

# MRM32R/UC12-48V

3 phase | 2 CO | Multifunction monitoring



## 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                                             |
| Overvoltage setting range                           | ± 0.1 ... 700 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 threshold I <sub>th</sub> 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                  |
| Overvoltage 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 <sup>2</sup> |
| 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

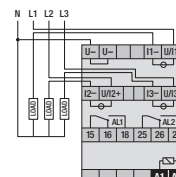


fig. 2. AC voltage endurance

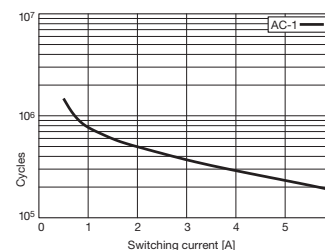


fig. 3. DC load limit curve

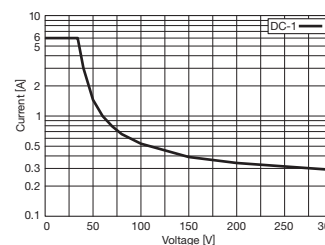
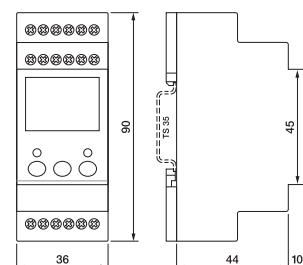


fig. 4. Dimensions (mm)



## Technical approvals, conformities

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