RELAY MODULES
PLUGGABLE SLIMLINE RELAYS

RS Series

- **Slim Size (6.2 mm Width)**
- **SPDT Configuration**
- **LED Indicator for Relay Energized State**
- **AC and DC Coil Voltages**

RSS-624U shown actual size.

RSR-12DCS shown larger than actual size.

At only 6.2 mm 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 5 Vdc up to 230 Vac/Vdc.

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 IP20 protection rating. The relay has an IP67 protection rating. Both the relay and the module are UL recognized.

SPECIFICATIONS

SOCKET

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

SUBMINIATURE POWER RELAY CONTACT INFORMATION

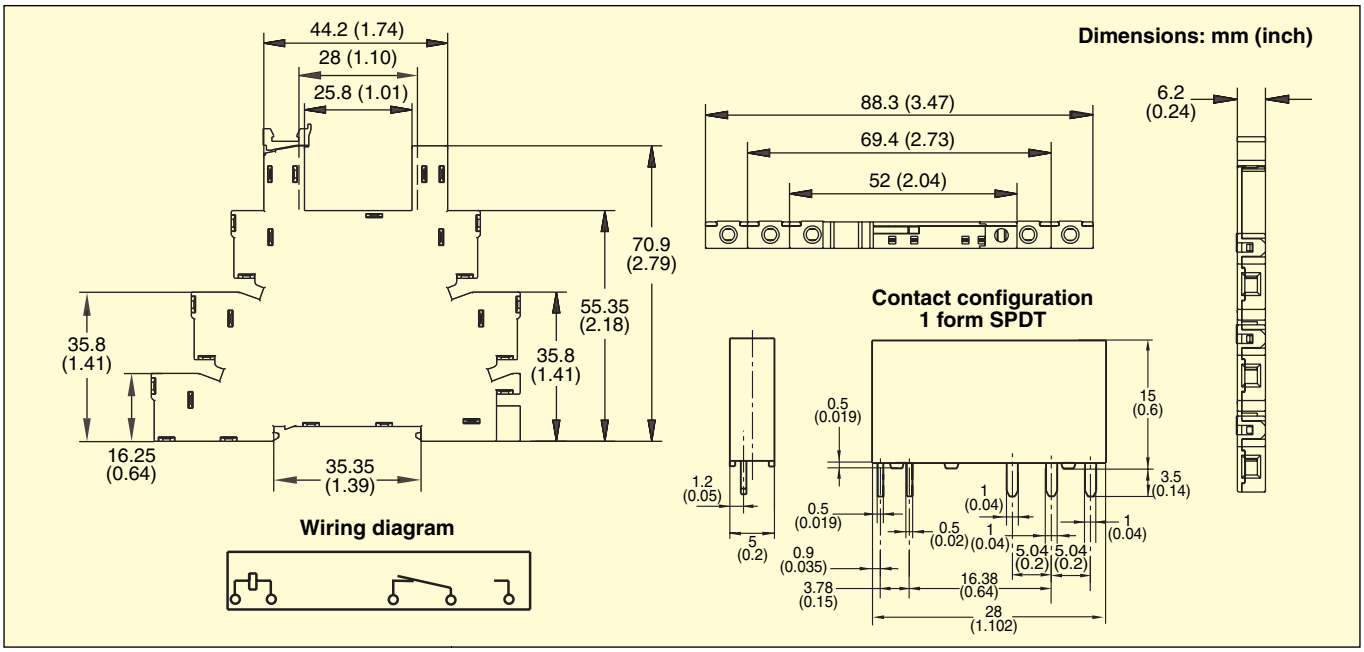
Contact Arrangement: SPDT
Contact Resistance: 100 mΩ (at 1A/6 Vdc)
Contact Material: AgNi
Contact Rating: 6A/250 Vac, 6A/30 Vdc (resistive load)
Maximum Switching Voltage: 400 Vac/ 125 Vdc
Maximum Switching Current: 6A resistive
Maximum Switching Power: 1500 VA/ 180 W
Mechanical Life: 10 million cycles
Electrical Life: 10,000 cycles at 85°C (185°F)
Insulation Resistance: 1000 mΩ (at 500 Vdc)
Dielectric Strength: 4000 Vac/1 minute (between coil and contacts); 1000 Vac/1 minute (between open contacts)
Operate Time: Maximum 8 ms (at nominal voltage)
Release Time: Maximum 4 ms (at nominal voltage)
Shock Resistance (Functional): 50 m/s² (5 g)
Shock Resistance (Destructive): 1000 m/s² (100 g)
Vibration Resistance: 1 mm double amplitude maximum @10 55 Hz, 6G maximum
Humidity: 5 to 85% RH
Ambient Temperature: -40 to 85°C (-40 to 185°F)
Unit Weight: 5.4 g (0.2 oz)

COIL

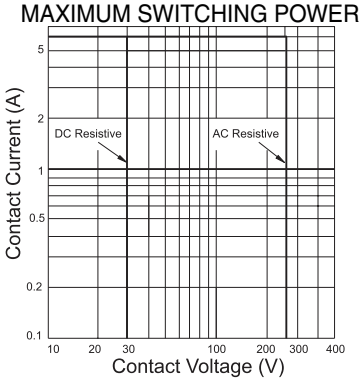
Coil Power Consumption: 170 mW (5 to 24 Vdc), 210 mw (48 Vdc, 60 Vdc)

COIL DATA [AT 20°C (68°F)]

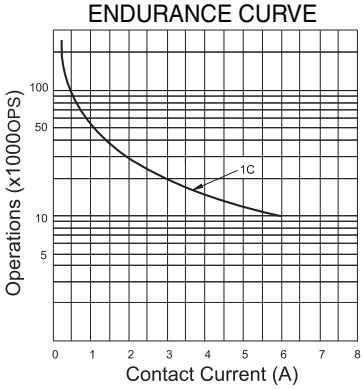
NOMINAL VOLTAGE (Vdc)	PICK-UP VOLTAGE (Vdc)	DROP-OUT VOLTAGE (Vdc)	MAXIMUM ALLOWABLE VOLTAGE (Vdc) 85°C (185°F)	COIL RESISTANCE (Ω)
5	3.75	0.25	6.50	147 ±10
6	4.50	0.30	7.80	212 ±10
12	9.00	0.60	15.6	848 ±10
24	18.0	1.20	31.2	3390 ±15
48	36.0	2.40	62.4	10600 ±15
60	45.0	3.00	78.0	16600 ±15



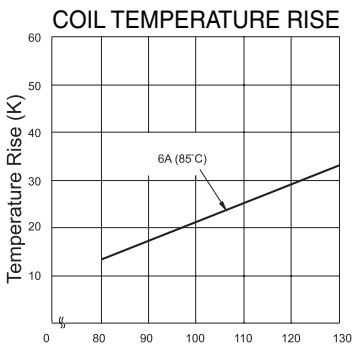
MAXIMUM SWITCHING POWER



ENDURANCE CURVE



COIL TEMPERATURE RISE



COMPLETE RELAY MODULES: SOCKET + RELAY

To Order *Visit omega.com/rs_series for Pricing and Details*	
MODEL NO.	**DESCRIPTION**
RSM-05CU	Relay module, 5 Vdc coil, SPDT, LED
RSM-06CU	Relay module, 6 Vdc coil, SPDT, LED
RSM-12CU	Relay module, 12 Vdc coil, SPDT, LED
RSM-24CU	Relay module, 24 Vdc coil, SPDT, LED
RSM-110CU	Relay module, 110 Vac coil, SPDT, LED
RSM-220CU	Relay module, 220 Vac coil, SPDT, LED

Ordering Examples: RSM-24CU, *SPDT Relay module with 24 VDC coil and LED.*
RSM-110CU, *SPDT Relay module with 110 VAC coil and LED.*

RELAY SOCKETS

MODEL NO.	DESCRIPTION
RSS-624D	Relay socket, for 5 to 24 Vdc coil voltages, LED
RSS-624U	Relay socket, for 12 to 24 Vdc/Vdc coil voltages, LED
RSS-4860U	Relay socket, for 48 to 60 Vac/Vdc coil voltages, LED
RSS-110U	Relay socket, for 110 to 125 Vac/Vdc coil voltages, LED
RSS-220U	Relay socket, for 220 to 240 Vac/Vdc coil voltages, LED

RELAYS

MODEL NO.	DESCRIPTION
RSR-05DCS	Relay, SPDT, 5 Vdc coil
RSR-06DCS	Relay, SPDT, 6 Vdc coil
RSR-12DCS	Relay, SPDT, 12 Vdc coil
RSR-24DCS	Relay, SPDT, 24 Vdc coil
RSR-48DCS	Relay, SPDT, 48 Vdc coil
RSR-60DCS	Relay, SPDT, 60 Vdc coil (use in RSS-110U/220U for AC coil voltage)

ACCESSORIES

MODEL NO.	DESCRIPTION
RSJ-BK	Jumper for RSM, Black, 36A, 250V, 20-position
RSJ-RD	Jumper for RSM, Red, 36A, 250V, 20-position
RSJ-BL	Jumper for RSM, Blue, 36A, 250V, 20-position
RST-1	Marking tag strip for RSM, white,16 tags/strip
RSP-1	Partition plate for RSM, 2.2 mm wide