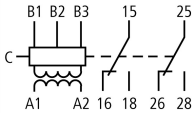




**Current monitoring relay, I/I= 0.3 - 1.5 A, 1 - 5 A, 3 - 15 A, 24 - 240 V AC, 50/60 Hz, 24 - 240 V DC**

**Part no. EMR4-I15-1-A**  
**Catalog No. 106943**  
**Alternate Catalog No. EMR4-I15-1-A**  
**EL-Nummer 4110379**  
**(Norway)**

**Delivery program**

			This item will continue to be available for a limited time only and is being replaced by the following item: 184754, EMR6-I15-A-1
Product range			EMR Measuring and monitoring relays
Basic function			Current monitoring relays
Monitoring of			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
Current measuring range	I~/I=	A	Overcurrent Undercurrent 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			
Rated operational current for specified heat dissipation	I <sub>n</sub>	A	0
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	2
Heat dissipation capacity	P <sub>diss</sub>	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.

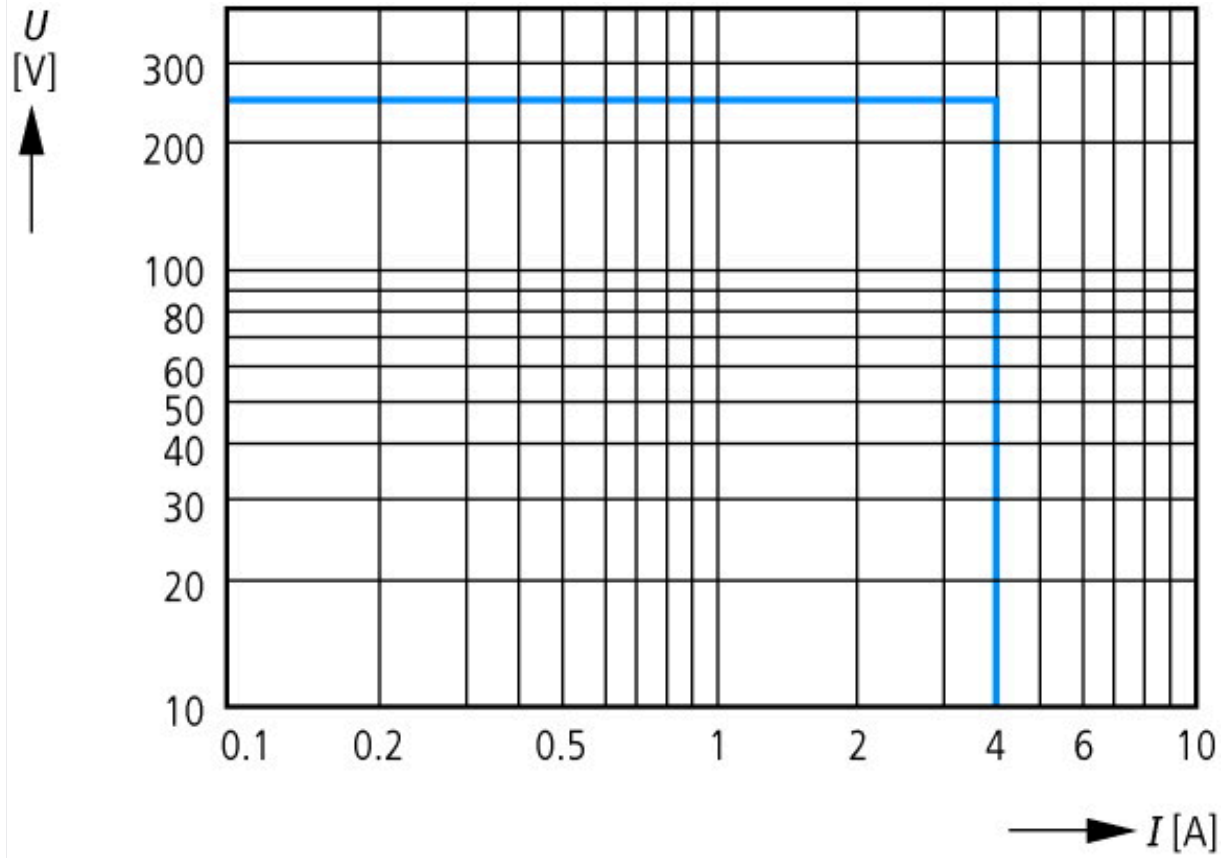
## Technical data ETIM 7.0

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 (ec@ss10.0.1-27-37-18-02 [AKF096014])		
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 Us at AC 50HZ	V	24 - 240
Rated control supply voltage Us at AC 60HZ	V	24 - 240
Rated control supply voltage Us 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
External current transformer		No
Width	mm	23
Height	mm	78
Depth	mm	110

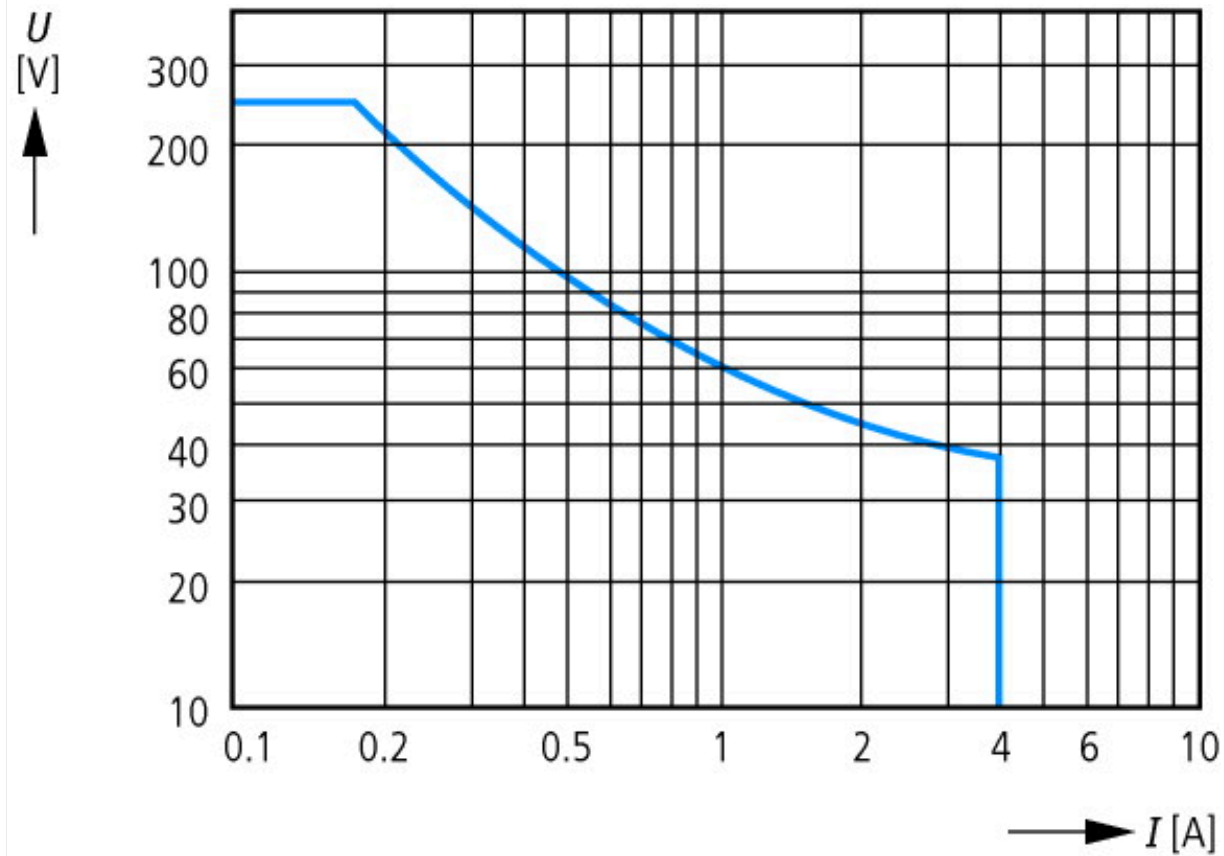
## Approvals

Product Standards		IEC 255-6; UL 508; CSA-22.2 No. 14-05; CE marking
UL File No.		E29184
UL Category Control No.		NKCR, NKCR7
CSA File No.		203843
CSA Class No.		3211-03
North America Certification		UL listed, CSA certified
Degree of Protection		IEC: IP20, UL/CSA Type: -

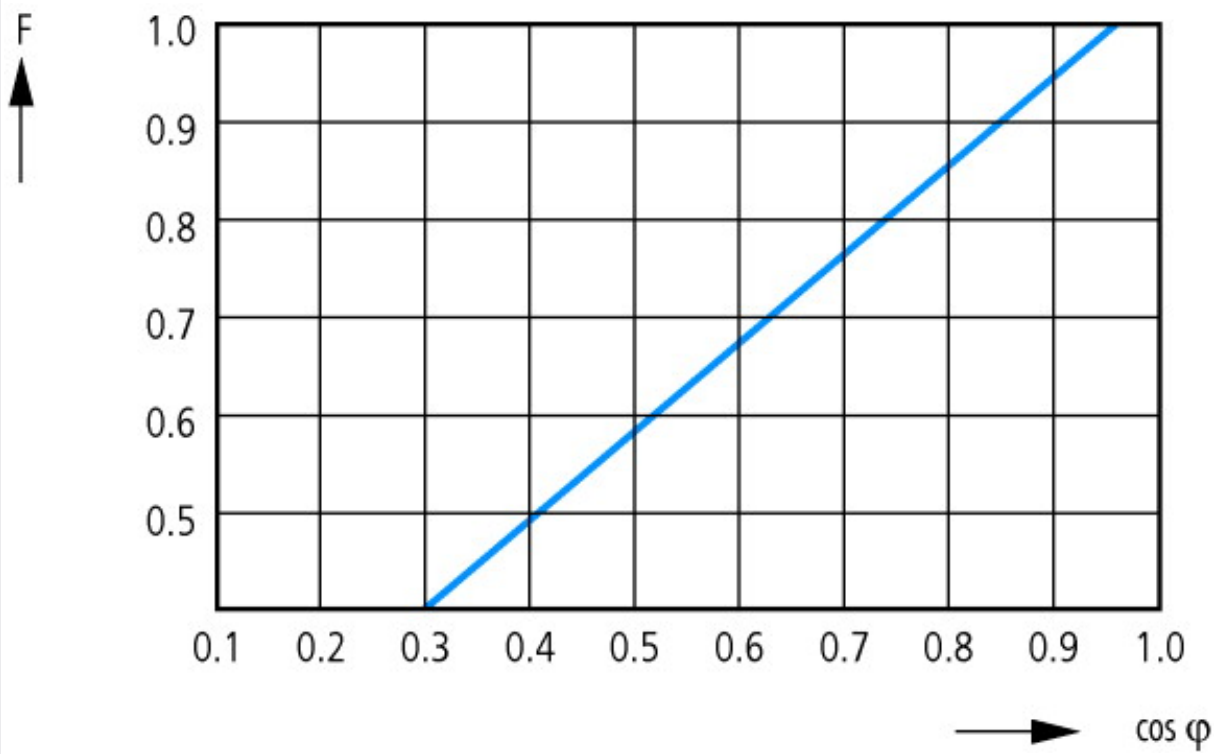
## Characteristics



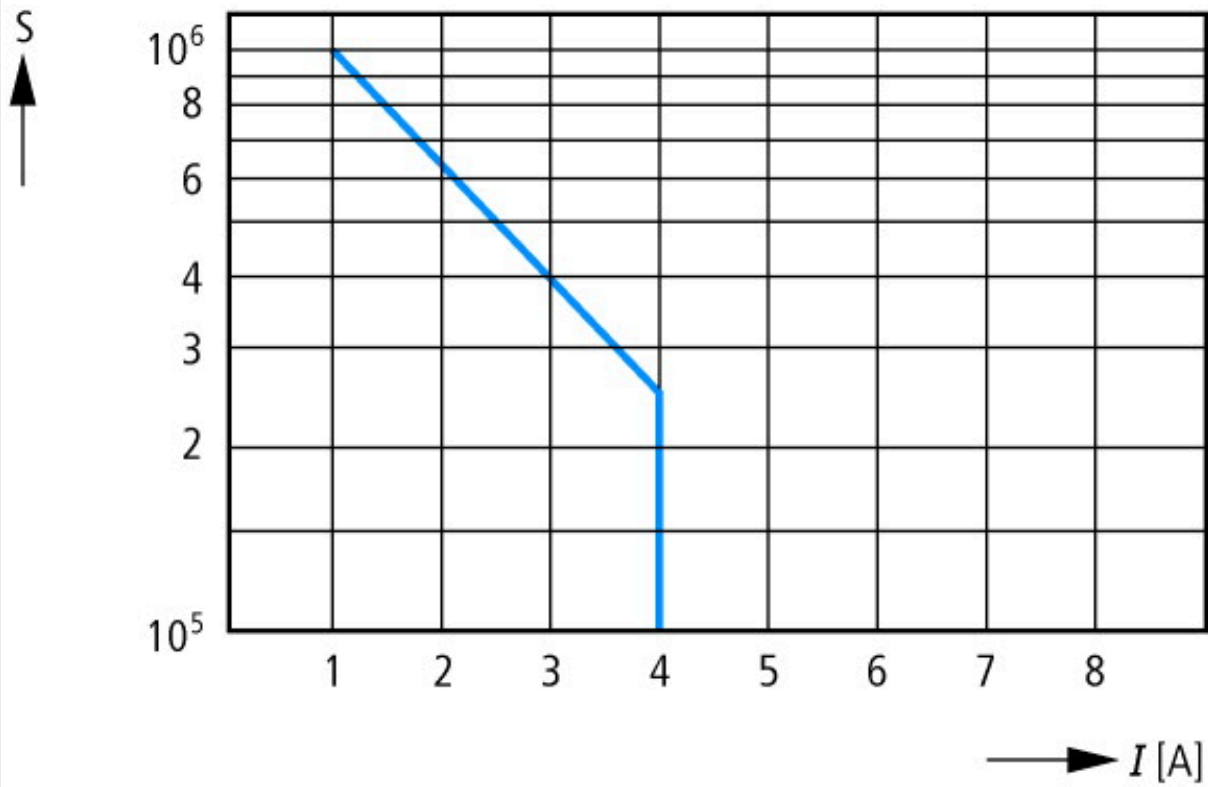
AC load (resistive)



DC load (resistive)

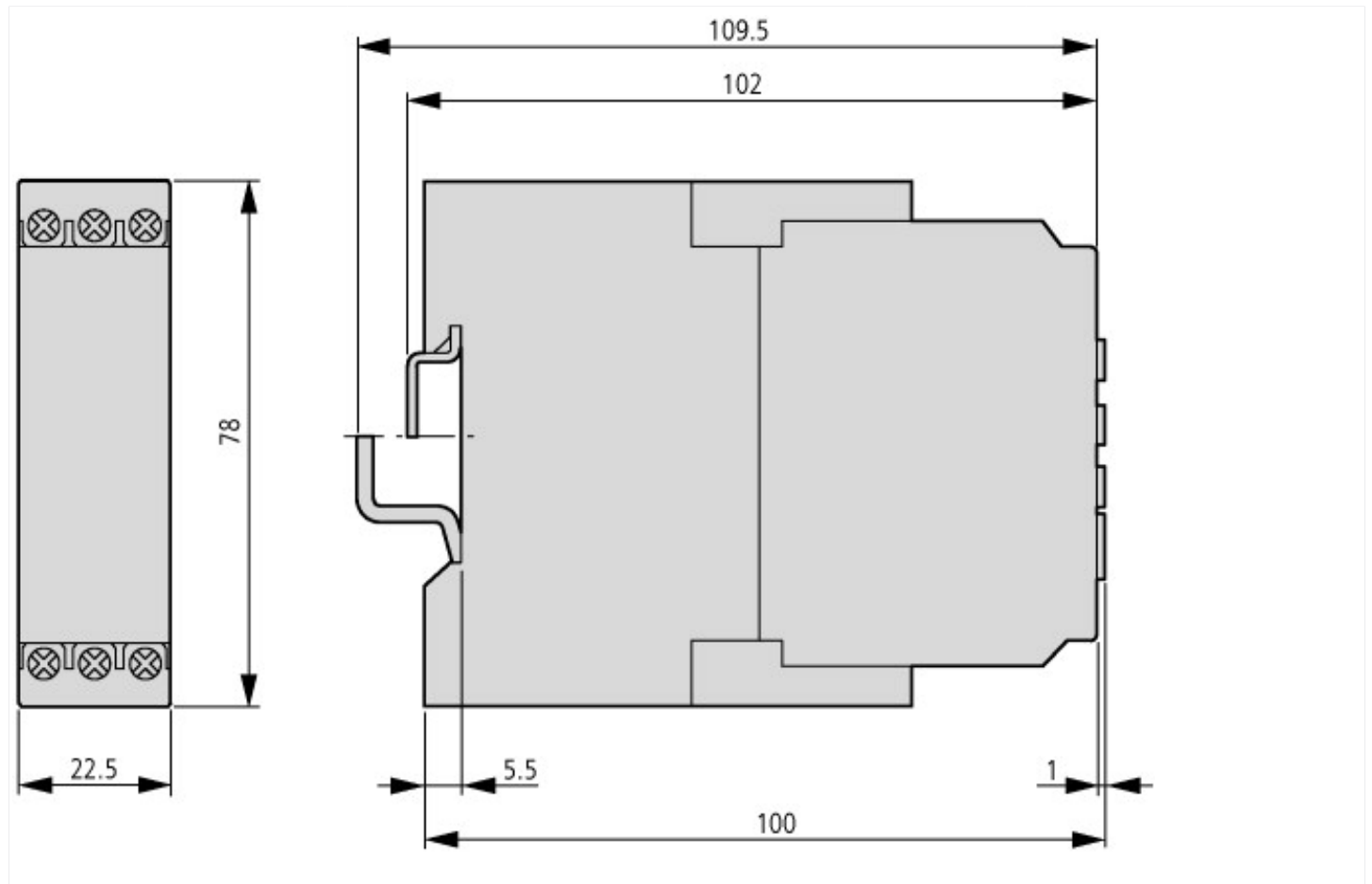


Derating factor  $F$  with inductive AC load



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

## Dimensions



## Additional product information (links)

### IL04914002Z (AWA2431-2352) Single-phase current monitoring relays

IL04914002Z (AWA2431-2352) Single-phase current monitoring relays

[https://es-assets.eaton.com/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL04914002Z2018\\_07.pdf](https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL04914002Z2018_07.pdf)

Current monitoring relays

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