

# Annunciator Relay Units

## 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

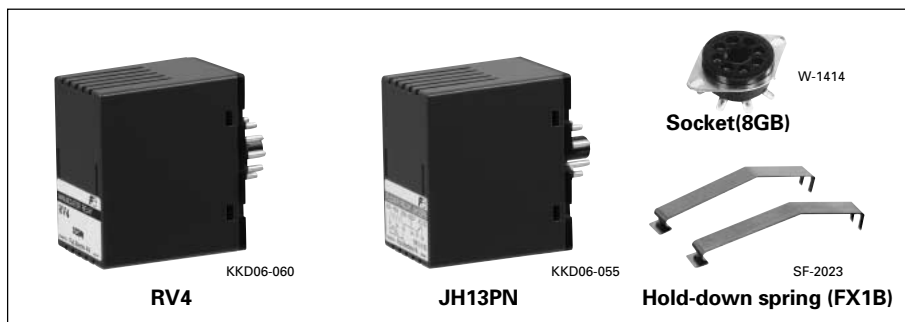
Type	RV1□	RV2□	RV3□	RV4□	RV5□	RV1-Z□	RV2-Z□	RV3-Z□	RV4-Z□	RV5-Z□
Ordering code *	RV1A-□	RV2A-□	RV3A-□	RV4A-□	RV5A-□	RV1Z-□	RV2Z-□	RV3Z-□	RV4Z-□	RV5Z-□
Operating coil rated voltage	24 to 240V AC, 50/60Hz		24 to 110V DC			24 to 110V DC				
Input Output	24 to 240V AC, 50/60Hz		24 to 110V DC			24 to 240V 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	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A
Auxiliary contact arrangement	-	SPDT	1NO	1NC	1NC	-	SPDT	1NO	1NC	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	100MΩ 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

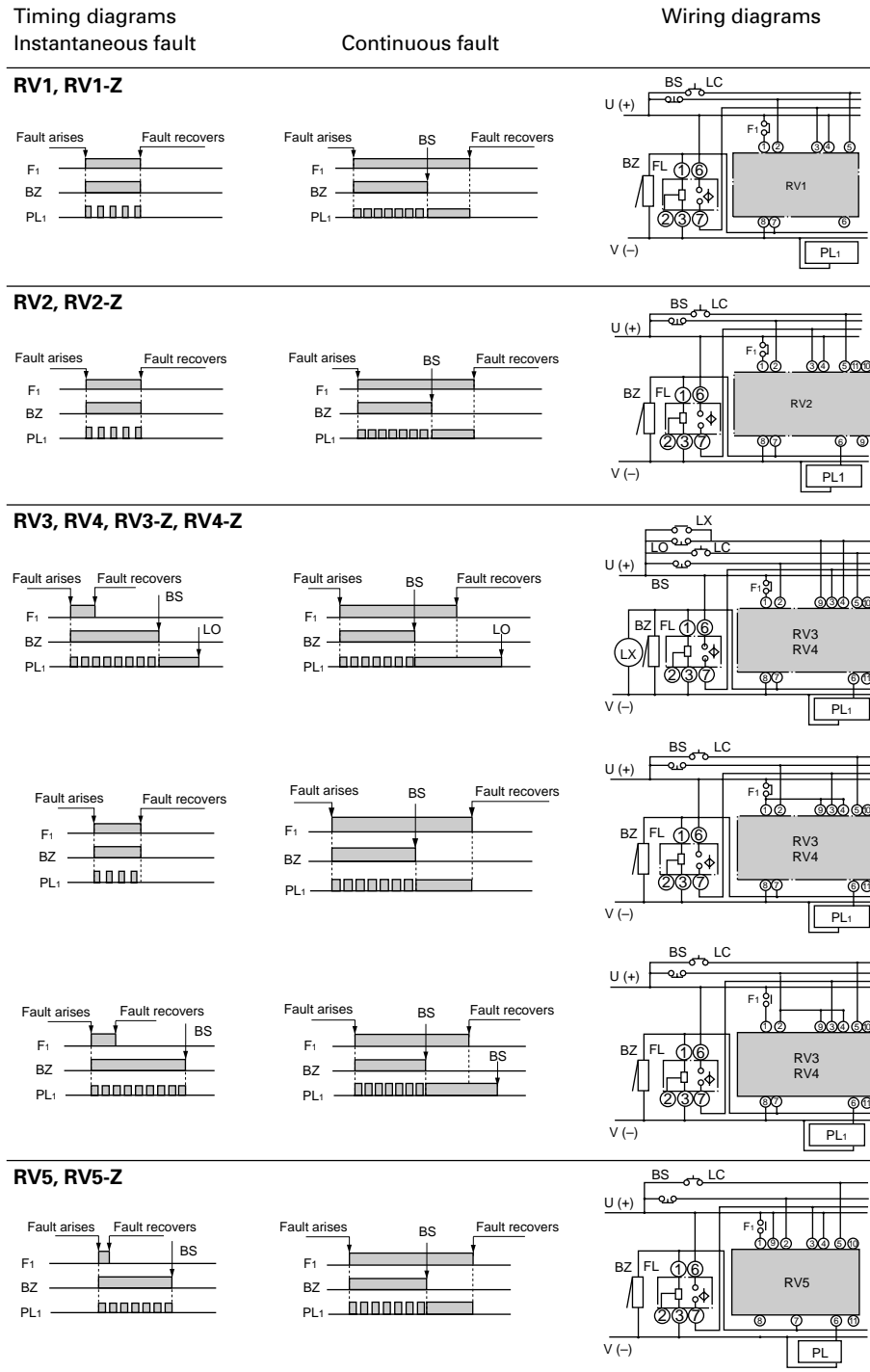
Type (Ordering code)	JH13PN-□ (RF1-□)	
Coil	Rated operating voltage	100-110/200-220V AC, DC (selectable) 24, 48V AC/DC
	Operating voltage range	85 to 120% of rated voltage
Output contact arrangement	SPDT	
Flickering period	600msec.	
Contact rated thermal current	6A	
Insulation voltage	250V	
Mechanical durability	10 million operations	
Ambient temperature	-10°C to +40°C (no icing)	
Insulation resistance	100MΩ 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



- 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.

### ■ Timing and wiring diagrams/Flicker indication system

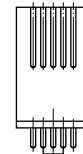
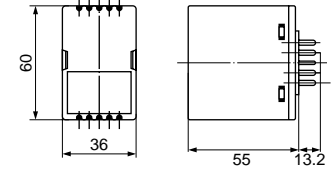


F1: Fault signal input contact  
 BZ: Buzzer (or bell)  
 PL: Indicating lamp  
 FL: Flicker relay  
 BS: Buzzer stop switch  
 LO: Lamp off switch  
 LC: Lamp checking switch  
 LX: Lock relay

### ■ Dimensions, mm

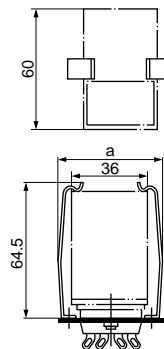
#### ● Annunciator relay/RV

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



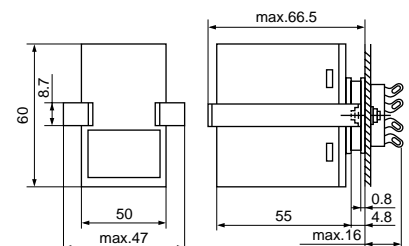
Mass: 110g

Hold-down spring FX1B



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

#### ● Flicker relay/JH13PN



Mass: 94g

### ■ Ordering information

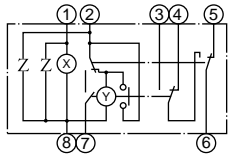
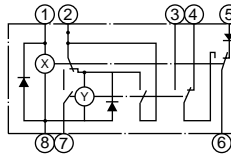
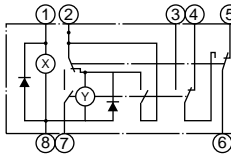
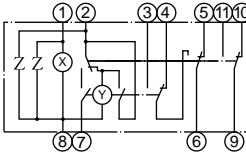
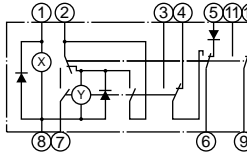
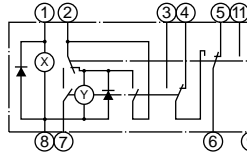
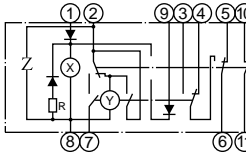
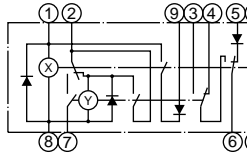
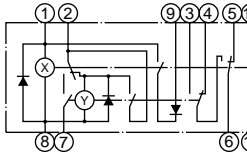
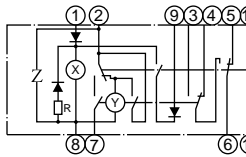
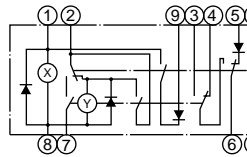
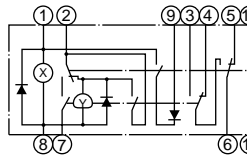
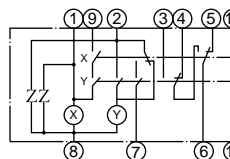
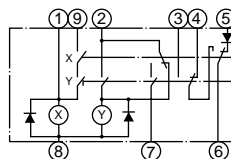
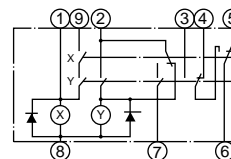
Specify the following:

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

Type	AC rating (Input/output: AC)	DC rating (Input/output: DC)	Z type (Input: DC, output: AC)
RV1			
RV2			
RV3			
RV4			
RV5			

### ■ Sockets

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

■ Dimensions of sockets: See page 03/45.