-02 [AKF096011])

Type of electric connection			Screw connection
With detachable clamps			No
Single-phase under current possible			Yes
Three-phase under current possible			No
Single-phase over current possible			Yes
Three-phase over current possible			No
Single-phase hysteresis possible			No
Three-phase hysteresis possible			No
Contains function DC-voltage under current			Yes
Contains function DC-voltage over current			Yes
Function DC-current hysteresis			No
Rated control supply voltage $U_s$ at AC 50HZ		V	24 - 240
Rated control supply voltage $U_s$ at AC 60HZ		V	24 - 240
Rated control supply voltage $U_s$ at DC		V	24 - 240
Voltage type for actuating			AC/DC
Current measurement range		A	0.3 - 15
Min. adjustable delay-on energization time		s	0.1
Max. permitted delay-on energization time		s	30
Min. adjustable off-delay time		s	0
Max. permitted off-delay time		s	0
Number of contacts as normally closed contact			0
Number of contacts as normally open contact			0
Number of contacts as change-over contact			2
Width		mm	23
Height		mm	78
Depth		mm	110

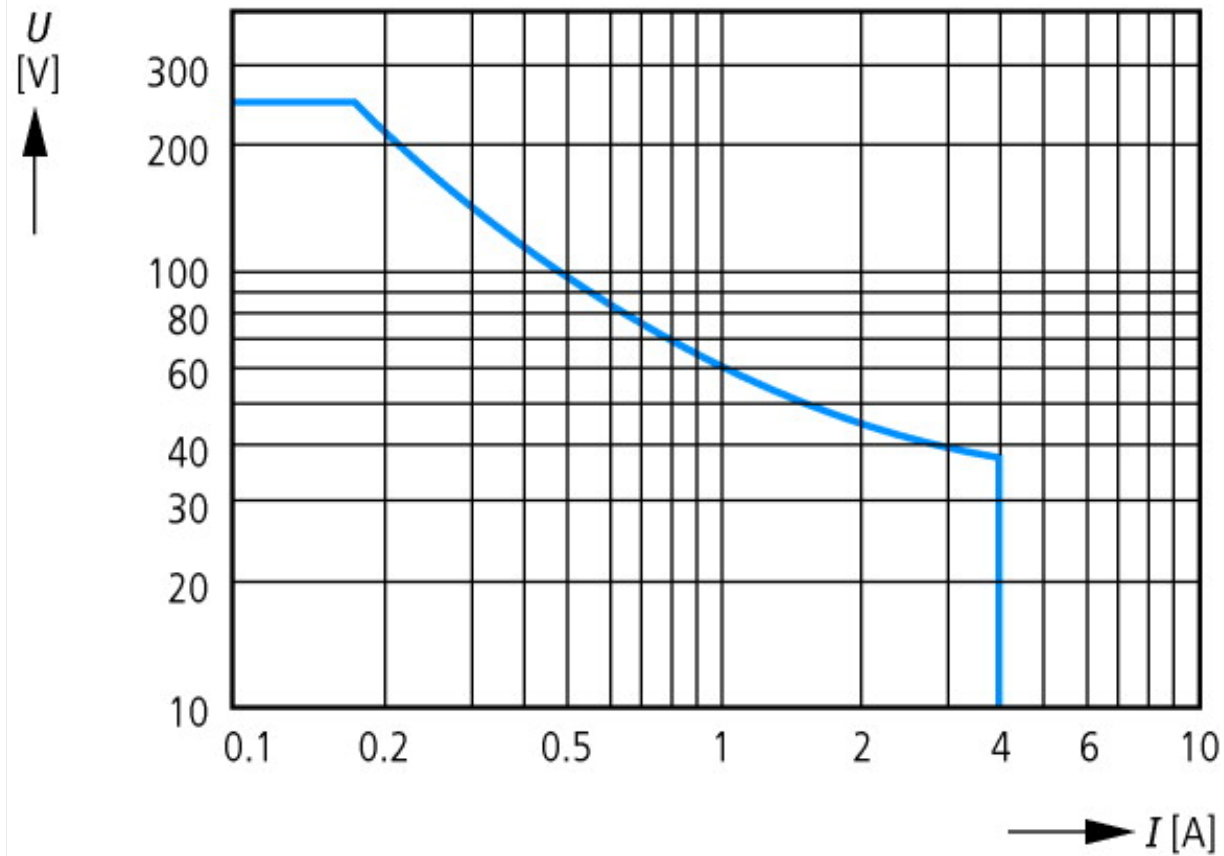
## Approvals

			IEC 255-6; UL 508; CSA-22.2 No. 14-05; CE marking
			E29184
			NKCR, NKCR7
			203843
			3211-03
			UL listed, CSA certified
			IEC: IP20, UL/CSA Type: -

## Characteristics



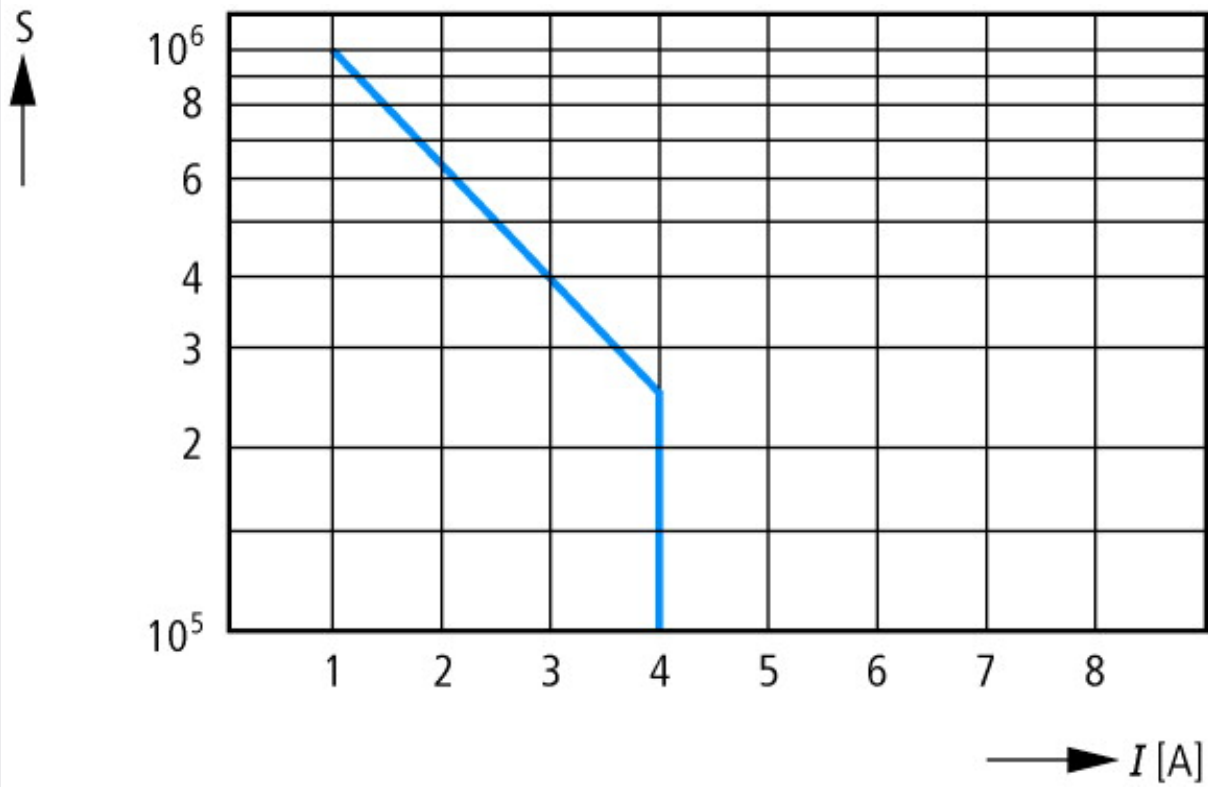
AC load (resistive)



DC load (resistive)

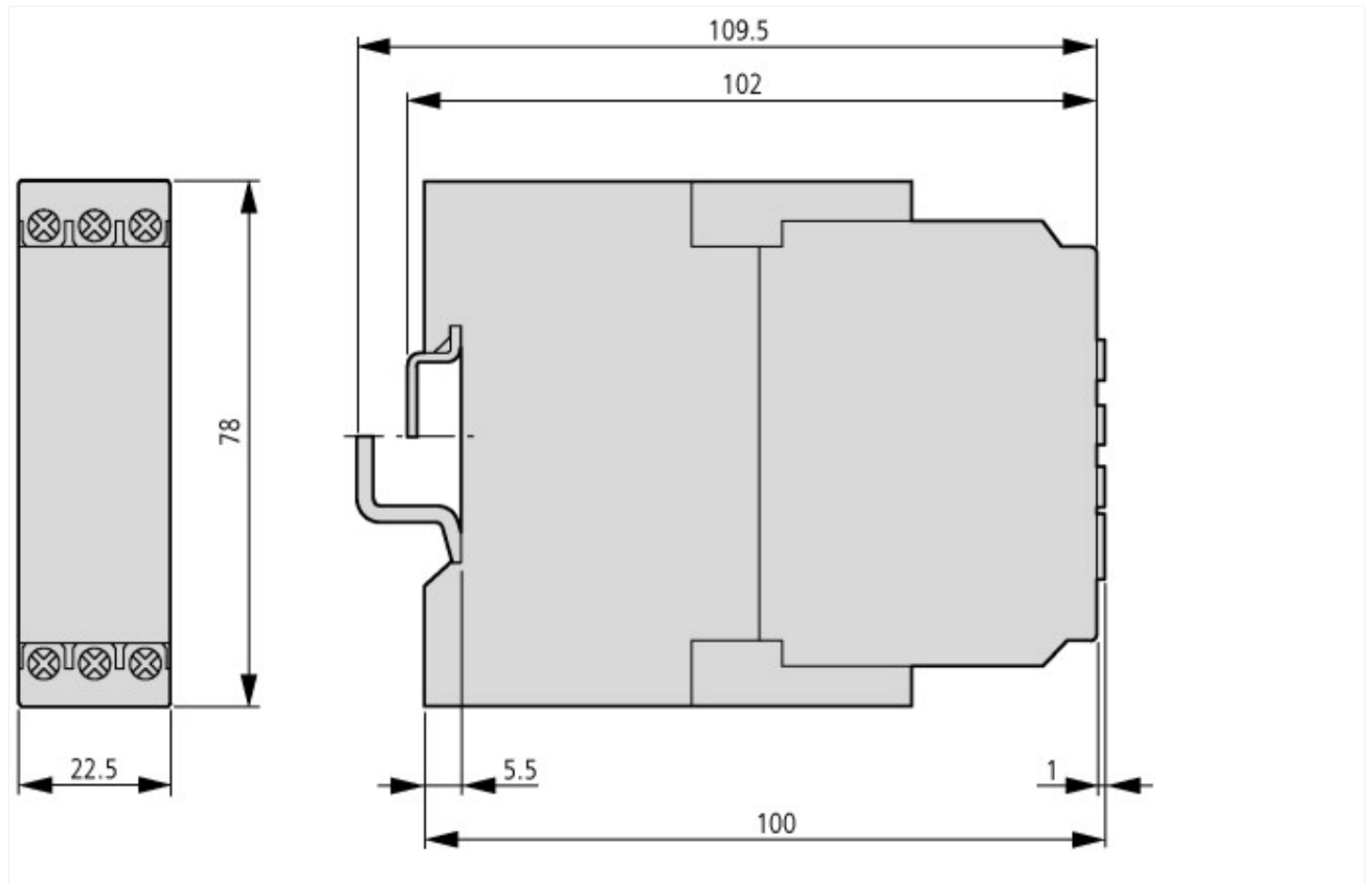


Derating factor  $F$  with inductive AC load



Contact life  
 S operations  
 220 V 50 Hz AC-1  
 360 operations/h

## Dimensions



## Additional product information (links)

### AWA2430-1862 Current monitor

AWA2430-1862 Current monitor [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/18620200.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/18620200.pdf)

### IL0491400Z (AWA2431-2352) Current monitoring relay, Measuring relay

IL0491400Z (AWA2431-2352) Current monitoring relay, Measuring relay [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL0491400Z2011\\_06.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL0491400Z2011_06.pdf)

Current monitoring relays <http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=11.22>