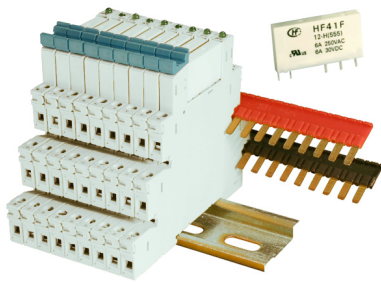


RS Series Relay Modules



The RS series Relay module features a compact Din Rail mountable slim line construction; it is only 6.2 mm thick. 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 SPST configuration and a maximum switching current of 6A. It is available with several standard coil voltages from 5VAC/DC up to 230V AC/DC.

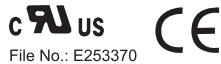
There is a provision for fitting pluggable jumpers which reduces the wiring time. The modules have screw terminals with finger protection for wire termination and offer an IP 20 protection rating. The relay has an IP67 protection rating. Both the relay and the module are UL recognized.



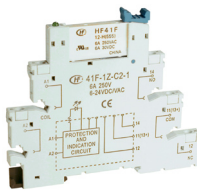
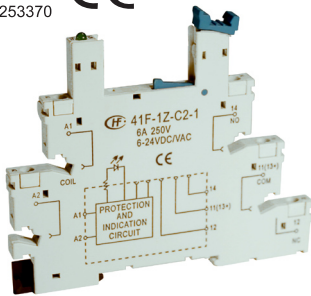
shown on DIN rail with relays and jumpers

Part Number	Type number	Description	Std. Pk.
RSM-12CU	41F-1Z-C2-1-555 + HF41F/12-Z-S	6A@250VAC/30VDC, 12VAC/DC Coil, 6.2 mm, LED, SPDT	10
RSM-24CU	41F-1Z-C2-1-555 + HF41F/24-Z-S	6A@250VAC/30VDC, 24VAC/DC Coil, 6.2 mm, LED, SPDT	10
RSM-110CU	41F-1Z-C2-3-555 + HF41F/60-Z-S	6A@250VAC/30VDC, 110VAC/DC Coil, 6.2mm, LED, SPDT	10
RSM-220CU	41F-1Z-C2-4-555 + HF41F/60-Z-S	6A@250VAC/30VDC, 220VAC/DC Coil, 6.2mm, LED, SPDT	10
I1C-20RD	ZG20-1 Interconnection Jumper Strip	20 Connection, 36A, Red	10
I1C-20BK	ZG20-2 Interconnection Jumper Strip	20 Connection, 36A, Black	10
I1C-20BL	ZG20-3 Interconnection Jumper Strip	20 Connection, 36A, Blue	10

RS Series Socket



File No.: E253370



shown with relay

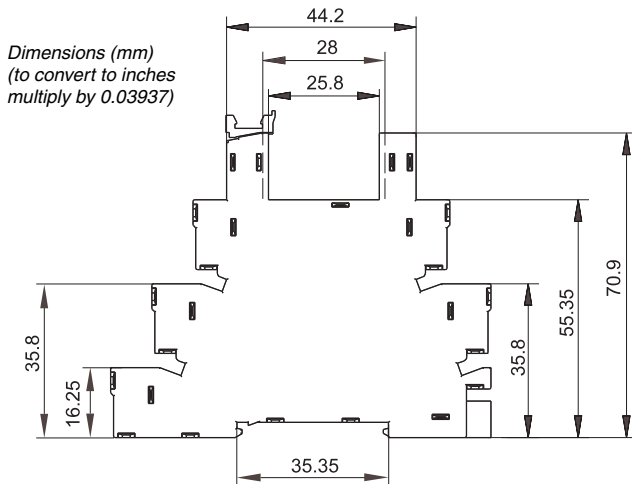
CHARACTERISTICS

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)

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).

Part Number	Type number	Description
RSS-624U	41F-1Z-C2-1-555	For 6 to 24VAC/DC relays, IP20, LED
RSS-624D	41F-1Z-C2-5-555	For 6 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 VAC/DC relays, IP20, LED
RSS-220U	41F-1Z-C2-4-555	For 220 VAC/DC relays, IP20, LED





cRU US
File No.:E133481

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)
- Outline Dimensions: 28.0 x 5.0 x 15.0mm

CONTACT INFORMATION

Contact arrangement	SPST
Initial contact Resistance Max.	100mΩ (at 1A/6VDC) Gold plated: 30mΩ (at 1A/6VDC)
Contact material	AgNi
Contact rating (Res. load)	6A/250VAC/30VDC
Max. switching voltage	400VAC / 125VDC
Max. switching current	6A
Max. switching power	1500VA / 180W
Mechanical life	10 million cycles
Electrical life	10,000 cycles at 85°C (185°F)

Part Number	Type number	Description
RSR-05DCS	HF41F/5-Z-S-555	SPDT, 5 mm, 5VDC Coil, IP67
RSR-06DCS	HF41F/6-Z-S-555	SPDT, 5 mm, 6VDC Coil, IP67
RSR-12DCS	HF41F/12-Z-S-555	SPDT, 5 mm, 12VDC Coil, IP67
RSR-24DCS	HF41F/24-Z-S-555	SPDT, 5 mm, 24VDC Coil, IP67
RSR-48DCS	HF41F/48-Z-S-555	SPDT, 5 mm, 48VDC Coil, IP67
RSR-60DCS	HF41F/60-Z-S-555	SPDT, 5 mm, 60VDC Coil, IP67

CHARACTERISTICS

Initial insulation resistance	1000MΩ (at 500VDC)
Dielectric strength	Between coil & contacts: 4000VAC 1 min.
	Between open contacts: 1000VAC 1 min.
Operate time (at nominal voltage)	Max. 8ms
Release time (at nominal voltage)	Max. 4ms
Shock resistance	Functional: 49m/s ²
	Destructive: 980m/s ²

Vibration resistance **1mm Ampl. max @ 10 ...55 Hz, ?G 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

COIL

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

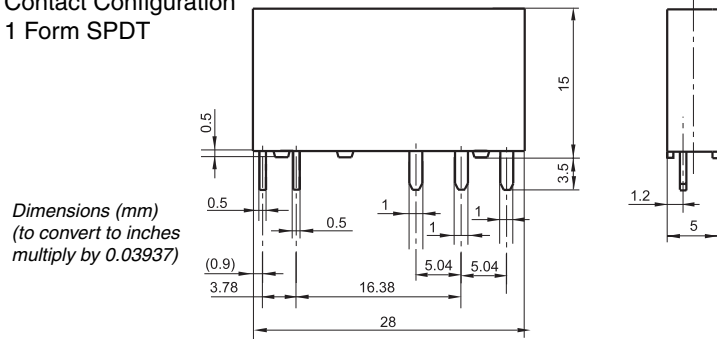
SAFETY APPROVAL RATINGS



cRU US
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6A/30VDC
Resistive: 6A/277VAC
Pilot duty: R300

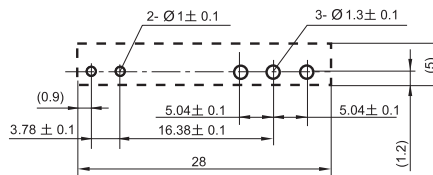
Contact Configuration 1 Form SPDT



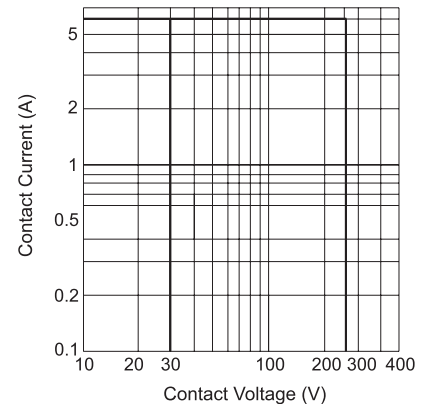
Wiring Diagram



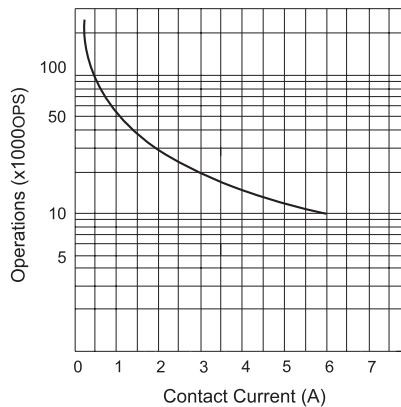
PCB Layout



MAX. SWITCHING POWER



LIFE CURVE



COIL TEMPERATURE RISE

