



29×12.6×20.6

J Q X - 1 4 1 F F



CH0077843

Features

- Slim type and small occupying area can offer high density P.C.B. technique.
- Employment of suitable plastic materials to be applied to high temperature and various chemical solution.
- Relay covers switching capacity from 10A to 16A
- Switching capacity by 5A available with 2 transfer contact form.

Ordering Information

JQX-141FF C S 10 DC12V 0.54 3.5
 1 2 3 4 5 6 7

- | | |
|---|--|
| 1 Part number : JQX-141FF | 4 Contact Current : 5A,8A,10A,16A |
| 2 Contact arrangement : 1A:1A ; 2A:2A ; 1C:1C ; 2C:2C | 5 Coil rated Voltage(V) : DC:3,5,6,9,12,24,48 |
| 3 Enclosure : S: Sealed type ; Z: Dust cover | 6 Coil power consumption : 0.54:0.54W ; 0.72:0.72W |
| | 7 Pole-distance : 3.5:3.5mm ; 5:5.0mm |

Contact Data

Cont ct Arrangement	1A (SPSTNO) , 2A (DPSTNO) , 1C (SPDT(B-M)) , 2C (DPDT(B-M))			
	Cont ct Material	Ag·CdO	Ag·SnO ₂	
Cont ct Rating	Resistive	16A/250VAC;30VDC 1A:20A/120VAC	10A/250VAC,30VDC	5A/250VAC,30VDC
	Inductive	8A/250VAC,30VDC	5A/250VAC,5A/30VDC	2A/250VAC,3A/30VDC
Max. Switching Power	Resistive	480W 4000VA	300W 2500VA	150W 1250VA
	Inductive	240W 2000VA	150W 1875VA	90W 500VA
Max. Switching Voltage	125VDC 380VAC		Max. Switching Current:20A	
Cont ct Resistance or Voltage drop	≤100m		item 3.12 of IEC255-7	
Operation life	Electrical	10 ⁵	item 3.30 of IEC255-7	
	Mechanical	10 ⁷	item 3.31 of IEC255-7	

Coil Parameter

Dash numbers	Coil voltage VDC		Coil resistance ±10%	Pickup voltage VDC(max) (80%of rated voltage)	release voltage VDC(min) (5% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated	Max.						
003-540	3	3.9	17	2.4	0.15	0.54	20	8
005-540	5	6.5	47	4.0	0.25			
006-540	6	7.8	68	4.8	0.30			
009-540	9	11.7	155	7.2	0.45			
012-540	12	15.6	270	9.6	0.60			
024-540	24	31.2	1100	19.2	1.20			
048-540	48	62.4	4400	38.4	2.40			
003-720	3	3.9	12.5	2.4	0.15			
005-720	5	6.5	36	4.0	0.25			
006-720	6	7.8	50	4.8	0.30			
009-720	9	11.7	115	7.2	0.45			
012-720	12	15.6	200	9.6	0.60			
024-720	24	31.2	820	19.2	1.20			
048-720	48	62.4	3300	38.4	2.40			

CAUTION: 1.The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.
 2.Pickup and release voltage are for test purposes only and are not to be used as design criteria.

Operation condition

Insulation Resistance	1000M min (at 500VDC)	Item 7 of IEC255-5
Dielectric Strength		
Between contacts	50Hz 1200V	Item 6 of IEC255-5
Between contact and coil	50Hz 5000V	Item 6 of IEC255-5
Shock resistance	100m/s ² 11ms	IEC68-2-27 Test Ea
Vibration resistance	10~55Hz double amplitude 1.5mm	IEC68-2-6 Test Fc
Terminal strength	10N	IEC68-2-21 Test Ua1
Solderability	235 ± 2 3 ± 0.5s	IEC68-2-20 Test Ta method 1
Ambient Temperature	0.54W:-30~70 ; 0.72W:-30~55	
Relative Humidity	85% (at 40 °C)	IEC68-2-3 Test Ca
Mass	13g	

Qualification inspection:

Perform the qualification test as specified in the table of IEC255-19-1 and minimum sample size 24.

Safety approvals

Safety approval	CCEE
Load	16A/250VAC

Dimensions (Unit: mm)

	mm	inch
0.3	0.012	
0.4	0.016	
0.5	0.020	
0.6	0.024	
1.0	0.039	
1.3	0.051	
2.2	0.087	
3.5	0.138	
4.0	0.157	
5.08	0.200	
7.5	0.295	
12.6	0.496	
20	0.787	
20.3	0.799	
20.6	0.811	
29	1.142	

Dimensions (16A) (10A) Mounting (Bottom views)

Wiring diagram (Bottom views)

NOTES 1).Dimensions are in millimeter.
2).Inch equivalents are given for general information only.

Reference Data

Coil temperature rise

Coil Power (W)	Temp. rise (deg.)
0.1	5
0.2	15
0.3	25
0.4	30
0.5	35
0.6	38
0.7	40
0.8	42

Operation time

Coil Power (W)	Operate time (msec)	Release time (msec)
0.2	11	2.5
0.4	6	2.5
0.6	4.5	2.5
0.8	4	2.5
1.0	3.5	2.5
1.2	3.2	2.5

Life expectancy

Current of Load (A)	Operation (x10 ⁴)
2	100
4	50
6	30
8	20
10	15
12	12
14	10
16	8
18	6
20	5