F6

POWER RELAY

Features

- Miniature relay with high switching contact capacity, 20A/250VAC and 25A/250VAC
- Low profile, height 16mm
  Dimensions: 30.5×16.0×20.1(mm)
- Dielectric strength of 5000V between coil and contacts
- Ideal for switching compressor and inverter loads
- Available in both PCB and quick connect terminals
- Applications: Air conditioners, refrigerators, OA equipment, etc

Safety Approval

c UL us NO.E164730 VDE NO.40028681

CQC NO.CQC09002033819

Relay Picture

ORDERING INFORMATION

F6 – S – DC12V – P

Model	Enclosure	Coil Voltage	Terminal Type
	S - Plastic Sealed Type	DC5V, DC6V, DC9V, DC12V, DC24V	Blank - Quick Connection Terminals P - PCB Terminals

Remark: 1. Available in 1 Form A only

SPECIFICATION

CONTACT DATA

Contact Form		1 Form A
Contact Material		Ag Alloy
Contact Rating		F6:25A 250VAC(Resistive) F6-P:20A 250VAC(Resistive) 20FLA/80LRA 120VAC
Contact Resistance		Max. 100mΩ (24VDC 1A)
Load	Max. Switching Voltage	250VAC
	Max. Switching Current	25A
	Max. Switching Power	6,250VA
	Min. Switching Load	5VDC, 100mA
Life	Electrical	100,000 operations
	Mechanical	10,000,000 operations

COIL DATA

Nominal Coil Power	900mW

GENERAL DATA

Insulation Resistance		Min. 1000MΩ 500VDC
Dielectric Strength	Between open contacts	1,500VAC, 1min
	Between coil and contacts	5,000VAC, 1min
Operate Time		Max. 10ms
Release Time		Max. 10ms
Operating Temperature		-40℃ to +85℃
Humidity		35～95%RH, +40℃
Shock Resistance	Endurance	1,000m/s^2
	Misoperation	100m/s^2
Vibration Resistance	Endurance	10～55Hz, 1.5mm double amplitude
	Misoperation	10～55Hz, 1.5mm double amplitude
Weight		Approximately 18.0g

Note:Data shown are of initial value

SAFETY APPROVAL

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating		Remarks
UL E164730	A	0.9W	5,6,9, 12,24VDC	20A 250VAC	25A 250VAC	Class F Insulation Ambient Temperature: 85℃
	A	0.9W	5,6,9, 12,24VDC	HP:2HP 240VAC FLA/LRA:20/80A, 120VAC		Ambient Temperature: 85℃
VDE40028681	A	0.9W	5,6,9, 12,24VDC	25A 250VAC		Class F Insulation Ambient Temperature: 85℃
CQC09002033819	A	0.9W	5,6,9, 12,24VDC	25A 250VAC		Ambient Temperature: 85℃
Explosion-proof Certificate CNEx16.3132U	A	0.9W	12VDC	20A 250VAC	25A 250VAC	Mark: Ex nC IIC Gc

Specifications subject to change without notice

F6

POWER RELAY

COIL DATA

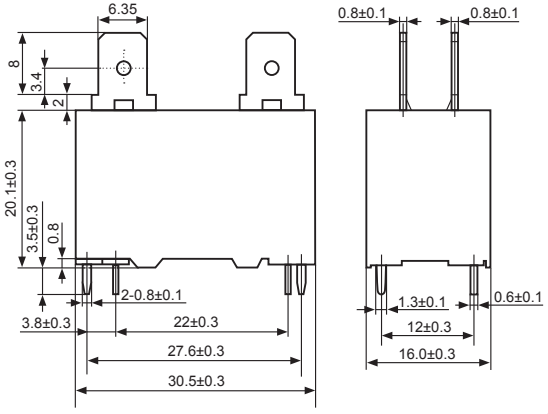
Ambient Temperature: 23℃

Model	Nominal Voltage VDC	Coil Resistance Ω+/-10%	Operate Voltage ≤VDC	Release Voltage ≥VDC	Coil Power mW
F6-S-DC5V	5	27.8	3.5	0.5	900
F6-S-DC6V	6	40	4.2	0.6	
F6-S-DC9V	9	90	6.3	0.9	
F6-S-DC12V	12	160	8.4	1.2	
F6-S-DC24V	24	640	16.8	2.4	
F6-S-DC5V-P	5	27.8	3.5	0.5	
F6-S-DC6V-P	6	40	4.2	0.6	
F6-S-DC9V-P	9	90	6.3	0.9	
F6-S-DC12V-P	12	160	8.4	1.2	
F6-S-DC24V-P	24	640	16.8	2.4	

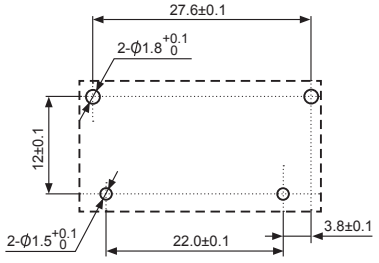
OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

Quick Connect Type

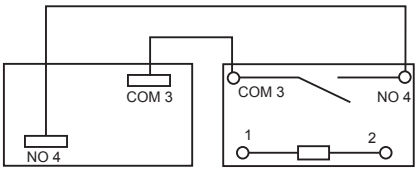
Outline



Mounting Hole Layout
(Bottom View)



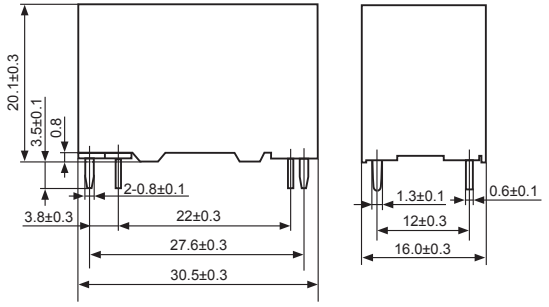
Wiring Diagram



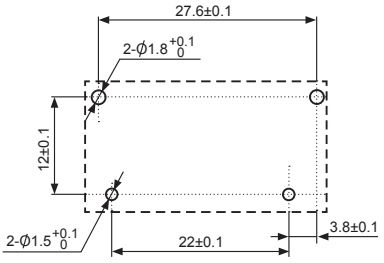
OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

PCB Type

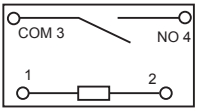
Outline



Mounting Hole Layout
(Bottom View)

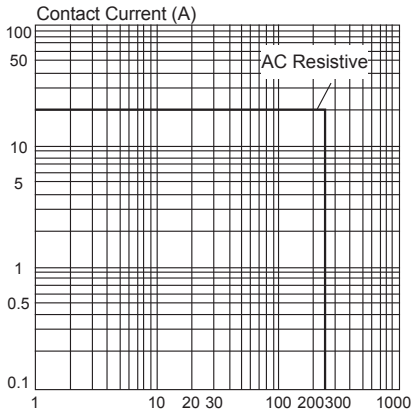


Wiring Diagram
(Bottom View)



REFERENCE DATA

Maximum Switching Power



Life Curve