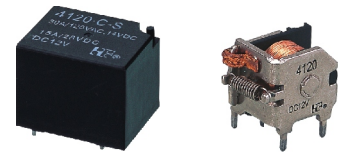


# 4120 (JQC-4)



Dust Covered 26.8×21.5×22.3  
Open Type 24×19×20

| Features  |  |
|---|--|
| • Small size, heavy contact load, capable of standing strong current of 45A at 14VDC. |  |
| • PC board mounting.  |  |
| • Suitable for automatic control facilities and automobile application etc.           |  |
| • Both European 11mm pole distance and American 8mm pole distance available.          |  |

| Ordering Information                       |   |
|--|---|
| <b>4120</b>                                | <b>C S 30 DC12V 1.6</b>                           |
| 1  | 2 3 4 5 6   |
| 1 Part number: 4120 (JQC-4)                | 4 Contact current: 15:15A; 20:20A; 30:30A; 45:45A |
| 2 Contact arrangement: A:1A; B:1B; C:1C    | 5 Coil rated voltage(V): DC:6,9,12,18,24          |
| 3 Enclosure: S: Sealed type; Z: Dust cover | 6 Coil power consumption: 1.6:1.6W; 1.9:1.9W      |
| O: Open type                               |   |

| Contact Data                       |  |
|------------------------------------|--|
| Contact Arrangement                | 1A (SPSTNO) 1B (SPSTNC) 1C (SPDT(B-M))   |
| Contact Material                   | AgNi AgSnO <sub>2</sub> AgCdO  |
| Contact Rating (resistive)         | 1A: 45A/14VDC; 1B: 30A/14VDC; 1C:20A/120VAC, 15A/28VDC, NO: 45A/14VDC ,NC: 30A/14VDC                         |
| Max. Switching Power               | 560W 2400VA  |
| Max. Switching Voltage             | 75VDC 380VAC   |
| Contact Resistance or Voltage drop | <30mΩ Max. Switching Current:45A   |
| Operation life                     | Electrical: 10 <sup>5</sup> Item 4.30 of IEC 61810-7<br>Mechanical: 10 <sup>7</sup> Item 4.31 of IEC 61810-7 |

| Coil Parameter |                  |      |                        |   |   |                          |                 |                 |
|----------------|------------------|------|------------------------|---|---|--------------------------|-----------------|-----------------|
| Dash numbers   | Coil voltage VDC |      | Coil resistance Ω ±10% | Pickup voltage VDC(max) (70% of rated voltage ) | Release voltage VDC(min) (10% of rated voltage) | Coil power consumption W | Operate Time ms | Release Time ms |
|                | Rated            | Max. |                        |   |   |                          |                 |                 |
| 006-1900       | 6                | 7.8  | 19                     | 4.20  | 0.6   | 1.9                      | <5              | <3              |
| 009-1900       | 9                | 11.7 | 42.6                   | 6.30  | 0.9   |                          |                 |                 |
| 012-1600       | 12               | 15.6 | 90                     | 8.40  | 1.2   | 1.6                      | <5              | <3              |
| 018-1600       | 18               | 23.4 | 202.5                  | 12.6  | 1.8   |                          |                 |                 |
| 024-1600       | 24               | 31.2 | 360                    | 16.8  | 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    | 100MΩ min (at 500VDC)           | Item 7 of IEC 61810-5       |
| Dielectric Strength      |                                 |                             |
| Between contacts         | 50Hz 500V                       | Item 6 of IEC 61810-5       |
| Between contact and coil | 50Hz 750V                       | Item 6 of IEC 61810-5       |
| Shock resistance         | 200m/s <sup>2</sup> 11ms        | IEC68-2-27 Test Ea          |
| Vibration resistance     | 10~40Hz double amplitude 1.27mm | IEC68-2-6 Test Fc           |
| Terminals strength       | 10N                             | IEC68-2-21 Test Ua1         |
| Solderability            | 235°C ± 2°C 3 ± 0.5s            | IEC68-2-20 Test Ta method 1 |
| Ambient Temperature      | -40~125°C                       |                             |
| Relative Humidity        | 85% (at 40°C)                   | IEC68-2-3 Test Ca           |
| Mass                     | 19g (Open type) 21g             |                             |

### Dimensions

mm /inch

Open type

Dust cover type

USA Mounting (Bottom view)

European Mounting (Bottom view)

1A 1B 1C

Wiring diagram(Bottom view)

Dimensions

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

### Reference Data

