



<b>Identification</b>	Type	LCR-U-3-1-2U-24-240
	Part-No.	750605
<b>Description</b>	Voltage monitoring 3-phase	
<b>Function</b>	<p>Function</p> <p>Voltage monitoring in 3-phase networks with adjustable thresholds</p> <p>Settable trigger delay</p> <p>Monitoring the phase sequence and phase failure</p> <p>Asymmetry monitoring with settable asymmetry function selection via rotary switch</p> <p><b>Under:</b> Under-voltage monitoring</p> <p><b>Under + SEQ:</b> Under-voltage and phase sequence monitoring</p> <p><b>WIN:</b> Monitoring the range between thresholds Min and Max</p> <p><b>WIN + SEQ:</b> Monitoring the range between the Min and Max thresholds and phase sequence monitoring</p>	
<b>Time range</b>	<p>Start-up suppression, settable</p> <p>trigger delay, settable</p>	
	No	0.1 – 10 s
<b>Status indication</b>	Output relay status	
	LED yellow	

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Part-No. 750605

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Threshold error status	LED red
Trigger delay status	LED red flashing

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### Housing

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Dimensions (w × h × d)	22.5 × 90.0 × 105.0 mm
Colour of the housing	light grey
Housing material	PA
Protection class	IP40
Connection cross-section	1×0.5 to 2.5 mm <sup>2</sup> with AE 1×4 mm <sup>2</sup> without AE 2×0.5 to 1.5 mm <sup>2</sup> with AE 2×2.5 mm <sup>2</sup> without AE
Installation position	any
Weight	0.200 kg/piece
Approvals	cULus

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### Supply circuit

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Rated voltage range	AC/DC 24 V – 240 V
Power consumption	2 VA (1 W)
Operating time	100 % ED
Recovery time	500 ms
Waveform AC	Sinus
Residual ripple	10 %
Voltage drop	>30 % of the supply voltage
Measurement surge voltage	4 kV

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### Output circuit

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Number of channels	2
Switching element	Relays
Contact type	Change over contact
Measurement voltage	AC 250 V
Switching voltage	AC 250 V
Switching current max.	3A (5A at a distance >5mm)
Protection device	5 A, quick-acting
Mechanical service life	20 × 10 <sup>6</sup> (1000 VA)
Electrical service life	2 × 10 <sup>5</sup> (1000 VA)
Switching frequency	60/min @100 VA, 6/min @ 1000 VA
Over voltage category	III acc. IEC 60664-1
Measurement surge voltage	4 kV

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### Accuracy

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Basic accuracy	≤3 % (end of scale)
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Tolerance of setting	≤5 % (end of scale)
Repeat accuracy	≤2 %
Temperature error	≤0.05 %/°C

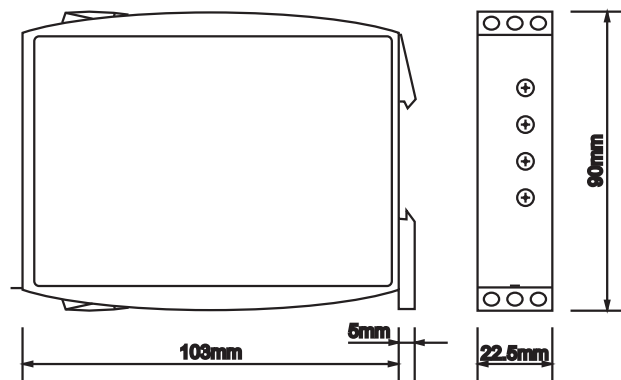
### Measuring circuit

Measuring variable	AC Sinus (48 to 63 Hz)
External fuse	max. 20 A (acc. UL 601010)
Measuring range	3(N) AC 400/230 V
Overload capability	3(N) AC 600/346 V
Input resistance	1 MΩ
Switching threshold min.	-30 % – 20 % U <sub>N</sub>
Switching threshold max.	-20 % – 30 % U <sub>N</sub>
Asymmetry	5 % – 25 %
Over voltage category	III acc. IEC 60664-1
Measurement surge voltage	4 kV

### Environmental conditions

Temperature range according to UL	-25 °C ... +40 °C
Temperature range	-25 °C ... +55 °C
Storage temperature range	-25 °C ... +70 °C
Relative air humidity	15 % to 85 % acc. IEC 60721-3-3 Class 3K3
Degree of pollution	3
Vibration resistance	10 – 55 Hz 0.35 mm acc. IEC60068-2-6
Impact resistance	15 g 11 ms acc. IEC 60068-2-27

### Dimensions



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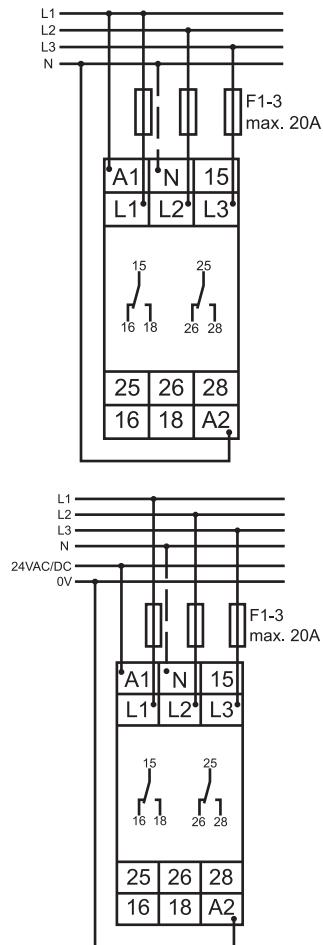
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## PIN assignment



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