

ZHRV2-36G

Operating Instructions for ZHRV2 Series Over-voltage-Under-voltage Protector

Function Features

- Controls its own supply voltage (True RMS measurement).
- Voltage value and delay time are set via front controls.
- Value with auto restart and self-resetting functions.
- Voltage measurement accuracy <1%.
- Control status is indicated by a LED.
- The relays are designed for clip-on mounting on rail.

Applications

- Applicable for overvoltage and under-voltage protection for household appliances

Model and Connotation

ZHRV2-

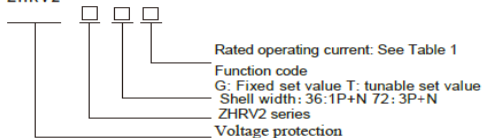


Table 1

Model	Rated operational current
ZHRV2-36G ZHRV2-72	32A/40A/50A/63A/80A
ZHRV2-36T	32A/40A

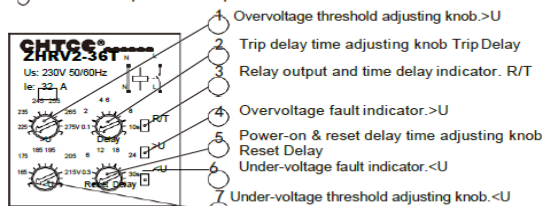
Technical Parameters

Rated supply voltage	AC 220~240V
Rated supply frequency	50/60Hz $\pm 10\%$
Max. current output	32A/40A/63A/80A resistance
Overvoltage operating value	ZHRV2-36G: 265V ZHRV2-36T: 225~265V(knob adjustment)
Overvoltage Hysteresis	ZHRV2-36G: 257V ZHRV2-36T: Overvoltage operating value $\times (1 - 3\%)$
Under-voltage operating value	ZHRV2-36G: 175V ZHRV2-36T: 165~215V(knob adjustment)
Under-voltage Hysteresis	ZHRV2-36G: 180V ZHRV2-36T: Undervoltage operating value $\times (1 + 3\%)$
Tripping time delay	ZHRV2-36G: 0.1s ZHRV2-36T: 0.1s~10s(knob adjustment)
Power-on delay time	ZHRV2-36G: 2s ZHRV2-36T: 0.3s~30s(knob adjustment)
Reset delay time	ZHRV2-36G: 1s ZHRV2-36T: 0.3s~30s(knob adjustment)
Measurement error	$\leq 1\%$
Delay error	$\pm 10\% + 0.1s$
Konb setting accuracy	$\pm 2V$
Rated insulation voltage	415V
IP degree of protection	Ip20
Pollution degree	3
Electrical durability	100000 cycles
Mechanical durability	1000000 cycles
Height above sea level	$\leq 2000m$
Operation temperature	$-5...40^{\circ}C$
Relative humidity	$\leq 50\%(40^{\circ}C)$

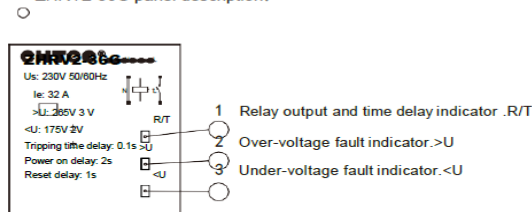
Storage temperature	$-25...75^{\circ}C$
Mounting support	35mm symmetrical DIN rail conforming to EN/IEC 607 15

Panel Diagram

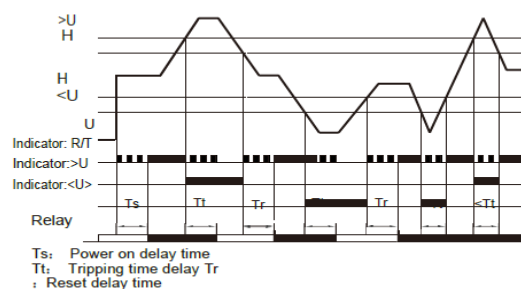
ZHRV2-36T panel description:



ZHRV2-36G panel description:



Function Diagrams



Operating Instructions

- Wire the protector according to the indicator IN and OUT directive.
- When the protector is with normal supply voltage, yellow R/T indicator stays on, relay implements output action; otherwise protector shows fault and the relay is disconnected.
- In case supply voltage goes over the set voltage value, the yellow R/T indicator flashes and red U > indicator light is on. When fault time is longer than the set delay time, output relay is disconnected, R/T indicator light is off. If supply voltage is lower than under-voltage operating value, yellow R/T indicator flashes and red U < light is on. Also when fault time is longer than the set delay time, output relay gets disconnected, R/T indicator light is off.
- When overvoltage fault protection is on and supply voltage is lower than overvoltage reset value, output relay is on and R/T indicator light is on; when overvoltage fault protection is on and supply voltage is higher than under-voltage reset value, output relay is on and R/T indicator light is on.
- When supply voltage is lower than 150V, protector activates right away with no action delay: Yellow R/T indicator light is off, red U < indicator light is on and output relay gets disconnected.
- Wiring terminal: N represents Neutral Line, L represents Live Line.
- To avoid heating of contact from heavy current, please make ensure that terminal screws are tight.

BRANCH CONTACT DETAILS

Johannesburg	010 202 3300
Germiston	011 418 9600
Cape Town	021 510 0710
Pinetown	031 700 4215
Riverhorse	031 492 4800

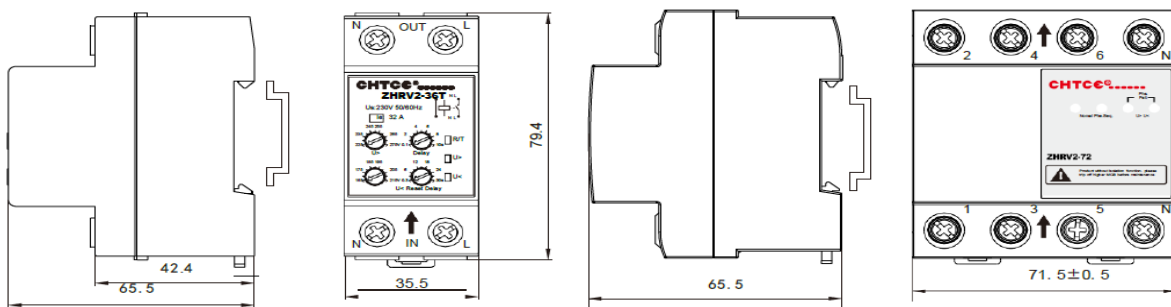
NATIONAL CALL CENTRE

Sales	010 202 3400
Technical	010 202 3500

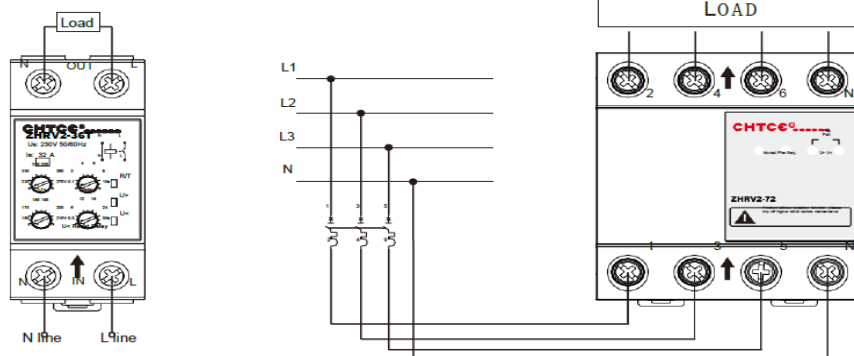
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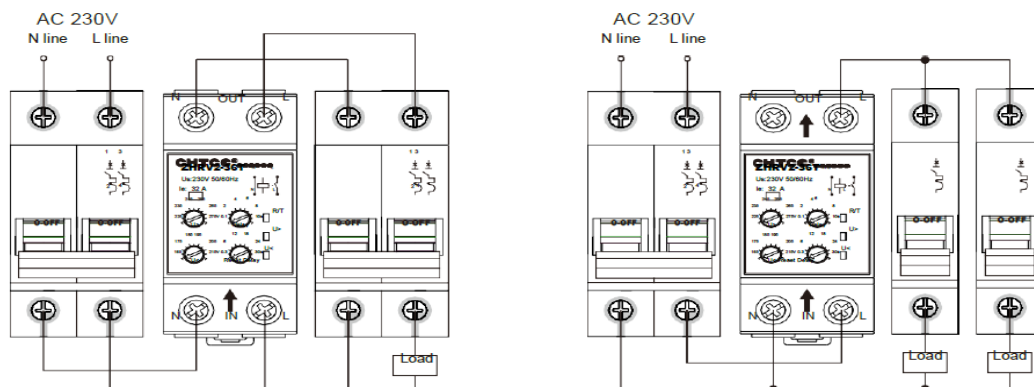
Overall Dimensions



Wiring Diagram



Typical Application



Warning

1. This product shall be installed, operated and maintained by professional personnel.
2. Whether or not the product functions normally, user shall not dismantle or repair the said product without permission, and we shall not assume any responsibility for the accident as a result thereof.
3. Please refer to the wiring diagram in Operation Instructions when arranging wires.
4. Never place power input line in the same conduit with other wires with heavy current. Please use shielded wire if necessary so as not to bring about interference that may influence the normal operation of relay.
5. Do not use this product in areas with dust, corrosive gases and with exposure to direct sunlight and rain.
6. Never use this product in medium with explosion hazard and with gases that may corrode metals and destroy the insulation, and do not use this product in a space with conductive dust.
7. Please store and use this product at rated supply voltage and stated temperature, height above sea level and humidity.
8. Failure to follow these instructions can result in death, serious injury, or equipment damage.
9. The warranty period of this product shall be 18 months under normal use.

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