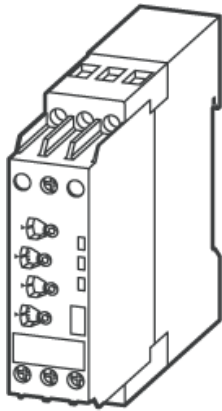


Type: **EMR4-W300-1-C**

Article No.: **290182**

Sales text **Phase monitoring relay**

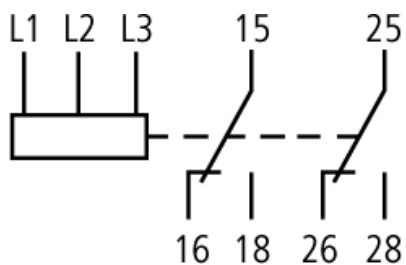


- Three-phase monitoring
  - Phase sequence
  - Phase failure
  - Overvoltage
  - Undervoltage
  - Asymmetry 2...15 %
- ON-delay or OFF-delay 0.1 – 10 s
- Power supply from the measuring circuit
- EMR4-AWN... with neutral monitoring

### Ordering information

Description		Single function
Monitoring voltage		160 – 300 V 50/60 Hz
Threshold value		$U_{min}$ 160 – 220 V AC $U_{max}$ 220 – 300 V AC
Supply voltage		160 – 300 V 50/60 Hz

### Contact sequence



### General

Standards			IEC/EN 60255–6, IEC255–6, UL, CE
Lifespan, mechanical	Operations	$\times 10^6$	30
Climatic proofing			Damp heat, cyclical to IEC 60068–2–30: 24 h cycle, 55 °C, 93% relative humidity, 96 h
Ambient temperature			
Open		°C	... 20...+60
Storage		°C	... 20...+60
Mounting position			As required
Shock resistance			10 g
Degree of protection			
Terminals			IP 20
Enclosures			IP 50
Weight		kg	0,13
Terminal capacities			
Solid		mm <sup>2</sup>	2 × 2.5
Flexible with ferrule		mm <sup>2</sup>	2 × 2.5/2 × AWG14
Standard screwdriver		mm	5.5 × 0.8
Tightening torque		Nm	0,5 – 0,8
Fixing			Snap fixing, top–hat rail IEC/EN 60715
<b>Contacts</b>			
Rated impulse withstand voltage	$U_{imp}$	V AC	4000
Overtoltage category/pollution degree			III/3
Rated insulation voltage	$U_i$	V AC	600
<b>Power supply</b>			
Supply voltage		V AC	160 ... 300
Voltage tolerance		$\times U_c$	0,85 – 1,1
Power consumption		VA	3
Rated frequency		Hz	50 – 60
Duty factor		% DF	100
<b>Timing cycle</b>			
Response delay time		s	Adjustable 0.1 – 10
Reset delay/Off–delay time		s	Adjustable 0.1 – 10
Time error within supply voltage		%	0,5
Time error within temperature range		%/°C	0,06
<b>Measuring circuits</b>			
Response range for undervoltage	$U_{min}$	V AC	160...220

Response range for overvoltage	$U_{max}$	V AC	220...300
Hysteresis		%	0...5
Frequency		Hz	50/60 $\pm$ 10 %
Measuring cycle		ms	50
Temperature error		%/°C	0,06
Error within supply voltage		%	0,5

### Status indication

Supply voltage			LED green: R on
Output relay energized			LED green: R flashes
Overvoltage			LED red: F1 on
Undervoltage			LED red: F2 on
Phase failure			LED red: F1 on, F2 flashes
Phase sequence error			LED red: F1, F2 flashing

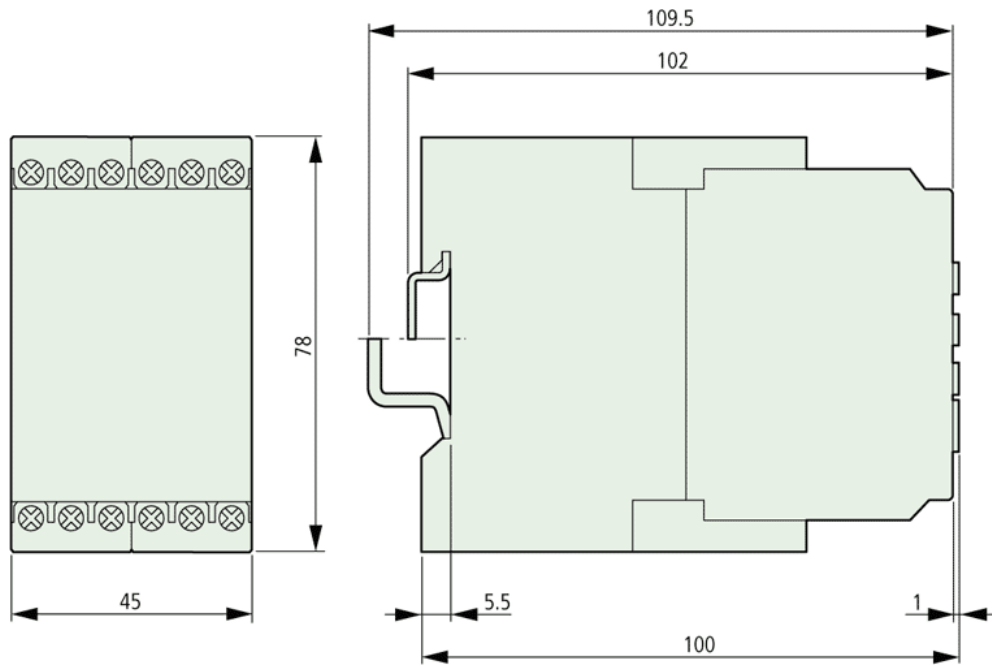
### Relay output contacts

Rated operational voltage	$U_e$	V AC	250
Rated operational current			
AC-12 at 230 V	$I_e$	A	4
AC-15 with 230 V	$I_e$	A	3
DC-12 at 24 V	$I_e$	A	4
DC-13 at 24 V	$I_e$	A	2
Lifespan, electrical (AC-12/230 V/5 A)	Operations	$\times 10^6$	0,1
Short-circuit rating			
max. fuse	Fast/gL	A	5

### Electromagnetic compatibility (EMC)

Electromagnetic compatibility			IEC/EN 60947-6-2
ESD			IEC/EN 61000-4-2 level 3
HF-immunity to radiation			IEC/EN 61000-4-3 level 3
Burst			IEC/EN 61000-4-4 level 3
Surge			IEC/EN 61000-4-5 Level 4
HF-immunity to line-conducted interference			IEC/EN 61000-4-6 level 3

### Dimensions



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