



# 6mm Interface Relays - RV8H Series

## Key Features

- Space-saving 6mm width
- Only 70mm in height from DIN rail
- Gold-plated contacts
- Pre-assembled relay and DIN mount socket
- Universal screw terminals (flat and Phillips)
- Universal AC/DC socket with built-in surge suppression and green LED
- Lever for easy locking and removal of relay
- Wide input voltage range: 6 to 240V
- High dielectric strength and impulse withstand voltages
- Sensitive coil 170mW
- Reverse Polarity protected
- 400V AC maximum switching voltage
- 1500VA maximum switching power
- RoHS compliant

## Specifications

Number of Poles		1 pole
Contact Configuration		1 form C (SPDT)
Contact material		AgNi (Au plating)
Degree of Protection		IP20
Dielectric strength	Between contact and coil	4,000V AC for 1min
	Between pole	1,000V AC for 1min
Vibration Resistance	Operating extremes	NO: Frequency 10 to 55Hz, Amplitude 1.0mm NC: Frequency 10 to 55Hz, Amplitude 0.4mm
	Damage limits	Frequency 10 to 55Hz, Amplitude 1.0mm
Shock Resistance	Operating extremes	NO: 49m/s <sup>2</sup> (5G) NC: 29.4m/s <sup>2</sup> (3G)
	Damage limits	980m/s <sup>2</sup> (10G)
Electrical Life		AC load: 10,000 operations minimum* DC load: 10,000 operations minimum*
Mechanical Life (without load)		Over 10,000,000 operations
Operating Temperature		-40 to +70°C (RV8H-L-D6, D9, D12, D18, D24, AD12, AD18, AD24, AD48, AD60) -40 to +55°C (RV8H-L-AD110, AD220) without freezing
Operating Humidity		5 to 85% (without condensation)
Weight		Approx. 30g

\*Operation frequency 1800 operation per hour.

## Coil Ratings

Rated Voltage	Rated Current +15% (mA)	Circuit AC Resistance +10% (Ω)	Circuit DC Resistance +10% (Ω)	Operating Characteristics			Power Consumption		
				Pickup Voltage	Dropout Voltage	Maximum Allowable voltage			
DC	6V	35	-	80% max	5% min	110%	0.21W		
	9V	18.6	-				0.2W		
	12V	14.6	-				0.2W		
	18V	11.6	-				0.2W		
	24V	10.6	-				0.25W		
AC/DC	12V	15.5	755			80% max	5% min	110%	0.2W
	18V	13.3	1365						0.25W
	24V	13.7	1730						0.33W
	48V	4	11880						0.2W
	60V	3.4	17600						0.2W
	110V - 125V	3.4 - 3.9	31790 - 31890	0.5W					
	220V - 240V	3.3 - 3.6	65670 - 66070	0.85W					



Top view with Marking Plate



(when using combination of RV1H relay and SV1H socket)

## Contact Ratings

Allowable contact power	Resistive load	1500VA, 180W
Rated Load	Resistive load	250V AC 6A, 30V DC 6A
Allowable Switching Current		6A
Allowable Switching Voltage		400VAC, 125VDC
Allowable Switching Power		1500VA, 180W
Minimum Applicable Load		6VDC/10mA



## Complete Part Numbers (Relay & Socket)

Coil voltage	Part number
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DC	6V	RV8H-L-D6
	9V	RV8H-L-D9
	12V	RV8H-L-D12
	18V	RV8H-L-D18
	24V	RV8H-L-D24
AC/DC	12V	RV8H-L-AD12
	18V	RV8H-L-AD18
	24V	RV8H-L-AD24
	48V	RV8H-L-AD48
	60V	RV8H-L-AD60
	110V - 125V	RV8H-L-AD110
	220V - 240V	RV8H-L-AD220

## Replacement Parts

Complete Part Number	Applicable Socket Part Number	Applicable Relay Part Number
		
RV8H-L-D6	SV1H-07L-5	RV1H-G-D5
RV8H-L-D9	SV1H-07L-5	RV1H-G-D9
RV8H-L-D12	SV1H-07L-5	RV1H-G-D12
RV8H-L-D18	SV1H-07L-5	RV1H-G-D18
RV8H-L-D24	SV1H-07L-5	RV1H-G-D24
RV8H-L-AD12	SV1H-07L-1	RV1H-G-D12
RV8H-L-AD18	SV1H-07L-1	RV1H-G-D18
RV8H-L-AD24	SV1H-07L-1	RV1H-G-D24
RV8H-L-AD48	SV1H-07L-2	RV1H-G-D48
RV8H-L-AD60	SV1H-07L-2	RV1H-G-D60
RV8H-L-AD110	SV1H-07L-3	RV1H-G-D60
RV8H-L-AD220	SV1H-07L-4	RV1H-G-D60

## Accessories

Description	Color	Part Number
Jumper (20 combs*) 	Black	SV9Z-J20B
	Gray	SV9Z-J20W
	Blue	SV9Z-J20S
Spacer (circuit separator)** 	-	SV9Z-SAW
Marking plate (10 pcs) 	-	SV9Z-PW10

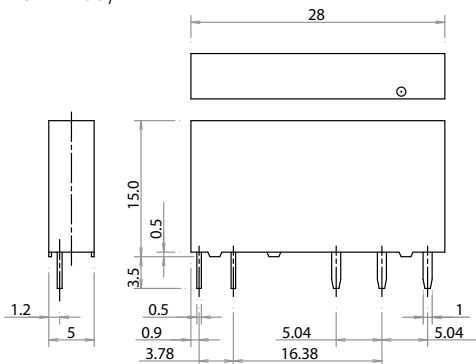
\*Jumper combs come with 20 points, if shorter lengths are needed simply cut off the excess points.

\*\*Width of spacer: 2mm

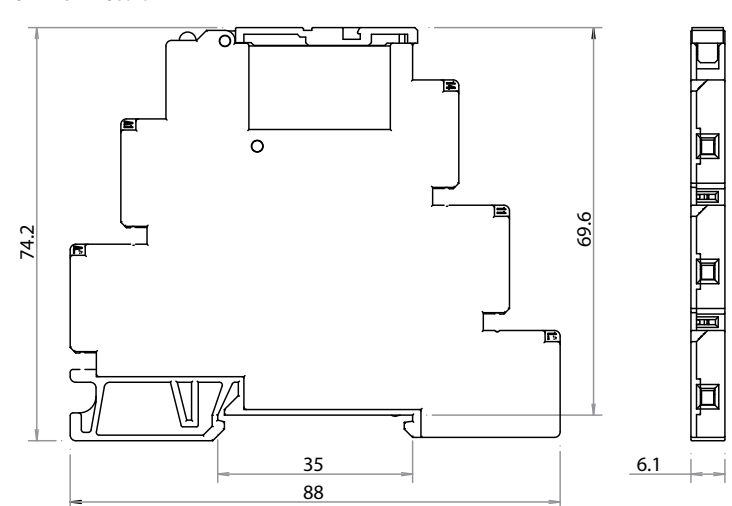
Note: When using a cut jumper, please use a spacer on the cut side. For additional information see instruction sheet.

## Dimensions (mm)

RV8H-L\* Relay



SV1H-07L\* Socket



Note: Drawings are not to scale.

