

CJ19 Series
Contactor for Capacitor Switching

User Instruction



Safety Warning

- ① Only professional technicians are allowed for installation and maintenance.
- ② Installation in any damp, condensed-phase environment with inflammable and explosive gas is forbidden.
- ③ When the product is being installed or maintained, the power must be switched off.
- ④ You are prohibited from touching the conductive part when the product is operating.

1 Use Purpose and Range of Application

CJ19 series contactor for capacitor switching (hereinafter referred to as contactor) is mainly used in power systems with AC 50Hz/60Hz, rated operating voltage up to 690V and rated power up to 130kvar. It is used to connect and disconnect shunt capacitors with the aim to improve power factor.

2 Key Technical Parameters and Performance

Table 1 Environmental conditions

Environmental conditions	
Ambient temp. (°C)	-5°C~+40°C, average temperature should not exceed +35°C within 24h
Hot and humid atmospheric conditions	Relative humidity should not exceed 50% at +40°C; up to 90% at +20°C;
Altitude	No influence below 2000m,
Pollution class/installation category	Class 3/III

Table 2 Key technical parameters and performance index

Specifications		Item							
		CJ19 -25	CJ19 -32	CJ19 -43	CJ19 -63	CJ19 -95	CJ19 -115	CJ19 -150	CJ19 -170
Controllable capacitors Qe (kvar)	220V/230V/240V	6.7	10	15	20	35	40	46	52
	380V/400V/415V	12.5	20	25	33.3	50	60	80	90
	660V/690V	18	26	36	48	92	100	120	130
Rated insulation voltage Ui (V)		690							
Rated impulse withstand voltage (kV)		6							
Rated limited short-circuit current Iq (kA)		50							
Rated operating voltage Ue (V)		220/230/240, 380/400/415, 660/690							
Conventional free air thermal current Ith (A)		25	32	43	63	95	200	200	275

Table 2 (Continued)

Item	Specifications							
	CJ19 -25	CJ19 -32	CJ19 -43	CJ19 -63	CJ19 -95	CJ19 -115	CJ19 -150	CJ19 -170
Rated operating current (AC-6b) Ie (A)	17	23	29	43	72.2	87	115	130
Inrush current suppression capability	20Ie							
Control power supply voltage Us (V)	110, 127, 220, 380							
Auxiliary contacts	AC-15 Ie: 0.95A Ue: 380V/400V/415V DC-13 Ie: 0.15A Ue: 220V/250V Ith: 10A							
Operating frequency Time/hour	120							
Electrical life ($\times 10^4$ times)	10					2		
Mechanical life ($\times 10^4$ times)	100					300		
IP Grade	IP10							
Impedance/Pole (Ω)	≤ 0.05							
Type of Coordination	Type II Coordination							
Matched Fuse Mode	NT00- 25A	NT00- 32A	NT00- 43A	NT00- 63A	NT00- 95A	NT2- 250A	NT2- 315A	
Rated current of Fuse (A)	25	32	40	63	95	250	315	

3 Installation

See Figure 1~Figure 3 and Table 3 for outline and installation dimensions, see Figure 4 for installation diagram, see Table 4 for wiring capacity of wiring terminals.

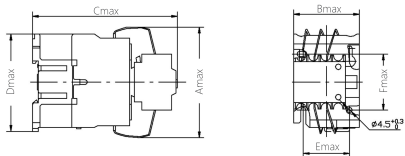


Figure 1 Outline and installation dimensions of CJ19-25~43 contactors

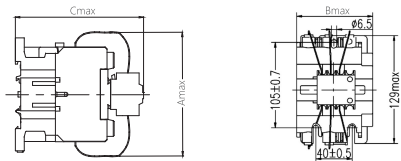


Figure 2 Outline and installation dimensions of CJ19-63~95 contactors

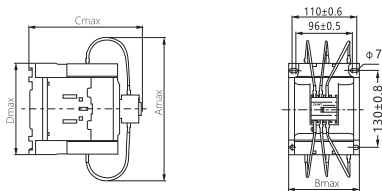


Figure 3 Outline and installation dimensions of CJ19-115~170 contactors

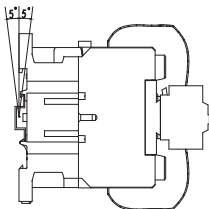


Figure 4 Product installation diagram

Table 3 Outline and installation dimensions

Unit: mm

Contactor model	Amax	Bmax	Cmax	Dmax	E	F	Remarks
CJ19-25	80	47	124	76	34/35	50/60	In addition to screws, user can also use 35mm mounting rails for installation
CJ19-32	90	58	132	86	40	48	
CJ19-43	90	58	136	86	40	48	
CJ19-63	132	79	150	—	—	—	In addition to screws, user can also use 35mm or 75mm mounting rails for installation
CJ19-95	135	87	158	—	—	—	
CJ19-115	200	120	192	155			In addition to screws, user can also use two 35mm mounting rails for installation
CJ19-150	200	120	192	155			
CJ19-170	200	120	192	155			

Table 4 Sectional area of conductors

Basic specifications	CJ19 -25		CJ19 -32		CJ19 -43		CJ19 -63		CJ19 -95		CJ19 -115		CJ19 -150		CJ19 -170	
	Main circuit Max./Min. cross-sectional area (mm ²)	4	1.5	6	1.5	10	4	16	1	25	1	150	10	150	10	150
Max.number of connections to wiring terminals	2	2	2	2	1	2	1	2	1	2	1	2	1	2	1	2
Stripping length of main circuit wire mm	8.6		10.8		11.3		12		15.2		21		21		21	
control circuit Max cross-sectional area (mm ²)	1.5															
control circuit Min cross-sectional area (mm ²)	0.5															
Max. number of connections to wiring terminals	2															
Stripping length of control circuit wire mm	8.4				9				8							

4 Maintenance

Check if the contactor can operate reliably every month. Method: Check if the contact incline 5° forward upon pick-up and incline 5° backward upon release.

Conduct maintenance every month. **Note: Do not disassembly, assembly and repair the product at will. Replace the product if it is found to be damaged.**

Table 5 Analysis and Troubleshooting of Faults

Symptoms	Cause analysis	Troubleshooting method
The product does not operate or does not operate reliably	Inconsistency between control power voltage and coil voltage.	Use control power supply that complies with coil voltage.
	Insufficient operation circuit power capacity or disconnection or wrong connection exists in the circuit.	Check the circuit to ensure correct connection.
	Coil burnt; mechanical movable parts jammed.	Replace the coil, remove foreign objects or replace the product.
Noise	There are foreign objects on the polar face of magnet yoke or armature.	Clean the polar face of the iron core.
	The voltage of control power supply is too low.	Use control power supply that complies with coil voltage.
The product does not release or release slowly	Contact welding	Replace the product.
	There is oil or dust on the polar face of the iron core.	Clean the polar face of the iron core.

5 Environmental Protection

In order to protect the environment, the product or product parts should be disposed of according to the industrial waste treatment process, or be sent to the recycling station for assortment, dismantling and recycling according to local regulations.

CHINT

QC PASS

CJ19 Series
Contactor for Capacitor Switching
IEC/EN 60947-4-1

Check 46

Test date: Please see the packing

ZHEJIANG CHINT ELECTRICS CO.,LTD.

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User Instruction

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