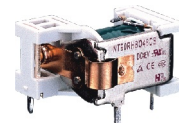


# DB ELECTRO<sup>CO., LTD.</sup>

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;<br>1C:10A,16A,20A/250VAC,30VDC;<br>10A/250VAC,14VDC(20AApplication for 5mm Pole-distance)<br>2A,2C:5A,8A/220VAC, 30VDC;JQX-14FC <sub>3</sub> ;2A:8A/220VAC;2C:6A/220VAC<br>Motor load:1HP 250VAC ; 1/2HP 125VAC<br>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%<br>C <sub>1</sub> C <sub>2</sub> | Pick up voltage VDC(max)<br>(75%of rated voltage) | Release voltage VDC(min)<br>(10%of rated voltage) | Coil power consumption W<br>C <sub>1</sub> C <sub>2</sub> | Operate Time ms<br>C <sub>1</sub> C <sub>2</sub> | Release Time ms<br>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 $\Omega \pm 10\%$<br>C <sub>3</sub> | Pick up voltage VDC(max)<br>(75% of rated voltage) | Release voltage VDC(min)<br>(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)<br>(75% of rated voltage) | Release voltage VAC(min)<br>(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  |                          | IEC68-2-21 Test Ua1         |
| Relative Humidity        | 235°C $\pm$ 2°C 3 $\pm$ 0.5s               |                          | IEC68-2-20 Test Ta method 1 |
| Ambient Temperature      | -40~70°C -25~75°C (JQX-14FC <sub>3</sub> ) |                          |                             |
| Relative Humidity        | 85% (at 40°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.

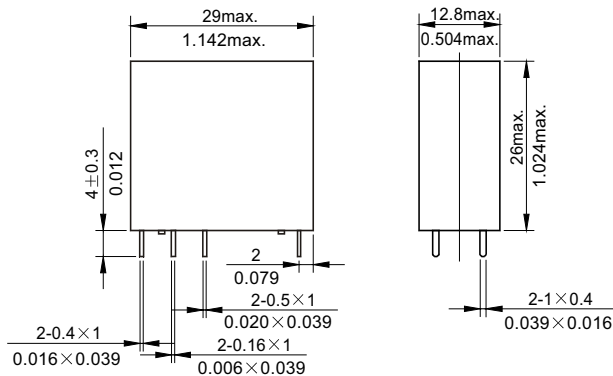
## Safety approvals

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

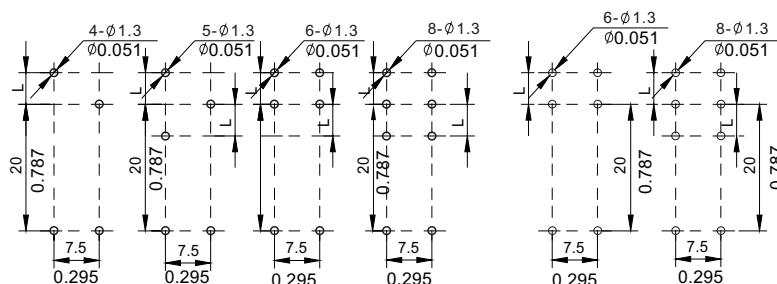
# JQX-14FC<sub>1</sub> & JQX-14FC<sub>2</sub> (4124)JQX-14FC<sub>3</sub>

## Dimensions

mm /inch



## Dimensions

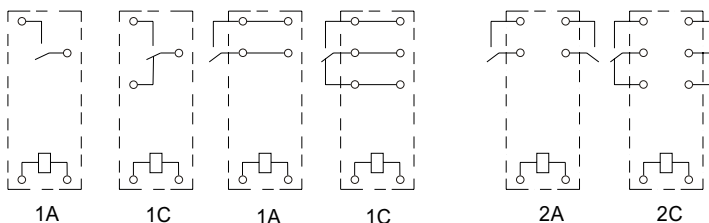


Pole-distance L: 3.5mm or 5mm (0.138 inch or 0.197 inch)  
JQX-14FC<sub>3</sub>: 5mm (0.197 inch)

## Mounting (Bottom view)

(10A)

(16A)



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

