

Product Overview

■ Product Introduction

The new CDC6i series motor control and protection products are product featuring with convenient operation and leading technology, and they adopt a new generation of technology platform and are used in automated production and testing equipment, effectively satisfying the actual application needs of customers. The series includes CDC6i AC contactor, CDC6 high current AC contactor, CDR6i & CDR6 thermal overload relay, CDP6 motor circuit breaker, and CDZ6i contactor relay products.

■ Product Range

- CDC6i AC contactor: 6~400A, with a total of 18 current specifications, of which 9~95A has 11 auxiliary contacts (1 normally-open and 1 normally-closed)

Accessories: FS surge suppressor, FN reversible busbar, FD6 top auxiliary contact, FC6 side auxiliary contact, FT6 air delay head, FR6 mechanical interlock

Certifications: CCC, CE, SEMKO

Adapted thermal relays: JRS1Dsp thermal overload relay, CDR6i thermal overload relay, CDR6 thermal overload relay without quick terminal post products)

- CDC6 high current AC contactor: 115-630A

Accessories: FD6 top auxiliary contact, FT6 air delay head, FR6 mechanical interlock, LX coil, and MC6 main contact

Certifications: CCC, CE, SEMKO

Adapted thermal relay: CDR6 thermal overload relay

- CDZ6i contactor type relay: 2NO+2NC, 3NO+1NC, 4NO+0NC, 1NO+3NC, 0NO+4NC

Accessories: FD6 top auxiliary contact, FT6 air delay head

Certification: CCC, CE

- CDR6i thermal overload relay: setting current ranged 0.1~93A

Accessories: Independent mounting base

Certification: CCC, CE

- CDR6 thermal overload relay: setting current range: 48~630A

Accessories: Independent mounting base

Certifications: CCC, CE, SEMKO

- CDP6 motor circuit breaker: setting current: 0.1~80A

Accessories: AE front-mounted auxiliary contact, AN side-mounted auxiliary contact, AU undervoltage release, AS shunt release, CDP6LJ connector, CDPDB bus plate

Certifications: CCC, CE, SEMKO

■ Standards

- GB/T 14048.1 General rules
- GB/T 14048.2 Circuit breaker
- GB/T 14048.4 Contactors
- GB/T 14048.5 Relays
- IEC 60947-1 General rules
- IEC 60947-2
- IEC 60947-4-1 Contactors
- IEC 60947-5-1 Relays

■ Ambient temperature

- The ambient air temperature is not higher than +40°C, and is not below -5°C during the normal operation. The mean value within 24 hours does not exceed +35°C;
(The normal operating temperature range of CDC6 and CDR6 is -5 to 55°C)
- The storage temperature is -25°C~+55°C, and can reach +70°C in a short time (24h).

■ Installation location

Installed perpendicular to the mounting plane, the inclination in all directions should not exceed 22.5° (no more than 5° for CDR6i); The installation category is Class III.

■ Humidity

- The relative humidity of the atmosphere does not exceed 50% at the maximum ambient temperature +40°C ;
A higher relative humidity is allowed at t lower temperatures, such as 90% at 20°C.
- Protective measures should be taken for condensation occurred occasionally due to temperature changes.

■ Altitude

The altitude of the normal operation and installation site does not exceed 2000m.

■ Pollution level

Level 3

■ Product protection grade

IP20

Product Selection

■ CDC6i AC contactor

Product Model	Current spec.	Auxiliary contact	Coil voltage	Coil frequency	Accessories	Special inspection
CDC6i	06	10	M		FN	
	06: 6A ... 95: 95A	10: 1NO+0NC 01: 0NO+1NC 11: 1NO+1NC	B: 24V ... M: 220V/230V ... Q: 380V/400V ...	Default: 50Hz 7: 50/60Hz	FN: with reversible busbar Default: No accessories	9-95A: RoHS compliant Inspection products

Note: The full series of CDC6i products is RoHS compliant

Motor power Pe (KW AC-3,380V)	Rated current Ie (A)	Auxiliary contact		Order code	Motor power Pe (KW AC-3,380V)	Rated current Ie (A)	Auxiliary contact		Order code
		Normally-open NO	Normally-closed NC				Normally-open NO	Normally-closed NC	
2.2	6	1	-	CDC6i 06 10 *	11	25	1	-	CDC6i 25 10 *
		-	1	CDC6i 06 01 *			-	1	CDC6i 25 01 *
4	9	1	-	CDC6i 09 10 *			1	1	CDC6i 25 11 *
		-	1	CDC6i 09 01 *	15	32	1	-	CDC6i 32 10 *
		1	1	CDC6i 09 11 *			-	1	CDC6i 32 01 *
5.5	12	1	-	CDC6i 12 10 *			1	1	CDC6i 32 11 *
		-	1	CDC6i 12 01 *	18.5	38	1	-	CDC6i 38 10 *
		1	1	CDC6i 12 11 *			-	1	CDC6i 38 01 *
5.5	16	1	-	CDC6i 16 10 *			1	1	CDC6i 38 11 *
		-	1	CDC6i 16 01 *	18.5	40	1	1	CDC6i 40 11 *
		1	1	CDC6i 16 11 *			1	1	CDC6i 50 11 *
7.5	18	1	-	CDC6i 18 10 *	22	50	1	1	CDC6i 50 11 *
		-	1	CDC6i 18 01 *	30	65	1	1	CDC6i 65 11 *
		1	1	CDC6i 18 11 *	37	80	1	1	CDC6i 80 11 *
11	22	1	-	CDC6i 22 10 *	45	95	1	1	CDC6i 95 11 *
		-	1	CDC6i 22 01 *	Note: 3-pole is a conventional pole number, and will be default in the model. * in the CDC6i order code can be indicated by the coil voltage code The coil frequency 50Hz is a conventional frequency, and is default in the model. All coil voltages for 50Hz are also available for 50/60Hz				
		1	1	CDC6i 22 11 *					

Coil voltage code

Coil voltage (V)	24	36	48	110	127	220/230	240	380/400	415	440
*	B	C	E	F	S	M	U	Q	L	X

■ CDC6i-N reversible AC contactor

Product Model	Current spec.	Mechanical interlock	Aux. contact	Coil voltage	Accessory
CDC6i	09	N	10	M	FN
	09: 9A ... 95: 95A	N: Mechanical interlock	10: 1NO+0NC 01: 0NO+1NC 11: 1NO+1NC	B: 24V ... M: 220V/230V ... Q: 380V/400V ...	FN: with reversible busbar Default: No accessories

Motor power Pe (KW AC-3,380V)	Rated current Ie (A)	Auxiliary contact		Order code		Motor power Pe (KW AC-3,380V)	Rated current Ie (A)	Auxiliary contact		Order code
		Normally-open NO	Normally-closed NC					Normally-open NO	Normally-closed NC	
1.5	9	1	-	CDC6i 09N 10 *		4	25	1	-	CDC6i 25N 10 *
		-	1	CDC6i 09N 01 *				-	1	CDC6i 25N 01 *
		1	1	CDC6i 09N 11 *				1	1	CDC6i 25N 11 *
2.2	12	1	-	CDC6i 12N 10 *		5.4	32	1	-	CDC6i 32N 10 *
		-	1	CDC6i 12N 01 *				-	1	CDC6i 32N 01 *
		1	1	CDC6i 12N 11 *				1	1	CDC6i 32N 11 *
2.2	16	1	-	CDC6i 16N 10 *		5.5	38	1	-	CDC6i 38N 10 *
		-	1	CDC6i 16N 01 *				-	1	CDC6i 38N 01 *
		1	1	CDC6i 126 11 *				1	1	CDC6i 38N 11 *
3.3	18	1	-	CDC6i 18N 10 *		7.5	40	1	1	CDC6i 40N 11 *
		-	1	CDC6i 18N 01 *				1	1	CDC6i 50N 11 *
		1	1	CDC6i 18N 11 *				1	1	CDC6i 65N 11 *
4	22	1	-	CDC6i 22N 10 *		18.5	80	1	1	CDC6i 80N 11 *
		-	1	CDC6i 22N 01 *				1	1	CDC6i 95N 11 *
		1	1	CDC6i 22N 11 *						

Note:

3-pole is a conventional pole number, and will be default in the model.

* in the CDC6i order code can be indicated by the coil voltage code

Products with other voltage specifications and 50/60Hz can be quickly customized

Coil voltage code

Coil voltage (V)	24	36	110	220/230	380/400
*	B	C	F	M	Q

Technical Parameters

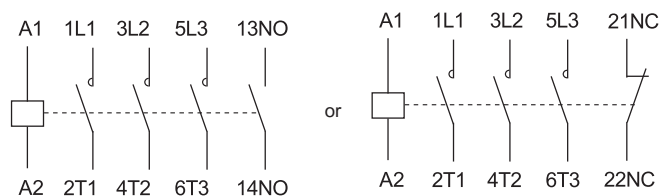
Contactor model			CDC6i -06	CDC6i -09	CDC6i -12	CDC6i -16	CDC6i -18	CDC6i -22	CDC6i -25	CDC6i -32	CDC6i -38	CDC6i -40	CDC6i -50	CDC6i -65	CDC6i -80	CDC6i -95	
Main circuit characteristics																	
Number of poles			3-pole														
Rated insulation voltage (Ui)		V	690														
Rated operating voltage (Ue)		V	380/400, 660/690														
Resistive current (Ith), AC-1 rated operating current			16	25	25	25	32	32	40	50	50	60	80	80	125	125	
Rated operating current (Ie)	AC-3,380/400V	A	6	9	12	16	18	22	25	32	38	40	50	65	80	95	
	AC-3,660/690V	A	3.8	6.6	8.9	8.9	12	14	18	22	22	34	39	42	49	49	
	AC-4,380/400V	A	2.6	3.5	5	5	7.7	7.7	8.5	12	14	18.5	24	28	37	44	
	AC-4,660/690V	A	1	1.5	2	2	3.8	3.8	4.4	7.5	8.9	9	12	14	17.3	21.3	
Rated operating power (Pe)	AC-3,380/400V	kw	2.2	4	5.5	7.5	7.5	11	11	15	18.5	18.5	22	30	37	45	
	AC-3,660/690V	kw	3	5.5	7.5	7.5	10	11	15	18.5	18.5	30	33	37	45	45	
	AC-4,380/400V	kw	1.1	1.5	2.2	2.2	3.3	3.3	4	5.4	5.5	7.5	11	15	18.5	22	
	AC-4,660/690V	kw	0.75	1.1	1.5	1.5	3	3	3.7	5.5	6	7.5	10	11	15	18.5	
Mechanical durability			million times	1.2						1			0.9			0.65	
Electrical durability	AC-3	10,000 times	115			110	115	110	115	95				70			
	AC-4	10,000 times	23			22	23	22	23	23		28			12		
Operation frequency	AC-3	cycles/h	1200						600								
	AC-4	Times/h	300						300								
Main circuit terminal wiring capacity																	
Soft wire, without terminal block	1 wire	mm ²	1~4	1~4	1~4	1~4	1~4	1~4	1.5~10	1.5~10	1.5~10	4~25	4~25	4~25	6~50	6~50	
	2 wires	mm ²	1~4	1~4	1~4	1~4	1~4	1~4	1.5~6	1.5~6	1.5~6	4~16	4~16	4~16	6~25	6~25	
Soft wire, with terminal block	1 wire	mm ²	1~4	1~4	1~4	1~4	1~4	1~4	1~6	1~6	1~6	4~25	4~25	4~25	6~50	6~50	
	2 wires	mm ²	1~2.5	1~2.5	1~2.5	1~2.5	1~2.5	1~2.5	1~4	1~4	1~4	4~10	4~10	4~10	6~16	6~16	
Hard wire, without terminal block	1 wire	mm ²	1~4	1~4	1~4	1~4	1~4	1~4	1.5~6	1.5~6	1.5~6	4~25	4~25	4~25	6~50	6~50	
	2 wires	mm ²	1~4	1~4	1~4	1~4	1~4	1~4	1.5~6	1.5~6	1.5~6	4~10	4~10	4~10	6~25	6~25	
Tightening torque			N·m	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	5	5	5	9	9	
Coil																	
Rated control circuit 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														
Permissible control circuit voltage (Us)	Run	V	Installation tilt angle ±22.5°: 85%~110%Us; Installation tilt angle ±5°: 70%~120%Us														
	Release	V	Installation tilt angle ±22.5°: 20%~75%Us; Installation tilt angle ±5°:20%~65%Us														
Coil power consumption	Pull-in	VA	50	60					70			200			200		
	Hold	VA	9	9.5					11.4			36.6			36.6		
	Power consumption	W	1~3	1~3					1~3			6~10			6~10		
Auxiliary contact																	
Contact spec.			10,01	10,01,11								11					
Resistive 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														
Certification			CCC、CE、SEMKO														

■ CDC6i-N reversible AC contactor

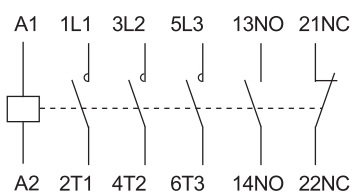
Contactor model	Rated insulation voltage	Rated operating voltage	Resistive current	Intermittent periodic duty-type AC-4	
	Ui(V)	Ue(V)	Ith(A)	Ie(A)	Pe(kw)
CDC6i-09N	690	380	25	3.5	1.5
		660		1.5	1.1
CDC6i-12N	690	380	25	5	2.2
		660		2	1.5
CDC6i-16N	690	380	25	5	2.2
		660		2	1.5
CDC6i-18N	690	380	32	7.7	3.3
		660		3.8	3
CDC6i-22N	690	380	32	7.7	3.3
		660		3.8	3
CDC6i-25N	690	380	40	8.5	4
		660		4.4	3.7
CDC6i-32N	690	380	50	12	5.4
		660		7.5	5.5
CDC6i-38N	690	380	50	14	5.5
		660		8.9	6
CDC6i-40N	690	380	60	18.5	7.5
		660		9	7.5
CDC6i-50N	690	380	80	24	11
		660		12	10
CDC6i-65N	690	380	80	28	15
		660		14	11
CDC6i-80N	690	380	125	37	18.5
		660		17.3	15
CDC6i-95N	690	380	125	44	22
		660		21.3	18.5

■ Wiring diagram

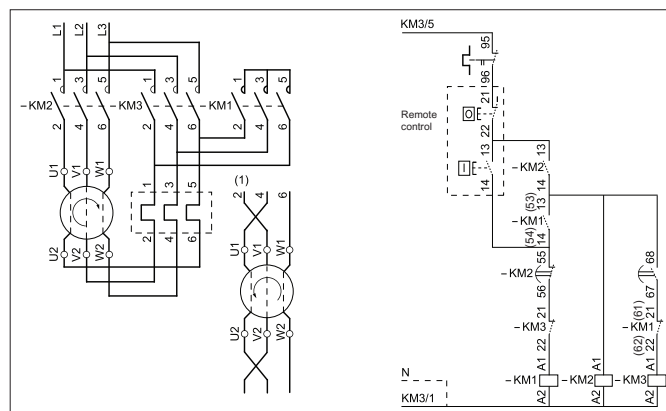
CDC6i-06~38 10/01 Auxiliary



CDC6i-09~95 11 Auxiliary

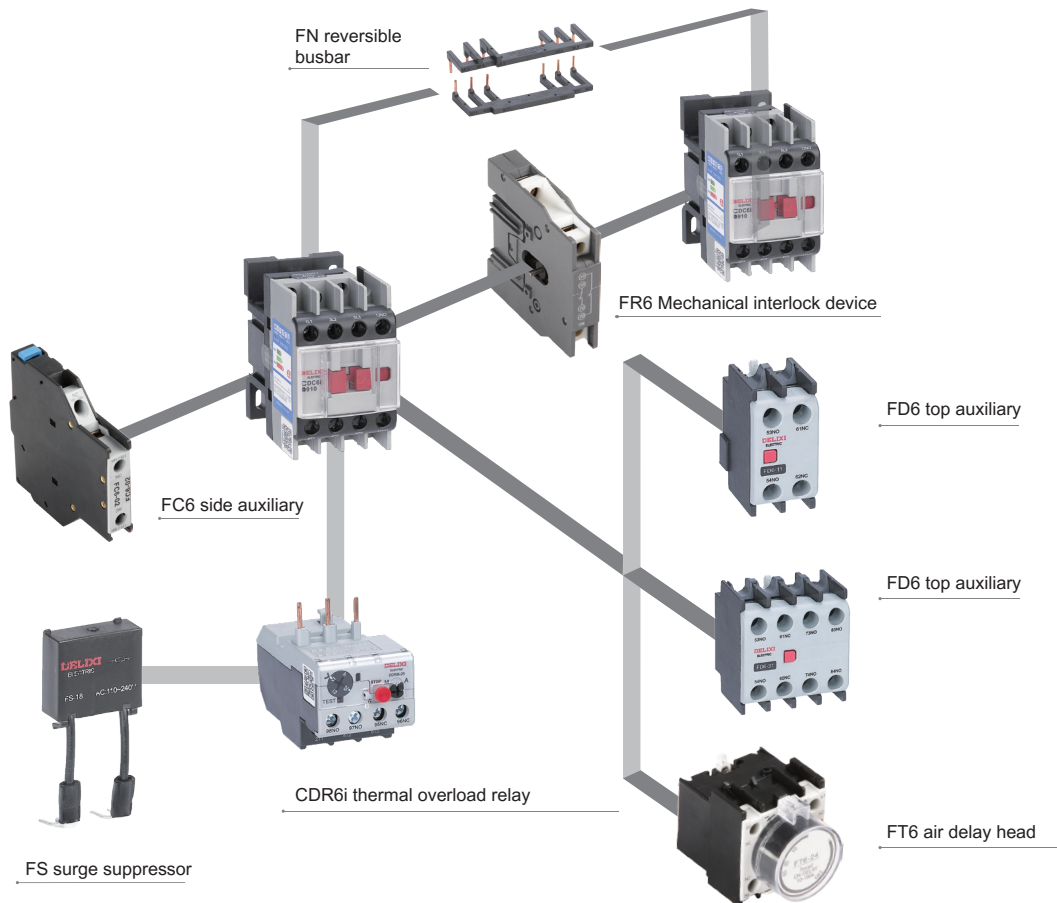


Star-delta starter wiring diagram



■ Accessory installation diagram

CDC6i-6-95A

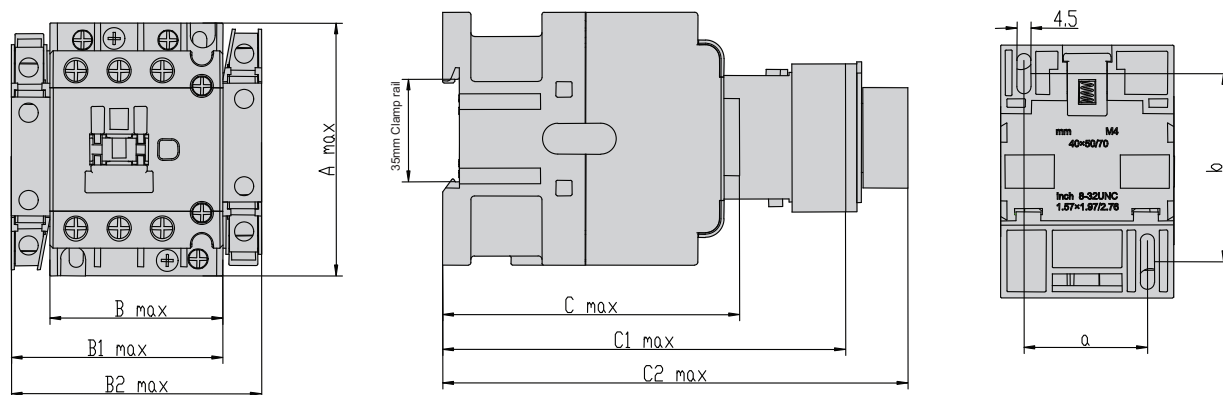


Note: CDC6i-06 cannot be equipped with side auxiliary contacts and mechanical interlock devices

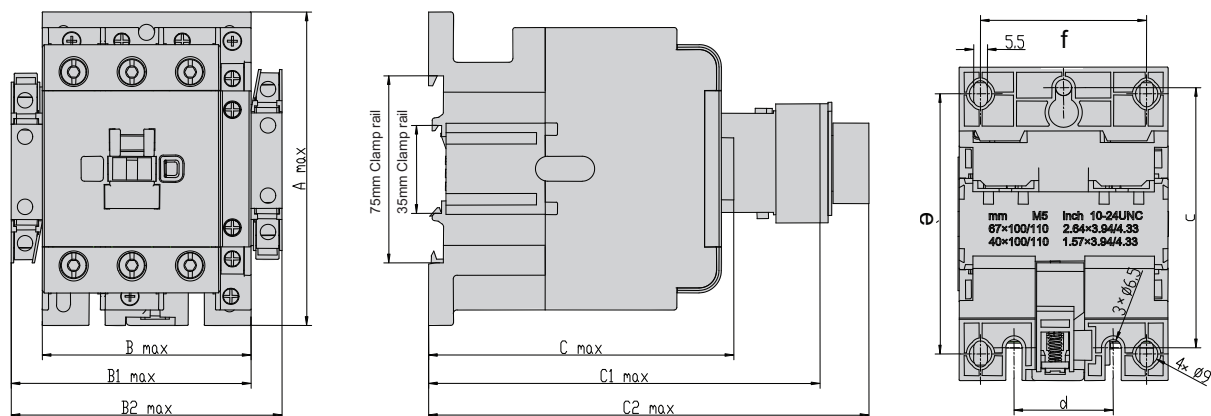
Outline and Installation Dimensions

■ CDC6i AC contactor

CDC6i 06~38A



CDC6i 40~95A



Outline dimensions of CDC6i 06~95A AC contactor

Model	Aux. contact	Amax	Bmax	B1max	B2max	Cmax	C1max	C2max
CDC6i-06	01,10	74.5	45.5	-	-	75	107	132
CDC6i-09,12,16,18,22	01,10	74.5	45.5	58	71	82.5	114.5	139.5
	11	74.5	45.5	58	71	85.5	117.5	142.5
CDC6i-25,32,38	01,10,11	83	56.5	69	82	97	129	154
CDC6i-40,50,65	11	127.5	74.5	88	101	117	148.5	173.5
CDC6i-80,95	11	127.5	85.5	99	112	125.5	157	182

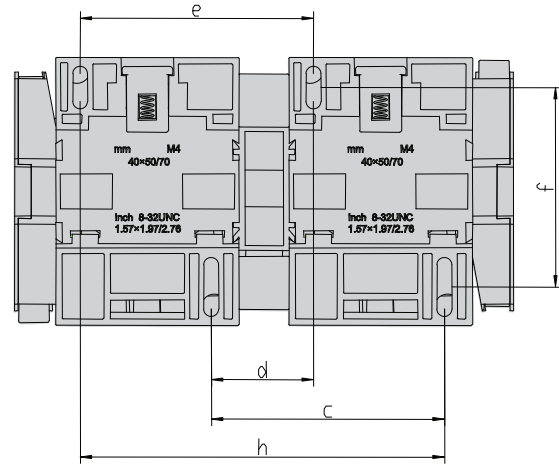
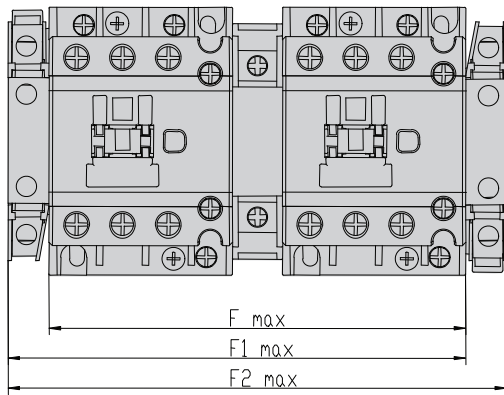
Note: B1max—contactor + FC6 B2max—contactor +two FC6 C1max—contactor + FD6 C2max—contactor + FT6

Installation dimensions of CDC6i 06~95A AC contactor

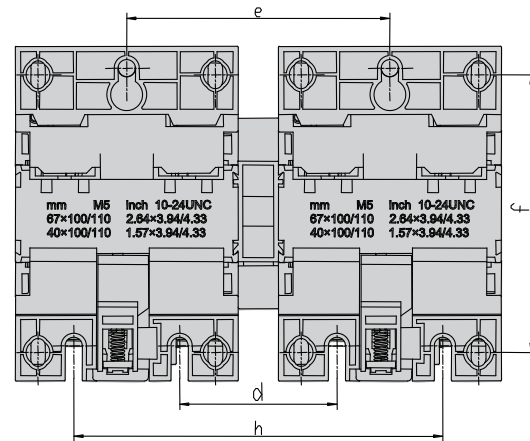
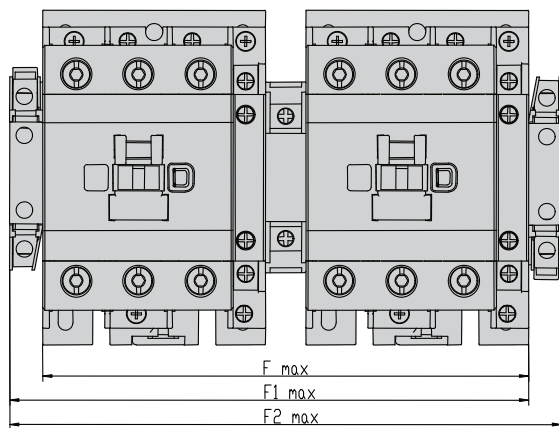
Model	Aux. contact	a	b	c	d	e	f
CDC6i-06	01,10	35	50/60	-	-	-	-
CDC6i-09,12,16,18,22	01,10,11	35	50/60	-	-	-	-
CDC6i-25,32,38	01,10,11	40	50/60	-	-	-	-
CDC6i-40,50,65	11	-	-	105	40	100/110	59
CDC6i-80,95	11	-	-	105	40	100/110	67

CDC6i-N reversible AC contactor

CDC6i-N 09~38A



CDC6i-N 40~95A



Outline dimensions of CDC6i-N 09~95A reversible AC contactor

Model	Fmax	F1max	F2max	c	d	e	f	h
CDC6i-09N,12N,16N,18N,22N	107	120	131	60	25	60	50/60	95
CDC6i-25N,32N,38N	129	142	153	71	31.5	71	50/60	111.5
CDC6i-40N,50N,65N	163	180	193	-	50	90	100/110	130
CDC6i-80N,95N	186	202	215	-	60	100	100/110	140