

› HWUA

› Monitoring Relays

› 3-Phase Monitoring Relays

› DIN Rail Mount - 35 mm Multi-function

- › Control of 3-phase networks : phase sequence, phase failure, asymmetry, under and overvoltage with independent settings
- › Multi-function/Multi-voltage product
- › Controls its own supply voltage
- › True RMS measurement
- › LED status indication



Specifications			
Functions	Nominal voltage (V)	Output	Code
Phase sequence, phase failure, asymmetry, under/overvoltage with independent settings	3 x 220 → 3 x 480 VAC*	1 single pole changeover relay	84873026

Supply	
Supply voltage Un	3 x 220 → 3 x 480 V AC *
Voltage supply tolerance	-12% / +10%
Operating range	194 → 528 V
AC supply voltage frequency	50 / 60 Hz ± 10%
Galvanic isolation of power supply/measurement	No
Power consumption at Un	3,9 VA in AC
Immunity from micro power cuts	10 ms

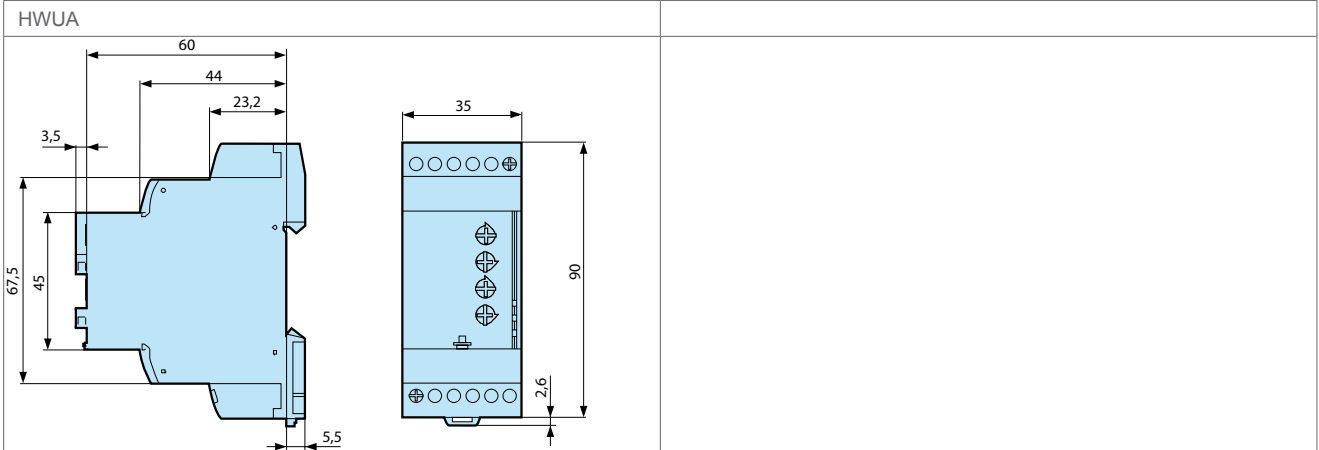
Inputs and measuring circuit	
Measurement ranges	194 → 528 V
Selection of phase-phase nominal voltage Un	220 - 380 - 400 - 415 - 440 - 480 V
Frequency of measured signal	50 → 60 Hz ± 10%
Max. measuring cycle time	140 ms/True RMS measurement
Voltage threshold adjustment	2 → 20% of selected Un (+2 → +10% across the 3 x 480 V AC range -12 to -2% across the 3 x 220 V AC range)
Fixed hysteresis	Under or overvoltage, asymmetry : 2% of the Un value of the selected network
Asymmetry threshold hysteresis	Asymmetry : 2% of the Un value of the selected network
Asymmetry threshold adjustment	5 → 15% of selected Un
Display precision	± 3% of the displayed value
Repetition accuracy with constant parameters	± 0,5%
Measuring error with voltage drift	< 1%
Measuring error with temperature drift	0,05% / °C

Timing	
Delay on threshold crossing	0,1 → 10s (0, +10%)
Repetition accuracy with constant parameters	± 0,3%
Reset time	1,5 s
Delay on pick-up	≤ 650 ms
Alarm on delay time max.	< 200 ms
Output	
Type of output	1 double changeover relay
Type of contacts	No cadmium
Maximum breaking voltage	250 V AC/DC
Max. breaking current	5 A AC/DC
Min. breaking current	10 mA / 5 V DC
Electrical life (number of operations)	1 x 10 ⁵
Breaking capacity (resistive)	1250 VA AC
Maximum rate	360 operations/hour at full load
Operating categories acc. to IEC/EN 60947-5-1	AC 12, AC 13, AC 14, AC 15, DC 12, DC 13, DC 14
Mechanical life (operations)	30 x 10 ⁶
Insulation	
Nominal insulation voltage IEC/EN 60664-1	400 V
Insulation coordination (IEC/EN 60664-1)	Overvoltage category III : degree of pollution 3
Rated impulse withstand voltage (IEC/EN 60664-1)	4 kV (1,2 / 50 µs)
Dielectric strength (IEC/EN 60664-1)	2 kV AC 50 Hz 1 min
Insulation resistance (IEC/EN 60664-1)	> 500 MOhm(s) / 500 VDC
General characteristics	
Display power supply	Green LED Extinguished in the event of phase failure
Display relay	Yellow LED Flashes during the threshold crossing delay
"Fault" indication	Yellow LED Lights up in the event of asymmetry Flashes in the event of under or overvoltage
Casing	35 mm
Mounting	On 35 mm symmetrical DIN rail, IEC/EN 60715
Mounting position	All positions
Material : enclosure plastic type VO to UL94 standard	Incandescent wire test according to IEC/EN 60695-2-11
Protection (IEC/EN 60529)	Terminal block : IP 20 Casing : IP 30
Weight	130 g
Connecting capacity IEC/EN 60947-1	Rigid : 1 x 4 ² - 2 x 2.5 ² mm ² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules : 1 x 2.5 ² - 2 x 1.5 ² mm ² 1 x 14 AWG - 2 x 16 AWG
Max. tightening torques IEC/EN 60947-1	0,6 → 1 Nm / 5,3 → 8,8 Lbf.In
Operating temperature IEC/EN 60068-2	-20 → +50 °C
Storage temperature IEC/EN 60068-2	-40 → +70 °C
Humidity IEC/EN 60068-2-30	2 x 24 hr cycle 95% RH max. without condensation 55 °C
Vibrations according to IEC/EN 60068-2-6	10 → 150 Hz, A = 0.035 mm
Shocks IEC/EN 60068-2-6	5 g
Standards	
Product standard	IEC/EN 50178
Electromagnetic compatibility (EMC)	IEC/EN 61000-6-1, IEC/EN 61000-6-2, IEC/EN 61000-6-3, IEC/EN 61000-6-4

Standards	
Certifications	CE, UL, CSA, GL
Conformity with environmental directives	RoHS

Comments	
	* 3-phase mains with earth

Dimensions



Curves

Connections

