# **CJX2F Series AC Contactor**



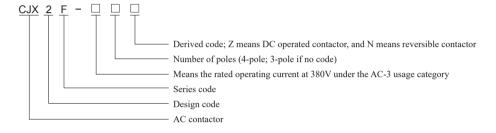
#### 1 Overview

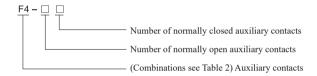
CJX2F series AC contactor (hereinafter referred to as contactor) is primarily used in AC 50Hz or 60Hz circuits with rated operating voltage up to 1000V and with rated operating current up to 800A for remote making and breaking operation of circuits, and forms an electromagnetic starter together with the thermal overload relay to protect circuits that may be overloaded.

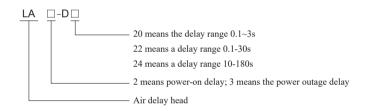
Applied standards: GB/T 14048.4, IEC60947-4-1.

## 2 Type Designation











### **3 Technical Parameters**



- 3.1.1 According to the current level:
- 3.1.2 According to the rated control power voltage of contactor coil Us: AC 50HZ or 60HZ, AC110V (115V), AC220V (230V), AC380V (400V); DC DC110V, DC220V.
- 3.2 The main parameters and technical performance indicators of the contactor (see Table 1).

Table 1



Contactor model	Rated insulation voltage	Resistive current in free air		operating AC-3(A)			ax. power lable thre cage mo	e-phase	Operating frequency AC-3	Electrical life AC-3 (10000	Mechanical life (10000 times)	Model & Spec. of matched fuse
	Ui (V)	(A)	380V	660v		380V	660v	1000v			umes)	
CJX2F-115		200	115	86	46	55	80	65	1200	120	1000	RT16-2/200
CJX2F-150		200	150	108	50	75	100	65	1200	120	1000	RT16-2/225
CJX2F-185		275	185	118	71	90	110	100	_	100		RT16-2/315
CJX2F-225		275	225	137	90	110	129	100		100		RT16-2/315
CJX2F-265	1000	315	265	170	112	132	160	147				RT16-2/355
CJX2F-330	1000	380	330	235	155	160	220	160	600		600	RT16-2/450
CJX2F-400		450	400	303	200	200	280	185	600	80		RT16-2/560
CJX2F-500		630	500	353	232	250	335	300				RT16-2/630
CJX2F-630		800	630	462	331	335	450	380				RT16-2/630
CJX2F-800		800	800	486		450	475			60	300	RT17-7/1000



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3.3 Model, specification and parameters of auxiliary contact set (see Table 2)

Table 2

	Model	F4-11	F4-20	F4-02	F4-40	F4-31	F4-22	F4-13	F4-04	Remarks				
Otro	Normally open	1	2	0	4	3	2	1	0					
Qty.	Normally closed	1	1 0 2 0 1 2 3							Rated insulation voltage: 660V;				
	Sketch					2				Control capacity: AC-15 360VA DC-13 33W				

- 3.4 Operating characteristics:
- 3.4.1 The pull-in voltage is 85%~110% Us.
- 3.4.2 The release voltage is  $20\%\sim75\%$ Us for common products, and is  $10\%\sim75\%$ Us for DC products.
- 3.5 The main specifications and codes of the coil are listed in Table 3.

Table 3

	5	0Hz o	r 60Hz	coil		50Hz	(60Hz)	) coil	D	C coil			
Model	Coil code	Start (VA)	Hold (VA)	Control voltage Us (V)	Coil code	Start (VA)	Hold (VA)	Control voltage Us (V)	Coil code	Control voltage Us (V)			
CJX2F-115	LX1-FF⊓	660	85.5						LX4-FF□				
CJX2F-150	LAI-FF	000	83.3	110, 220, 380					LA4-FF				
CJX2F-185	LX1-FG□	966	91.2	110, 220, 360					LX4-FG□				
CJX2F-225	LAT-TO	900	91.2						LA4-FUL				
CJX2F-265					LX1-FH	840	150		LX4-FH	110, 220			
CJX2F-330					LAI-FII	040	130		LA4-F∏⊔	110, 220			
CJX2F-400					LX1-FJ□	1500	150	110, 220, 380	LX4-FJ□				
CJX2F-500					LX1-FK□	1500	150	110, 220, 360	LX4-FK□				
CJX2F-630 CJX2F-800					LX1-FL	1700	150		LX4-FL				
	Note: 1)   in table means the control power voltage of coil, Us;  2) Those with coil control power voltage not specified in table shall be specially ordered.												

3.6 Coordination with the short circuit protection device (SCPD).

Rated ultimate short circuit current Iq: 50kA;

The model of matched protective device (SCPD) sees Table 1;

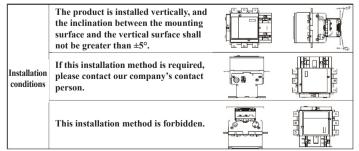
Coordination type (protection type): "2".

3.7 CJX2F-115~150 contactor complies with the national energy efficiency level 3;

CJX2F-185~800 contactor complies with the national energy efficiency level 2;

#### **4 Normal Working Conditions and Installation Conditions**

- 4.1 The ambient air temperature is -25°C~+40°C; the mean temperature within 24 hours does not exceed +35°C.
- 4.2 Altitude: Not exceed 2000m.
- 4.3 Atmospheric conditions: The relative air humidity does not exceed 50% at the maximum temperature +40°C; higher relative humidity is allowed at lower temperatures, such as 90% at 20°C. Special measures shall be taken for condensation occasionally generated due to temperature changes.
- 4.4 Pollution level: 3.
- 4.5 Installation category: Class III.
- 4.6 Installation conditions: The inclination between the mounting surface and the vertical surface is not greater than  $\pm 5^{\circ}$ .



4.7 Impact vibration: The product should be installed and used in places where there is no obvious shaking, impact or vibration.

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#### **5 Structure Features**

- 5.1 The contactor is mainly composed of arc extinguishing system, contact system, base, and magnetic system (including iron core and coil).
- 5.2 The contact system of the contactor adopts the direct-operated and double breaking points layout, the lower base is made of Al alloy material, and the coil is of the plastic packaged structure and is integrated with the magnet yoke; they can be directly taken out or installed in the contactor for very convenient operation and maintenance
- 5.3 The contactor can be equipped with two auxiliary contact groups, and up to 8 pairs of contacts can be provided. Auxiliary contact combinations (see Table 2).
- 5.4 The contactor has small flashover distance. For example, CJX2F-115~330 flashover distance is only 10mm (200~500V), and it is only about one-sixth of other contactors of the same capacity. It is an excellent supporting component in electronic control equipment due to its small occupied space in the complete set of equipment.
- 5.5 Some accessories such as auxiliary contact sets and air delay heads can be installed in a building block installation way, as shown in Fig. 1.
- 5.6 The contactor can be equipped with a horizontal or vertical mechanical interlock to realize the interlocking between three vertically installed contactors.
- 5.7 It can be made into 3-pole and 4-pole contactor.
- 5.8 The wiring bolt combination is provided in the form of accessories.



Fig. 1 Contactor equipping with accessory diagram

#### **6 Outline and Installation Dimensions**

6.1 The outline and installation dimensions of CJX2F-115, 1154~330, and 3304 see Fig. 2 and Table 4.

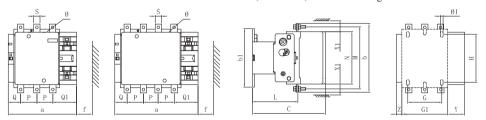


Fig. 2 Outline and Installation Dimensions of CJX2F-115, 1154, 150, 1504, 185, 1854, 225, 2254, 265, 2654, 330, and 3304

Table 4

Product				01		Ф	c	h	b1	М	N	<u> </u>		G	н	Ф1	G1	7.	37	X	1
			Q	Qī		Ψ		В						d		ΨΙ	GI			≤500	>500
CJX2F-115	167	37	29.5	60	15	M6	131	164	137	147	124	174	107	80	106-120	6.5	106	13.5	44	10	15
CJX2F-1154	200.5	37	29.5	60	15	M6	131	164	137	147	124	174	107	80	106-120	6.5	143	13.5	44	10	15
CJX2F-150	167	40	26	57.5	20	M8	131	171	137	150	124	174	107	80	106-120	6.5	106	13.5	44	10	15
CJX2F-1504	200.5	40	25	55.5	20	M8	131	171	137	150	124	174	107	80	106-120	6.5	143	13.5	44	10	15
CJX2F-185	172	40	29	59.5	20	M8	131	175	137	154	127	186	113.5	80	106-120	6.5	111	13.5	44	10	15
CJX2F-1854	208.5	40	29	59.5	20	M8	131	175	137	154	127	186	113.5	80	106-120	6.5	151	13.5	44	10	15
CJX2F-225	172	48	21	51.5	25	M10	131	199	137	172	127	186	113.5	80	106-120	6.5	111	13.5	44	10	15
CJX2F-2254	208.5	48	17	47.5	25	M10	131	199	137	172	127	186	113.5	80	106-120	6.5	151	13.5	44	10	15
CJX2F-265	202	48	39	66.5	25	M10	147	203	145	178	147	217	141	96	110-120	6.5	142	21.5	38	10	15
CJX2F-2654	244.5	48	34	66.5	25	M10	147	203	145	178	147	217	141	96	110-120	6.5	190	16.5	38	10	15
CJX2F-330	214	48	43	74	25	M10	147	207	145	181	158	222	145	96	110-120	6.5	154.5	20.5	38	10	15
CJX2F-3304	261	48	43	74	25	M10	147	207	145	181	158	222	145	96	110-120	6.5	202.5	20.5	38	10	15

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6.2 The outline and installation dimensions of CJX2F-400, 4004, 500, and 5004 see Fig. 3 and Table 5.

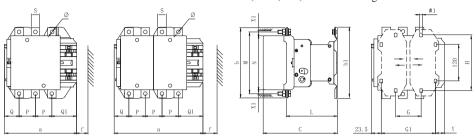


Fig. 3 Outline and installation dimensions of CJX2F-400, 4004, 500, and 5004

Table 5

Produ		a ρ O Ol s Φ f b bl		М	N C I			G	G1	н	Ф1		Х	1							
mod	lel			Q	Qī													Ψι			>500
CJX2F	-400	214	48	43	74	25	M10	151	206	209	181	158	222	145	80	170	170-180	8.5	19.5	15	20
CJX2F-	4004	261	48	43	74	25	M10	151	206	209	181	158	222	145	80	170	170-180	8.5	67.5	15	20
CJX2F	-500	233	55	46	77	30	M10	169	238	209	208	172	232	146	80	170	170-180	8.5	39.5	15	20
CJX2F-	-5004	288	55	46	77	30	M10	169	238	209	208	172	232	146	140	230	170-180	8.5	34.5	15	20

6.3 The outline and installation dimensions of CJX2F-630, 6304, 800, and 8004 see Fig. 4 and Table 6.

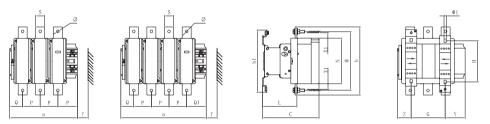


Fig. 4 Outline and installation dimensions of CJX2F-630, 6304, 800, and 8004

Table 6

Product			Q	01		Φ	f	L	b1	М	N	C	L	G	11	Ф1	7	v	X1	
model	a	Р		Ųī															≤500	>500
CJX2F-630 CJX2F-800	309	80	60	89	40	M12	201	307	280	264	202	260	155	180	180-190	10.5	60.5	68.5	20	30
CJX2F-6304 CJX2F-8004	389	80	60	89	40	M12	201	307	280	264	202	260	155	240	180-190	10.5	60.5	68.5	20	30

### 7 Ordering Notice

Please specify the following items when ordering:

- 7.1 Full name and model of contactor.
- 7.2 Rated control power voltage and frequency or specification and code of coil.
- 7.3 Generally, the product is not equipped with an auxiliary contact. If required, please order it separately; the quantity and combination form of auxiliary contact see Table 2.
- 7.4 Order quantity.
- 7.5 Order example: CJX2F-115 coil voltage 380V 50Hz 10 units.
- 7.6 The coil of the product is a wear part, and can be ordered separately. The voltage, model, and quantity of the coil can be specified according to the Table 3.
- 7.7 The coil is not listed in the Table 3, and can be specially ordered if required by user.