



30.4×16.0×26.0 (26.5)

# JQX- 54FE

R50126381 US E160644  
 03001003506

### Features

- Can be welded directly onto PCB.
- Used in household appliances like air conditioning , heater and instruments etc.
- Compact high capacity relay for inductive load, rushing current of 70A and steady-state current of 20A.

### Ordering Information

**JQX-54FE** A Z 25 b DC12V C 0.9  
 1 2 3 4 5 6 7 8

1 Part number: JQX-54FE	5 Terminal: b:PC type; NIL:PC type and QC type
2 Contact arrangement: A:1A	6 Coil rated voltage(V): DC:6,9,12,24,48
3 Enclosure: Z: Dust cover	7 Contact material: C:AgCdO; NIL:AgSnO <sub>2</sub>
4 Contact rating: Resistive:25A/250VAC; 20A/277VAC Inductive:20A/250VAC; cos φ=0.4	8 Coil power consumption: 0.9:0.9W

### Contact Data

Contact Arrangement	1A (SPSTNO)		
Contact Material	AgSnO <sub>2</sub> AgCdO		
Contact Rating	Resistive: 25A/250VAC, 20A/277VAC Inductive :20A/250VAC, cos φ=0.4 Motor load:1.5HP 250VAC		
Max. Switching Power	6380VA		
Max. Switching Voltage	300VAC	Max. Switching Current:25A	rushing current:70A
Contact Resistance or Voltage drop	<50mΩ	Item 4.12 of IEC 61810-7	
Operation life	Electrical	10 <sup>5</sup>	Item 4.30 of IEC 61810-7
	Mechanical	10 <sup>7</sup>	Item 4.31 of IEC 61810-7

### Coil Parameter

Dash numbers	Coil voltage VDC		Rated current mA	Coil resistance Ω ±10%	Pickup voltage VDC(max) (75%of rated voltage )	Release voltage VDC(min) (5% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated	Max.							
006-900	6	7.8	150	40	4.5	0.3	0.9	<20	<10
009-900	9	11.7	100	90	6.7	0.5			
012-900	12	15.6	75	160	9.0	0.6			
024-900	24	31.2	37.8	640	18	1.2			
048-900	48	62.4	18.8	2560	36	2.4			

**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	1000MΩ min (at 500VDC)	Item 7 of IEC 60255-5
Dielectric Strength	50Hz 1000V	Item 6 of IEC 60255-5
Between contacts	50Hz 5000V	Item 6 of IEC 60255-5
Between contact and coil	surge voltage:10kV	Item 8 of IEC 60255-5
Shock resistance	Functional:100m/s <sup>2</sup> 11ms Survival:1000 m/s <sup>2</sup> 11ms	IEC 68-2-27 Test Ea IEC 68-2-27 Test Ea
Vibration resistance	10Hz~55Hz Double amplitude Functional 1.5mm Double amplitude Survival 2.0mm	IEC 68-2-6 TestFc IEC 68-2-6 TestFc
Terminals strength	10N 8N	IEC 68-2-21 TestUa1 and Ua2
Solderability	235°C ± 2°C 3s ± 0.5s	IEC 68-2-20 Test Ta method 1
Ambient Temperature	-30°C~85°C	
Relative Humidity	20%~85%	IEC 68-2-3 Test Ca
Mass	28g	

### Safety approvals

Safety approval	UL&CUR	TUV	CQC
Load	25A/250VAC 20A/277VAC 1.5HP 250VAC	25A/250VAC 20A/250VAC COSφ=0.4	25A/250VAC

### Dimensions

mm /inch

Mounting (Bottom view)

Wiring diagram (Bottom view)

Dimensions

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