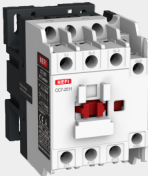


CC7 AC Contactor



CC7-M06-16A



CC7-09-95A



CC7-110A



CC7-120-630A

General

The CC7 series features a compact design and a clean, unified look across the product line. It is well-suited for frequent starting and control of AC motors, as well as remote circuit switching. When combined with thermal overload relays, it provides a reliable solution for industrial motor starting.

Standard: IEC 60947-1, IEC 60947-4-1

Parameters

- Rated operation current Ie: 6A~630A
- Rated operation voltage Ue: 220V~690V
- Rated insulation voltage: 690V (CC7-M06~16A)
690V (CC7-09~110A)
1000V (CC7-120~630A)
- Number of poles: 3P and 4P (only for CC7-M06~16A)
- Installation method: Din rail and screw installation

Operation and Installation Conditions

Type	Operating and Installation Conditions
Installation category	III
Pollution level	3
Protection degree	CC7-M06-16A: IP20; CC7-09~38: IP20; CC7-40~110: IP10; CC7-120-630: IP10
Ambient temperature	Limit of temperature: -35°C~+70°C, Normal temperature: -5°C~+40°C, The average no more than +35°C within 24 hours.
Altitude	≤2000m
Ambient temperature	The maximum temperature is 70 °C, the relative humidity of the air does not exceed 50%, and the temperature below 50% can allow higher relative humidity. If the temperature is 20°C, the air relative humidity could up to 90%. Special measures should be taken for occasional condensation due to humidity changes.
Installation position	Inclination between installation surface and vertical surface should not exceed ±5°
Shock vibration	Products should be installed and used without significant shake, shock and vibration.

Selection

CC7 AC Contactor

CC7	12	230V	50Hz
↓	↓	↓	↓
Model	Rated current	Coil voltage	Frequency
Contactor	09, 12, 18, 25, 32, 38, 40, 50, 65, 80, 95, 110, 120, 160, 185, 225, 265, 330, 400, 500, 630	24, 48, 110, 127, 220, 230, 240, 380, 400, 415	50, 60, 50/60

Note: 09A-110A products contain 1NO auxiliary contact and 1 NC auxiliary contact;
120A-630A products contain 2 NO auxiliary contacts and 2 NC auxiliary contacts

CC7-M Miniature AC Contactor

CC7	06M	10	230V	50Hz
↓	↓	↓	↓	↓
Model	Rated current	Auxiliary contact	Coil voltage	Frequency
Contactor	06M 09M 12M 16M	10: 3 NO main contacts + 1 NO auxiliary contact 01: 3 NO main contacts + 1 NC auxiliary contact 08: 2 NO + 2 NC main contacts 04: 4 NO main contacts	24, 36, 48, 110, 127, 220, 230, 240, 380, 400, 415	50, 60, 50/60


CC7 AC Contactor Selection Table

No.	Three-phase asynchronous motor power KW(AC-3)			Max Operating Current (AC-3380V/400V)	Contactor Model	The number of auxiliary products	
	220V/230V	380V/400V	380V/400V			Normally Open (NO)	Normally Closed (NC)
1	1.5	2.2	3	6	CC7-M0610	1	0
2	1.5	2.2	3	6	CC7-M0601	0	1
3	2.2	4	4	9	CC7-M0910	1	0
4	2.2	4	4	9	CC7-M0901	0	1
5	2.2	4	5.5	9	CC7-09	1	1
6	3	5.5	4	12	CC7-M1210	1	0
7	3	5.5	4	12	CC7-M1201	0	1
8	3	5.5	7.5	12	CC7-12	1	1
9	3	7.5	7.5	16	CC7-M1610	1	0
10	3	7.5	7.5	16	CC7-M1601	0	1
11	4	7.5	10	18	CC7-18	1	1
12	5.5	11	15	25	CC7-25	1	1
13	7.5	15	18.5	32	CC7-32	1	1
14	11	18.5	30	40	CC7-40	1	1
15	15	22	37	50	CC7-50	1	1
16	18.5	30	37	65	CC7-65	1	1
17	22	37	37	75	CC7-80	1	1
18	22	37	45	85	CC7-95	1	1
19	25	45	45	100	CC7-110	1	1
20	37	55	80	120	CC7-120	2	2
21	45	75	100	160	CC7-160	2	2
22	55	90	100	185	CC7-185	2	2
23	63	110	110	225	CC7-225	2	2
24	75	132	160	265	CC7-265	2	2
25	90	160	200	330	CC7-330	2	2
26	132	200	300	400	CC7-400	2	2
27	160	250	335	500	CC7-500	2	2
28	200	335	350	630	CC7-630	2	2






CC7 Coil Voltage Specification Table

CC7-M06~M16								
AC (V) 50/60Hz	24	36	48	110	127	220	380	415
DC (V)	24	36	48	110	127	220	--	--
CC7-09~110								
AC (V) 50Hz	24	36	48	110	127	220	380	415
AC (V) 60Hz	24	36	48	110	127	220	380	415
AC (V) 50/60Hz	24	36	48	110	127	220	380	415
CC7-120~265								
AC/DC (V) 50Hz	24	--	48	110	127	220	380	--
AC/DC (V) 60Hz	24	--	48	110	127	220	380	--
AC/DC (V) 50/60Hz	24	--	48	110	127	220	380	--
CC7-330~630								
AC/DC (V) 50Hz	--	--	48	110	127	220	380	--
AC/DC (V) 60Hz	--	--	48	110	127	220	380	--
AC/DC (V) 50/60Hz	--	--	48	110	127	220	380	--


Technical Parameters

Type			CC7-M06	CC7-M09	CC7-M12	CC7-M16
Appearance						
Poles			3P,4P			
Rated insulation voltage(Ui)		V	690			
Rated operating voltage(Ue)		V	380/400,660/690			
Rated thermal current(Ith),AC-1			20	20	20	20
Rated operation current(Ie)	AC-3,380/400V	A	6	9	12	16
	AC-3,660/690V	A	3.8	4.9	4.9	4.9
	AC-4,380/400V	A	6	9	9	12
	AC-4,660/690V	A	3.8	4.9	4.9	4.9
Rated operational power(Pe)	AC-3,380/400V	kW	2.2	4	5.5	7.5
	AC-3,660/690V	kW	3	4	4	4
Mechanical life			1200			
Electrical life	AC-3	10000 times	12			
	AC-4		See electrical life curve			
Frequency of operation	AC-3	times/ hour	1200			
	AC-4		300			
Connecting capability of main circuit terminal						
Flexible wire	wire	mm²	1..4			
No terminal	2 wire	mm²	1....4			
Flexible wire	1 wire	mm²	1...4			
With terminals	2wire	mm²	1...2.5			
Hard wire	1 wire	mm²	1...4			
No terminal	2 wire	mm²	1...4			
Fastening torque		N ·m	1.2			
Coil						
Rated control voltage(Us)	50Hz	V	24,36,48,110,127,220,380,415			
	50/60Hz	V	24,36,48,110,127,220,380,415			
	DC	V	12,24,36,48,110,127,220			
Allowed control circuit voltage(Us)	Operation	V	Installation inclination angle ±22.5°:85%~110%Us; Installation inclination angle±5°:70%~120%			
	Release(AC)	V	Installation inclination angle ±22.5°:20%~75%Us; Installation inclination angle±5°:20%~60%			
	Release(DC)	V	Installation inclination angle ±22.5°:10%~75%Us; Installation inclination angle±5°:10%~60%			
Power consumption of coil	Actuation	VA	20-40			
	Keep	VA	9.5			
	Consumption	W	1-3			
Auxiliary contacts						
Auxiliary contacts specification		A	1NO+1NC			
Rated thermal current (Ith)		A	10			
Rated operating voltage (Ue)	AC	V	380/400			
	DC	V	220			
Rated control capacit	AC-15	VA	Ue/Ie:AC380V/400V/1.5A Ith:10A			
	DC-13	W	Ue/Ie:DC220V/0.3A			

Technical Parameters

Type			CC7-09	CC7-12	CC7-18	CC7-25	CC7-32	CC7-38	CC7-40	CC7-50	CC7-65	CC7-80	CC7-95	CC7-110
Appearance														
Poles			3P											
Rated insulation voltage(Ui)		V	690											
Rated operating voltage(Ue)		V	380/400,660/690											
Rated themal curent(Ith),AC-1			20	20	32	40	50	50	50	60	80	125	125	140
Rated operation current(Ie)	AC-3,380/400V	A	9	12	18	25	32	38	40	50	65	80	95	110
	AC-3,660/690V	A	6.6	8.9	12	18	22	22	34	39	42	49	49	86
	AC-4,380/400V	A	3.5	5	7.7	8.5	12	14	18.5	24	28	37	44	51
	AC-4,660/690V	A	1.5	2	3.8	4.4	7.5	8.9	9	12	14	17.3	21.3	25
Rated operational power(Pe)	AC-3,380/400V	kW	4	5.5	7.5	11	15	18.5	18.5	22	30	37	45	55
	AC-3,660/690V	kW	5.5	7.5	10	15	18.5	18.5	30	33	37	45	45	80
	AC-4,380/400V	KW	1.5	2.2	3.3	4	5.4	5.5	7.5	11	15	18.5	22	25.5
	AC-4,660/690V	kW	1.1	1.5	3	3.7	5.5	6	7.5	10	11	15	18.5	21.7
Mechanical life		10000 times	1200			1000			900			650		
Electrical life	AC-3		110			90			65					
	AC-4		22			22		17		11				
Frequency of operation	AC-3	times/ hour	1200				600							
	AC-4		300				300							
Connecting capability of main circuit teminal														
Flexible wire	1 wire	mm ²	1...4			1.5...6			2.5....25			4...50		
No terminal	2 wire	mm ²	1...4			1.5...6			2.5.....16			4...25		
Flexible wire	1 wire	mm ²	1...4			1..6			2.5.....25			4...50		
With teminals	2 wire	mm ²	1...2.5			1...4			2.5...10			4...16		
Hard wire	1 wire	mm ²	1...4			1.5...6	1.5....10		2.5....25			4...50		
No teminal	2 wire	mm ²	1...4			1.5..			2.5....10			4...25		
Fastening torque		Nm	1.2			1.8			5			9		
Coil														
Rated control voltage(Us)	50Hz	V	24,36,48,110,127,220/230,240,380/400,415,440											
	50/60Hz	V	24,36,48,110,127,220/230,240,380/400,415,440											
Alowed control circuit voltage(Us)	Operation	V	Installation inclination angle±22.5°:85%~110%Us;Installation inclination angle±5°:70%~120%											
	Release	V	Installation inclination angle±22.5°:20%~75%Us;Installation inclination angle±5°:20%~65%											
Power consumption ofcail	Actuation	VA	60			70			200			200		
	Keep	VA	6-9.5			6-9.5			15-20			15-20		
	Consumption	W	1-3			1-3			6-10			6-10		
Auxiliary contacts														
Auxiliary contacts specification		A	11											
Rated themal current (Ith)		A	10											
Rated operating voltage (Ue)	AC	V	380											
	DC	V	220											
Rated control capacity	AC-15	VA	360											
	DC-13	W	33											

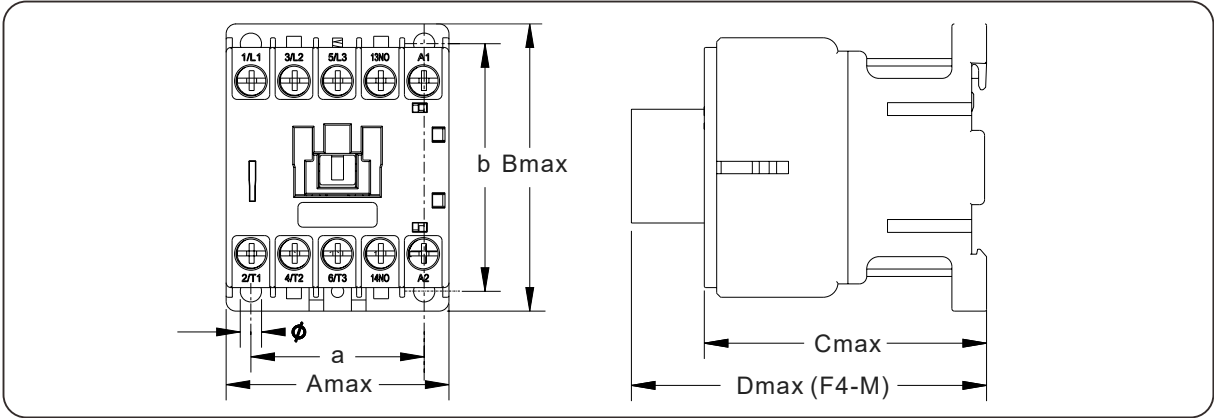
Technical Parameters

Model			CC7-120	CC7-160	CC7-185	CC7-225	CC7-265	CC7-330	CC7-400	CC7-500	CC7-630
Appearance											
Frame grade			120-225				265-400			500-630	
Agreed free air heating current(A)			200	200	275	275	315	380	450	630	700
Rated insulation voltage(V)			1000								
Rated impulse withstand voltage(kV)			12								
Poles			3P								
Rated operating current Ie(A)	AC-1		200	200	275	275	315	380	450	630	700
	200V/230V	AC-3	120	160	185	225	265	330	400	500	630
		AC-4	120	160	160	185	265	330	330	500	500
	380V/400V	AC-3	120	160	185	225	265	330	400	500	630
		AC-4	120	160	160	185	265	330	330	500	500
	660V/690V	AC-3	86	107	107	118	170	235	303	353	400
		AC-4	86	107	107	107	137	170	235	303	353
Rated control power	AC-3(kW)	200V/230V	37	45	55	63	75	90	132	160	200
		380V/400V	55	75	90	110	132	160	200	250	335
		660V/690V	80	100	100	110	160	200	300	335	350
Electrical life(10,000 times		AC-3	120				80				
Electrical ife(10,000 times			600								
Main contact structure			3NO								
Number of auxiliary contacts			2NO+2NC								

Control circuit		Model		CC7-120	CC7-160	CC7-185	CC7-225	CC7-265	CC7-330	CC7-400	CC7-500	CC7-630
Main circuit wiring	Cable connection (mm²)	Prefabricated soft wire	1	10~150			-					
			2	10~75			-					
		Hard wire	1	10~150			50~240					
			2	10~75			50~240					
	Fastening screw size			M6	M8		M10					
	Fastening torque(N ·m)			10			14					
Control circuit connection	Cable connection (mm²)	Prefabricated soft wire	1	1~4								
			2	1~2.5								
		Hard wire	1	1~4								
			2	1~4								
	Fastening screw size			M3.5								
	Fastening torque(N ·m)			1.2								
Operating range		Pull-in		(75%~120%)Us								
		Release		(20%~70%)Us								

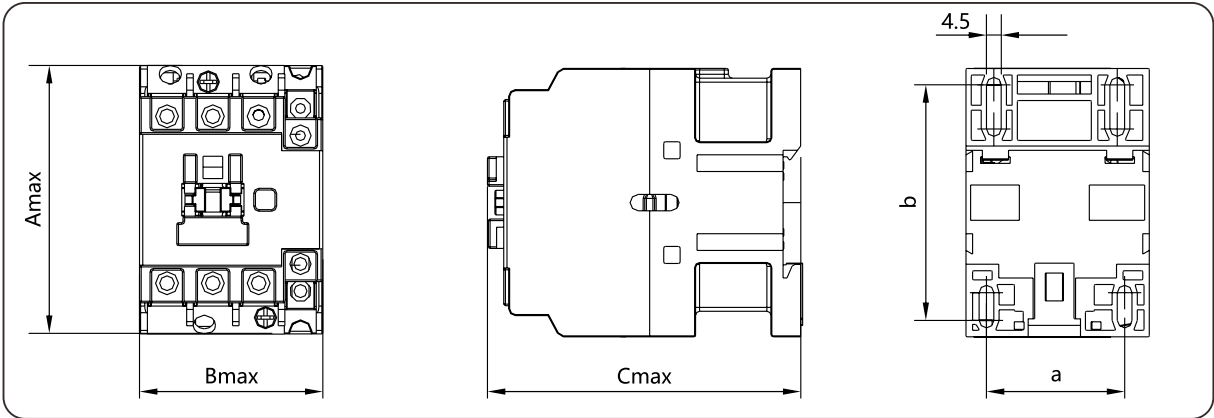
Dimensions and Installation Sizes(mm)

CC7-M06~M16



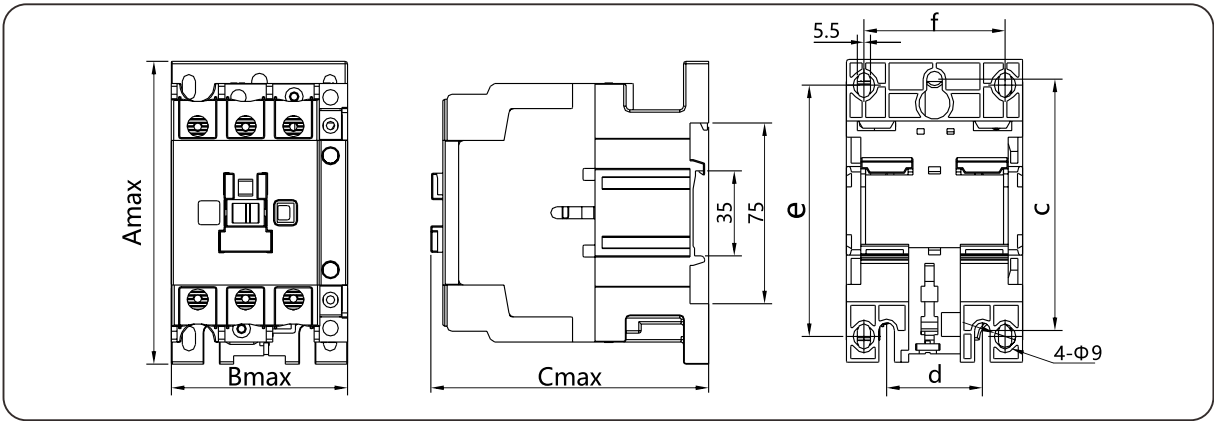
Type	Amax	Bmax	Cmax	Dmax	a	b	Φ
CC7-M06-M16	45.5	59	58	94	35±0.35	50±0.48	4.2
CC7-M06/Z-M16/Z	45.5	59	70	106	35±0.35	50±0.48	4.2

CC7-09~38



Type	Amax	Bmax	Cmax	a	b
CC7-09,12,18	74.5	45.5	85.5	35	50/60
CC7-25,32,38	86	56.5	97	40	50/70

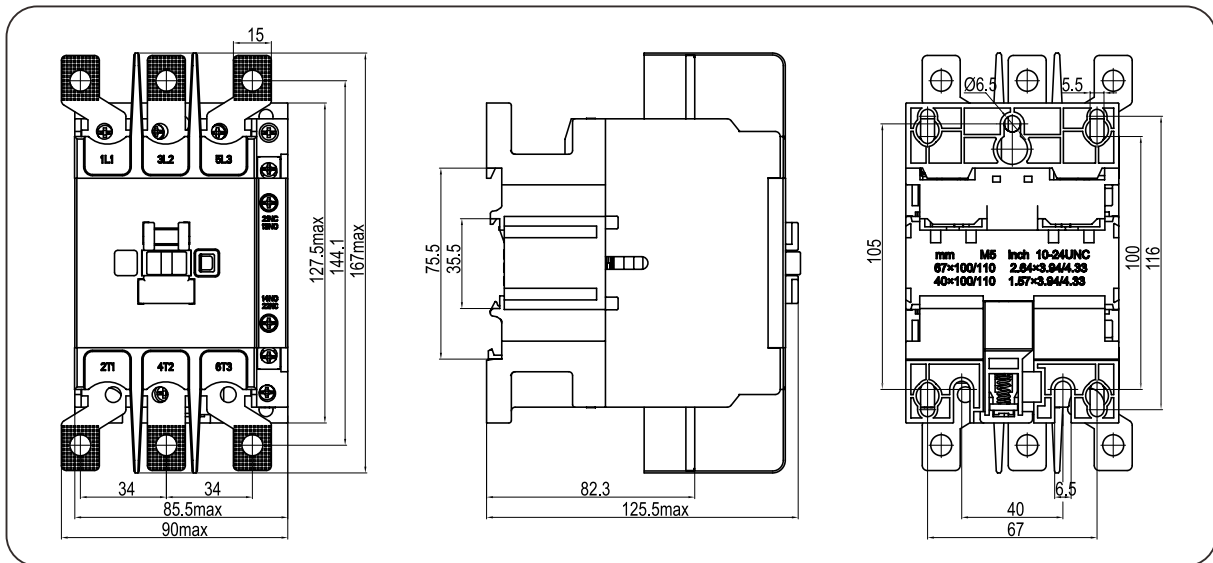
CC7-40~95



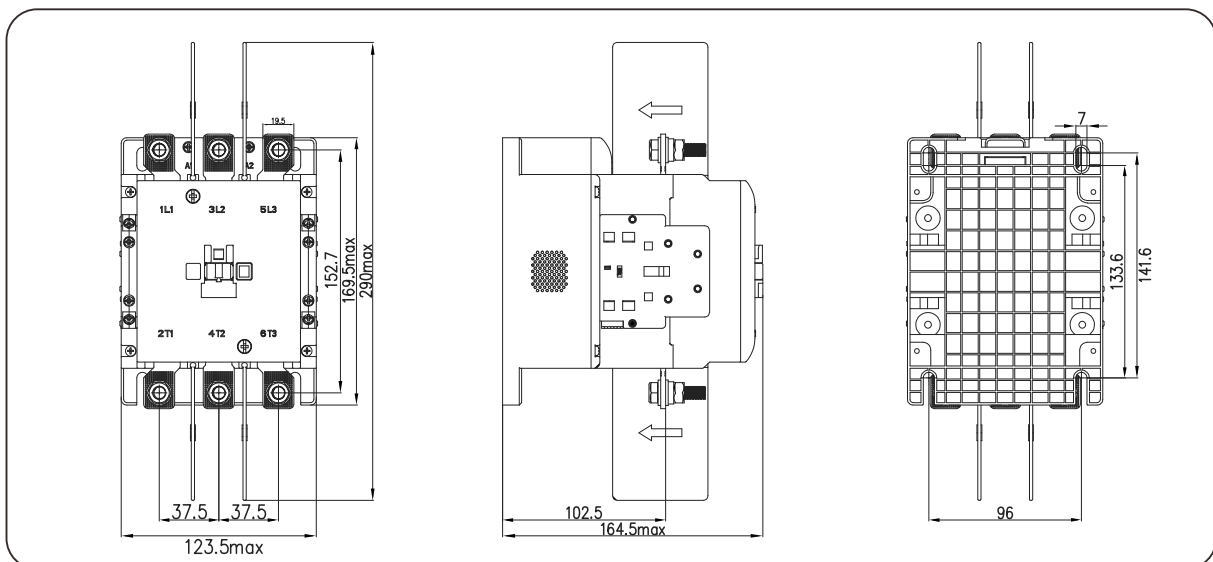
Type	Amax	Bmax	Cmax	C	d	e	f
CC7-40,50,65	127.5	74.5	117	105	40	100/110	59
CC7-80,95	127.5	85.5	125.5	105	40	100/110	67

Dimensions and Installation Sizes(mm)

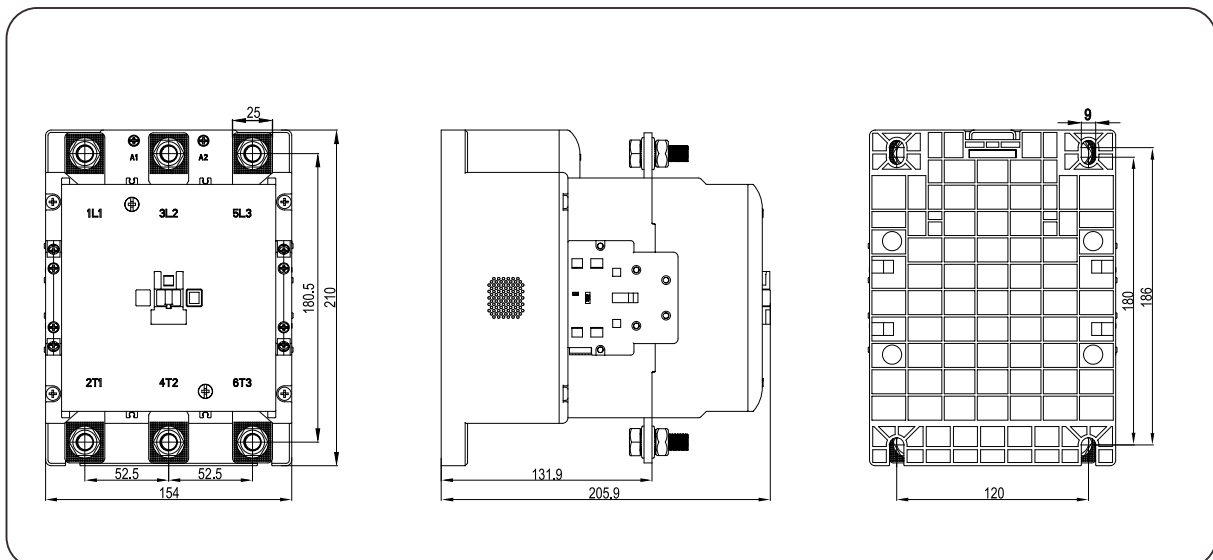
CC7-110



CC7-120~225


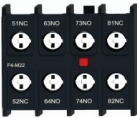


CC7-265~400



Modularized Accessories








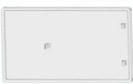




F4-M Auxiliary Contact

Type	Product	Configuration of contacts	
		Number of N/O contact	Number of N/C contact
F4-M20 F4-M11 F4-M02		2 1 0	0 1 2
F4-M40 F4-M31 F4-M22 F4-M13 F4-M04		4 3 2 1 0	0 1 2 3 4

FS-M Surge Suppressor



Surge Suppressor	Product	Control Voltage
FS-M		AC/DC:24V-48V AC/DC:380V-440V AC/DC:110V-240V

Derived Products Which Can Be Installed Additionally



Derived products	Contactor	Accessorial modular	Picture
Reversing Contactor			
Auxiliary Contact			
Dust Cover			
Electromagnetic Starter			

Modularized Accessories


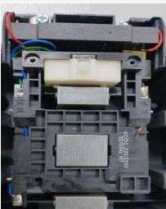
F4-D Auxiliary Contact

Type	Product	Configuration of contacts	
		Number of N/O contact	Number of N/C contact
F4-DN20 F4-DN11 F4-DN02		2 1 0	0 1 2
F4-DN40 F4-DN31 F4-DN22 F4-DN13 F4-DN04		4 3 2 1 0	0 1 2 3 4





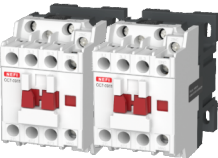

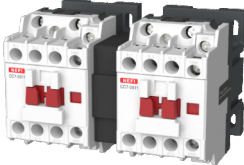












LA2-D, LA3-D Time-delay Block

Type	Product	Time-delay range	Number of time-delay contacts
LA2-DT0 LA2-DT2 LA2-DT4		0.1s~3s 0.1s~30s 10s~180s	NO+NC NO+NC NO+NC
LA3-DR0 LA3-DR2 LA3-DR4		0.1s~3s 0.1s~30s 10s~180s	NO+NC NO+NC NO+NC

LX1S Coil

Type	Product	Coil Voltage US(V) Frequency (Hz)	24	36	42	48	110	127	220	230	240	380	400	415	440	600
LX1S-D2 09-18		50Hz	B5	C5	D5	E5	F5	G5	M5	P5	U5	Q5	V5	N5	R5	X5
LX1S-D4 25-38		60Hz	B6	C6	D6	E6	F6	G6	M6	P6	U6	Q6	V6	N6	R6	X6
LX1S-D6 40-65		50/60Hz	B7	C7	D7	E7	F7	G7	M7	P7	U7	Q7	V7	N7	R7	X7
LX1S-D8 80-95		50/60Hz	B7	C7	D7	E7	F7	G7	M7	P7	U7	Q7	V7	N7	R7	X7
CC7-120-225		50/60Hz	AC/DC 220V, AC/DC 380V													
CC7-265-400		50/60Hz	AC/DC 220V, AC/DC 380V													
CC7-500-630		50/60Hz	AC/DC 220V, AC/DC 380V													
LX1S-D2 09-18	Wide voltage	50-60Hz	AC/DC100-240V													
LX1S-D4 25-38		50-60Hz	AC/DC100-240V													

Modularized Accessories

Derived products	Contactor	Accessorial modular	Picture
Time-delay Contactor		 + 	
Reversing Contactor			
Magnetic Starter			
Front Auxiliary Contact			
Side Auxiliary Contact			
Changeover Capacitor AC Contactor			
Dust Cover	