RS Series Relay Modules

At only 6.2mm thickness the RS series Relay module features a slim Din Rail mountable interface solution. The modules have a plug in construction and are available with or without the relay. The built in LED indicates the relay energizing state. The relay features a SPDT configuration and a maximum switching current of 6A. It is available with several standard coil voltages from 5VAC/DC up to 230V AC/DC.

There is a provision for fitting pluggable jumpers which reduces the wiring time. The modules have screw terminals with finger protection for wire termination and offer an IP 20 protection rating. The relay has an IP67 protection rating. Both the relay and the module are UL recognized.



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shown on DIN rail with relays and jumpers



Jumpers can be cut to required sizes.

Partition Plate, RSP-1



Marking Tags, RST-1

Part Number	Type number	Description	Std. Pk.
RSM-05CU	41F-1Z-C2-5 + HF41F/5-Z-S	6A@250VAC/30VDC,5VDC Coil, 6.2 mm, LED, SPDT	10
RSM-06CU	41F-1Z-C2-5 + HF41F/6-Z-S	6A@250VAC/30VDC,6VDC Coil, 6.2 mm, LED, SPDT	10
RSM-12CU	41F-1Z-C2-1 + HF41F/12-Z-S	6A@250VAC/30VDC,12VAC/DC Coil, 6.2 mm, LED, SPDT	10
RSM-24CU	41F-1Z-C2-1 + HF41F/24-Z-S	6A@250VAC/30VDC,24VAC/DC Coil, 6.2 mm, LED, SPDT	10
RSM-110CU	41F-1Z-C2-3 + HF41F/60-Z-S	6A@250VAC/30VDC,110VAC/DC Coil, 6.2mm, LED, SPDT	10
RSM-220CU	41F-1Z-C2-4 + HF41F/60-Z-S	6A@250VAC/30VDC,220VAC/DC Coil, 6.2mm, LED, SPDT	10
RSJ-RD	HF41F-AAJ-001-RD	Jumper for RSM, Red, 36A, 250V, 20 pole	10
RSJ-BK	HF41F-AAJ-001-BK	Jumper for RSM, Black, 36A, 250V, 20 pole	10
RSJ-BL	HF41F-AAJ-001-BL	Jumper for RSM, Blue, 36A, 250V, 20 pole	10
RSP-1	HF41F-AAS-001	Partition plate for RMS 2.2mm wide	10
RST-1	HF41F-AAT-001	Marking Tag strip for RSM, white, (16 tags per strip)	4
RSA-8P	RSA-8P	Relay module adapter, 8 pole for FBK20	1

RS Series Socket

CHARACTERISTICS

Ambient Temperature:	-40°C to +70°C (-40°F to +158°F)
Rated Voltage:	250VAC
Rated Current:	6A (per pole)
Insulation Voltage (Min.):	5000VAC
Protection:	IP20
Socket Material:	PA66+GF V0 (UL)
Contacts Spring Material:	QSn6.5-0.1
Terminal Torque:	0.6Nm (5.3 lb. in.)
Wire Strip Length:	7mm
Applicable Relay Type:	RSR Series (41F)

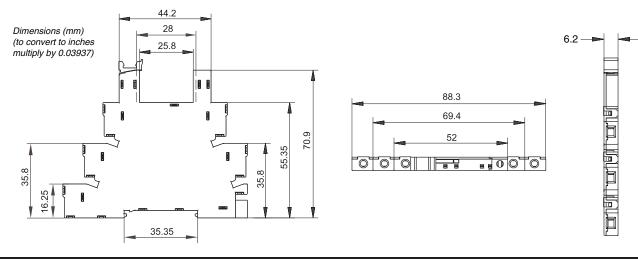
Part Number	Type number	Description
RSS-624U	41F-1Z-C2-1-555	For 12 to 24VAC/DC relays, IP20, LED
RSS-624D	41F-1Z-C2-5-555	For 5 to 24VDC relays, IP20, LED
RSS-4860U	41F-1Z-C2-2-555	For 48 to 60VAC/DC relays, IP20, LED
RSS-110U	41F-1Z-C2-3-555	For 110 to 125 VAC/DC relays, IP20, LED
RSS-220U	41F-1Z-C2-4-555	For 220 to 240 VAC/DC relays, IP20, LED





Notes: Module features/ functions:

- (1) LED indicates the coil energizing state.
- (2) Eliminates negative current of relays.
- (3) Rectifying function (only for VAC/DC types).



RS Series Subminiature Power Relay

FEATURES

- Slim size (width 5mm)
- · High breakdown voltage 4kV (between coil and contacts)
- Surge voltage up to 6kV (between coil and contacts)
- · Clearance/creepage distance: 8mm
- · Coil power consumption: 170mW
- Contact configuration: SPDT (Form C)
- · Environmental friendly product (RoHS compliant)
- Outlne Dimensions: 28.0 x 5.0 x 15.0mm



Type number



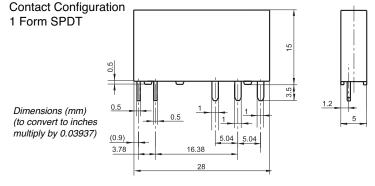


Description

CONTACT INFORMATION

Contact arrangement	SPDT		
Initial contact Resistance Max.	100m Ω (at 1A/6VDC) Gold plated: 30m Ω (at 1A/6VDC)		
Contact material	Ag		
	Resistive Load	6A/250VAC	
Contact rating		6A/30VDC	
	Pilot Duty	R300	
Max. switching voltage	400VAC / 125VD0		
Max. switching current	6A resistive		
Max. switching power	1500VA / 180W		
Mechanical life	10 million cycles		
Electrical life	10,000 cycles at 85°C (185°F)		

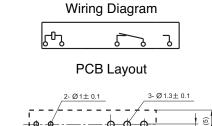
	RSR-05DCS	HF41F/5-Z-S-210	SPD1, 5 mm, 5VDC Coll, 1P67
	RSR-06DCS	HF41F/6-Z-S-210	SPDT, 5 mm, 6VDC Coil, IP67
	RSR-12DCS	HF41F/12-Z-S-210	SPDT, 5 mm, 12VDC Coil, IP67
	RSR-24DCS	HF41F/24-Z-S-210	SPDT, 5 mm, 24VDC Coil, IP67
	RSR-48DCS	HF41F/48-Z-S-210	SPDT, 5 mm, 48VDC Coil, IP67
	RSR-60DCS	HF41F/60-Z-S-210	SPDT, 5 mm, 60VDC Coil, IP67



5.04± 0.1

CHARACTERISTICS

Initial insulation resistance			1000mΩ (at 500VDC)		
Dielectric	Between coil & contacts		ontacts	4000VAC 1 min.	
strength	Between open contacts		ontacts	1000VAC 1 min.	
Operate time (at nominal voltage)			Max. 8ms		
Release ti	me (at nom	inal v	oltage)	Max. 4ms	
Shock resistance		Functional		50m/s ² (5g)	
		Destructive		1000m/s ² (100g)	
Vibration resistance			1n	nm double amplitude max	
				@1055 Hz, 6G max	
Humidity				5 to 85% RH	
Ambient temperature			-40°C to +85°C (-40°F to +185°F)		
Termination		Plug in; PCB mount			
Unit weight		5.4g (0.2 oz.)			
Construction		Sealed IP67. Flux proof			

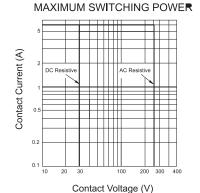


5.04± 0.1

 16.38 ± 0.1

<u>3.78</u> ± 0.1

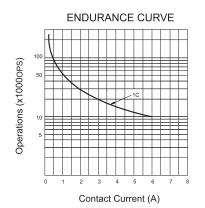
Part Number

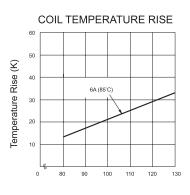


COIL

Coil power	5 to 24VDC: 170mW
consumption:	48VDC, 60VDC: 210mW

COIL DATA at 20°C					
Nominal Voltage (VDC)	Pick-up Voltage (VDC)	Drop-out Voltage (VDC)	Max. Allowable Voltage (VDC) 85°C	Coil Resistance (Ω)	
5	3.75	0.25	6.50	147 ± 10%	
6	4.50	0.30	7.80	212 ± 10%	
12	9.00	0.60	15.6	848 ± 10%	
24	18.0	1.20	31.2	3390 ± 15%	
48	36.0	2.40	62.4	10600 ± 15%	
60	45.0	3.00	78.0	16600 ± 15%	





Percentage Of Nominal Coil Voltage