– Rvc –

Monitoring voltage relay 1RVCR1-01.02
Instruction Manual

General

■Applications
-Protect electrical equipment and motors from over-voltage and under-voltage.
-Normal/emergency power supply switching.

■ Function Features
-Controls its own supply voltage(True RMS measurement)
-.User may select operation mode through knob.
- Voltage measurement accuracy<1%.
- Relay status is indicated by LED.
- 1-MODULE,DIN rail mounting.

■Model and connotation

1RVCR1—□/□

Rated control supply voltage:

Rated supply voltage code	Rated supply voltage	Supply voltage limits	Range of adjustment
D12	DC 12V	DC 7…20V	DC 9…15V
AD48	AC/DC 24…48V	AC/DC 15…100V	AC/DC 20…80V
AD240	AC/DC 110…240V	AC/DC 50…270V	AC/DC 65…260V
A220	AC 220V	AC 160…270V	AC 180…260V

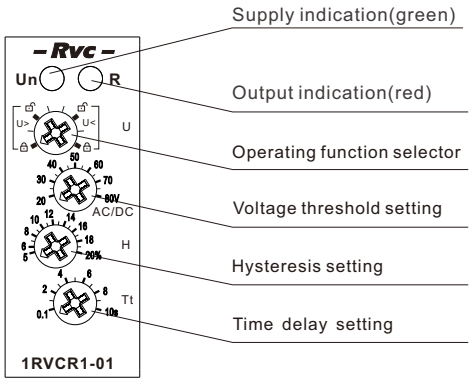
Function mode:
01 - Over/under voltage in windows mode
02 - Overvoltage Undervoltage

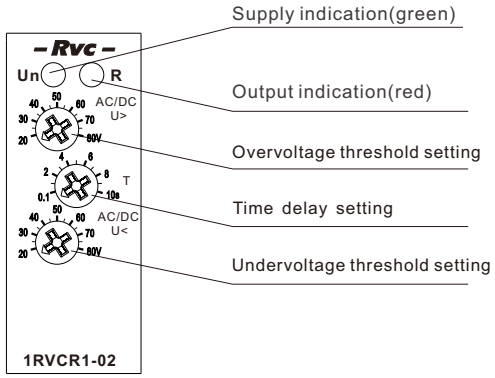
1RVCR1 Series

Technical parameters

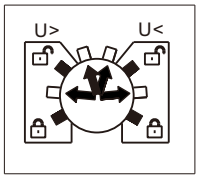
Technical parameters	1RVCR1-01	1RVCR1-02
Function	Monitoring voltage	
Supply terminals	A1-A2	
Rated supply voltage	DC12V,AC/DC24V-48V,AC/DC110V-240V,AC220V	
Rated supply frequency	45Hz-65Hz,0	
Hysteresis	5%-20%	3%fixed
Supply indication	green LED	
Time delay	Adjustable 0.1s-10s,10%	
Measurement error	≤1%	
Run up delay at power up	0.5s time delay	
Konb setting accuracy	5% of scale value	
Reset time	1000ms	
Temperature coecient	0.05%/℃,at=20℃(0.05%℉ , at=68℉)	
Output	1×SPDT	
Current rating	10A/AC1	
Switching voltage	250VAC/24VDC	
Min.breaking capacity DC	500mW	
Output indication	red LED	
Mechanical life	1×10^7	
Electrical life(AC1)	1×10^6	
Operating temperature	-20℃ to +55℃ (-4℉ to 131℉)	
Storage temperature	-35℃ to +75℃ (-22℉ to 158℉)	
Mounting/DIN rail	Din rail EN/IEC 60715	
Protection degree	IP40 for front panel/IP20 terminals	
Operating position	any	
Overvoltage cathegory	III.	
Pollution degree	2	
Max.cable size(mm^2)	solid wire max.1×2. 5or 2×1. 5/with sleeve max.1×2. 5(AWG 12)	
Dimensions	90×18×64mm	
Weight	64g	
Standards	IEC/EN 60255-1,IEC60947-5-1	

Panel Diagram





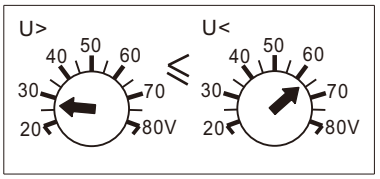
Wrong setting of 1RVCR1-01



As shown in the figure above,they are wrong settings.In that cases , LED-Un and LED-R will flash at the same time, which indicate the setting error. Normal operation will be resumed through resetting after power-off.

If the operating function is changed after power-on, the two LED indicators would flash while the relay operates based on original operating functions; the LED would resume the normal indication after the original setting is recovered.

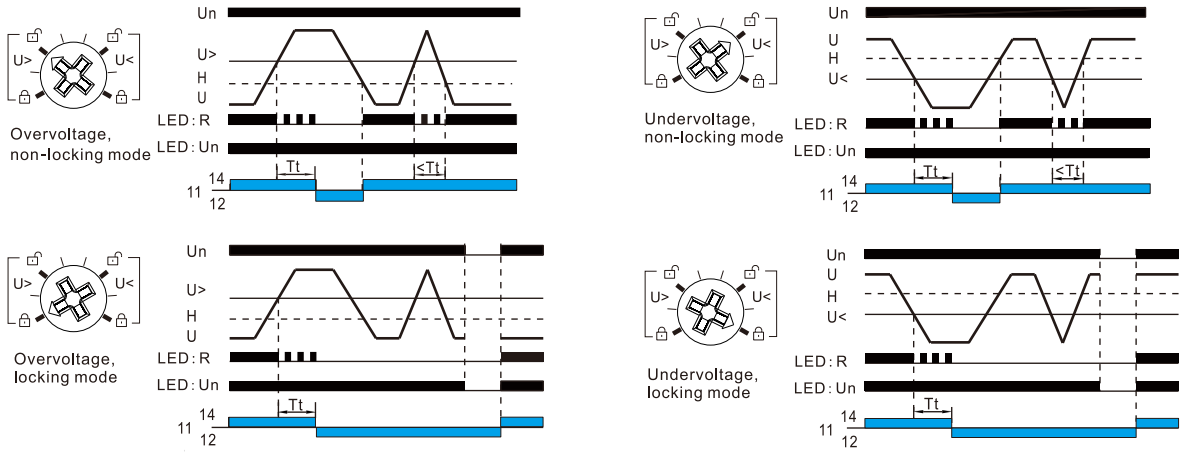
Wrong setting of 1RVCR1-02



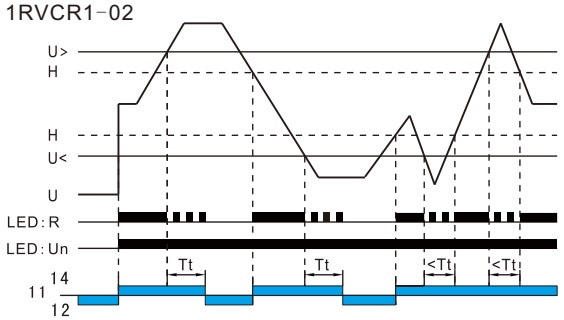
The set overvoltage threshold value must be larger than undervoltage threshold value. Otherwise, all LEDs would flash and the output relay would be disconnected.

Functions Diagram

1RVCR1-01

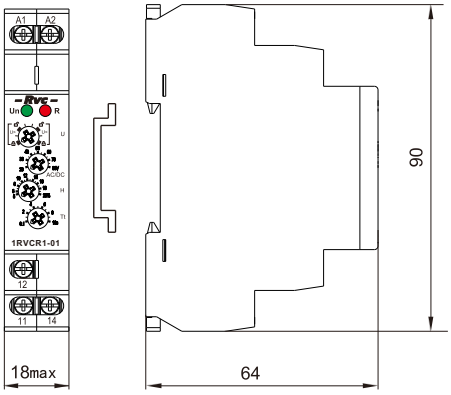


1RVCR1-02

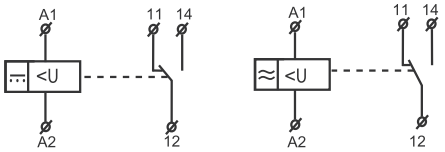


U> :Overvoltage threshold
U< :Undervoltage threshold
H :Hysteresis
U :Controlled signal
Tt :Delay on threshold crossing

Dimensions(mm)



Wiring Diagram



Disposal of Electrical Waste
All electrical waste should be disposed of in compliance with current WEEE regulations.

Caution
The products must be installed by qualified electricians. All and any electrical connections of the time relay shall comply with the appropriate safety standards.

Re.val.co. International s.r.l. — Rvc —
Via G.Di Vittorio 13 – 20017 Rho (MI) - ITALY
www.revalcointernational.it info@revalcointernational.it