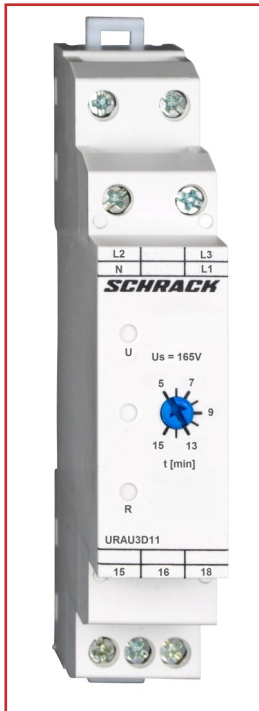


■ Datasheet: Voltage monitoring relay with adjustable delay time 5-15 minutes



■ SCHRACK-INFO

- Undervoltage monitoring 1- and 3-phase with fixed switching threshold, adjustable delay time 5-15 minutes
- Supply voltage 400/230 V AC, Supply voltage = measured voltage
- Connection of neutral is necessary
- 1 CO, 5A
- Overall width 17,5mm

■ Technical data

SUPPLY CIRCUIT	
Terminals	L1-L2-L3-N or L-N
Supply voltage	400/230 V AC
Supply voltage tolerance	-30 / +15 %
Rated frequency	50 / 60 Hz
Rated frequency tolerance	48 ... 63 Hz
Rated consumption	230V AC 0,8W (10VA)
Duty-cycle	100 %
Backup power time	-
Recovery time	500 ms
Drop-out voltage	see MIN-threshold (165V)

MEASURING CIRCUIT		
Terminals		L1-L2-L3-N or L-N
Measurand		voltage 1- or 3-phase
Measuring method		Gleichrichtwert
Monitoring functions		undervoltage
Measuring range		see supply circuit
Frequency		see rated frequency
Input resistance		-
Overload capacity		see supply voltage tolerance
Thresholds	Max	-
	Min	165 V
	adjustable	no
	Asymmetry	-
Hysteresis		5 %
TIMING CIRCUIT		
Start-up delay (ON Delay)	adjustable	5 ... 15 min
Tripping delay (OFF Delay)		-
Start-up suppression (START)		-
RANGE OF FUNCTIONS		
Functions	1	U - Undervoltage
STATUS INDICATION		
Supply voltage	LED U (green) on	supply voltage applied
	LED U (green) flashes	indication of lapse of time
Relay status	LED R (yellow) on	output relay energized
CONTROL ELEMENTS		
Start-up delay (ON Delay)		see timing circuit
OUTPUT CIRCUIT		
Terminals		15-16-18
Type		Relay
Number of contacts		1 change over contact
Contact material		AgNi
Rated voltage		250 V
Max. switching voltage		250 V
Max. switching current		5A
Rated current		5 A / 250 V
Endurance	mechanical	1 x 10 <sup>6</sup> switching cycles
	electrical	1 x 10 <sup>5</sup> switching cycles
Rated frequency of operation	with load	6/min
	without load	1200/min
Fuse rating		5A fast acting

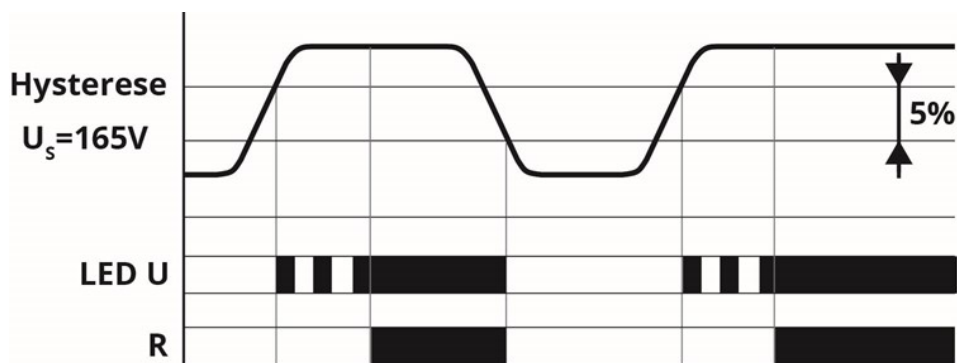
ACCURACY		
Base accuracy		< 5 %
Setting accuracy		-
Repeat accuracy		< 2 %
Temperature influence		< 0,05 % / °C
Voltage influence		-
Frequency influence		-
ENVIRONMENTAL CONDITIONS		
Ambient temperature	operation	-25 ... +50 °C
	storage	-40 ... +70 °C
Relative humidity		25 ... 75 %
Vibration		TBD
Shock		TBD
GENERAL DATA		
Dimensions (in accordance with DIN 43880) WxHxD		17,5 x 98 x 57,9 mm
Mounting		DIN rail (EN 60715)
Mounting position		any
Degree of protection	housing	IP40
	terminals	IP20
Electrical connection		screw terminal
Wire size	nominal wire size	2,5mm <sup>2</sup>
	flexible with/without wire end ferrule	1x 0,25...2,5mm <sup>2</sup> (23 AWG... 14 AWG)
	flexible without wire end ferrule	2x 0,25... 1,5mm <sup>2</sup> (23 AWG... 14 AWG)
	flexible with TWIN wire end ferrule	2x 0,25... 1,5mm <sup>2</sup> (23 AWG... 14 AWG)
	rigid without wire end ferrule	1x 0,25...2,5mm <sup>2</sup> (23 AWG... 14 AWG)
Screw size		suitable for Philips 1
Stripping length		7 mm
Tightening torque		max. 0,5 Nm
MTTF		-
Weight		52g
ISOLATION DATA		
Pollution degree (IEC 61010-2-201)		2
Overvoltage category (IEC 61010-2-201)		II
Rated insulation voltage (IEC 61010-2-201) supply circuit / output circuit		300 V
Rated impulse withstanding voltage (IEC 61010-2-201) supply circuit / output circuit		2500 V
Insulation test voltage (IEC 61010-2-201) supply circuit / output circuit		1500 V
Degree of protection supply circuit / output circuit		basic insulation

STANDARDS		
Product standard		EN 61010-2-201: 2013
Interference immunity	Basic electromagnetic environment	EN 61326-1
Interference emission	Class B	EN 61326-1
Approvals		CE

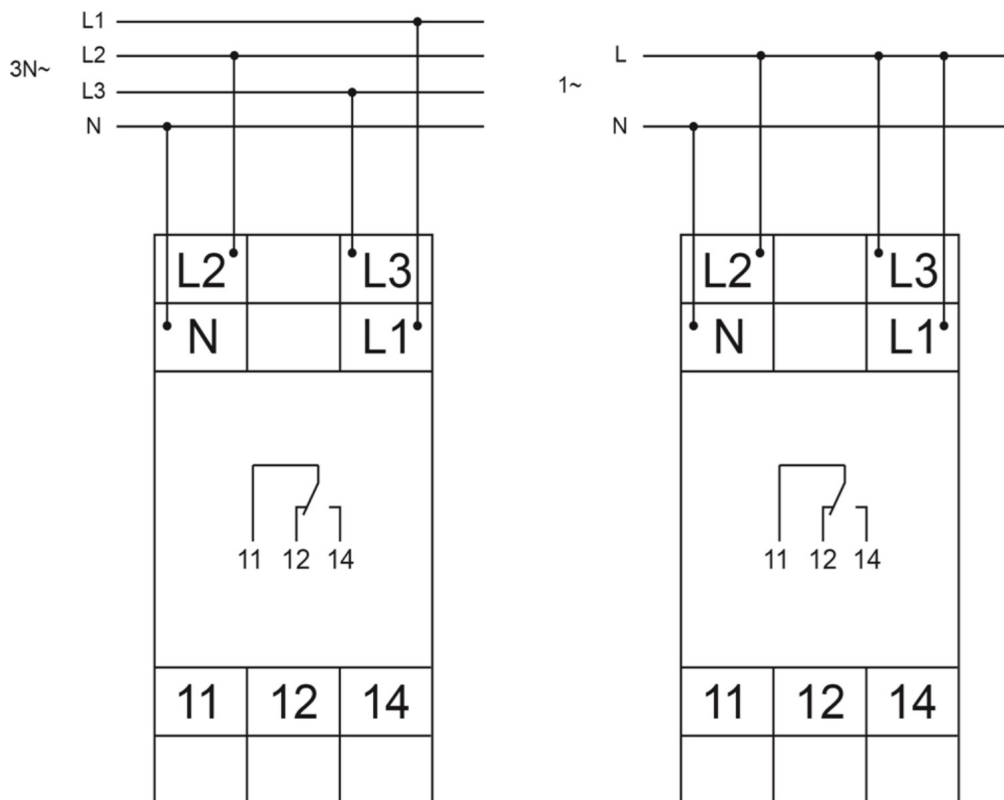
**Functions**

Undervoltage monitoring:

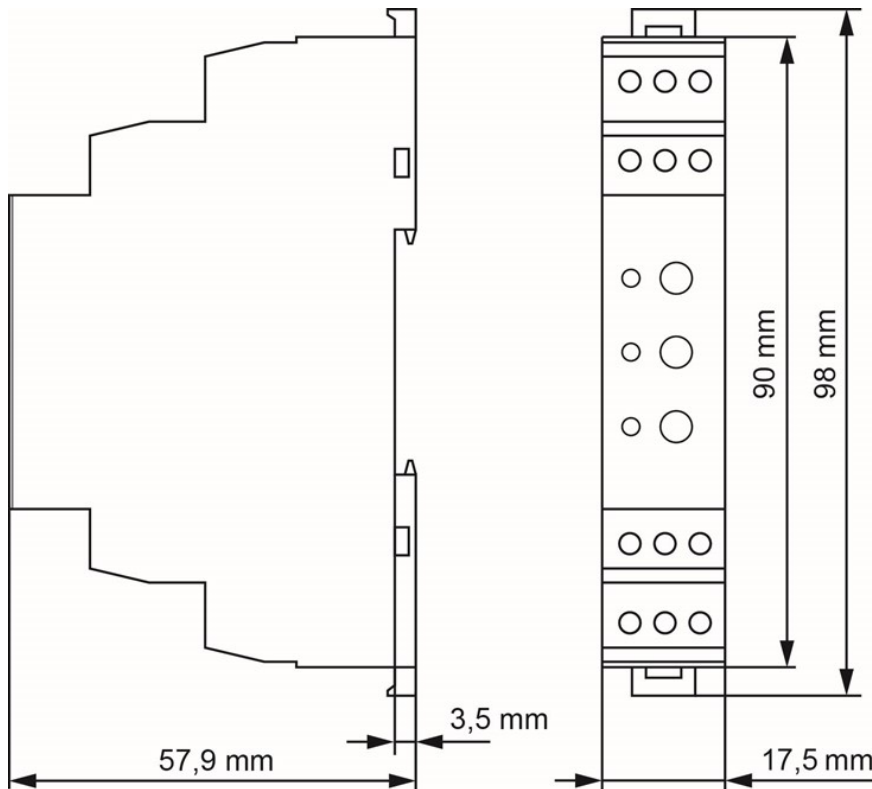
When the measuring voltage exceeds the fixed threshold  $U_s$  by more than the fixed Hysteresis  $H$  the set interval of the startup delay (DELAY) begins. After the interval has expired, the output relay  $R$  switches into on-position. When the measured voltage falls below the fixed threshold  $U_s$  the output relay  $R$  switches into off-position.



**Wiring diagram**



**Dimensions**



**Articles**

Description	order no.
Voltage monitoring relay with adjustable delay time 5-15 minutes	URAU3D11--