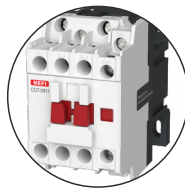
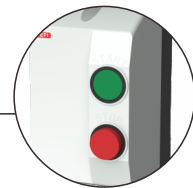


CQJ7 Motor Controller



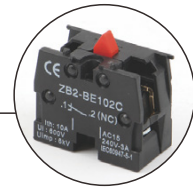
**Built-in CC7
AC contactor**



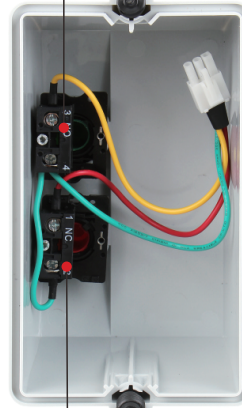
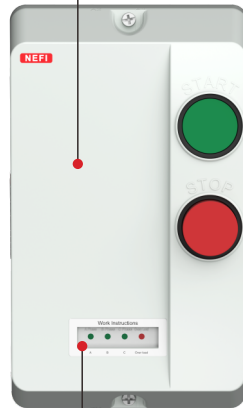
High compatibility



**Built-in JD-8
motor integrated protector**



High reliability



General

CQJ7 series motor controller is designed for AC 50Hz or 60Hz circuits, with a rated operational voltage up to 380V, rated control power up to 18.5kW (current up to 38A).

It controls the direct start and stop of water pumps or motors, provides overload and phase-failure protection, and enables automatic liquid level control for civil water towers and reservoirs. Not suitable for liquid level control of low-conductivity liquids (e.g., oil, purified water), flammable/explosive chemical liquids, or high-density sewage.

Standard: IEC 60947-4-1

Operation and Installation Conditions

Type	Operating and Installation Conditions
Altitude	≤ 2000m
Ambient air temperature	-5°C ~ +40°C; 24-hour average temperature ≤ +35°C
Atmospheric conditions	The maximum temperature of 40°C, the air relative humidity not exceed 50%; higher humidity allowed at lower temperatures. Special measures should be taken if condensation occurs on the product occasionally due to temperature variation
Pollution degree	3
Installation category	III
Weather	Where there is rain and snow protection and there is no steam.
Environment	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.
Shock vibration	Products should be installed and used without severe shake, shock and vibration of the place.
Installation position	Tilt and vertical deviation ≤ 5°

Selection

CQJ7	-	W	220V	3.5~11
↓		↓	↓	↓
Model		Frame Size	Rated control supply voltage	Setting Current Scope
Motor Starter		Blank: without liquid level relay W:with liquid level relay	220V 380V	0.72~2.4
				3.5~11
				10~16
				20~25
				30~38

Technical Parameters

Type	Conventional heating current(A)	Max.rated power(kW)		Model of matching AC contactor	Model of matching motor protector	Setting current range(A)	Number of turns of protector(turn)
		AC-3					
		380V	220V				
CQJ7 0.72A~2.4A	2.4	1.1	0.55	CC7-09	JD-8/0.5A~5A	0.72~2.4	5
CQJ7-W 0.72A~2.4A							
CQJ7 3.5A~11A	12	5.5	3	CC7-12	JD-8/2A 20A	3.5~11	1
CQJ7-W 3.5A~11A							
CQJ7 10A~16A	16	7.5	4	CC7-18	JD-8/2A~20A	10~16	1
CQJ7-W 10A~16A							
CQJ7 20A~25A	25	11	5.5	CC7-25	JD-8/20A~80A	20~25	1
CQJ7-W 20A~25A							
CQJ7 30A~38A	38	18.5	9	CC7-38	JD-8/20A~80A	30~38	1
CQJ7-W 30A~38A							

- Rated control supply voltage Us: AC220V, AC380V.
- Degree of protection of enclosure: IP55.
- Down-lead distance of liquid level control electrode: 200m max.
- Protection characteristics of the controller.

Phase failure protection characteristics of the controller: In case of failure of any phase of the three-phase main circuit passing through the center hole of the motor comprehensive protector in the controller, the motor comprehensive protector operates for a period of ≤5s.

Overload protection characteristics of the controller under balanced three-phase load.

No.	Setting Current multiple	Operation time			Starting conditions
1	1.05	No operation within 2h			Cold state start
2	1.2	Operation within 2h			Start after No.1
3	1.5	Tripping class	30	≤12min	Startater applying a 1.0 times setting current for 2h
4	7.2	Tripping class	30	9s<Tp≤30s	Cold state start

Features

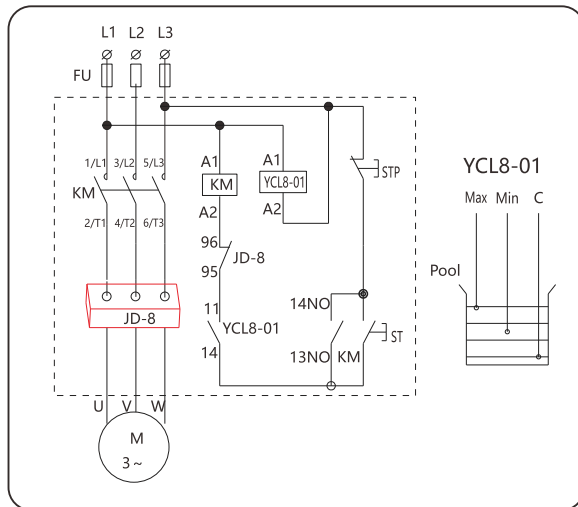
The controller is composed of a CC7 series AC contactor, a JD-8 series motor comprehensive protector, and an YCL8 liquid level relay, all housed in a protective enclosure. It is available in two versions:

- With liquid level relay: Controls the start/stop and automatic pumping/draining of water pumps, while providing overload and phase-failure protection.
- Without liquid level relay: Controls the start/stop of motors and provides overload and phase-failure protection.

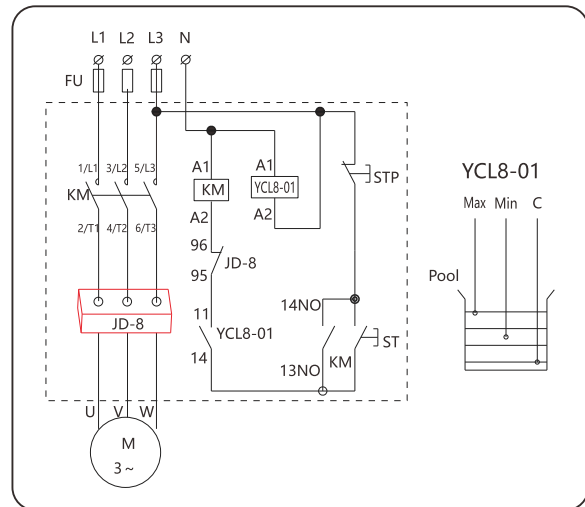
Setting of the motor comprehensive protector in the controller is required before it is connected and put into use.

Wiring Diagram

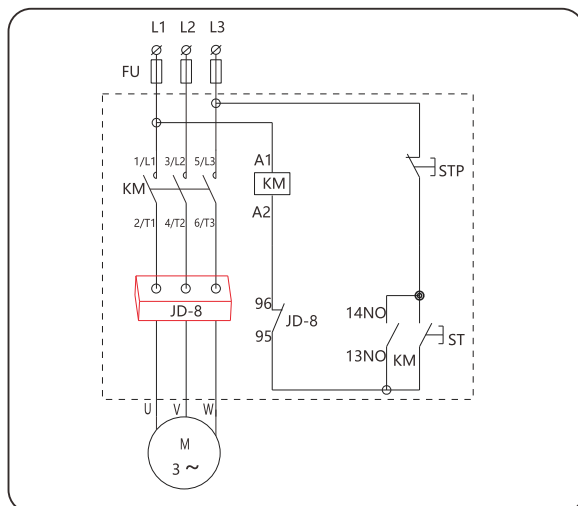
Connection diagram of CQJ7-W in case both the control circuit voltage and the main circuit voltage are AC380V



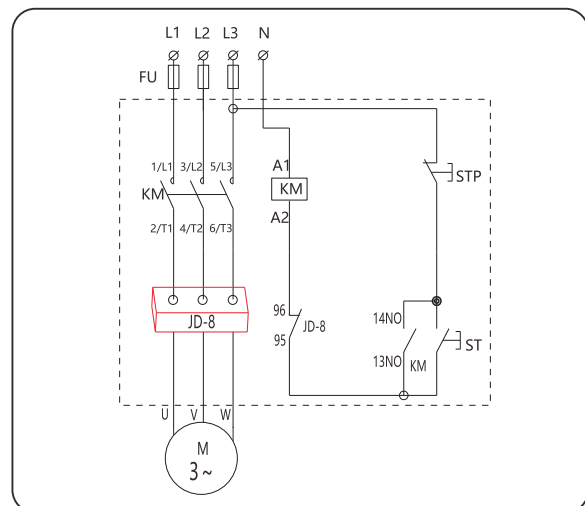
Connection diagram of CQJ7-W in case the main circuit voltage is AC380V and the control circuit voltage is AC220V



Connection diagram of CQJ7 in case both the control circuit voltage and the main circuit voltage are AC380V



Connection diagram of CQJ7 in case the main circuit voltage is AC380V and the control circuit voltage is AC220V



Dimensions and Installation Sizes(mm)

