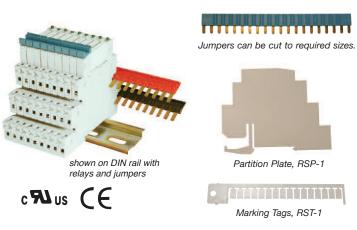
#### **RS Series Relay Modules**

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.

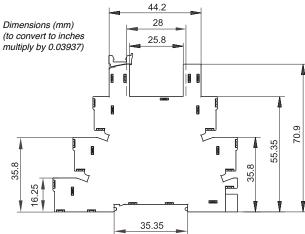


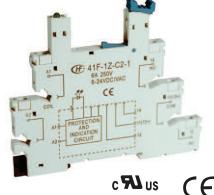
Part Number	Type number	Description	Std. Pk.
RSM-05CU	41F-1Z-C2-5 + HF41F/5-Z-S	6A@250VAC/30VDC,5VDC Coil, 6.2 mm, LED, SPDT	10
RSM-06CU	41F-1Z-C2-5 + HF41F/6-Z-S	6A@250VAC/30VDC,6VDC Coil, 6.2 mm, LED, SPDT	10
RSM-12CU	41F-1Z-C2-1 + HF41F/12-Z-S	6A@250VAC/30VDC,12VAC/DC Coil, 6.2 mm, LED, SPDT	10
RSM-24CU	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

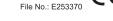
#### **RS Series Socket CHARACTERISTICS**

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



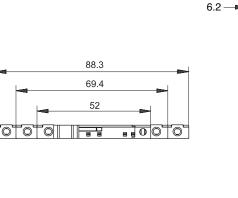


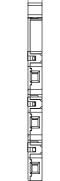


#### Notes: Module features/ functions:

(1) LED indicates the coil energizing state. (2) Eliminates negative current of relays.

(3) Rectifying function (only for VAC/DC types).





# Altech

## **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

# **CONTACT INFORMATION**



File No.:E133481 D File No.:40020043

Contact arrangement	SPDT		Part Number	Type number	Description
Initial contact	100mΩ (at 1A/6VDC)		RSR-05DCS	HF41F/5-Z-S-210	SPDT, 5 mm, 5VDC Coil, IP67
Resistance Max.	Gold plated: 3	Gold plated: $30m\Omega$ (at 1A/6VDC)		HF41F/6-Z-S-210	SPDT, 5 mm, 6VDC Coil, IP67
Contact material	AgN		RSR-12DCS	HF41F/12-Z-S-210	SPDT, 5 mm, 12VDC Coil, IP67
Contact rating	Resistive Load	6A/250VAC	RSR-24DCS	HF41F/24-Z-S-210	SPDT, 5 mm, 24VDC Coil, IP67
		6A/30VDC	RSR-48DCS	HF41F/48-Z-S-210	SPDT, 5 mm, 48VDC Coil, IP67
	Pilot Duty	R300	RSR-60DCS	HF41F/60-Z-S-210	SPDT, 5 mm, 60VDC Coil, IP67
Max. switching voltage	400VAC / 125VDC		Contact Configuration		
Max. switching current		6A resistive	1 Form SPDT		
Max. switching power	1500VA / 180W				
Mechanical life		10 million cycles			12
Electrical life	10,000 cycles at 85°C (185°F)			0.5	

### **CHARACTERISTICS**

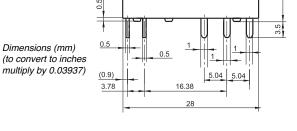
Initial insulation resistance			1000mΩ (at 500VDC)		
Dielectric Between coil &		coil & c	ontacts	4000VAC 1 min.	
strength	Between open contacts			1000VAC 1 min.	
Operate time (at nominal voltage)			Max. 8ms		
Release time (at nominal voltage)			Max. 4ms		
Shock resistance Fun		Fund	ctional	50m/s² (5g)	
ONUCKIES	SHOCK resistance		ructive	1000m/s <sup>2</sup> (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		

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onstruction	

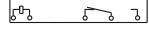
001

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

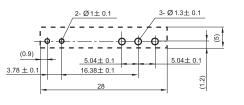
COIL DATA at 20°C						
Nominal Voltage (VDC)	Pick-up Voltage (VDC)	Drop-out Voltage (VDC)	Max. Allowable Voltage (VDC) 85°C	Coil Resistance (Ω)		
5	3.75	0.25	6.50	147 ± 10%		
6	4.50	0.30	7.80	212 ± 10%		
12	9.00	0.60	15.6	848 ± 10%		
24	18.0	1.20	31.2	3390 ± 15%		
48	36.0	2.40	62.4	10600 ± 15%		
60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



# Wiring Diagram

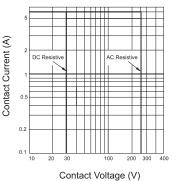


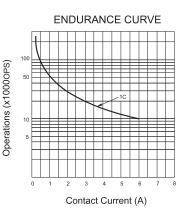




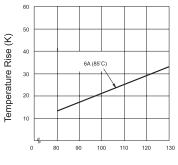
#### MAXIMUM SWITCHING POWER

1.2





COIL TEMPERATURE RISE



Percentage Of Nominal Coil Voltage