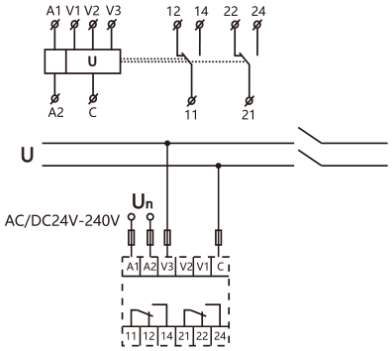
SHANGHAI NEWTREND ELECTRIC CO., LTD.
No. 618 North Huting Road | 201615 | Shanghai | China
Tel / WhatsApp: +86-18019187010 | sales@sntelec.com | www.sntelec.com

RV8-VW2 Isolated Voltage Monitoring Relay

NewTrend RV8-VW2 monitors an external single-phase AC or DC voltage signal through inputs separate from its AC/DC 24-240V control supply. Select V1-C for 15-150V, V2-C for 30-300V or V3-C for 60-600V. Front controls set overvoltage/undervoltage thresholds and 0.1-10 second trip and start/reset delays. Five DIP switches select the monitoring mode, latching behavior, normal-state contact logic and simultaneous or separate operation of two SPDT outputs rated 5A AC-1.

Parameter	Specification
Model	RV8-VW2
Function	Isolated external-voltage over/under monitoring
Measurement	True RMS
Control supply terminals	A1-A2
Rated control supply	AC/DC 24-240V; 50/60Hz
Monitoring inputs	V1, V2, V3 and common C
V1-C monitoring range / resistance	AC/DC 15-150V; 500kΩ
V2-C monitoring range / resistance	AC/DC 30-300V; 1MΩ
V3-C monitoring range / resistance	AC/DC 60-600V; 2MΩ
Input frequency	50/60Hz AC; DC
Rated insulation voltage	600V
Threshold setting	10%-100% of the selected input full scale
Hysteresis	Single limit: adjustable 5%-20%; combined window: fixed 3%
Measurement error	Maximum 2%
Trip delay Tt	0.1-10 seconds
Power-up / reset delay	0.1-10 seconds
Knob-setting accuracy	10%
Supply / reset indication	Green LED
Fault / output indication	Red LEDs
Output contacts	2 SPDT; simultaneous or separate operation
Contact rating	5A (AC-1)
Switching voltage	250VAC / 24VDC
Minimum DC breaking power	500mW
Mechanical life	5,000,000 operations
Electrical life (AC-1)	50,000 operations
Operating temperature	-20 to +55 degrees C
Storage temperature	-35 to +75 degrees C
Mounting	35mm DIN rail; EN/IEC 60715
Protection	IP40 front panel; IP20 terminals
Overvoltage category / pollution degree	III / 2
Maximum conductor size	Solid: 1 x 2.5mm2 or 2 x 1.5mm2; with sleeve: 1 x 2.5mm2 (AWG 12)
Body dimensions / weight	90 x 36 x 70mm; 100g
Referenced standard	IEC 60947-5-1

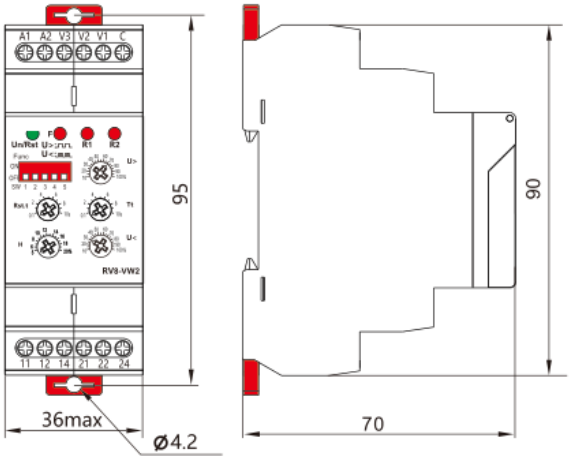
Connections and operation



SW1 selects a single limit or combined over/under monitoring. In single-limit mode, SW2 chooses overvoltage or undervoltage. SW3 selects a latched trip or automatic reset.

SW4 sets whether contacts 11-14 and 21-24 are closed or open in the normal operating state. SW5 selects simultaneous outputs or separate overvoltage/undervoltage outputs when combined monitoring is selected. Refer to the complete waveform charts.

Dimensions and adjustment





Body: 90 x 36 x 70mm. Overall height: 95mm. Fixing holes: 4.2mm.

RV8-VW2 housing dimensions; open-cover product photograph shown.

Set the threshold knobs as a percentage of the full scale for the selected V1-C, V2-C or V3-C input. Use the five DIP switches for the required monitoring and output logic. In single-limit mode, hysteresis is adjustable from 5%-20%; in combined over/under mode it is fixed at 3%. The open-cover photograph shows the DIP switches and controls.

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.

Five DIP switches and their functions

SW1
ON: one limit (over OR under)
OFF: combined over AND under

SW2
ON: overvoltage only
OFF: undervoltage only (effective when SW1 is ON)

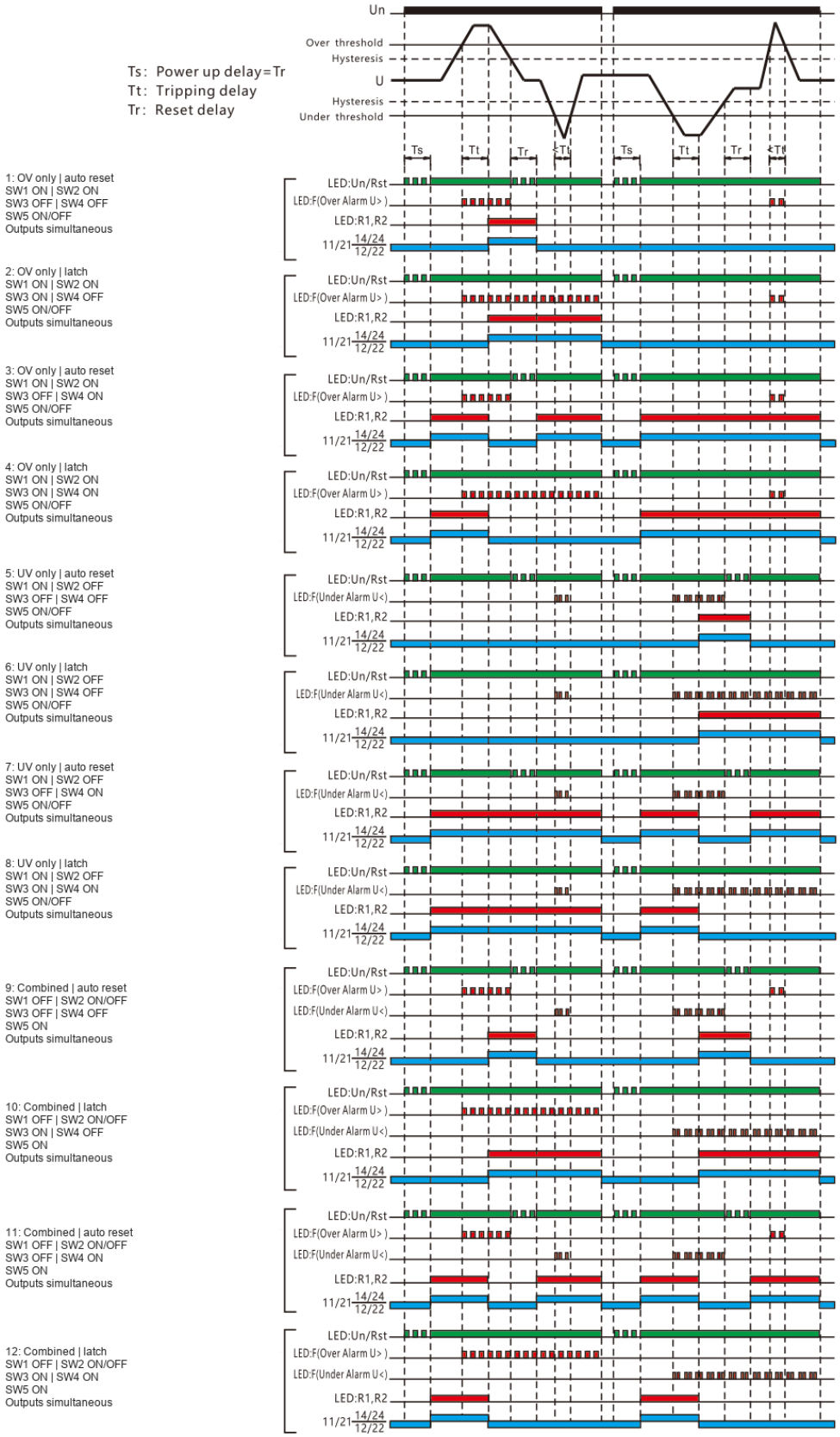
SW3
ON: latch after a voltage trip
OFF: automatic reset after voltage recovery

SW4
ON: 11-14 and 21-24 closed in normal operation
OFF: 11-14 and 21-24 open in normal operation

SW5
ON: outputs operate simultaneously
OFF: separate outputs in combined mode: R1 overvoltage; R2 undervoltage

The normal-state contact setting refers to operation at normal monitored voltage. In combined monitoring, an invalid threshold order flashes Un/Rst and F and resets the contacts; correct U< below U>.

Operating waveforms: configurations 1-12



Operating waveforms: configurations 13-16

13: Combined | auto reset
SW1 OFF | SW2 ON/OFF
SW3 OFF | SW4 OFF
SW5 OFF
Outputs separate

14: Combined | latch
SW1 OFF | SW2 ON/OFF
SW3 ON | SW4 OFF
SW5 OFF
Outputs separate

15: Combined | auto reset
SW1 OFF | SW2 ON/OFF
SW3 OFF | SW4 ON
SW5 OFF
Outputs separate

16: Combined | latch
SW1 OFF | SW2 ON/OFF
SW3 ON | SW4 ON
SW5 OFF
Outputs separate

