

# 6mm Interface Relays - RV8H Series

**NEW**  
Spring Clamp  
Terminals

## Screw Terminals



Top view with  
Marking Plate

Only 70mm from DIN rail!

## Spring Clamp Terminals



Top view without  
Marking Plate

Only 70mm from DIN rail!

## 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)
- Spring clamp terminals
- 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
- 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 0.5mm NC: Frequency 10 to 55Hz, Amplitude 0.2mm
	Damage limits	NO: Frequency 10 to 55Hz, Amplitude 0.5mm NC: Frequency 10 to 55Hz, Amplitude 0.2mm
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)
Mechanical Life (without load)		Over 10,000,000 operations
Operating Temperature		-40 to +70°C without freezing (-40 to +55°C for RV8H-L-AD110, AD220, RV8H-S-AD110, AD220)
Operating Humidity		5 to 85% (without condensation)
Weight (approx.)		30g (RV8H-L), 26g (RV8H-S)



## Coil Ratings

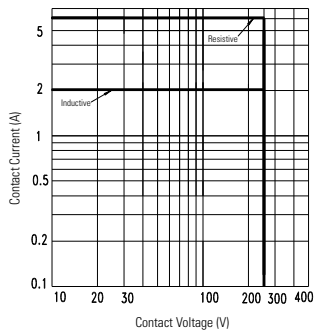
Rated Voltage	Rated Current +15% (mA)	Circuit AC Resistance +10% ( $\Omega$ )	Circuit DC Resistance +10% ( $\Omega$ )	Operating Characteristics			Power Consumption	
				Pickup Voltage	Dropout Voltage	Maximum Allowable voltage		
DC	6V	35	-	170	90% max	7% min	110%	0.21W
	9V	18.6	-	485				0.2W
	12V	14.6	-	820				0.2W
	18V	11.6	-	1550				0.2W
	24V	10.6	-	2270				0.25W
AC/DC	12V	15.5	755	800			110%	0.2W
	18V	13.3	1365	1345				0.25W
	24V	13.7	1730	1790				0.33W
	48V	4	11880	12230				0.2W
	60V	3.4	17600	17910				0.2W
	110V - 125V	3.4 - 3.9	31790 - 31890	32450 - 32900	0.5W			
	220V - 240V	3.3 - 3.6	65670 - 66070	65940 - 68570	0.85W			

## Contact Ratings

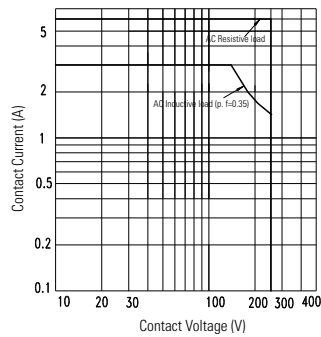
Allowable contact power	Resistive load	1500VA, 180W DC
Rated Load	Resistive load	250V AC 6A, 30V DC 6A
Allowable Switching Current		6A
Allowable Switching Voltage		400V AC, 125V DC
Allowable Switching Power		1500VA, 180W DC
Minimum Applicable Load		6V DC/10mA

## RV1H Relay

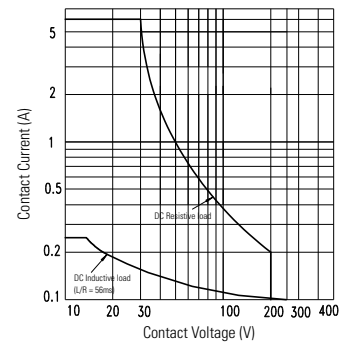
### Contact Ratings



### Maximum Switching Power AC



### Maximum Switching Power DC



## Part Numbers

### Complete Part Numbers (Relay & Socket)

Screw  
Terminals







Spring Clamp  
Terminals



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

### Accessories

Description	Color	Part Number
Jumper (20 combs*) 	Black	SV9Z-J20B
	Gray	SV9Z-J20W
	Blue	SV9Z-J20S
Spacer (circuit separator)** 	-	SV9Z-SA2W
Marking plate (10 pcs) 	-	SV9Z-PW10
Screwdriver 	-	BC1S-SD0

\*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.

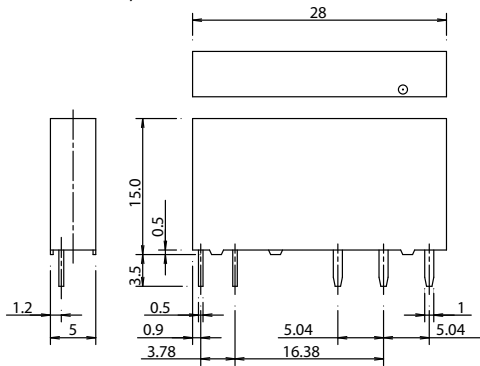
### Replacement Parts

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

	Complete Part Number	Applicable Socket Part Number	Applicable Relay Part Number
Spring Clamp Terminals		SV1H-07LS-5	RV1H-G-D5
	RV8H-S-D6		RV1H-G-D9
	RV8H-S-D9		RV1H-G-D12
	RV8H-S-D12		RV1H-G-D18
	RV8H-S-D18		RV1H-G-D24
	RV8H-S-D24	SV1H-07LS-1	RV1H-G-D12
	RV8H-S-AD12		RV1H-G-D18
	RV8H-S-AD18		RV1H-G-D24
	RV8H-S-AD24		RV1H-G-D48
	RV8H-S-AD48		RV1H-G-D60
	RV8H-S-AD60	SV1H-07LS-2	RV1H-G-D60
	RV8H-S-AD110		RV1H-G-D60
	RV8H-S-AD220		RV1H-G-D60

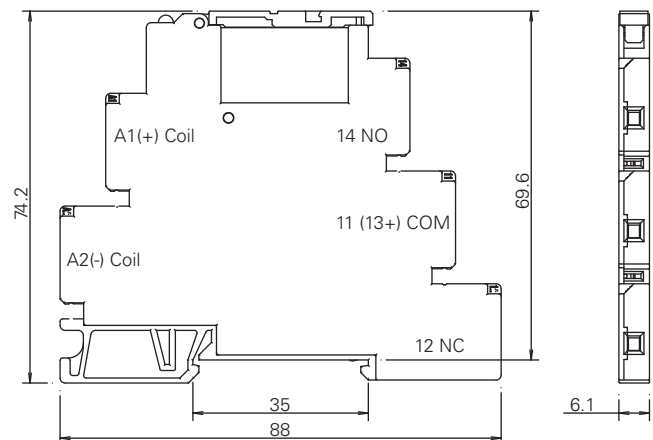
## Dimensions (mm)

RV1H-G Relay

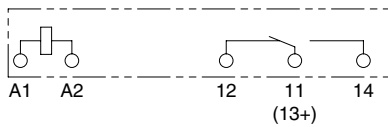


Note: Drawings are not to scale.

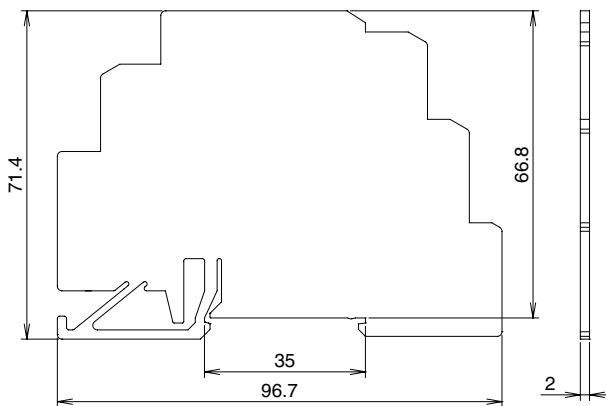
RV8H-L Screw Terminal



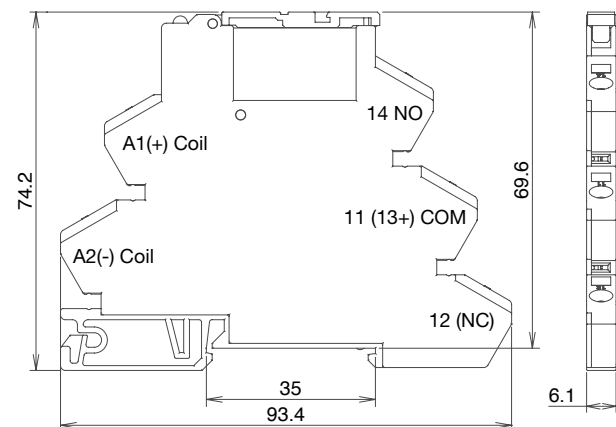
## Internal Connection (bottom view)



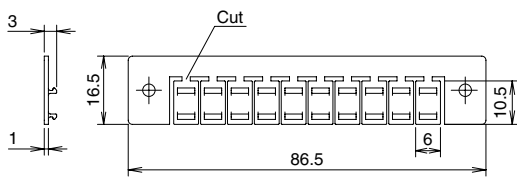
SV9Z-SA2W



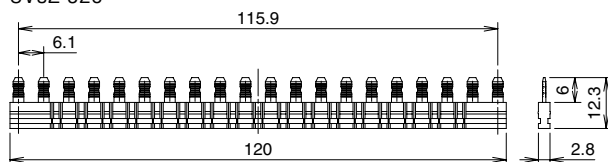
RV8H-S Spring Clamp Terminal



SV9Z-PW10



SV9Z-J20\*



\*Available in black, gray and blue.

Marking Plate Placement

