

Motor Control & Protection

JD-5, JD-6 Motor Integrated Protector



General

JD-5, JD-6 Motor Integrated Protector (hereinafter referred to as protector) is applicable for overload and phase-failure protection of AC motor @ A.C.50Hz, less than AC690V rated insulation voltage and 20A~300A rated operating current for its continuous working or discontinuous working. Protector and AC contactor are generally used cooperatively.

This product meets the requirements of IEC 60947- 4-1.

Operating conditions

- Altitude $\leq 2000\text{m}$.
- Ambient temperature Range: $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$, with daily average $\leq +35^{\circ}\text{C}$.
Atmospheric condition: when the highest temperature is $+40^{\circ}\text{C}$, the relative humidity of air shall be no more than 50%, higher relative humidity shall be allowable at lower temperature, for instance air humidity may reach 90% at $+20^{\circ}\text{C}$. As for dews, which contingently appear due to change of temperature, special steps should be taken.
- Pollution Level: Level 3.
- Inclination between installation plane and vertical plane shall $\leq \pm 5^{\circ}$.
- In the media without explosive risk, and no gases that may be corrosive to metal and damage insulation in the media together with at places where much conducting dust being in existence.
- At places where rain & snow proof facilities are equipped with and not being full of steam.
- At places without prominence rock, impact and vibration.
- Installation Category: III.



Technical data

Rated insulation voltage AC690V, rated frequency 50Hz, rated operating current 0.5A~300A.

Parameter	Model	JD-5	JD-5B (with buzzer)	JD-6	BHQ-S-C	BHQ-S-J
Rated Voltage		AC380V 50Hz(Other voltage levels can be customized)				
Setting current range (suitable motor power)		2-80A (1-40KW)	2-80A (1-40KW)	60-300A (30-150KW)	20-80A, 63-150A 100-250A	0.5-5A 5-20A
Overload action time (with inverse time limit characteristics)		3-300s (Adjustable)				
Phase failure action time		$\leq 2\text{s}$				
Reset Mode		De-energizing reset				
Contact capacity		AC380V 3A				
Display mode		LED Light indication				
Alarm mode		Sound-light alarm				
Mechanical life		10^6				
Electric life		10^5				
Installation mode		Screw				

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Protection features

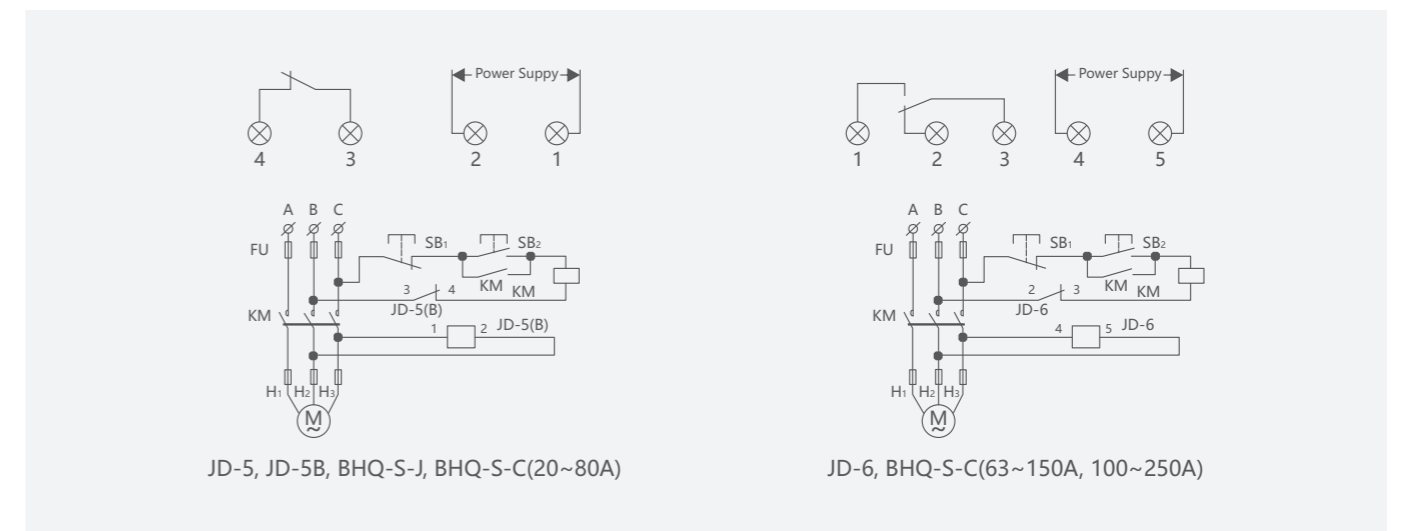
Operation characteristics under three-phase balanced-load status

I/In	Operating time	Test condition	Ambient temperature
1.05	<2h non-tripping	Cold status	+20°C
1.20	<2h tripping	Hot status	
1.50	<2 min tripping	Hot status	
7.20	$2\text{s} < T_p \leq 10\text{s}$	Cold status	

Operation characteristic under phase-failure status

Multiple of setting current		Operating time	Test condition	Ambient temperature
Any two phases	The Third phases			
1.0	0.9	<2h non-tripping	Cold status	+20°C
1.15	0	$\leq 5\text{s}$	Hot status	

Wiring diagram



Overall and mounting dimensions (mm)

