



RCCB SMART ACCESSORIES USER MANUAL

Thank you for choosing Floatless Level Switch Control Relay. Please read this manual before installation, operation and maintenance.

OVERVIEW

Applications
Can be widely used in power grid terminal line, such as meter box, new energy circuit management, PV solar control box, smart electricity, smart home, new energy vehicle charging pile, and so on.

Function Features

- It can be matched with circuit breaker/leakage protection switch and automatically reclose when RCCB trips unexpectedly, No need for manual closing, reduce the cost of manual maintenance, and eliminate faults in time to improve efficiency.
- Built in 3 reclosing times, continuous closing failure within 15 minutes can send alarm through auxiliary contact.
- With manual / automatic selector switch.
- With mechanical / electronic double locking function.
- The shaft transmission mode is more stable and reliable.
- Can match other accessories.
- Work status is indicated by LED.
- 1-MODULE.

STANDARD AND QUALITY CERTIFICATES

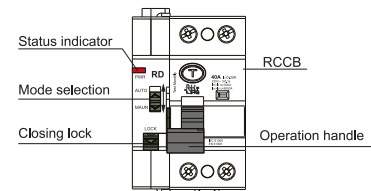
EN 61008-1

TECHNICAL PARAMETERS

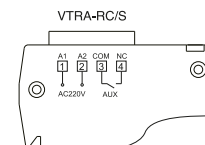
Control mode	Auto Reclosing
Supply terminals	A1-A2
Voltage range	DC12V
Power input	DC max.1W(standby) max.20W(action)
Voltage range	AC 220V(50-60Hz)
Supply voltage tolerance	-10%~+10%
Power input	AC max.1VA(standby) max.20VA(action)
Supply voltage tolerance	-10%~+10%
Supply indication	red LED
Action time	≤1s
Auto reclosing times	3
Auto reclosing interval time	10s-60s-300s
Reset the closing times	No trip or manual reset within 15 minutes after successful closing
Mechanical life	10000
Electrical life(AC1)	4000
Operating temperature	-20℃ to +55℃ (-4℉ to 131℉)
Storage temperature	-35℃ to +75℃ (-22℉ to 158℉)
Mounting/DIN rail	Din rail EN1EC 60715
Protection degree	IP20
Operating position	any
Overvoltage category	III.
Pollution degree	2
Max. cable size(mm ²)	solid wire max.1×2.5or 2×1.5with sleeve max.1×2.5(AWG 12)
Dimensions	82×18×78mm
Weight	80g

Mode	Electromagnetic
Type(wave form of the earth leakage sensed)	B
Rated current I _n	25,40,63,80A
Pulse	2P 4P
Rated voltage U _e	2P 240V~, 4P 415V~
Insulation voltage U _i	500V
Rated frequency	50/60Hz
Rated residual operation current(I _{Δn})	30, 100, 300mA
Rated residual making and breaking capacity(I _{Δm})	500(I _n =2540A) 630(I _n =63A)
Short-circuit current I _{sc}	10,000A
SCP/DP fuse	
Break time under I _{Δn}	≤0.1s
Rated impulse withstand voltage(1.5/50) U _{imp}	4000V
Dielectric test voltage at ind.Freq. for 1min	2.5kV
Electrical life	2,000 Cycles
Mechanical life	4,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature(with daily averages35℃)	-5℃~+40℃
Storage temperature	-25℃~+70℃
Terminal connection type	Cable/Pin-type busbar/U-type busbar
Terminal size top/bottom for cable	35mm ² 18-34AWG
Terminal size top/bottom for cable	35mm ² 18-34AWG
Tightening torque	2.5Nm 22In-lbs
Mounting	On DIN rail EN60715(35mm) by means of fast clip device
Connection	From top and bottom

PRODUCT FUNCTIONS



WIRING DIAGRAM



TRIPPING CURRENT RANGE

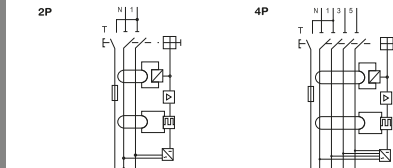
Lagging Angle	I _{Δn} ≤0.01A	
	0°	0.35(I _n ≤1.4In)
	90°	0.25(I _n ≤1.4In)
135°	0.11(I _n ≤1.4In)	
Alternative Current Sensitive		Surge current proof
Pubaling direct current sensitive		Surge current proof

B class
Tripping is ensured for sinusoidal AC residual currents pulsed DC residual currents, alternating residual sinusoidal currents up to 1000Hz, pulsed direct residual currents and for smooth direct residual currents, whether applied suddenly or increasing slowly.

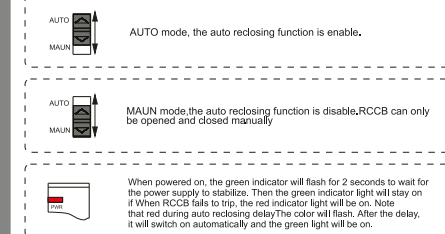
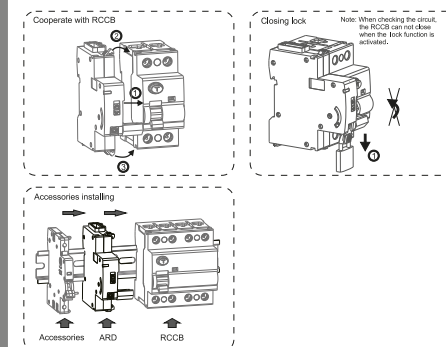
They react to AC and pulsed DC fault current which reach 0 or almost 0 within one time period of the mains frequency.

RCCB's surge capacity:
Surge tripping at standardized 8/20 us surge-current waves acc.to VDE 6432 Part 2 with surge current values of up to 250kA.

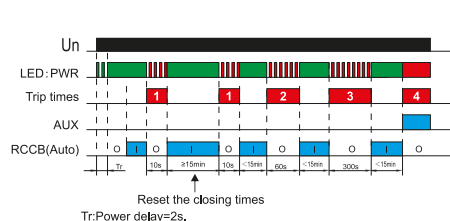
CIRCUIT DIAGRAM



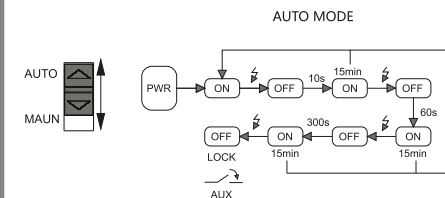
INSTALLATION AND USE



FUNCTIONS DIAGRAM

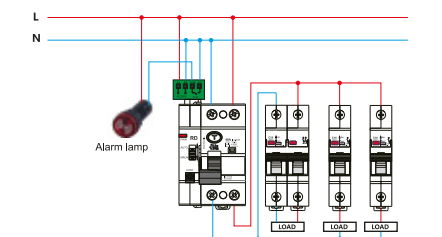


VTRA-RC/S has automatic closing function,The closing logic is shown in the figure below:



Note: If the closing times and delay time need to be customized, please contact our company.

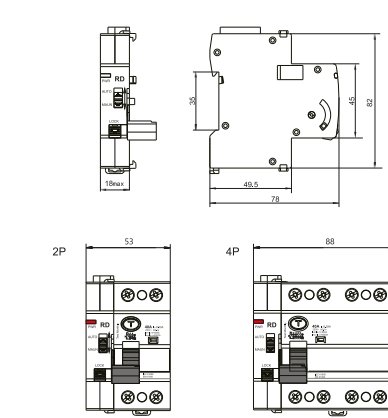
CONNECTION



COMMON FAULTS

Fault description	Resolvent
1 Unable to close or open.	1. Please confirm whether the power supply voltage is normal. 2. Please confirm whether the working mode is set in AUTO mode. 3. Please confirm the buckle of the electric operation mechanism and RCCB.
2 Trip immediately after closing.	1. Please check the circuit to confirm whether there is overload / short circuit / leakage fault at the lower end of RCCB. 2. Whether the circuit breaker is damaged or not, and whether it is slipped.

DIMENSIONS(mm)



WARRANTY CONDITIONS

- Warranty period starts as of the delivery date of the product and it is 2 years.
- Warranty covers the malfunctions likely to occur due to the manufacturing defects of the product and within the warranty period.
- The product including all of its parts is under warranty as a whole. If the product turns out to be defective, the consumer can use one of the following rights stipulated in Article 11 of Consumer Protection Law no. 6502:
 - a- Withdrawal from the contract
 - b- Demanding discount from sales fee
 - c- Demanding free repair,
 - d- Demanding the replacement of the sold one with a fungible one free from defects.
- In case the consumer chooses the right of free repair among those rights; the dealer is obliged to repair the product or have the product repaired without claiming any fee under the name of replaced part fee, labor cost or for any other reasons. The consumer can also use the right of free repair against the manufacturer or exporter. The dealer, manufacturer and exporter are jointly and severally liable for the usage of this right by the consumer.
- In case the consumer uses the right of free repair and if the product - fails within the warranty period again and - the maximum period required for the repair is exceeded and - Authorized service station, dealer, manufacturer or exporter state that it's not possible to repair the product in a report, the consumer can demand the return of the product fee, fee discount at the ratio of the defect or the replacement with the one free of defects, if possible, from the dealer. The dealer can not reject the demand of the consumer. In case this demand is not met, the dealer, manufacturer and exporter shall jointly and severally be held responsible.

WARRANTY CONDITIONS

- The repair period of the product can not exceed 20 business days.
- This period starts on the notification of the failure on the product to the authorized service station or the dealer within the warranty period and from the date of delivery of the product to the authorized service station out of warranty period. In case of not eliminating the product malfunction within 10 business days, manufacturer or importer is obliged to dedicate another product with similar characteristics to the use of the consumer until the completion of the product repair. In case the product fails within the warranty period, elapsed time is added to the warranty period.
- Usage of the product contrary to the rules stipulated in user's manual, operating out of determined voltage, current and environmental conditions, damage on the cable connection due to the user's fault and failure of the product due to the facts arising from the fire, flood, earthquake, lightning and similar disasters are not under warranty.
- The consumer can apply to the arbitration committee for consumers or the consumer court where the consumer operations are made or in the residential area for the disputes to be occurred regarding the usage of the rights arising from the warranty.
- In case the dealer doesn't provide this certificate of warranty, the consumer can apply to the General Directorate of Consumer Protection and Market Surveillance of Ministry of Customs and Trade.

WARNING

- Ensure that the power is cut off before the assembly of the products
- Connection and assembly of the electrical devices should be carried out only by the technical personnel having certificate of competency.
- No responsibility is assumed for the entire of the malfunction, accident and loss arising from the assembly or interference of the persons not having the competency certificate.
- Never use alcohol, cologne, detergent or other similar chemicals for cleaning. Do not perform wet cleaning do not contact the product with water when the product is energized.
- Keep the product away from the damp or wet environment during the transportation and shipping.

PANASONIC AND ENVIROMENT

As Panasonic, we are aware of the contribution of a balanced relation established between human and nature to the sustainable life. Thanks to our continuous innovation and R&D studies, we prefer materials and technologies that are not affecting the environment in a negative way during the production and usage of the products starting from the designing phase. We take necessary measures to use energy and natural sources in a more efficient way.

This symbol indicates separate collection of waste electrical and electronic equipment.

PANASONIC CUSTOMER RELATIONS

Dear Customer,
We believe in providing quality service to your as well as offering quality products.



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