

Power supply

| | |
|---------------------------|---------------------|
| Nominal voltage | 12 ... 48 V AC / DC |
| Operating voltage range | 10 ... 60 V |
| Power consumption AC / DC | 3.2 VA / 1.6 W |
| Frequency range | 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 |
| Oversupply 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 |
| Oversupply threshold I_{th} 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

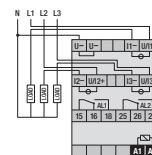
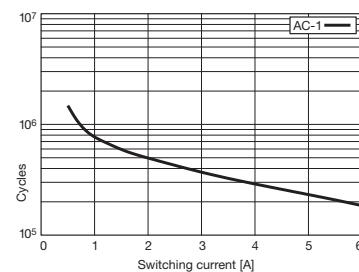
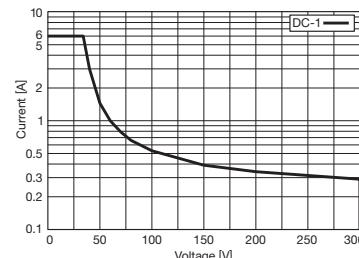
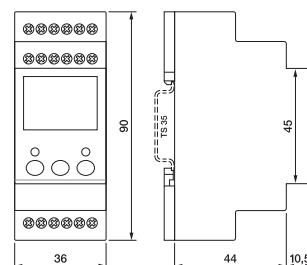
| | |
|---|--------------------|
| Rated test voltage measuring / measuring circuit | 1.5 kV rms / 1 min |
| Rated test voltage measuring circuit / power supply | 2 kV rms / 1 min |
| Rated test voltage measuring circuit / main circuit | 2 kV rms / 1 min |
| Rated test voltage main circuit / power supply | 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 |
| Oversupply category | III |

General data

| | |
|--|---------------------|
| Storage temperature (no ice) | -40 ... 85 °C |
| Operation temperature | -40 ... 70 °C |
| Conductor cross section control / main circuit | 2.5 mm ² |
| Nominal screw torque control / main circuit | 0.6 |
| Dimensions | fig. 4 |
| Weight | 125 g |
| Ingress Protection | IP 20 |
| Housing material | PA |

Product references

| Description | Type | 12-48 |
|--|---------------|-------|
| 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. Dimensions (mm)****Technical approvals, conformities**

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

Approvals