

3.2 Voltage Monitoring

MRU11R

Single phase multifunction monitoring | 12 ... 48 V UC | 110 ... 240 V UC



Power supply

Nominal voltage	12 ... 48 V AC / DC	110 ... 240 V AC / DC
Operating voltage range	10 ... 60 V	85 ... 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, f
Min. setting step, resolution	0.1 V / 1 Hz
Monitoring functions	Under, over, inside, outside
Number of voltage measurement inputs	1
Rated AC voltage L-N / L-L	230 V / -
Rated DC voltage U+ / U-	300 V
DC voltage measurement range U+ / U-	+0.1 ... +690 V, -0.1 ... -690 V
Undervoltage setting range	+0.1 ... +700 V, -0.1 ... -700 V
Overvoltage setting range	+0.1 ... +700 V, -0.1 ... -700 V
Alarm delay	0.5 ... 999.9 s
Alarm reset delay	0.5 ... 999.9 s

Main circuit

Number of contacts	1 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. 2
Rated load AC-1	1,200 VA
Mechanical endurance (cycles)	30 000 000
Electrical endurance at rated load AC-1 (cycles)	fig. 3

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 open contact	1.5 kV rms / 1 min
Pollution degree	2
Overvoltage category	III

General data

Ambient temperature storage (no ice)	-40 ... 85 °C
Ambient temperature operation	-40 ... 60 °C
Conductor cross section	2.5 mm ²
Nominal screw torque	0.6 Nm
Dimension	fig. 4
Weight	107 g
Protection degree	IP 20
Housing material	PC

Product references

Description	Type	12-48	110-240
Single phase monitoring	MRU11R/UC...V	✓	✓

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



fig. 1. Wiring diagram

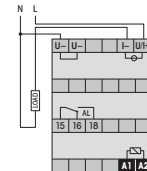


fig. 2. AC voltage endurance

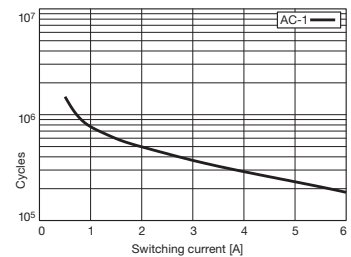


fig. 3. DC load limit curve

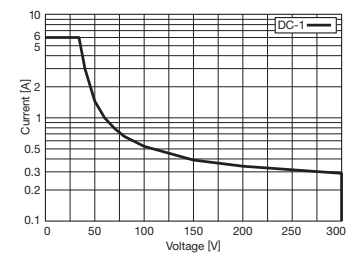
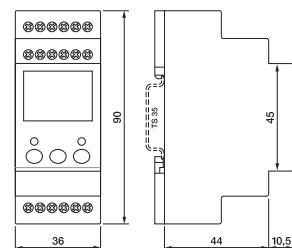


fig. 4. Dimension (mm)



Technical approvals, conformities

Standards EN 60730-1; EN 60947; EN 61000-6-2; EN 61000-6-3

Approvals