

**HMPA5A**

- 3-phase monitoring relays for phase sequence and phase loss.
- Detects when all phases are present and have the correct sequence.
- Measures its own power supply.
- Power supply range: 208 to 480 VAC.
- Output: 5 A SPDT relay normally energized.
- For mounting on DIN-rail in accordance with DIN/EN 50 022.
- 17.5 mm DIN-rail housing (DIN 43880).
- LED indicator for relay and power supply ON.

## Model Description

### HMPA5A344

H	CHORDN Factory Code
M	Monitoring relays
P	3-Phase
A	Type function
5A	Item number
3	Output, SPDT relay
44	Power supply 208 - 480VAC



### Input Specifications

Input	L1, L2, L3	Terminals L1, L2, L3, Measures its own supply
Measuring range	208 to 480 VAC ( $\pm 15\%$ )	177 to 550 VAC
ON-level		> 85% of the phase-phase voltage

### Output Specifications

Output		SPDT relay
Rated insulation voltage		250 VAC
Contact ratings (AgSnO <sub>2</sub> ) $\mu$		
Resistive loads	AC 1	5 A @ 250 VAC
	DC 12	5 A @ 24 VDC
Small inductive loads	AC 15	2.5 A @ 250 VAC
	DC 13	2.5 A @ 24 VDC
Mechanical life		30 x 10 <sup>6</sup> operations
Electrical life		10 <sup>5</sup> operations (at 5 A, 250 V, $\cos \varphi = 1$ )
Operating frequency		7200 operations/h
Dielectric strength	Dielectric voltage	2 kVAC (rms)
	Rated impulse with stand volt	4 kV (1.2/50 $\mu$ s)

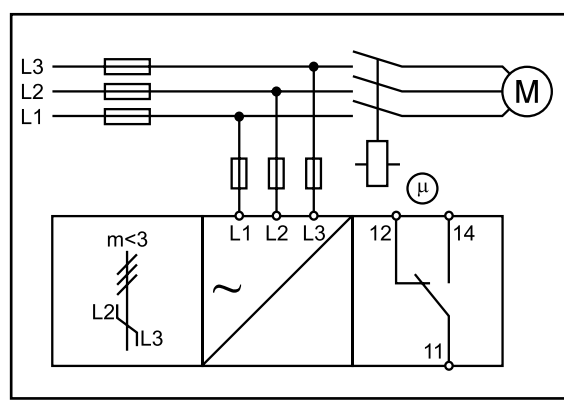
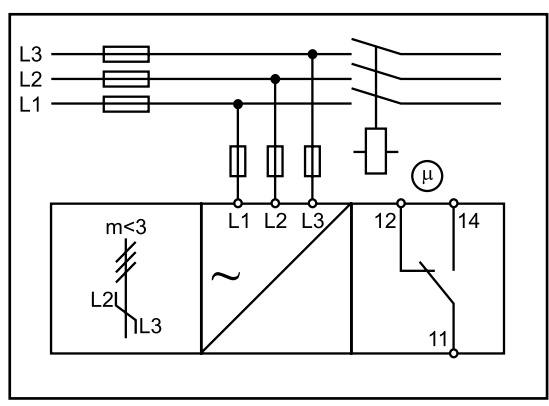
### Supply Specifications

Overvoltage cat. (IEC60664, IEC 60038)		III
Rated operational voltage through terminals		L1, L2, L3
Rated Voltage range		208 to 480 VAC $\pm 15\%$ , 45 to 65 Hz
Rated operational power		13 VA , 400 VAC, 50 Hz, Supplied by L2 and L3

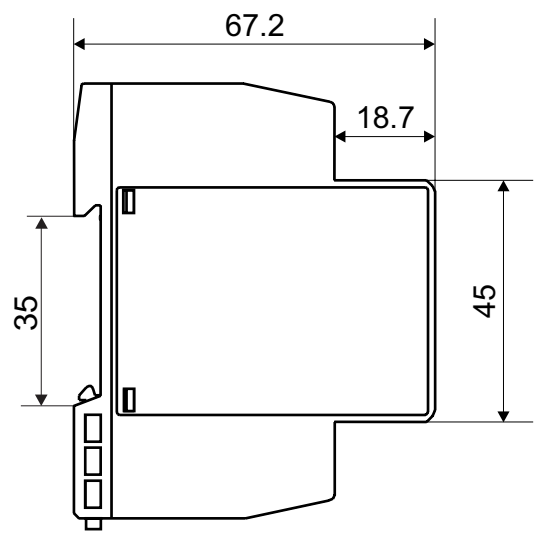
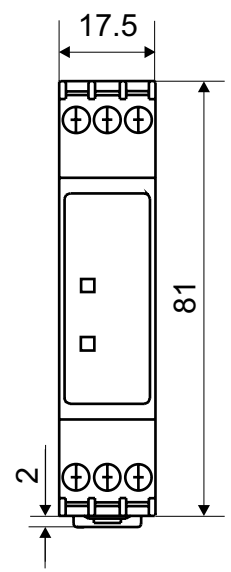
### General Specifications

Alarm ON delay		< 100 ms
Alarm OFF delay		< 300 ms
Accuracy (15 min warm-up time)	Temperature drift	$\pm 1000$ ppm /
	Repeatability	$\pm 0.5\%$
Power supply ON		LED, green
Relay ON		LED, yellow
Degree of protection		IP 20
Pollution degree		3
Operating temperature	@ Max. voltage, 50 Hz	-20 to +60 , R.H. < 95%
	@ Max. voltage, 60 Hz	-20 to +50 , R.H. < 95%
Storage temperature		-30 to +80 , R.H. < 95%
Dimensions		17.5 x 81 x 67.2 mm
Material		PA66 or Noryl
Weight		Approx. 75 g
Screw terminals	Tightening torque	Max. 0.5 Nm
	Wire section	2.5mm <sup>2</sup> (AWG13) stranded wire
Product standard		EN 60947-5-1
Conform		UL, CSA
CE Marking		L.V. Directive 2014/35/EU
EMC		EMC Directive 2014/30/EU
Immunity		According to EN 61000-6-2
Emissions		According to EN 61000-6-3

### Wiring Diagrams



### Dimensions(mm)



### Operation Diagram

