

# YCQ7


Magnetic starter

OPERATION INSTRUCTION

Standard: IEC/EN 60947-4-1

**CNC**

Deliver  
Power For Better Life

-  Before installing and using this product, please read this manual carefully and pay more attention to safety.

## **YCQ7**

### **Magnetic starter**

#### **1 General**

YCQ7 series magnetic starter is suitable for using in the circuits the rated voltage up to 660V, AC 50Hz or 60Hz, rated control power to 45kW and current to 95A. It is used to control the direct start and stop of the motor, and the starter with thermal overload relay protects the motor from overload and phase failure. Standard: IEC/EN 60947-4-1.

#### **2 Operating conditions**

2.1 Altitude:  $\leq 2000\text{m}$

2.2 Ambient air temperature:  $-5^{\circ}\text{C}\sim+40^{\circ}\text{C}$ , average temperature of 24 hours must below  $+35^{\circ}\text{C}$

2.3 Relative humidity: the maximum temperature of 40 degrees, the air relative humidity not exceed 50%, at a lower temperature can allow for a higher relative humidity. The wettest month's average lowest temperature must be below  $25^{\circ}\text{C}$ , the max relative humidity of that month should not exceed 90%. If humidity changes as a result of occasional gel generated, should eliminate it.

2.4 Installation position: The installation degree of the tilt and vertical plane should not exceed  $5^{\circ}$

2.5 In a non-explosive hazardous medium, and there is no place in the medium that is sufficient to corrode

metals and destroy insulation gases and conductor dust.

2.6 Where there is rain and snow protection and there is no steam.

2.7 Shock vibration: Products should be installed and used without severe shake, shock and vibration of the place.

### 3 Technical data

3.1 Coil rated control power supply voltage  $U_s$  can be divided into AC 50Hz or 60Hz 36V, 110V, 220V, 380V.

3.2 Operating condition: Coil pull-in voltage is (85%~110%) $U_s$ ; Release voltage is (20%~75%) $U_s$ .

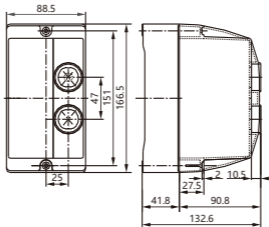
Table 1

Type	Rated current leA	Maximum power duty(kW)			Marched AC contactor type	Marched thermal relay	Setting current range(A)
		AC-3					
		660V	380V	220V			
YCQ7-09	9	5.5	4	2.2	CJX2-D9/ CJX2s(CJX2i)-09	JR28-25 JR28s-25	2.5~4,4~6, 5.5~8
YCQ7-12	12	7.5	5.5	3	CJX2-D12/ CJX2s(CJX2i)-12	JR28-25 JR28s-25	7~10, 9~13
YCQ7-18	18	10	7.5	4	CJX2-D18/ CJX2s(CJX2i)-18		12~18
YCQ7-25	25	15	11	5.5	CJX2-D25/ CJX2s(CJX2i)-25		17~25
YCQ7-32	32	18.5	15	7.5	CJX2-D32/ CJX2s(CJX2i)-32		23~32

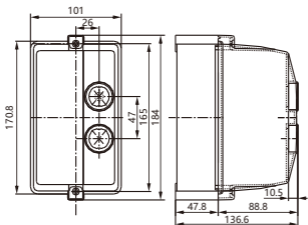
Renew Table1

Type	Rated current Ie(A)	Maximum power duty(kW)			Marched AC contactor type	Marched thermal relay	Setting current range(A)
		AC-3					
		660V	380V	220V			
YCQ7-40	40	18.5	18.5	11	CJX2-D40/ CJX2s(CJX2l)-40	JR28-93 JR28s-93	
YCQ7-50	50	22	22	15	CJX2-D50/ CJX2s(CJX2l)-50		
YCQ7-65	65	30	30	18.5	CJX2-D65/ CJX2s(CJX2l)-65		
YCQ7-80	80	37	37	22	CJX2-D80/ CJX2s(CJX2l)-80		
YCQ7-95	95	45	45	25	CJX2-D90/ CJX2s(CJX2l)-90		

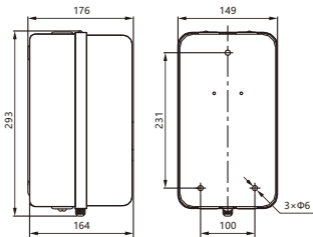
#### 4 Overall and mounting dimensions(mm)



YCQ7-09~18



YCQ7-25~32



YCQ7-40~95

## **5 Installation and disassembly methods**

Check the working voltage, rated current, control voltage and other requirements of the product before installation.

When connecting and disconnecting, separate the flexible wire connector and remove the shell to facilitate wiring.

When installing and fixing the product, the product must be firmly fixed.

## **6 Commissioning and operation**

(1) Check whether the rated voltage (nameplate parameter  $U_s$ ) and frequency of contactor coil are consistent with the power supply.

(2) Check whether the setting current range of the starter is consistent with the rated working current of the motor. If not, replace it.

(3) Check the action flexibility of the thermal overload relay: Push the red test button inside the hole next to TEST printed on the cover plate of the thermal relay toward the inside with a small screwdriver, and you can hear the sound of the contact action, and then release your hand to hear the sound of the contact reset (a multimeter can also be used) Otherwise, it must be repaired.

(4) Single-core polyvinyl chloride (PVC) insulated copper wire is recommended to be used as the

connecting conductor. Refer to Table 4 for the regulation of the sectional area of the conductor

Table 4 Conductor cross-sectional area reference table

Motor rated working current (A)	$0 < I \leq 8$	$0 < I \leq 12$	$0 < I \leq 20$	$0 < I \leq 25$	$0 < I \leq 32$	$0 < I \leq 50$	$0 < I \leq 65$	$0 < I \leq 85$	$0 < I \leq 115$	$0 < I \leq 150$	$0 < I \leq 175$
Connected wire (mm <sup>2</sup> )	1.0	1.5	2.5	4.0	6.0	10	16	25	35	50	70

(5) Power on the control circuit, press the start and stop buttons in turn, and check whether the internal wiring of the starter is correct.

(6) When the starter leaves the factory, the control power circuit has been connected to the main circuit, and no additional wiring is required (the wiring diagram is in the cover).

(7) When controlling single-phase motor, any two main circuits in the starter must be changed to series before use.

(8) When the voltage of the control circuit is different from that of the main circuit, the two wires connected to the main circuit should be removed and connected to other corresponding control power supplies.

(9) When the starter leaves the factory, the setting current value of the thermal relay has been set to the

minimum gear. Before use, the setting current value of the thermal overload relay must be adjusted to the scale consistent with the rated working current of the motor.

(10) During startup, if the relay acts, the setting current value can be appropriately increased until the starter can work normally.

### **7 Maintenance and service**

(1) Conduct regular maintenance and timely remove the dust deposited on the starter;

(2) Tighten the screws connecting the contactor and thermal relay regularly;

(3) During use, check whether the thermal relay acts reliably on a regular basis (preferably once a month).

The method is to rotate the setting current adjusting knob to reduce the setting current until the relay acts, and then adjust the knob back to its original position;

(4) In case of product failure, please contact customer service for solution or stop using.





# CERTIFICATE

Product Model: YCQ7

Standard: IEC/EN 60947-4-1

Inspector : **CNC003**

Production date: Printed on the product  
or package.

This product is qualified according  
to the delivery inspection

## CNC ELECTRIC

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CNC

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