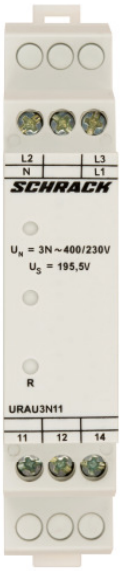
Datasheet: Undervoltage monitoring with fixed threshold, series AMPARO



SCHRACK-INFO

- Undervoltage monitoring 1- and 3-phasig with fixed threshold
- Supply voltage 400/230 V AC, Supply voltage = measured voltage
- Connection of neutral is necessary
- 1 CO, 5A

Technical datas

Input circuit	
Terminals	L1-L2-L3-N
Supply voltage	400/230 V AC
Voltage supply tolerance	-30 / +15 %
Rated frequency	50 / 60 Hz
Duty cycle	100 %
Bridging time	10 ms
Reset time	500 ms
Drop-away voltage	According to switching threshold of 0.85 Un
Power loss	0,8 W

Measuring circuit		
Terminals		L1-L2-L3-N
Measure		Voltage 3-phase
Measurement methods		Rectified value
Monitoring function		Undervoltage
Measuring range		Un = 400/230 V AC
Overload		(= supply voltage)
Thresholds	Max	-
	Min	85% Un
	adjustable	no
	asymmetrie	-
Hysteresis		5 %

Time circles		
On delay	fixed	appr. 400 ms
Off delay		< 250 ms

Indicator		
Relay status	LED R (yellow) on	Relay is on

Output circuit		
Terminals		11-12-14
Type		Relay
Number of contacs	CO	1
Contact material		AgNi
Rated voltage		250 V
Max. switching voltage		250 V
Max. switching current		5A
Rated current		5 A / 250 V
Lifetime	mechanical	1 x 10^6 operation cycle
	electrical (AC-1)	1 x 10^5 operation cycle
Switching frequency	with load	6/min
	without load	300/min
Back up fuse		5A fast acting

Accuracy	
Basic accuracy	< 5 %
Setting accuracy	-
Repeatability	< 1 %
Influence of temperature	< 0,05 % / °C
Influence of voltage	-
Frequency influence	-

Standards		
Product standards		EN 61010-2-201: 2013
Immunity	EN 61326-1	Basic electromagnetic environment
Emission	EN 61326-1	Class B

Datas of insulation		
Pollution degree (IEC 61010-2-201)		2
Overvoltage category (IEC 61010-2-201)		II
Rated insulation voltage (IEC 61010-2-201)	Input circuit / outout circuit	300 V
Rated surge voltage (IEC 61010-2-201)	Input circuit / outout circuit	2.500 V
Insulation-test-voltage (IEC 61010-2-201)	Input circuit / outout circuit	1.500 V
Insulation	Input circuit / outout circuit	Basic insulation

Electrical connection		
Terminal design		Screw-terminal
Terminal capacity	Rated terminal capacity	2,5mm²
	Max. terminal capacity	
	flexible with/without ferrule	1x 0,25 ... 2,5 mm² (23 AWG ... 14 AWG)
	flexible without sleeve	2x 0,25 ... 1,5 mm² (23 AWG ... 14 AWG)
	flexible with twin-sleeve	2x 0,25 ... 1,5 mm² (23 AWG ... 14 AWG)
	Stranded without sleeve	1x 0,25 ... 2,5 mm² (23 AWG ... 14 AWG)
Length without insulation		7 mm
Tightening torque		max. 0,5 Nm

Mechanical datas		
Ambient temperature	Operation	-25 ... +50 °C
Dimensions (accord. DIN 43880)	LxHxD	17,5 x 97 x 57,9 mm
Mounting		DIN-rail (EN 60715)
Installation position		In any order
Protection class	Cover	IP40
	Terminals	IP20

Function

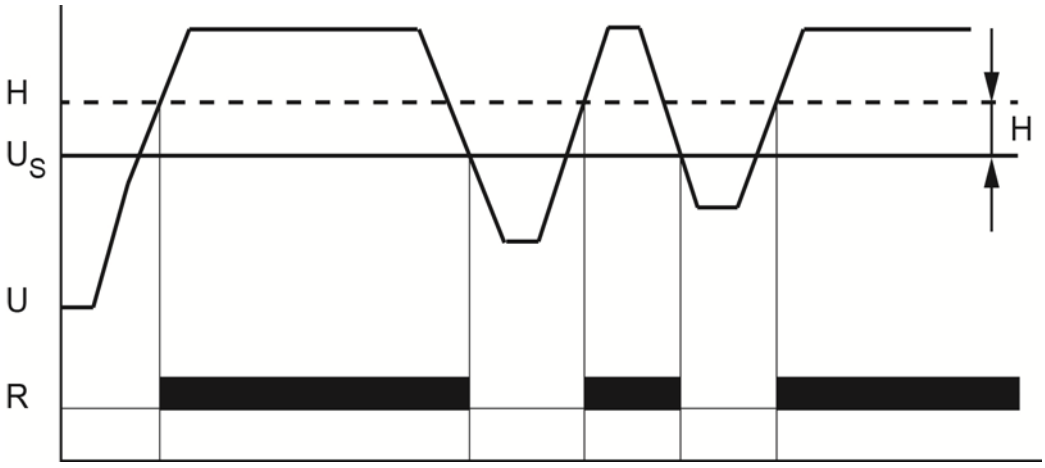
Undervoltage monitoring for 3-phase AC mains with fiexed threshold-voltage US = 195,5V and fixed hysteresis.

All measuring inputs (L1, L2 and L3) must be connected to phase voltage. If single-phase monitoring is required, unused input terminals (L) must be connected to mains voltage to have proper L-N voltage on the terminals L1, L2 and L3.

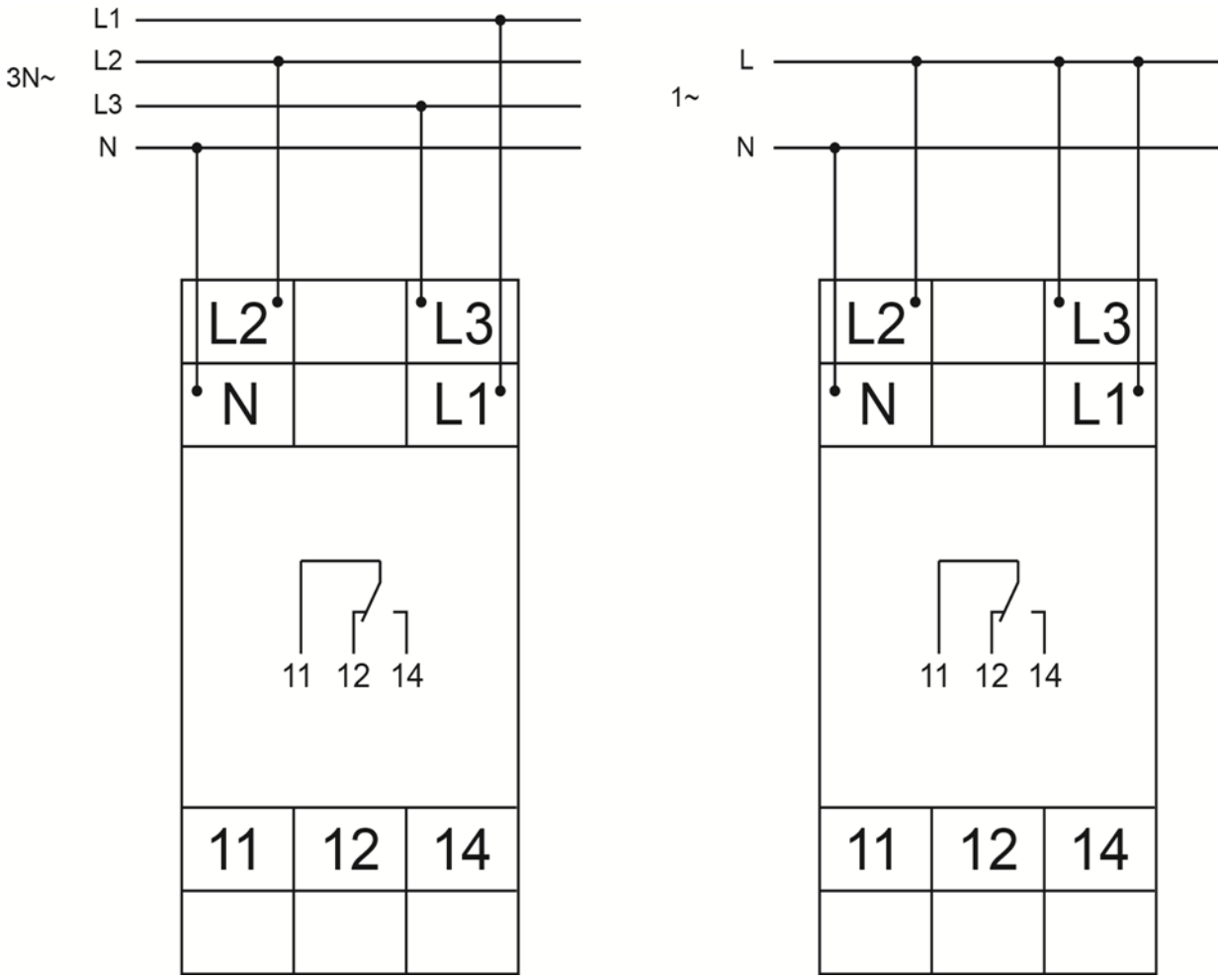
A phase failure can not be detected, if the reverse voltage coming from the load exceeds the threshold US relay.

Undervoltage monitoring

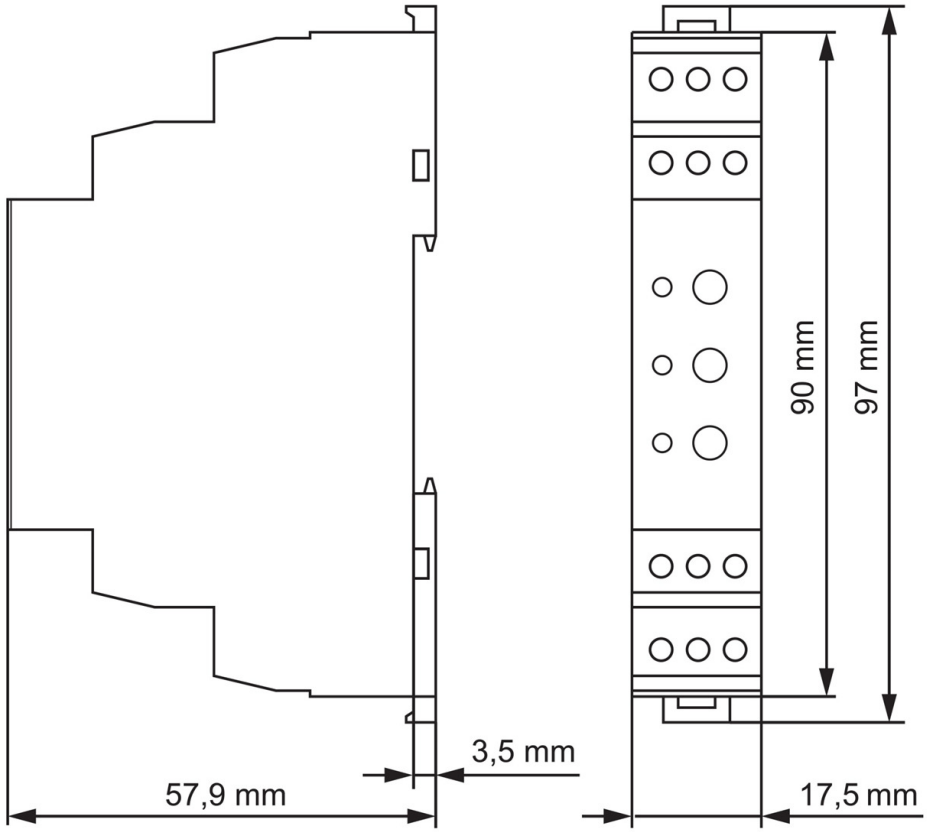
The output relay R switches into on-position,when the measuring voltage of all connected phases exeeds the fixed threshold US by more than the fixed hysteresis H. When the voltage of one of the connected phases (L1, L2 or L3) falls below the fixed threshold, the output relay R switches into off-position again.



Wiring diagram



Dimensions



Articles

Description	Orderno.
Voltage monitoring-relay AMPARO,3ph against N,fix Us=195,5V,1CO,5A	URAU3N11--