

CONTROL & SAFETY TIME RELAYS

1. INTRODUCTION

These type of relays are used for "Safety and Controlling" purposed applications in the industry.

2. USAGE

RR-FL, RR-FLT, RR-FL1, RR-FL2, RR-FLV2: RR-FLXX is used to turn on and off a system or motor in an adjustable time period. Operating and delay times are adjustable. Application areas are mainly; dosage (dosaging) arrangement units, advertising boards, etc. In time of the supply voltage applied, the in-built relay remains switched on during the t_{on} period. At the end of t_{on} period it is switched off and keeps its position during toff. At the end of t_{off} it is switched on again.

RR-SX2, RR-SX2T, RR-SX4T: Designed to inverse the rotation of the electric motors in certain time intervals. Switching on time for both right-left relays vary in between 0 sec. - 60 sec. This adjustment is done via t_{on} button. Interchanging time period from one relay to another relay varies from 0 sec. - 60 sec. t_{off} and t_{on} time adjustment is valid for both relays. Once the supply voltage is applied the right relay switches on and remains be switched on during the adjusted t_{on} period. At the end of t_{on} period the right relay switches off and remains inactive during the adjusted t_{off} period. At the end of the t_{off} period the left relay switches on and remains switched on for t_{on} time period. At the end of t_{on} period the right relay switches on again. The relay repeats the operation until energy is cut off.

RR-YΔ, RR-VYΔ : Instantaneous voltage peaks and high current passing may cause serious damages on the mains and the control parts of three phase electric motors in time of demurrage. Moreover, this can be also followed by a fuse-tripping. In order to prevent such damages the motors must be operated step by step. Star-Delta is used for safety operation of Star-Delta starter systems and to avoid high current passing (demurrage) at initial-start up of the motor. Once the supply voltage is applied the STAR contacts (1, 2) are closed and then released after the operating time. At the end of the adjusted time period STAR relay switches off and pauses for 0.5 second. After that, DELTA relay switches on and keeps its position until the supply voltage's been cut off.

RR-DG: RR-DG is designed for power generators and/or auxiliary energy applications to be kept at "on" position within a delay time prior to having start up is vitally important in time of electricity interruptions. The relay is switched on once the device is energized and the relay keeps this position within the set time t period. At the end of the time period the relay switches off.

NOTE: Custom-made devices with different standarts are specified on their label.

Product Scale Information

s: Second m: Minute h: Hour

3. USAGE AND SAFETY

- Turn off power during connection/wiring.
- Check correct mains voltage/wiring terminal.
- Installation shall only be performed by qualified personnel.
- Do not use any solvent or alike for cleaning.

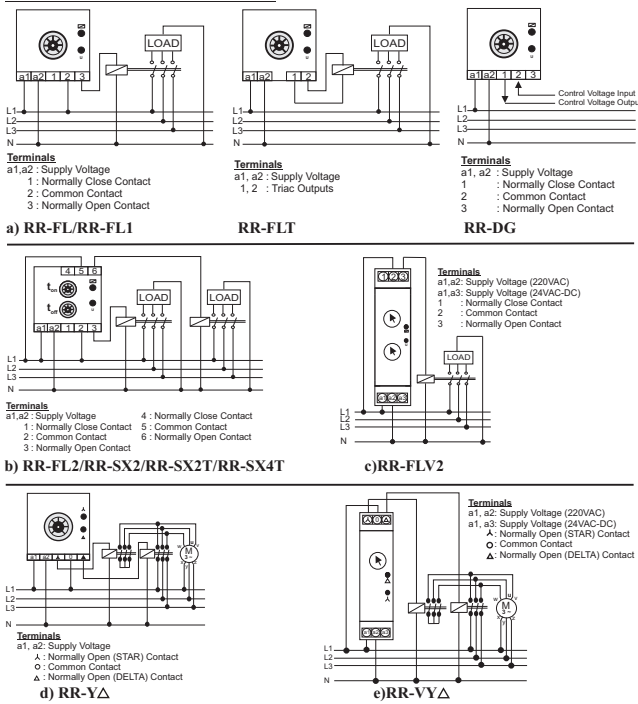
5. TECHNICAL SPECIFICATIONS

Model	Un	Operating Time Ranges	Contact	Connection Diagrams	Dimensions	Mount Type	Protection Class	Plastic Material	Operating Temperature	Weight
RR-DG	220VAC 1Phase + 1Neutral 50-60 Hz (0,8-1,2)xUn	0,1-6 sec. (adjustable)	1 Inversor 250VAC-5A	a	1	Rail Mounted	IP 20	V0 Nonflammable	-25°C ... +65°C	285 gr.
RR-FL		ton: 0,5 sec.(fixed) toff: 0,1-12 sec.(adjustable)	Triac Output 250VAC-5A	a	1					150 gr.
RR-FLT			1 Inversor 250VAC-5A	a	1					150 gr.
RR-FL1		ton: 2-60 sec. (adjustable) toff: 2-60 min.(adjustable)	2 Inversor 250VAC-5A	b	2					150 gr.
RR-FL2			c	4	170 gr.					
RR-FLV2	220VAC/24VAC-DC 1Phase + 1Neutral	tstar: 0,1-12 sec. (adjustable)	Star: 250VAC-5A Delta: 250VAC-5A	e	4					90 gr.
RR-VYA				d	1					160 gr.
RR-SX2	220VAC 1Phase + 1Neutral 50-60 Hz (0,8-1,2)xUn	ton: 2-60 sec. (adjustable) toff: 6 sec.(fixed)	2 Inversor 250VAC-5A	b	1					165 gr.
RR-SX2T				b	2					300 gr.
RR-SX4T		t(right): 2-60 sec. (adjustable) t(left): 2-60 sec. (adjustable)	b	3	250 gr.					

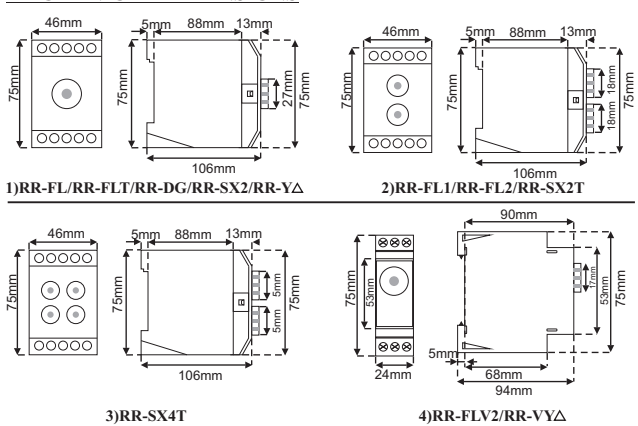
*On-Off time setting of "Right and Left" are independently adjustable in RR-SX4T model.

4. MECHANICAL DIMENSIONS AND CONNECTION DIAGRAMS

CONNECTION DIAGRAMS



MECHANICAL DIMENSIONS



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