

# DB ELECTRO<sup>CO., LTD.</sup>

Présente / Presents:

NINGBO HUAGUAN ELECTRONICS CO., LTD.



## JQX-14FC<sub>1</sub> & JQX-14FC<sub>2</sub> (4124) JQX-14FC<sub>3</sub>



29×12.8×26



CQC 03001003501

CE E9930952E01

UL US E160644

R2033977

### Features

- Heavy load, suitable for heavy power reverse.
- Small size, suitable for high-density mounting.
- Up to 5000VAC dielectric strength. Between open contacts of JQX-14FC<sub>3</sub>, 3000VAC dielectric strength.
- Contact gap of JQX-14FC<sub>3</sub>: 2 × 1.5mm=3mm.
- Suitable for remote control TV set, copy machine, sales machine and air conditioner etc.

### Ordering Information

**JQX-14FC<sub>1</sub> C S 10 DC12V 0.8 3.5**

1 2 3 4 5 6 7

1 Part number: JQX-14FC<sub>1</sub>, JQX-14FC<sub>2</sub>, JQX-14FC<sub>3</sub>  
 2 Contact arrangement: A:1A; 2A:2A; C:1C; 2C:2C  
 3 Enclosure: S: Sealed type; Z: Dust cover  
 4 Contact current: 3A,5A,6A,8A,10A,16A,20A

5 Coil rated voltage(V): DC:3,5,6,9,12,15,24  
 AC:6,12,24,48,110,120,220  
 6 Coil power consumption: NIL:0.53W; 0.8:0.8W; 1:1VA; 1.2:1.2W  
 7 Pole-distance: 3.5:3.5mm; 5:5.0mm

### Contact Data

Contact Arrangement	1A (SPSTNO) 、2A (DPSTNO) 、1C (SPDT(B-M)) 、2C (DPDT(B-M))	
Contact Material	AgCdO AgSnO <sub>2</sub>	
Contact Rating (resistive)	1A:16A/250VAC,30VDC; 1C:10A,16A,20A/250VAC,30VDC; 10A/250VAC,14VDC(20AApplication for 5mm Pole-distance) 2A,2C:5A,8A/220VAC, 30VDC;JQX-14FC <sub>3</sub> ;2A:8A/220VAC;2C:6A/220VAC Motor load:1HP 250VAC ; 1/2HP 125VAC Lamp load:TV-5	
Max. Switching Power	600W 5000VA	
Max. Switching Voltage	110VDC 380VAC	Max. Switching Current:20A
Contact Resistance or Voltage drop	<50mΩ	Item 3.12 of IEC255-7
Operation life	Electrical	10 <sup>5</sup>
	Mechanical	10 <sup>7</sup> 5 × 10 <sup>6</sup> (JQX-14FC <sub>3</sub> )
Contact gap	2 × 1.5mm=3mm (JQX-14FC <sub>3</sub> )	

### Coil Parameter (DC)

Dash numbers	Coil voltage VDC		Coil resistance Ω ±10% C <sub>1</sub> C <sub>2</sub>	Pick up voltage VDC(max) (75%of rated voltage)	Release voltage VDC(min) ( 10%of rated voltage )	Coil power consumption W C <sub>1</sub> C <sub>2</sub>	Operate Time ms C <sub>1</sub> C <sub>2</sub>	Release Time ms C <sub>1</sub> C <sub>2</sub>
	Rated	Max						
003-530	3	3.9	17	2.25	0.3	0.53	<15	<10
005-530	5	6.5	47	3.75	0.5			
006-530	6	7.8	68	4.50	0.6			
009-530	9	11.7	153	6.75	0.9			
012-530	12	15.6	275	9.00	1.2			
024-530	24	31.2	1100	18.0	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.

## Coil Parameter (DC)

Dash numbers	Coil voltage VDC		Coil resistance $\Omega \pm 10\%$  C <sub>3</sub>	Pick up voltage VDC(max) (75%of rated voltage )	Release voltage VDC(min) ( 10%of rated voltage )	Coil power consumption W	Operate Time ms	Release Time ms
	Rated	Max.						
2A								
006-670	6	7.8	54	4.50	0.6	0.67W~0.83W	<10	<5
009-810	9	11.7	100	6.75	0.9			
012-800	12	15.6	180	9.00	1.2			
015-830	15	19.5	270	11.3	1.5			
024-780	24	31.2	740	18.0	2.4			
2C								
006-900	6	7.8	40	4.50	0.6	0.9W~1.25W	<10	<5
009-1160	9	11.7	70	6.75	0.9			
012-1200	12	15.6	120	9.00	1.2			
015-1250	15	19.5	180	11.3	1.5			
024-1230	24	31.2	470	18.0	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.

## Coil Parameter (AC)

Dash numbers	Coil voltage VAC		Coil resistance $\Omega \pm 10\%$	Pick up voltage VAC(max) (75%of rated voltage )	Release voltage VAC(min) ( 10%of rated voltage )	Coil power consumption	Operate Time ms	Release Time ms
	Rated	Max.						
006AC	6	7.8	16	4.5	0.6	1VA	-	-
012AC	12	15.6	63	9	1.2			
024AC	24	31.2	240	18	2.4			
048AC	48	62.4	1085	36	4.8			
110AC	110	143	5600	82.5	11			
120AC	120	156	6680	90	12			
220AC	220	286	21000	165	22			

**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 $\Omega$ min (at 500VDC)		Item 7 of IEC255-5
Dielectric Strength	JQX-14FC <sub>3</sub>		
Between contacts	50Hz 1000V	3000V	Item 6 of IEC255-5
Between contact and coil	50Hz 5000V	4000V Surge voltage 12kV	Item 6 of IEC255-5
Creepage distance	8mm (only for JQX-14FC <sub>3</sub> )		Addenda B of IEC255-5
Shock resistance	100m/s <sup>2</sup>	11ms	IEC68-2-27 Test Ea
Vibration resistance	10~50Hz amplitude 1.5mm		IEC68-2-6 Test Fc
Terminals strength	10N		IEC68-2-21Test Ua1
Relative Humidity	235 $^{\circ}$ C $\pm$ 2 $^{\circ}$ C 3 $\pm$ 0.5s		IEC68-2-20 Test Ta method 1
Ambient Temperature	-40~70 $^{\circ}$ C -25~75 $^{\circ}$ C (JQX-14FC <sub>3</sub> )		
Relative Humidity	85% (at 40 $^{\circ}$ C)		IEC68-2-3 Test Ca
Mass	17g~20g		

## Qualification inspection:

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

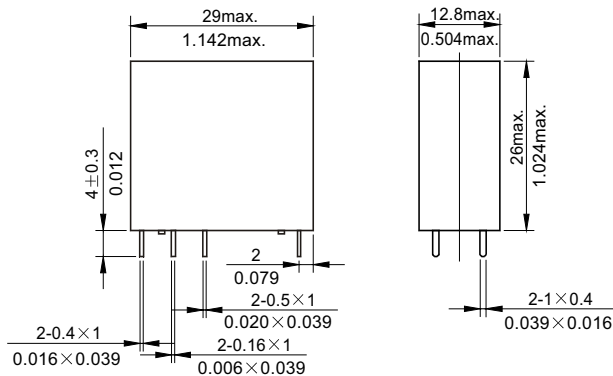
## Safety approvals

safety approvals	UL&CUR	TüV	CQC
Load	1C 16A/250VAC 2C 5A/220VAC 1HP 250VAC 1/2HP 125VAC TV-5	1C 10A/250VAC 14VDC 2C 5A/250VAC 30VDC	10A/250VAC

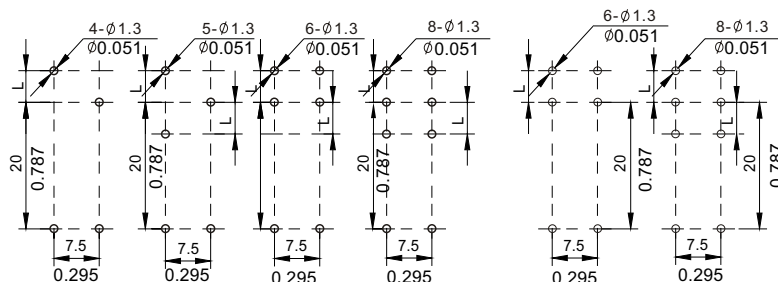
# JQX-14FC<sub>1</sub> & JQX-14FC<sub>2</sub> (4124)JQX-14FC<sub>3</sub>

## Dimensions

mm /inch



## Dimensions

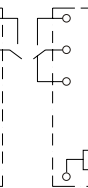
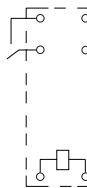
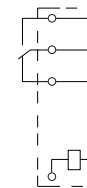
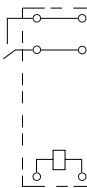
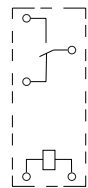
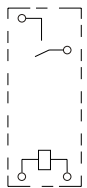


Pole-distance L: 3.5mm or 5mm (0.138 inch or 0.197 inch)  
JQX-14FC<sub>2</sub>; 5mm(0.197 inch)

## Mounting (Bottom view)

(10A)

(16A)



1A

1C

1A

1C

2A

2C

JQX-14FC<sub>1</sub>

JQX-14FC<sub>2</sub> JQX-14FC<sub>3</sub>

## Wiring diagram (Bottom view)

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

## Reference Data

