



## JD-8 Integrated Motor Protector

### 1. General

JD-8 Integrated Motor Protector is mainly applicable to fault protection of overload and phase failure of low-voltage three-phase AC asynchronous motor in electric power system with AC frequency 50Hz and rated insulation voltage less than 690V. The protector is usually matched with the contactor in AC motor loop circuit for use. It conforms to IEC 60947-4-1 standards.

### 2. Type designation

JD - □

Design serial number

Integrated Motor Protector

### 3. Operating conditions

- 3.1 The altitude shall not exceed 2000m.
- 3.2 The ambient air temperature is  $-5^{\circ}\text{C}\sim +40^{\circ}\text{C}$  and the average temperature within 24h shall not exceed  $+35^{\circ}\text{C}$ .
- 3.3 Atmospheric condition: Relative humidity of atmosphere shall not exceed 50% at the temperature of  $+40^{\circ}\text{C}$ , and higher relative humidity is allowed at lower temperature. For example, the air humidity can reach 90% at the temperature of  $+20^{\circ}\text{C}$ . Regarding the condensation casually caused by humidity change, special measures shall be taken.
- 3.4 Class of pollution: Class III
- 3.5 Installation category: category III
- 3.6 The angle between the installation surface and the vertical surface shall not exceed  $\pm 5$  degrees.
- 3.7 The place without obvious shake, impact and vibration shall be selected as the installation site.
- 3.8 The installation site shall conform to the following standards: explosive and dangerous medium, no gas capable of corroding and damaging insulation in the medium and less conductive dust in the medium
- 3.9 The place with rain-proof and snow-proof equipment and a little water vapor shall be used as the installation site.

### 4. Technical data

- 4.1 Main circuit: rated insulation voltage AC690V, rated frequency 50Hz

Model	Range of setting current (A)	Power suitable for motor (kW)
JD-8	0.5~5	0.25~2.5
	2~20	1~10
	20~80	10~40
	32~80	16~40
	64~160	32~80

- 4.2 Auxiliary circuit: rated insulation voltage AC380V, rated frequency 50Hz

Utility Category	AC-15	
Rated operating voltage (V)	220	380
Rated operating current (A)	1.5	0.95
Conventional thermal current (A)	5	

## 5. Others

### 5.1 Structure characteristics

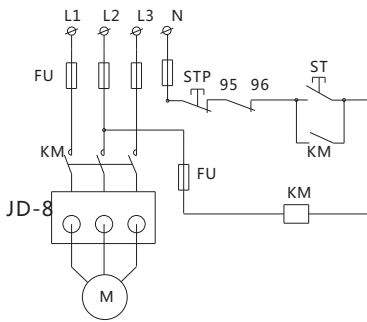
- 5.1.1 Three-phase electronic type
- 5.1.2 Function of phase failure and overload protection(not suitable for reversible motor)
- 5.1.3 Device capable of continuously adjusting setting current
- 5.1.4 The main circuit adopts pass-through-core type wiring method.
- 5.1.5 Installation method: installation via screws

5.2 The protector has the following operating characteristics for load balance of each phase; the tripping level is level 30.

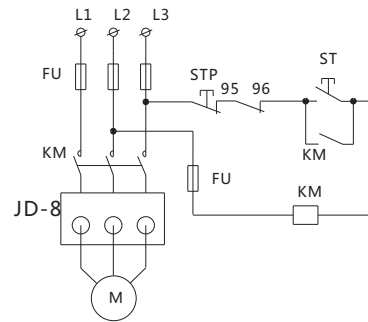
Serial number	Multiple of setting current	Actuation time	Starting condition	Ambient air temperature
1	1.05	No actuation within 2h	Cold state	Room temperature (20±5)°C
2	1.2	Actuation within 2h	Hot state (the test is done following sequence 1)	
3	1.5	Actuation within 12min		
4	7.2	9s < tp≤30s	Cold state	

### 5.3 Wiring diagram

Wiring diagram of control circuit with voltage AC220V

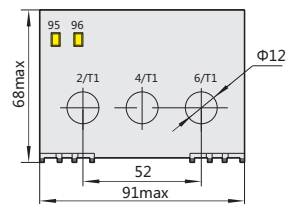
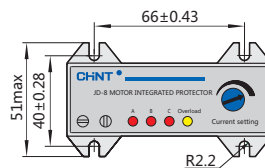


Wiring diagram of control circuit with voltage AC380V

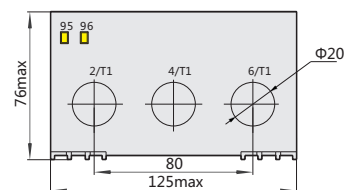


## 6. Overall and mounting dimensions (mm)

JD-8(0.5A~5A,2A~20A,20A~80A)



JD-8(32A~80A,64A~160A)



## 7. Ordering information

- 7.1 The protector with proper type number and specification shall be selected according to the use requirement.
- 7.2 Order quantity.