

# MRM32

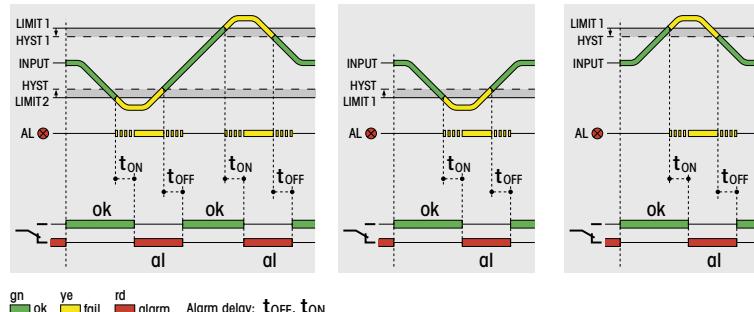
**Multifunction monitoring relay AC/DC, three phase  
DIN Rail mounting according to DIN 43 880**

## Type: MRM32...V

Multifunctional monitoring relay for simultaneous measurement of current and voltage and monitoring of U, I, P,  $\cos\phi$  and f and  $\Delta\phi$ . Alarm delay setting. Alarm LED. Display for multimeter function, alarm signal and interactive parameter setting.

2 change-over alarm contacts 5 A 250 V. Comfortable parameter setting.

## Monitoring function



## Measuring circuit data

Voltage setting ranges AC / DC	0 ... 480 V / 0 ... 700 V
Current setting ranges AC / DC	0 ... 5 A
Frequency	DC, AC 16 ... 100 Hz
Resolution U / I	100 mV / 1 mA
Accuracy	2 % $\pm$ 1 digit
Input resistance U / I	1 M $\Omega$ / 5 M $\Omega$

## Time data

Alarm delay setting time	0.1 ... 999.9 s
Reset time setting range	0.1 ... 999.9 s
Voltage failure buffering	ca. 30 ms

## Contacts

Type / Material	2 CO / AgNi 0.15
Rated operational current	6 A
Max. inrush current	15 A
Max. switching voltage	250 V
Max. AC load AC-1 (Fig.1)	1250 VA
Max. DC load DC-1, 24 V / 220 V (Fig.2)	120 W / 25 W
Recommended min. contact load	10 mA / 10 V

## Power supply

	<b>UC12-48V</b>	<b>UC110-240V</b>
Nominal voltage AC/DC	12 ... 48 V	110 ... 240 V
Operating voltage range	9.6 ... 57.6 V	88 ... 288 V
AC frequency	16 ... 63 Hz	16 ... 63 Hz
Power consumption	2 W / 4 VA	2 W / 4 VA

## Insulation

Test voltage open - contact	1 kVrms 1 minute
Test voltage between poles	2.5 kVrms 1 minute
Test voltage measuring input - contacts	4 kVrms 1 minute
Test voltage measuring input - power supply	4 kVrms 1 minute

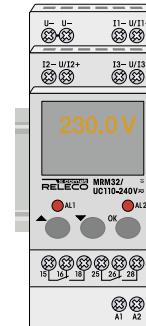
## General specifications

Ambient temperature storage /operation	-40 ... +85 °C / -25 ... +60 °C
Mechanical life of contacts	30 x 10 <sup>6</sup> operations
Conductor cross section	Stranded wire 2.5 mm <sup>2</sup> , 2 x 1.5 mm <sup>2</sup>
Ingress protection degree	IP20, (electronics: IP40)
Max. screw torque	0.4 Nm
Housing material	Lexan EXL 9330
Weight	130 g

## Standard types

**AC/DC 12-48 V, 15...60 Hz**  
**AC/DC 110-240 V, 15...60 Hz**

**MRM32/UC12-48V**  
**MRM32/UC110-240V**



Connection diagram

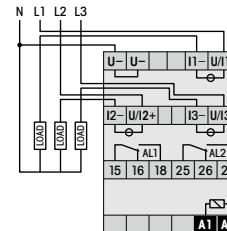


Fig.1 AC voltage endurance

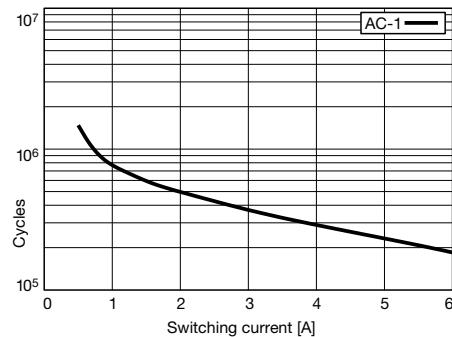
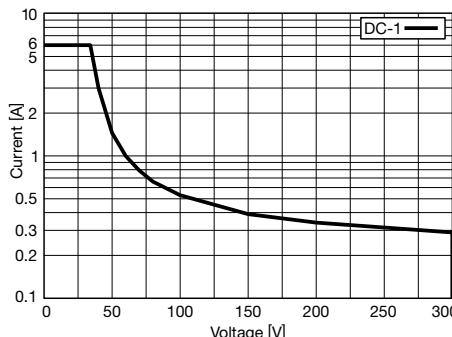
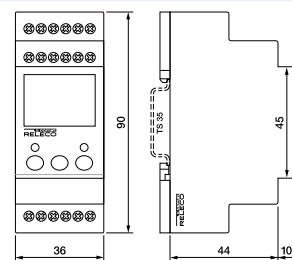


Fig. 2 DC load limit curve



Dimensions [mm]



Technical approvals, conformities

