

3.1 Multifunction Monitoring

MRM32R

3 phase | 2 CO | multifunction monitoring

Power supply

Nominal voltage	12 ... 48 V AC / DC	110 ... 240 V AC / DC
Operating voltage range	10 ... 60 V	77 ... 250 V
Power consumption AC / DC	3.2 VA / 1.6 W	2.6 VA / 1.5 W
Rated frequency	16 ... 63 Hz	16 ... 63 Hz

Measuring circuit

Measured parameters	U, I, P, S, f, Cosφ, ΔPhi, phase sequence
Min. setting step, resolution	0.1 V / 0.1 A / 1 W / 1 VA / 1 Hz / 0.05 / 1°
Monitoring functions	Under, over, inside, outside, phase sequence, phase failure
Number of voltage measurement inputs	3
Rated AC voltage L-N / L-L	230 V / 400 V
Rated DC voltage U+ / U-	300 V
DC voltage measurement range U+ / U-	± 0.1 ... 690 V
Undervoltage setting range	± 0.1 ... 700 V
Overvoltage setting range	± 0.1 ... 700 V
AC voltage measurement range L-N / L-L	0.1 ... 480 V
Number of current measurement inputs	3
Rated measurement current	5 A
Measurement current range	0.1 ... 5 A
Undercurrent setting range	0.1 ... 6 A
Overcurrent setting range	0.1 ... 6 A
Rated base frequency	15 ... 150 Hz
Alarm delay	0.5 ... 999.9 s
Alarm reset delay	0.5 ... 999.9 s

Main circuit

Number of contacts	2 CO
Available contact materials	⚡ AgNi
Rated voltage	250 V AC
Rated current	6 A
Minimum load	10 mA, 10 V
Inrush current	10 A, 10 ms
Rated load DC	fig. 3
Rated load AC-1	1,250 VA
Mechanical endurance (cycles)	30 000 000
Electrical endurance at rated load AC-1 (cycles)	fig. 2

Insulation

Rated test voltage measuring / measuring circuit	1.5 kV rms / 1 min
Rated test voltage measuring circuit / power supply	2 kV rms / 1 min
Rated test voltage measuring circuit / main circuit	2 kV rms / 1 min
Rated test voltage main circuit / power supply	2 kV rms / 1 min
Rated test voltage main / main circuit	1.5 kV rms / 1 min
Rated test voltage open contact	1.5 kV rms / 1 min
Pollution degree	2
Oversvoltage category	III

General data

Ambient temperature storage (no ice)	-40 ... 85 °C
Ambient temperature operation	-40 ... 70 °C
Conductor cross section	2.5 mm ²
Nominal screw torque	0.6 Nm
Dimension	fig. 4
Weight	125 g
Protection degree	IP 20
Housing material	PA

Product references

Description	Type	12-48	110-240
Single phase monitoring	MRM32R/UC...V	✓	✓

Other voltages on request. Please contact support@comatreleco.com.
 "... List control circuit voltage to complete product references.



fig. 1. Wiring diagram

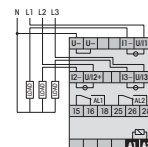


fig. 2. AC voltage endurance

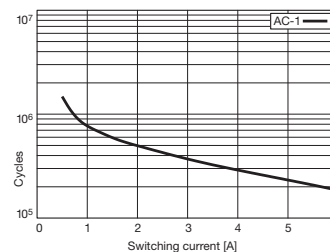


fig. 3. DC load limit curve

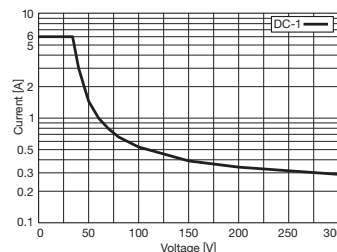
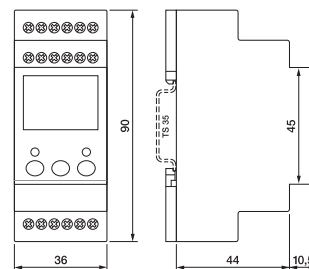


fig. 4. Dimension (mm)



Technical approvals, conformities

Standards EN 60730-1; EN 60947; EN 61000-6-3
 Railway EN 45545-2; EN 50155

Approvals