

# 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: 40A/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 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 60255-5
Dielectric Strength		
Between contacts	50Hz 500V	Item 6 of IEC 60255-5
Between contact and coil	50Hz 750V	Item 6 of IEC 60255-5
Shock resistance	200m/s <sup>2</sup> 11ms	IEC 68-2-27 Test Ea
Vibration resistance	10~40Hz double amplitude 1.27mm	IEC 68-2-6 Test Fc
Terminals strength	10N	IEC 68-2-21 Test Ua1
Solderability	235°C ±2°C 3±0.5s	IEC 68-2-20 Test Ta method 1
Ambient Temperature	-40~125°C	
Relative Humidity	85% (at 40°C)	IEC 68-2-3 Test Ca
Mass	19g (Open type) 21g	

### Dimensions

mm /inch

Open type

USA Mounting (Bottom view)

European Mounting (Bottom view)

Dust cover type

Dimensions

Wiring diagram(Bottom view)

1A 1B 1C

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

### Reference Data

