



CJX2sF-115~2100 | **NAVIGATOR**
AC Contactor | **Series**

User Manual



Please carefully read this User Manual before installing and operating the product, and keep this manual properly for future reference

Safety Notice

Please carefully read this instruction before the installation, operation, run, maintenance, and inspection, and follow the contents of the instruction to properly install and operate this product.



Danger:

- Do not operate the contactor with your wet hands;
- Do not touch the energized parts during operation;
- Make sure that the product is de-energized during the maintenance and service;



Caution:

- The installation, maintenance and service shall be performed by the qualified professional;
- Please confirm that the product voltage, current, frequency and utilization category of the product meet the operating requirements before use;
- Please connect the control circuit first, carry out the no-load operation test, and then connect the load if there is no abnormality;
- Please tighten the terminals regularly and remove the deposited dust;
- Do not let foreign objects fall into the product;
- If you need to purchase accessories, please choose the matching accessories provided by our company;
- If found damage or abnormal sound when unpacking, please stop the operation immediately and contact the supplier;
- When scrapping the product, please dispose the product waste properly. Thanks for your cooperation;

About CJX2sF-115~2100 AC Contactor

- Panel Introduction

Main circuit
terminal

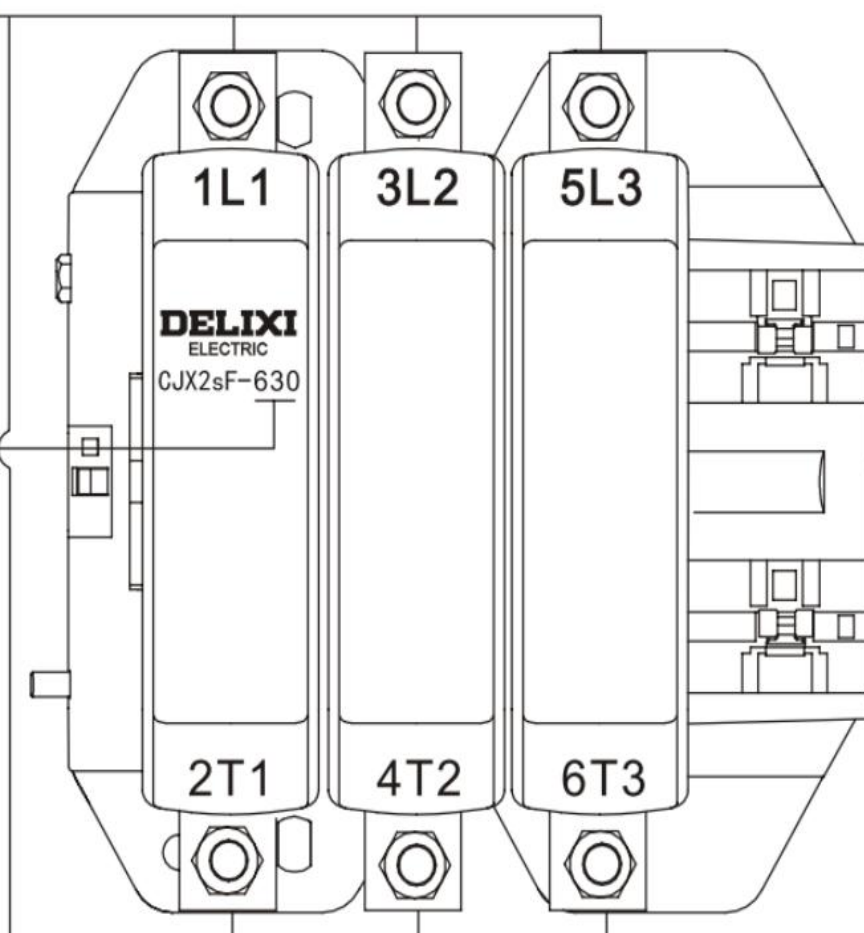
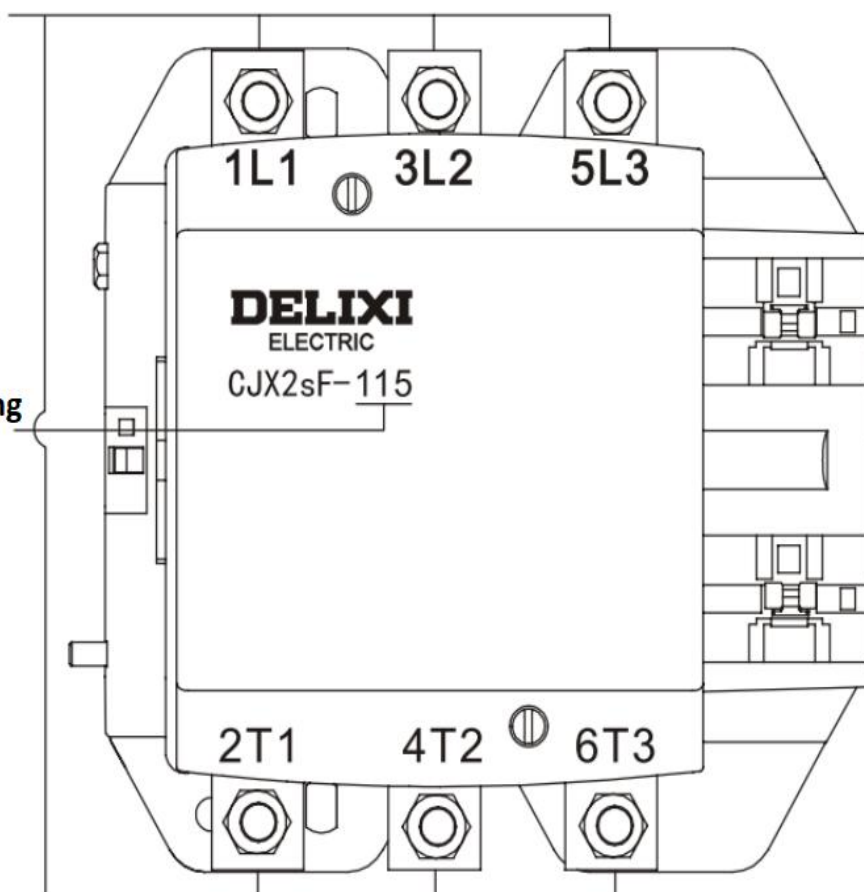
Rated working
current

A2
Coil terminal
A1

Main circuit
terminal

Rated
working
current

A2
Coil terminal
A1



Main Technical Parameters

Model	AC-3 Rated working current Ie/A	AC-1 ¹⁾ Conven- tional heating current Ith/A	AC-3 ²⁾ Pe			Fuse (SCPD)		Weight kg ⁴⁾	
			220V	380V	660V	Model	Rated current In/A		
			kW	kW	kW				
CJX2sF-115	115	200	30	55	80	RT16-2	250	3.6	
CJX2sF-150	150	200	40	75	100		355	3.7	
CJX2sF-185	185	275	55	90	110	RT16-3	425	4.6	
CJX2sF-225	225	275	63	110	129		500	4.7	
CJX2sF-265	265	315	75	132	160		630	7.1	
CJX2sF-330	330	380	100	160	220	RT16-4	800	7.6	
CJX2sF-400	400	450	110	200	280		800	8.5	
CJX2sF-500	500	630	145	250	335		1000	10.8	
CJX2sF-630	630	800	200	335	450	RT16	1250	17.4	
CJX2sF-800	800	800	230	450	475		1250	19	
Model	AC-1 Rated working current Ie/A	AC-1 ¹⁾ Conven- tional heating current Ith/A	AC-1 ²⁾ Pe				Fuse (SCPD)		Weight kg ⁴⁾
			220V	380V	660V	1000V	Model	Rated current In/A	
			kW	kW	kW	kW			
CJX2sF-1000	1000	1000	360	630	1030	1550	RSG-3	1100	17.3
CJX2sF-1250	1250	1250	450	780	1270	1900		1500	18.6
CJX2sF-1450	1450	1450	500	870	1430	2150		1500	26.7
CJX2sF-1700	1700	1700	585	1000	1650	2500		2000	27.7
CJX2sF-2100	2100	2100	730	1250	2050	3100		2300	28.7

1): $\theta \leq 40^{\circ}\text{C}$;

2): Three-phase

3) : $U_e=380\text{V}$

4): Weight of Three-phase contactor.

5): $U_e=690\text{V}$

Normal Operation, Installation and Transport Conditions

●Normal Operation and Installation Conditions

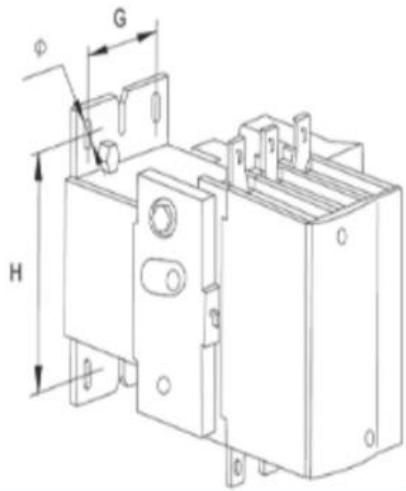
- (1) The ambient air temperature is not higher than +40°C, and is not below -5°C, and the average value within 24 hours does not exceed +35°C;
- (2) The altitude of the installation site does not exceed 2000m;
- (3) Atmospheric conditions
The relative humidity of the atmosphere does not exceed 50% when the highest ambient temperature is +40°C, and a higher relative humidity is allowed at lower temperatures, such as 90% at 20°C. Protective measures shall be taken for condensation occasionally occurred due to temperature changes.
- (4) The installation position shall be vertical, and the inclination angle at each direction shall not exceed 5°;
- (5) Installed at a place where there is no impact, vibration, and rain or snow erosion;
- (6) Pollution level: Level 3;
- (7) Installation category: Class III;
- (8) Rated impact withstand voltage U_{imp} :6000V;
- (9) Rated frequency :50Hz;
- (10) Protection grade: IP20(except wiring terminals);
- (11) Suitable for 8h working system, intermittent cycle working system, uninterrupted working system and short-time working system.

● Normal Storage and Transport Conditions

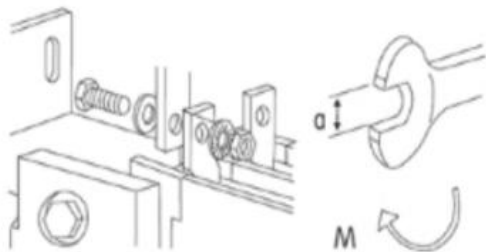
- (1) Temperature: -25°C~+55°C, +70°C in a short time (24h);
- (2) Relative humidity : $\leq 95\%$;
- (3) During the transport, please handle the product gently, and do not upside it down, and prevent the product from harsh collision;
- (4) The product shall not be attacked by rain or snow during transportation and storage.

Outline and Installation Dimensions (mm)

- CJX2sF-115~2100 Installation dimensions

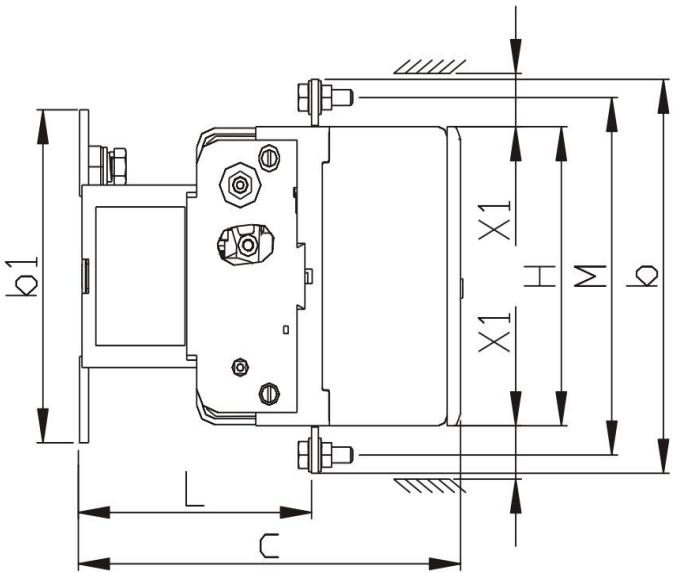
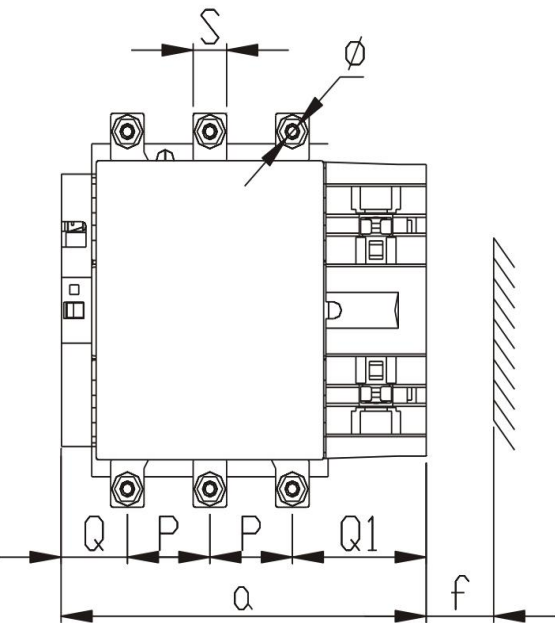


CJX2sF-		115、150 185、225	265 330	400 500	630、800、1000、1250	1450、1700、2100
mm	G	80	96	80	180	240
	H	106~120		170~180	180~190	172~190
	Φ	M6		M8	M10	M10
	±	M8	M10		M12	M12

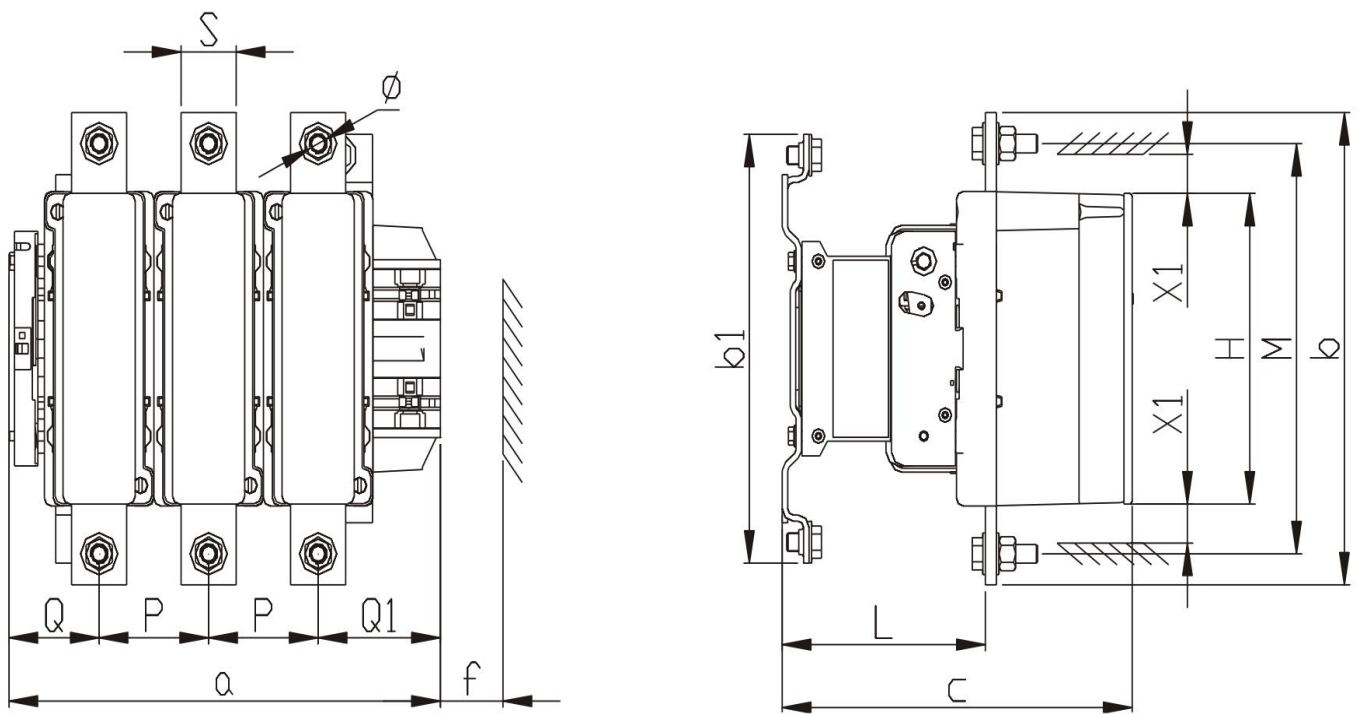


Specification	a mm	M N • m
115	10	10
150~185	13	18
225~500	16	35
630~2100	18	58

- CJX2sF-115~800 Outline dimensions



CJX2sF-115~500 Outline



CJX2sF-630, 800 Outline

	CJX2sF-					
	115	150	185	225	265	330
a	166	166	170	170	205	219.5
P	37	40	40	48	48	48
Q	32	28.5	30.5	22.5	42.5	49.5
Q1	60	57.5	59.5	51.5	66.5	74
S	15	20	20	25	25	25
Φ	M6	M8	M8	M10	M10	M10
f	131	131	130	130	147	147
b	162	170	174	197	203	206
b1	137	137	137	137	145	145
M	147	150	154	172	178	181
H	124	124	127	127	146	158
C	171	171	181	181	213	219
L	107	107	113.5	113.5	141	145
X1						
≤500V	10					
≥500V	15					

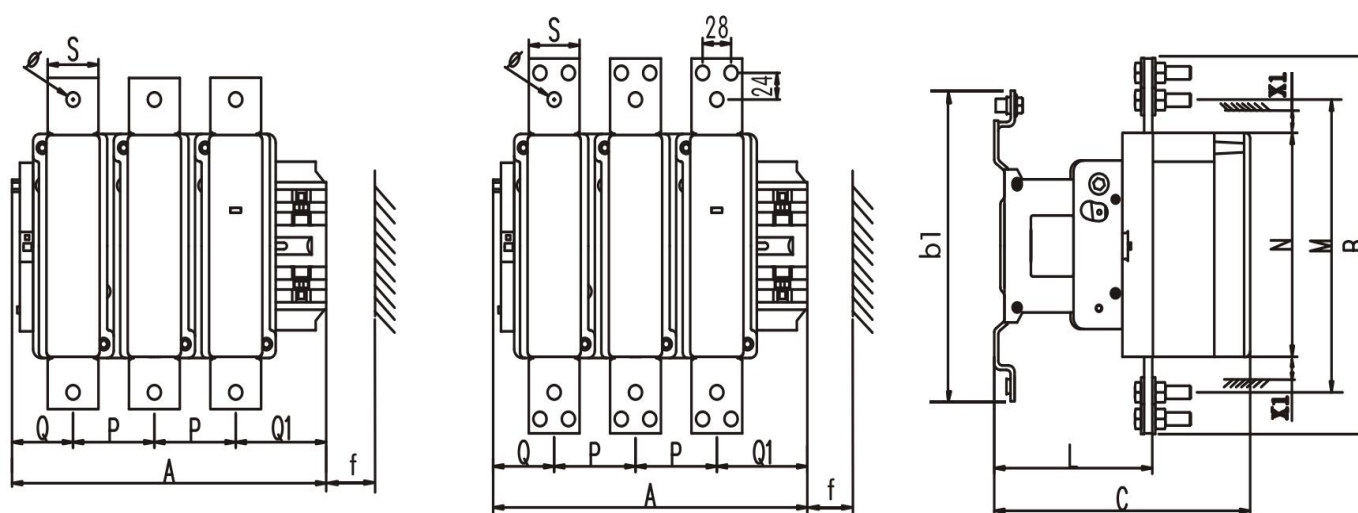
	CJX2sF-			
	400	500	630	800
a	216.5	237.4	314	309
P	48	55	80	80
Q	46.5	50.4	65	60
Q1	74	77	89	89
S	25	30	40	40
Φ	M10	M10	M12	M12
f	151	169	201	201
b	206	240	304	304
b1	209	209	288	280
M	181	208	264	264
H	158	172	202	202
C	219	232	255	255
L	145	146	155	155
X1				
≤500V	15		20	20
≥500V	20		30	30

Note:

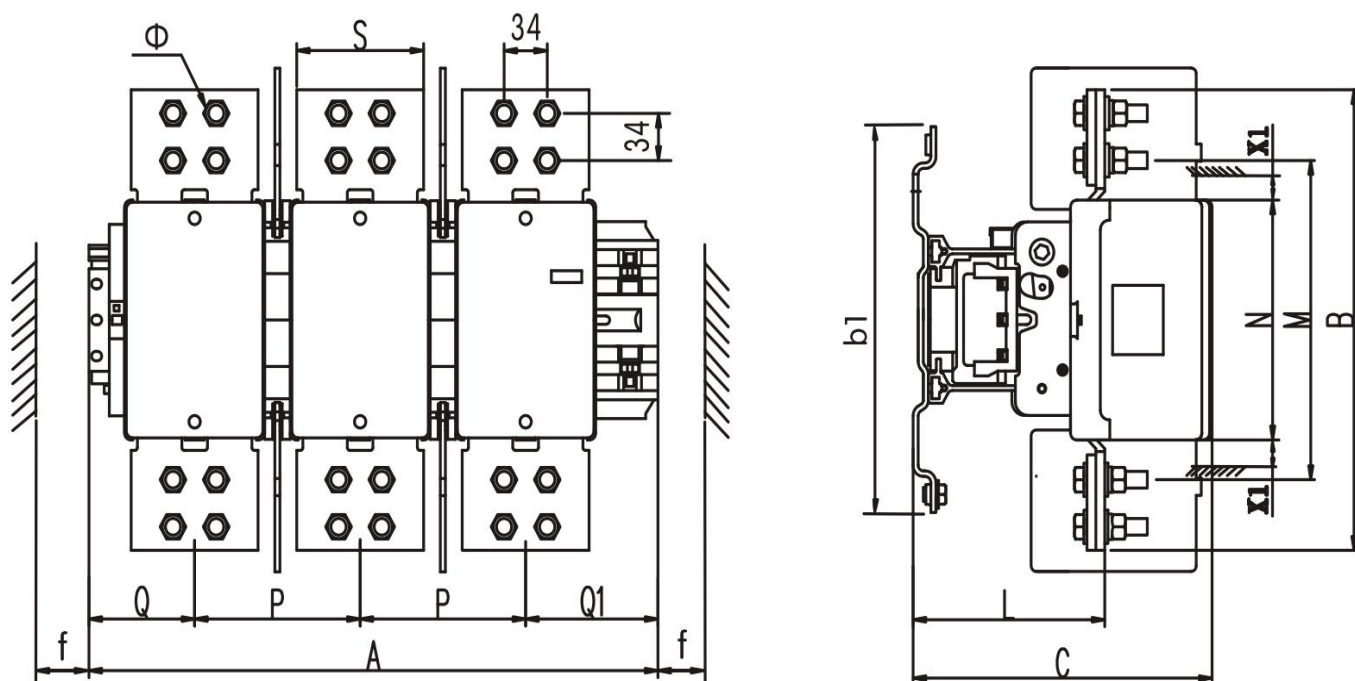
(1) f represents the minimum distance required to take out each coil

(2) X1 represents the arcing distance determined according to the working voltage and breaking capacity

● CJX2sF-1000~2100 Installation dimensions



CJX2sF-1000, 1250 Outline



CJX2sF-1450, 1700, 2100 Outline

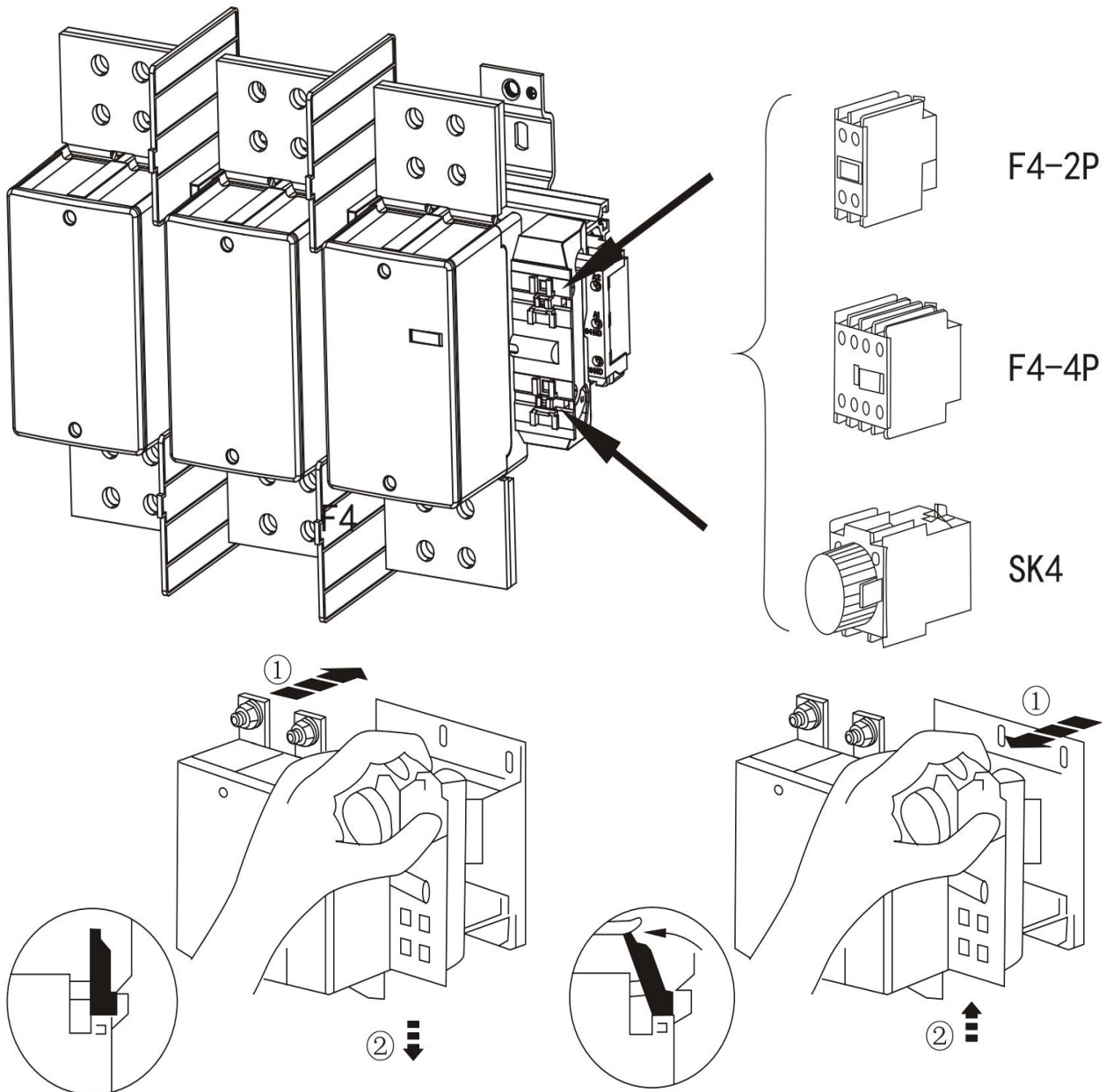
	CJX2sF-				
	1000	1250	1450	1700	2100
A	309	309	448		
P	80	80	130		
Q	60	60	85		
Q1	89	89	104		
S	40	50	100		
Φ	M12	M12	M12		
f	201	201	169		
B	304	338	332		
b1	280	280	278		
M	264	264	230		
N	202	202	172		
C	255	255	238		
l	155	155	151		
X1					
≤500V	20		90		
≥600V	30		100		

Note:

(1) f represents the minimum distance required to take out each coil

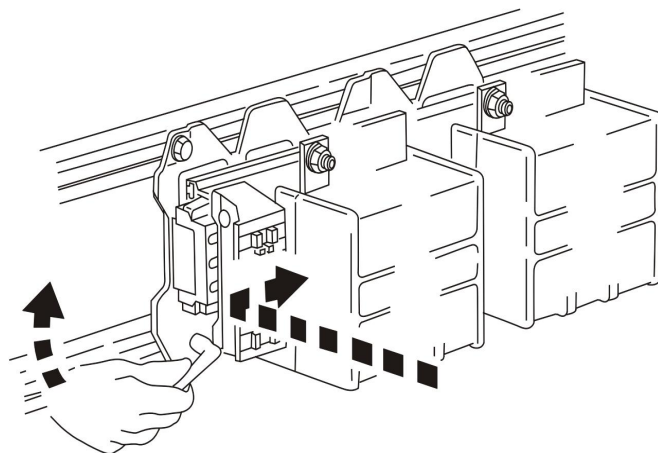
(2) X1 represents the arcing distance determined according to the working voltage and breaking capacity

● Accessories Installation

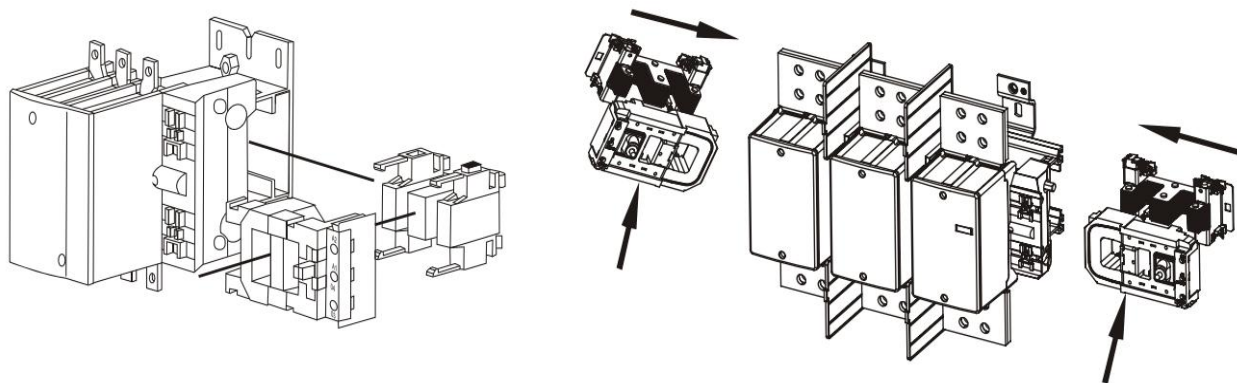


Note: The installation and removal method of the auxiliary contact on the top of F4 is the same as that of SK

Mechanical Interlock For Horizontal Installation



● Coil Removal



● Wiring Capacity Table

Model	Main circuit wiring				Control and auxiliary circuit			
	Copper wire		Copper bar		Soft wire mm ²		Hard wire mm ²	
	Pcs	Cross section mm ²	Pcs	Size mm	1	2	1	2
CJX2sF-115	1	95	2	20×3	2.5	4	1	2
CJX2sF-150	1	120	2	25×3				
CJX2sF-185	1	150	2	25×3				
CJX2sF-225	1	185	2	32×4				
CJX2sF-265	1	240	2	32×4				
CJX2sF-330	1	240	2	30×5				
CJX2sF-400	2	150	2	30×5				
CJX2sF-500	2	240	2	40×5				
CJX2sF-630/800	/	/	2	60×5				
CJX2sF-1000	/	/	2	80×5				
CJX2sF-1250/1450	/	/	2	100×5				
CJX2sF-1700	/	/	3	100×5				
CJX2sF-2100	/	/	4	100×5				

● Maintenance

1. Carry out regular maintenance and remove the dust deposited on the contactor in time
2. The uneven surface (as shown in Figure a) and burnt black of the contacts of the contactor due to arc burns will not affect the continued use. Do not use emery cloth or sandpaper for repairing. Small particles should be removed. If the surface of the contact is severely burned to expose the basic material (as shown in Figure b), it must be replaced with a new contact or stop using

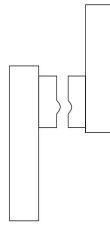


Figure a

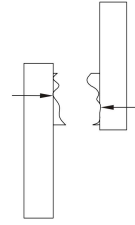


Figure b

Fault Analysis and Treatment

Fault	Cause Analysis	Treatment measures
The iron core cannot be closed or the suction force is insufficient (that is, the contact has been closed but the iron core has not been fully attracted)	1. The power supply voltage is too low or fluctuates too much; 2. The power supply capacity of the operating circuit is insufficient or disconnection, wiring errors and poor contact of the control contacts; 3. The technical parameters of the coil do not match the conditions of use; 4. The product itself is damaged (Such as coil disconnection or burnout, mechanical movable parts stuck, etc.)	1. Increase the power supply voltage; 2. Increase the power supply capacity, replace the circuit, and repair the control contacts; 3. Replace the contactor; 4. Eliminate stuck faults and repair damaged parts.
no release or slow release	1. The contact is welded; 2. The movable part of the machine is stuck; 3. There is oil or dust on the pole surface of the iron core.	1. Eliminate welding faults, repair or replace the contactor; 2. Eliminate stuck faults; 3. Clean the pole surface of the iron core.
Coil overheating or burning out	1. The power supply voltage is too high or too low; 2. The technical parameters of the coil (such as rated voltage, frequency, energization duration and applicable working system, etc.) do not match the actual use; 3. The moving part is stuck; 4. The pole surface of the iron core is uneven or dust sticking.	1. Adjust the power supply voltage; 2. Replace the contactor; 3. Eliminate mechanical jamming; 4. Clear the pole surface.
Electromagnet (AC) is noisy	1. The power supply voltage is too low; 2. The magnetic system is skewed or mechanically stuck, so that the iron core cannot be sucked flat; 3. The pole surface of the iron core is rusted or foreign matter invades the pole surface of the iron core; 4. The short-circuit ring is broken or the pole of the iron core is broken. The surface is excessively worn and uneven.	1. Increase the voltage of the operating circuit; 2. Adjust the magnetic system or eliminate mechanical jamming; 3. Clean the pole surface; 4. Replace the contactor.
Contact welding	1. The operating frequency is too high or the product is overloaded; 2. The load side is short-circuited;	1. Replace the appropriate contactor; 2. Eliminate the short circuit fault.

Company Commitment

Under the condition that users follow the use and storage conditions and the product are well sealed, within 24 months from the production date, our company will provide repair and replacement service free of charge for any damage or abnormal operation due to poor manufacture quality. A paid repair will be provided if the warranty period expires. For any damage due to one of the following situations, a paid repair will be given even if within the warranty period:

- (1) Improper operation, maintenance, or storage;
- (2) Modified and improper repair without permission;
- (3) Damage due to falling off or found during installation after purchase;
- (4) Force majeure such as earthquakes, fires, lightning strikes, abnormal voltages, and secondary disasters; If you have any question, please contact the dealer or our company's customer service department.

DELIXI
ELECTRIC
德力西电气

Certificate

DELIXI ELECTRIC LTD

Name: AC Contactor

Model: CJX2sF-115~2100

This product passes the inspection and is allowed to be shipped.

Standard: GB/T 14048.4

Inspector: Check 06

Production date: See label on inner box

www.cn-delixi.com

The first edition of this manual was issued on Dec., 2018.