

**MRI11**

**Single phase current monitoring | 12 ... 48 V UC | 110 ... 240 V UC**

**Power supply**

Nominal voltage	12 ... 48 V UC	110 ... 240 V UC
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	

**Measuring circuit**

Measured parameters	I, f
Min. setting step, resolution	0.1 A / 0.1 Hz
Monitoring functions	Under, over, inside, outside
Number of current measurement inputs	1
Rated measurement current	5 A
Measurement current range	0.1 ... 6 A
Undercurrent setting range	0.1 ... 5 A
Overcurrent setting range	0.1 ... 5 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	1 CO
Contact Material	AgNi
Rated voltage	250 V
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	1500 VA
Mechanical endurance (cycles)	3 x 10 <sup>7</sup>
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 kV rms / 1 min
Pollution degree	2
Overvoltage category	III

**General data**

Ambient temperature storage	-40 ... 85 °C
Ambient temperature operation	-40 ... 60 °C
Conductor cross section	2.5 mm <sup>2</sup>
Nominal screw torque	0.6 Nm
Module width	fig. 4
Weight	107 g
Protection degree	IP 20
Housing material	PC

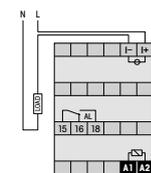
**Product references**

Types	Product reference	12-48	110-240
Single phase monitoring	MRI11/UC...V	✓	✓

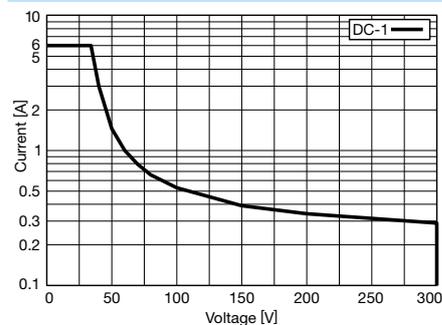
"..." list control circuit voltage to complete product references.  
Other voltages on request. Please contact support@comatreleco.com.



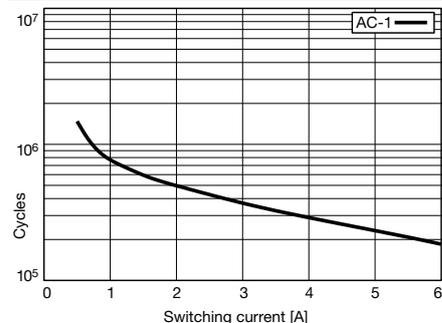
**fig. 1. Wiring diagram**



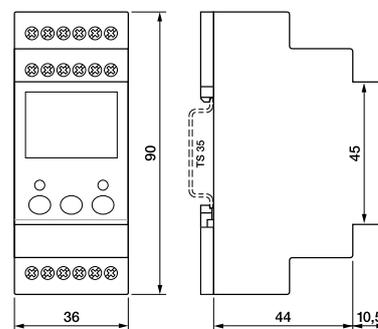
**fig. 2. DC load limit curve**



**fig. 3. AC voltage endurance**



**fig. 4. Dimensions (mm)**



**Standards and approvals**

Standards IEC/EN 60947, IEC/EN 60730, IEC/EN 43880

Approvals

	Description	MRE-44S	MRM11	MRM11R	MRM32	MRM32R	MRU11	MRU32	MV53	SSU34	SSU31	SSU33L	MRI11	MRI32	TSR19	ESU-D2R	CT515R	CT524R
Monitoring	One phase voltage monitoring		●	●			●		●									
	Three phase voltage monitoring				●	●		●		●		●						
	Four channel voltage measuring	●																
	DC Voltage monitoring		●	●	●	●	●	●			●							●
	One phase current monitoring		●	●									●					
	Three phase current monitoring				●	●								●				
	Four channel current measuring	●																
	DC current monitoring		●	●	●	●							●	●			●	
	Phase failure				●	●		●		●	●	●						
	Phase sequence monitoring	●			●	●		●		●	●	●						
	Phase angle monitoring / measuring*	●			●	●		●		●		●						
	Differential voltage monitoring / measuring*	●									●	●						
	Neutral failure monitoring	●									●	●						
	Frequency monitoring / measuring*	●	●	●	●	●	●	●		●		●	●	●				
	Apparent power monitoring / measuring*	●	●	●	●	●												
	Active power monitoring / measuring*	●	●	●	●	●												
	Power factor monitoring / measuring*	●	●	●	●	●												
	Active energy measuring	●																
	THDI / THDU measuring	●																
	PTC monitoring														●			
Earth failure monitoring																●		
Functions	Threshold exceeded "over" fig. 3.	●	●	●	●	●	●	●	●	●		●	●	●	●		●	●
	Threshold undershot "under" fig. 4.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Window function "inside" fig. 2.	●	●	●	●	●	●	●					●	●			●	●
	Window function "outside" fig.1.	●	●	●	●	●	●	●					●	●			●	●
	Alarm on-delay	●	●	●	●	●	●	●	●	●		●	●	●			●	●
	Alarm off-delay	●	●	●	●	●	●	●	●				●	●				
	Error storage function	●	●	●	●	●	●	●					●	●	●			
	Threshold selectable	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●
	Threshold fixed										●	●			●			
	Power supply	Supply isolated from measuring circuit	●	●	●	●	●	●	●					●	●	●	●	
Supply from measure circuit									●	●	●	●					●	●
Mounting	DIN rail mounting	●	●	●	●	●	●	●	●	●			●	●		●		
	Housing according IEC/EN 43880 (electrical distribution mounting)	●	●	●	●	●	●	●	●					●	●			
	Plug-in (socket mounting)											●	●		●		●	●

\*Measuring: MRE-44S only

