RV and JH13PN

Plug-in type annunciator relay units RV and JH13PN

■ Description

RV series are plug-in octal base-type relays designed for modular use. They combine the necessary functions for annunciator systems and simplify the connection to bells, buzzers, alarm lights, flicker relays and lamp test pushbuttons, etc. in alarm systems. Alarm systems require many types of annunciators i.e. alarm lights which flash on and off, or which light in the case of trouble, and trouble pilot lamps with a MEMORY. Thus the relay unit varies according to its usage and the type of annunciator used. FUJI can supply a wide range of relay units to meet the needs of clients. A flicker relay JH13PN is now available. Schematic diagrams of alarm circuits can be supplied.

■ Features

 A relay unit is available to match your alarm system and to permit a simplified circuit.

■ Specifications

Annunciator relays



- We can supply 10 different kinds of relay units which meet every situation
- The compact design allows density mounting and so even if a number of units are installed together the space they occupy is small.
- · Low power consumption
- The contact has a rated thermal current of 3 Amps.
- Highly dependable and trouble-free Relay units use the highly dependable FUJI miniature relay HH54B.
- Either lock or non-lock systems are available.

- Relay has a dielectric strength of 2000V AC for 1 minute.
- Alarm input contacts can be either normally open or normally closed.
- With surge suppression device Surges are suppressed by a surge suppressor. Therefore high sensitive relays or semiconductors can be connected to an annunciator circuit without malfunctions or damage.
- Available for uses input and output circuits in opposite polarity.

Туре		RV1□	RV2□	RV3□	RV4□	RV5□	RV1-Z□	RV2-Z□	RV3-Z□	RV4-Z□	RV5-Z□
Ordering code *		RV1A-□	RV2A-□	RV3A-□	RV4A-□	RV5A-□	RV1Z-□	RV2Z-□	RV3Z-□	RV4Z-□	RV5Z-□
Operating coil rated voltage	Input Output			24 to 110V DC 24 to 240V AC, 50/60Hz							
Power consumption		AC: Approx. 3.8VA, DC: Approx. 2.4W				AC: Approx. 3.8VA, DC: Approx. 2.4W					
Operating voltage range		85% to 110% of rated voltage				85% to 110% of rated voltage					
Contact rated thermal current Auxiliary contact arrangement		3A -	3A SPDT	3A 1NO	3A 1NC	3A 1NC	3A -	3A SPDT	3A 1NO	3A 1NC	3A 1NC
Mechanical durability		50 million operations									
Operating time at rated voltage		Max. 20msec. (AC coils of RV3 and RV4: Max. 25ms.)									
Release time		AC: Max. 20msec. DC: Max. 50msec.									
Ambient temperature		-10°C to +40°C (no icing)									
Insulation resistance		100M Ω at 500V DC megger									
Dielectric strength		2000V AC rms 1 minute between input and output 1000V AC rms 1 minute between each live part									

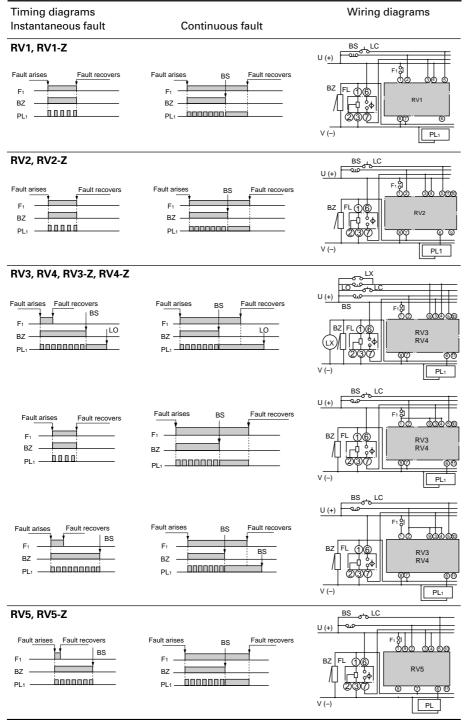
Note * Enter the operating coil voltage code in the ☐ mark as follow: 24V AC:AE, 48V AC:AF, 100V AC:A1, 110V AC:AH, 200V AC:A2, 220V AC:AM, 240V AC:AP 24V DC:DE, 48V DC:DF, 100V DC:D1, 110V DC:DH

Flicker relay

Type (Ordering code)		JH13PN-□ (RF1-□)				
Coil	Rated operating voltage 100–110/200–220V AC, DC (selectable) 24, 48V AC/DC					
	Operating voltage range	85 to 120% of rated voltage				
	t contact arrangement ring period	SPDT 600msec.				
Conta	ct rated thermal current	6A				
Insulation voltage		250V				
Mechanical durability		10 million operations				
Ambient temperature		-10°C to +40°C (no icing)				
Insulation resistance		100M Ω at 500V DC megger				
Dielectric strength		2000V AC rms 1 minute between control circuit and contact 1000V AC rms 1 minute between open contacts				

Note: Enter the operating coil voltage code in the ☐ mark as follow: 24V AC/DC:CE, 48V AC/DC:CF, 100/110V AC/DC, 200/220V AC/DC:CH

■ Timing and wiring diagrams/Flicker indication system



F1: Fault signal input contact

BZ: Buzzer (or bell)

PL: Indicating lamp

FL: Flicker relay

BS: Buzzer stop switch

LO: Lamp off switch

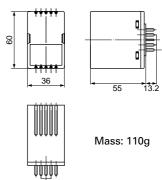
LC: Lamp checking switch

LX: Lock relay

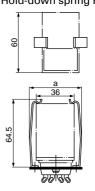
■ Dimensions, mm

Annunciator relay/RV

RV1, RV1-Z: 8pin Other types: 11-pin

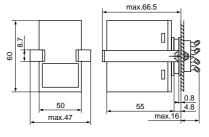


Hold-down spring FX1B



Socket type	а	
Soldering terminal	8 GB (8-pin) 11GB (11-pin)	47mm
Screw terminal	TP38S (8-pin) TP311S (11-pin)	41mm 47mm

• Flicker relay/JH13PN



Mass: 94g

■ Ordering information

Specify the following:

- 1. Type number
- 2. Type number of sockets and hold-down spring
- 3. Type number of flicker relay for flickering indication system

Annunciator Relay Units RV series and JH13PN

■ Wiring diagrams

Туре	AC rating (Input/output: AC)	DC rating (Input/output: DC)	Z type (Input: DC, output: AC)
RV1	02 30 6 7 2 30 6 87 6	02 34 6	34 S
RV2	(1/2) (3/4) (5/10) (2/2) (3/4) (5/10) (3/4) (5/10) (3/4) (5/10) (3/4) (5/10) (3/4) (5/10) (3/4) (5/10) (3/4) (5/10) (3/4) (5/10) (3/4) (5/10) (3/4) (5/4) (5/4) (3/4) (5/4) (3/4) (3/4) (5/4) (3/4)	(1) (2) (3) (5) (1) (0) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	12 34 51100 1 87 6 9
RV3	(1)(2) (9)(3)(4)(6)(1) (1)(2) (9)(3)(4)(6)(1) (1)(2) (9)(3)(4)(6)(1) (1)(2) (9)(3)(4)(6)(1) (1)(2) (9)(3)(4)(6)(1) (1)(2) (9)(3)(4)(6)(1) (1)(2) (9)(4)(4)(4)(4) (1)(2) (9)(4)(4)(4) (1)(2) (9)(4)(4)(4) (1)(2) (1)(4)(4)(4) (1)(4)(4)(4)(4)(4) (1)(4)(4)(4)(4)(4) (1)(4)(4)(4)(4)(4) (1)(4)(4)(4)(4) (1)(4)(4)(4)(4) (1)(4)(4)(4)(4) (1)(4)(4)(4)(4) (1)(4)(4)(4)(4) (1)(4)(4)(4)(4) (1)(4)(4)(4) (1)(4)(4)(4) (1)(4)(4)(4) (1)(4)(4)(4) (1)(4)(4)(4) (1)(4)(4) (1)(4)(4) (1)(4)(4) (1)(4)(4) (1)(4)(4) (1)(4)(4) (1)(4)(4) (1)(4)(4) (1)(4)(4) (1)(4)(4) (1	12 934 500 X X X X X X X X X X X X X	12 934 50 87 611
RV4	1) 2) 934510 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 934500	1) 2
RV5	(192 34 50) × / / / / / / / / / / / / / / / / / / /	192 34 500 x x X X X X X X X X X X X X X	192 34 500 × ** ** ** ** ** ** ** ** **

■ Sockets

Annunciator relay	Flicker relay	Applicable socket		
Туре	Туре		Type	Mass (Approx.)
RV1, RV1-Z	JH13PN	Rear connection soldering terminal (for 8-pin) Front connection screw terminal (for 8-pin) Rail mounting screw terminal (for 8-pin)	8GB TP38S TP38X	12.5g 33g 45g
RV2, RV2-Z RV3, RV3-Z RV4, RV4-Z RV5, RV5-Z		Rear connection soldering terminal (for 11-pin) Front connection screw terminal (for 11-pin) Rail mounting screw terminal (for 11-pin)	11GB TP311S TP311X	13g 46g 59g
Hold-down spring/Fro Hold-down spring/Re			FX1B FX1C	3g 3g

■ Dimensions of sockets: See page 03/45.