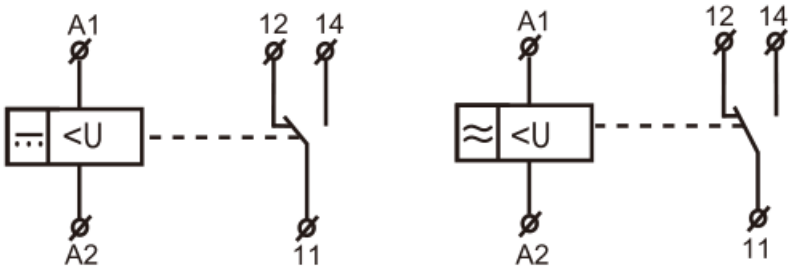
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RV8-01 Single-Phase Voltage Monitoring Relay

NewTrend RV8-01 monitors its own single-phase supply using true-RMS measurement. Select overvoltage or undervoltage operation and choose a latching or automatic-reset function with the front selector. Set one voltage threshold, an adjustable 5%-20% hysteresis and the trip delay. The output is one SPDT contact rated 10A AC-1 in an 18mm DIN-rail housing. Four supply versions use different voltage-setting scales.

Parameter	Specification
Model	RV8-01
Monitoring function	Selectable overvoltage or undervoltage; latching or automatic reset
Supply / monitoring terminals	A1-A2
Measurement	True RMS; own supply voltage
Supply versions	D12: DC 12V; AD48: AC/DC 24-48V; AD240: AC/DC 110-240V; A220: AC 220V
D12 operating / setting ranges	Operating: DC 7-20V; threshold setting: DC 9-15V
AD48 operating / setting ranges	Operating: AC/DC 18-270V; threshold setting: AC/DC 20-80V
AD240 operating / setting ranges	Operating: AC/DC 18-270V; threshold setting: AC/DC 65-260V
A220 operating / setting ranges	Operating: AC 160-270V; threshold setting: AC 180-260V
Supply frequency	45-65Hz AC; 0Hz DC
Hysteresis	Adjustable 5%-20%
Trip delay Tt	Adjustable 0.1-10 seconds; 10% setting accuracy
Measurement error	Maximum 1%
Power-up delay	0.5 seconds
Knob-setting accuracy	10% of scale value
Reset time	1000ms
Temperature coefficient	0.05%/degree C at 20 degrees C
Supply indication	Green LED
Output indication	Red LED
Output contacts	1 SPDT
Contact rating	10A (AC-1)
Switching voltage	250VAC / 24VDC
Minimum DC breaking power	500mW
Mechanical life	10,000,000 operations
Electrical life (AC-1)	100,000 operations
Operating temperature	-20 to +55 degrees C
Storage temperature	-35 to +75 degrees C
Mounting	DIN rail to EN/IEC 60715
Protection	IP40 front panel; IP20 terminals
Overvoltage category	III
Pollution degree	2
Maximum conductor size	Solid: 1 x 2.5mm2 or 2 x 1.5mm2; with sleeve: 1 x 2.5mm2 (AWG 12)
Terminal tightening torque	0.8Nm
Body dimensions	90 x 18 x 64mm
Weight	59g
Referenced standards	EN 60255-1; IEC 60947-5-1

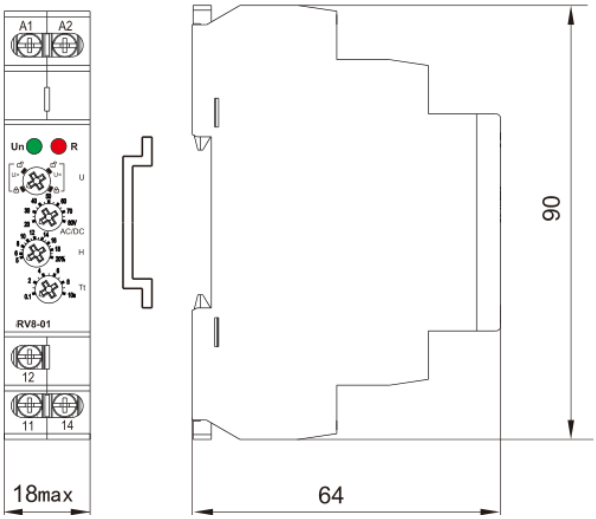
Connections and operation

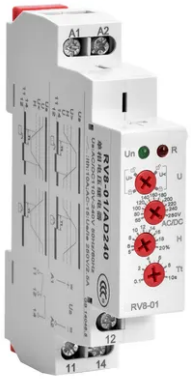


The selector provides overvoltage and undervoltage operation, each with non-latching and latching behavior; use the native waveform for the required function.

In a non-latching mode, output recovery follows the illustrated hysteresis threshold. A latching mode retains the trip until the supply is removed.

Dimensions and adjustment





Body: 90 x 18 x 64mm. DIN-rail housing; drawing shows 18mm maximum width.

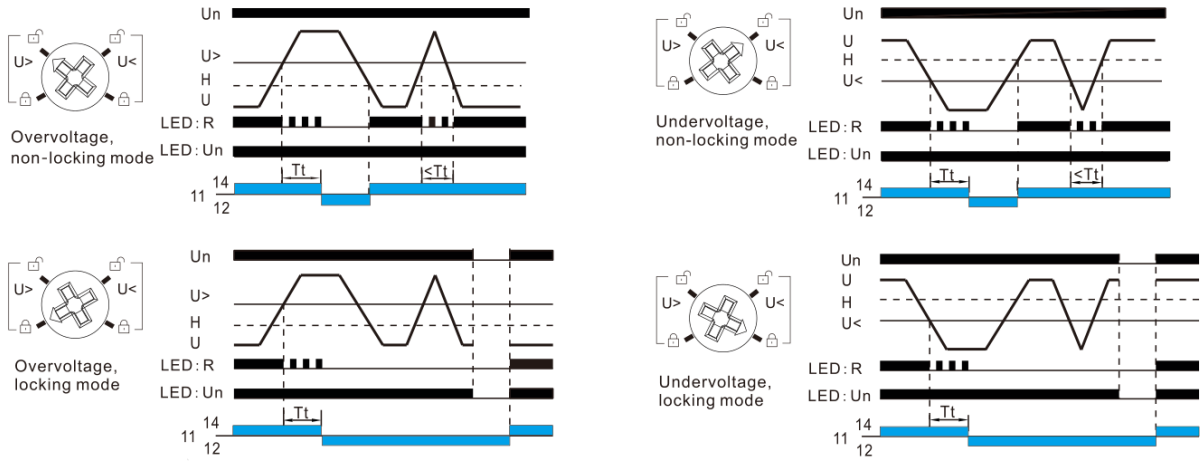
Common housing dimensions; RV8-01 front view shown.

Set the desired OV/UV and latch/reset function before energizing. Set threshold U, hysteresis H from 5%-20% and delay Tt from 0.1-10 seconds. Reset a latched trip by removing the supply.

Installation

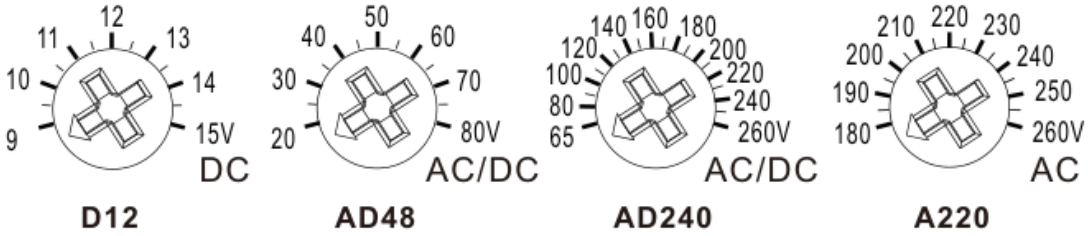
Installation and wiring must be performed by qualified electricians in accordance with applicable safety standards. Isolate the circuit before wiring and use the appropriate electrical-waste collection route.

Four selectable OV/UV functions



U>: overvoltage threshold. U<: undervoltage threshold. H: hysteresis. U: monitored voltage. Tt: threshold-crossing delay.

Voltage-setting scales by supply version



D12, AD48, AD240 and A220 have different threshold-setting scales. Match the installed supply version to the corresponding scale.