



■ Safety Approval

UL US NO. E164730 CQC NO. CQC08001022889

VDE NO. 40025393 TUV NO. 50130793

■ Features

- Compact and small in size
Dimension: 24.2×12.3×20.1(mm)
- Switching capacity: 20A
- Dielectric strength of 5000V between coil and contacts
- Available in PCB or quick connect terminals
- Ideal for switching magnetron and heater loads in microwave oven



ORDERING INFORMATION

F5 [H] - [DC12V] - [P1]

Model	Coil Sensitivity	Coil Voltage	PCB Type
	H - High Sensitivity (400mW) Blank - Standard (500mW)	DC3V, DC5V, DC6V, DC9V, DC12V, DC18V, DC24V, DC48V	P1 - PCB Type 1 P2 - PCB Type 2 P3 - PCB Type 3

SPECIFICATION

CONTACT DATA

Contact Form	1 Form A	
Contact Material	Ag Alloy	
Contact Rating	16A 250VAC, 20A 125VAC	
Contact Resistance	Max. 100mΩ (24VDC 1A)	
Load	Max. Switching Voltage	250VAC
	Max. Switching Current	20A
	Max. Switching Power	4,000VA
	Min. Switching Load	5VDC, 100mA
Life	Electrical	100,000 operations (16A 250VAC)
	Mechanical	2,000,000 operations

COIL DATA

Nominal Coil Power	500mW, 400mW
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GENERAL DATA

Insulation Resistance	Min. 1000MΩ 500VDC	
Dielectric Strength	Between open contacts	1,000VAC, 1min
	Between coil and contacts	5,000VAC, 1min
Operate Time	Max. 10ms	
Release Time	Max. 10ms	
Operating Temperature	-40°C to +85°C	
Humidity	35~95%RH, +40°C	
Shock Resistance	Endurance	1,000m/s ²
	Misoperation	150m/s ²
Vibration Resistance	Endurance	10~55Hz, 1.5mm double amplitude
	Misoperation	10~55Hz, 1.5mm double amplitude
Weight	Approximately 10.00g	

Note: Data shown are of initial value

SAFETY APPROVAL

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating	Remark
UL E164730	A	0.5W/0.4W	3 - 48VDC	16A 250VAC	Ambient Temperature: 95°C
				20A 125VAC	
VDE 40025393	A	0.5W/0.4W	3 - 24VDC	16A 250VAC	Ambient Temperature: 85°C
TUV 50130793	A	0.5W/0.4W	3 - 48VDC	16A 250VAC	Ambient Temperature: 85°C
CQC08001022889	A	0.5W/0.4W	3 - 48VDC	16A 250VAC	Ambient Temperature: 85°C

Specifications subject to change without notice

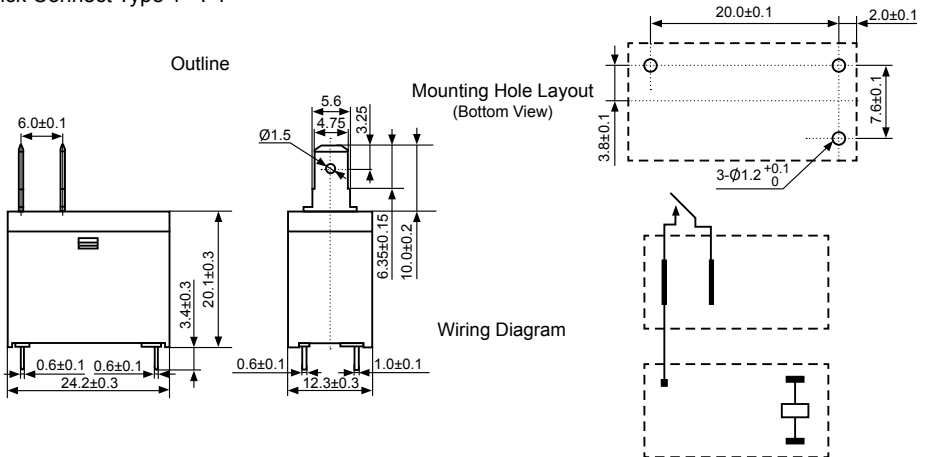
COIL DATA

Ambient Temperature: 23°C

Model	Nominal Voltage VDC	Coil Resistance $\Omega \pm 10\%$	Operate Voltage $\leq VDC$	Release Voltage $\geq VDC$	Coil Power mW
F5-DC3V-P1/P2/P3	3	18	2.25	0.3	500
F5-DC5V-P1/P2/P3	5	50	3.75	0.5	
F5-DC6V-P1/P2/P3	6	72	4.5	0.6	
F5-DC9V-P1/P2/P3	9	162	6.75	0.9	
F5-DC12V-P1/P2/P3	12	288	9.0	1.2	
F5-DC18V-P1/P2/P3	18	648	13.5	1.8	
F5-DC24V-P1/P2/P3	24	1152	18.0	2.4	
F5-DC48V-P1/P2/P3	48	4608	36.0	4.8	
F5H-DC3V-P1/P2/P3	3	22.5	2.25	0.3	400
F5H-DC5V-P1/P2/P3	5	62.5	3.75	0.5	
F5H-DC6V-P1/P2/P3	6	90	4.5	0.6	
F5H-DC9V-P1/P2/P3	9	202.5	6.75	0.9	
F5H-DC12V-P1/P2/P3	12	360	9.0	1.2	
F5H-DC18V-P1/P2/P3	18	810	13.5	1.8	
F5H-DC24V-P1/P2/P3	24	1440	18.0	2.4	
F5H-DC48V-P1/P2/P3	48	5760	36.0	4.8	

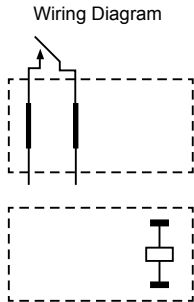
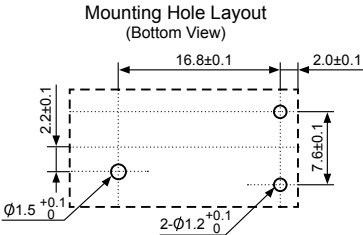
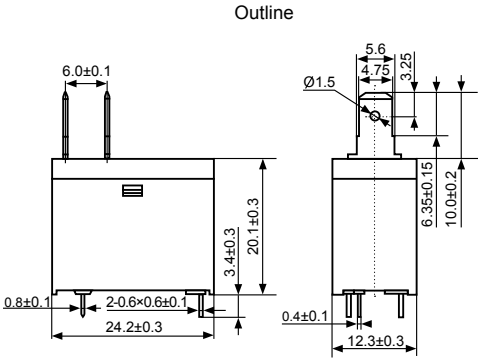
OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

Quick Connect Type 1 - P1

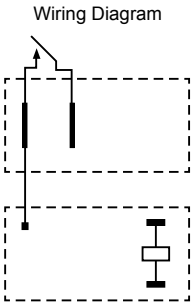
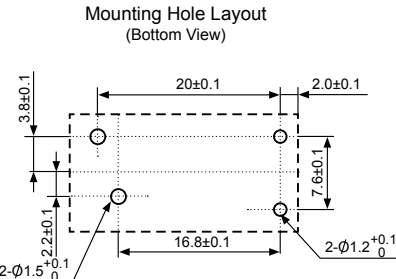
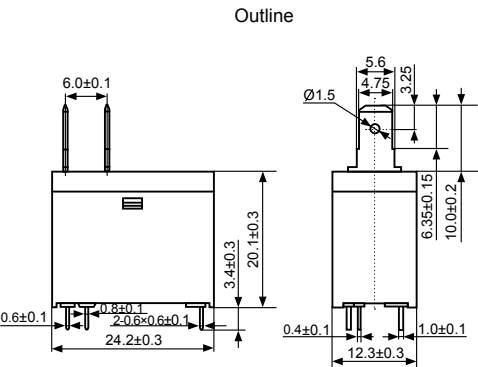


OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

Quick Connect Type 2 - P2

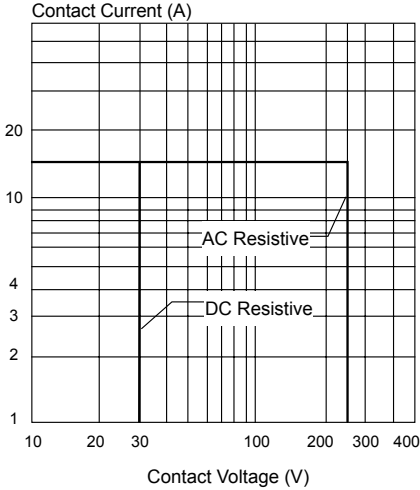


Quick Connect Type 3 - P3

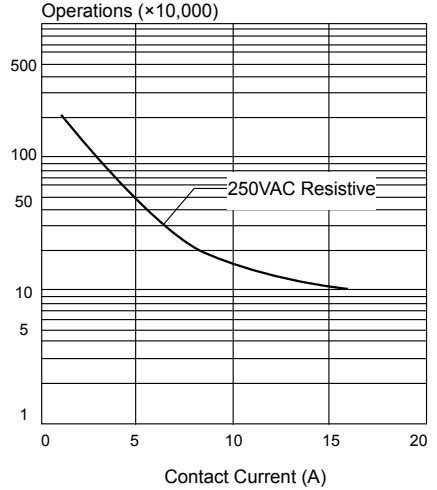


REFERENCE DATA

Maximum Switching Power



Life Curve



Coil Temperature Rise

