

SSU34

Three phase + N voltage monitoring | 400 V AC

Power supply

Nominal voltage	400 V AC
Operating voltage range	240 ... 495 V
Power consumption AC/DC	1.5 VA
Rated frequency	50 Hz

Measuring circuit

Measured parameters	U, ΔPhi, Δf
Monitoring functions	Under, over, phase failure, phase sequence
Number of voltage measurement inputs	4 (L1 / L2 / L3 / N)
Rated AC voltage L-N / L-L	230 V / 400 V
AC voltage measurement range L-N / L-L	160 ... 275 V / 280 ... 480 V
Undervoltage setting range	160 ... 225 V / 280 ... 390 V
Overvoltage setting range	235 ... 275 V / 410 ... 480 V
Voltage difference setting range L-L	20 ... 100 V 35 ... 173 V
Rated base frequency	50 Hz
Frequency difference setting range L-L	3 ... 15 Hz
Phase angle difference setting range L-L	3 ... 15°
Alarm delay	0.2 ... 5 s

Main circuit

Number of contacts	2 CO
Contact Material	AgNi
Rated voltage	250 V
Rated current	5 A
Minimum load	10 mA, 12 V
Inrush current	15 A, 20 ms
Rated load DC	fig. 2
Rated load AC-1	1250 VA
Mechanical endurance (cycles)	5 x 10 ⁶
Electrical endurance at rated load AC-1 (cycles)	fig. 3

Insulation

Rated test voltage measuring / measuring circuit	3 kV rms / 1 min
Rated test voltage measuring circuit / main circuit	3 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	-10 ... 60 °C
Conductor cross section	2.5 mm ² , 2 x 1.5 mm ²
Nominal screw torque	0.5 Nm
Module width	fig. 4
Weight	350 g
Protection degree	IP 20
Housing material	PC

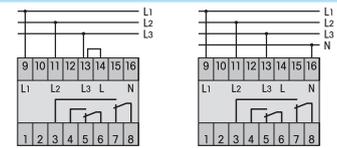
Product references

Types	Product reference	400
Three phase monitoring	SSU34/AC...V	✓

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



fig. 1. Wiring diagram



DO NOT CONNECT AT THE SAME TIME:
Neutral conductor N and bridge L3-1!

fig. 2. DC load limit curve

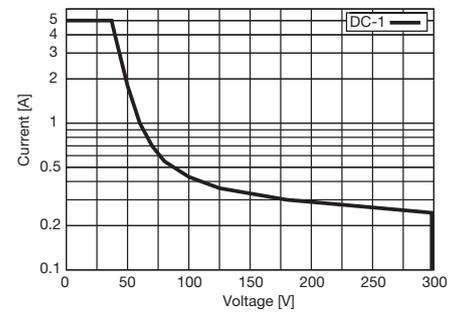


fig. 3. AC voltage endurance

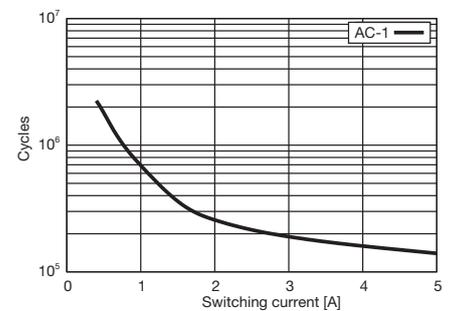
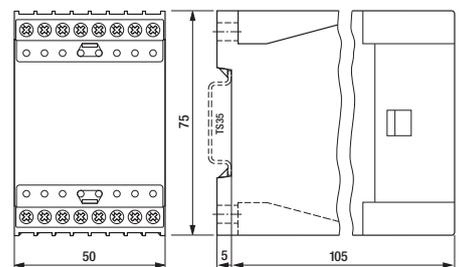


fig. 4. Dimensions (mm)



Standards and approvals

Standards IEC/EN 60947

Approvals

	Description	MRE-44S	MRM11	MRM11R	MRM32	MRM32R	MRU11	MRU32	MV53	SSU34	SSU31	SSU33L	MRT11	MRT32	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

