

Relay & Contactor & Frequency Transformer



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JRS2 Series Thermal Relay

1. Application

JRS2 thermal relay is suitable for AC 50/60Hz, voltage up to 660V and current up to 630A, general AC motor of long or discontinuous long operation, used as overload protection and has the functions of breaking phase protection, temperature compensation, and trip indication. It can automatically and manually get back. It can be fixed with contactor CJX1 together, also be independtly fixed. The product conforms to IEC60947-4-1 standard.



JRS2-12.5/Z



JRS2-25/Z



JRS2-32/Z



JRS2-45/Z



JRS2-63/Z

2. Motion Characteristic: Three-phase Balance Motion Time

No	Times of the setting current	Motion time			Start condition	Ambient temperature
1	1.05	>2h			Cold state	20±5℃
2	1.2	<2h			Heat state	
3	1.5	<4min			(Following the No.1 test)	
4	7.2	10A	2s<Tp≤10s	≤63A	Cold state	
		10A	4s<Tp≤10s	>63A		

3. Phase-losing Motion Characteristic

No	Times of the setting current		Motion time	Start condition	Ambient temperature
	Any two phases	Another phase			
1	1.0	0.9	>2h	Cold state	20±5℃
2	1.15	0	<2h	Heat state (Following the No.1 test)	

4. Specification

Type	Number	Setting range (A)	For contactor	Type	Number	Setting range (A)	For contactor
JRS2-12.5/Z	0A	0.1~0.16	CJX1-09 CJX1-12	JRS2-25/Z	0A	0.1~0.16	CJX1-16 CJX1-22
	0C	0.16~0.25			0C	0.16~0.25	
	0E	0.25~0.4			0E	0.25~0.4	
	0G	0.4~0.63			0G	0.4~0.63	
	0J	0.63~1			0J	0.63~1	
	0K	0.8~1.25			0K	0.8~1.25	
	1A	1~1.6			1A	1~1.6	
	1B	1.25~2			1B	1.25~2	
	1C	1.6~2.5			1C	1.6~2.5	
	1D	2~3.2			1D	2~3.2	
	1E	2.5~4			1E	2.5~4	
	1F	3.2~5			1F	3.2~5	
	1G	4~6.3			1G	4~6.3	
	1H	5~8			1H	5~8	
	1J	6.3~10			1J	6.3~10	
	1K	8~12.5			1K	8~12.5	
	2S	10~14.5			2A	10~16	
					2B	12.5~20	
					2C	16~25	



JRS2-80/Z



JRS2-135



JRS2-150



JRS2-180/F

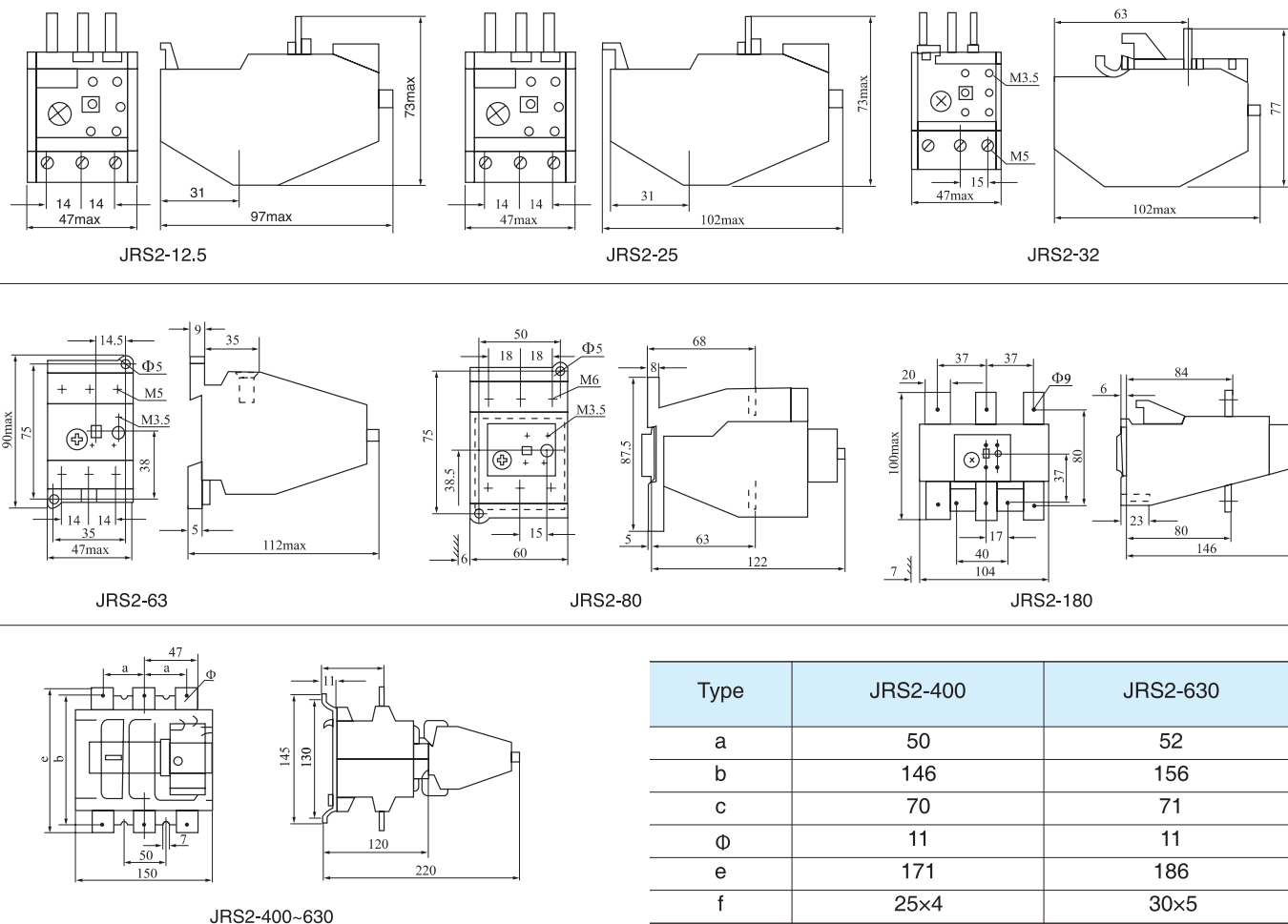


JRS2-400/F
JRS2-630/F

Type	Number	Setting range (A)	For contactor
JRS2-32/Z	1G	4~6.3	CJX1-32
	1J	6.3~10	
	2A	10~16	
	2B	12.5~20	
	2C	16~25	
	2D	20~32	
	2Q	25~36	
JRS2-45/Z	0A	0.1~0.16	CJX1-32
	0C	0.16~0.25	
	0E	0.25~0.4	
	0G	0.4~0.63	
	0J	0.63~1	
	0K	0.8~1.25	
	1A	1~1.6	
	1B	1.25~2	
	1C	1.6~2.5	
	1D	2~3.2	
	1E	2.5~4	
	1F	3.2~5	
	1G	4~6.3	
	1H	5~8	
	1J	6.3~10	
	1K	8~12.5	
	2A	10~16	
	2B	12.5~20	
	2C	16~25	
	2D	20~32	
	2Q	25~36	
	2R	32~40	
	8M	36~45	
JRS2-80/Z	1G	4~6.3	CJX1-45 CJX1-63 CJX1-75 CJX1-85
	8A	11~17	
	2B	12.5~20	
	2C	16~25	
	2D	20~32	
	2E	25~40	
	2F	32~50	
	2T	40~57	
	2P	50~63	
	2V	57~70	
	2U	63~80	
	8W	70~88	
JRS2-63/F	0A	0.1~0.16	CJX1-09~63
	0C	0.16~0.25	
	0E	0.25~0.4	
	0G	0.4~0.63	
	0J	0.63~1	

Type	Number	Setting range (A)	For contactor
JRS2-63/F	0K	0.8~1.25	CJX1-09~63
	1A	1~1.6	
	1B	1.25~2	
	1C	1.6~2.5	
	1D	2~3.2	
	1E	2.5~4	
	1F	3.2~5	
	1G	4~6.3	
	1H	5~8	
	1J	6.3~10	
	1K	8~12.5	
	2A	10~16	
	2B	12.5~20	
	2C	16~25	
	2D	20~32	
	2E	25~40	
	2M	32~45	
JRS2-135	2T	40~57	CJX1-85 CJX1-110
	2P	50~63	
	2H	55~80	
	2W	63~90	
	2X	80~110	
JRS2-150	2Y	80~110	CJX1-140
	3H	90~120	
	3J	110~135	
	2H	55~80	
	2W	63~90	
JRS2-180/F	2X	80~110	CJX1-170 CJX1-205
	3H	90~120	
	3J	110~135	
	3K	120~150	
	3L	135~160	
	3M	150~180	
	2K	80~125	
	3B	125~200	
JRS2-400	3C	160~250	CJX1-110~400
	3D	200~320	
	3E	250~400	
	3F	320~500	
JRS2-630	3G	400~630	CJX1-400

5. Outline and Mounting Dimension



6. Accessories

Pic				
Description	JRS2 mounting base	JRS2 mounting base	JRS2 mounting base	Terminal block box
Application	Assembled with JRS2-12.5/Z to form a complete set	Assembled with JRS2-80/Z to form a complete set	Assembled with JRS2-45/Z to form a complete set	Assembled with JRS2-135/Z to form a complete set

JR28 Series Thermal Relay

1. Application

JR28 series thermal relay is suitable for using in the circuit rated voltage up to 660V, rated current 93A AC 50/ 60Hz, for over-current protection of AC motor. The relay has the differential mechanism and temperature compensation and can plug in CJX2 series AC contactor. The product conforms to IEC60947-4-1 standard.

2. Motion Characteristic: Three-phase Balance Motion Time

No	Times of the setting current(A)	Motion time			Start condition	Ambient temperature
1	1.05	>2h			Cold state	20±5℃
2	1.2	<2h			Heat state	
3	1.5	<4min			(Following the No.1 test)	
4	7.2	10A	2s<Tp≤10s	≤63A	Cold state	
		10A	4s<Tp≤10s	>63A		

3. Phase-losing Motion Characteristic

No	Times of the setting current(A)		Motion time	Start condition	Ambient temperature
	Any two phases	Another phase			
1	1.0	0.9	>2h	Cold state	20±5℃
2	1.15	0	<2h	Heat state (Following the No.1 test)	

4. Specification

Type	Number	Setting range (A)	For contactor
JR28-25	1301	0.1~0.16	CJX2-09
	1302	0.16~0.25	CJX2-09
	1303	0.25~0.4	CJX2-09
	1304	0.4~0.63	CJX2-09
	1305	0.63~1	CJX2-09
	1306	1~1.6	CJX2-09
	1307	1.6~2.5	CJX2-09
	1308	2.5~4	CJX2-09
	1310	4~6	CJX2-09
	1312	5.5~8	CJX2-09
	1314	7~10	CJX2-12
	1316	9~13	CJX2-18
	1321	12~18	CJX2-18
	1322	17~25	CJX2-25
JR28-36	2353	23~32	CJX2-32
	2355	30~40	CJX2-40
JR28-93	3322	17~25	CJX2-25
	3353	23~32	CJX2-32
	3355	30~40	CJX2-40
	3357	37~50	CJX2-50
	3359	48~65	CJX2-65
	3361	55~70	CJX2-80
	3363	63~80	CJX2-80
	3365	80~93	CJX2-95
JR28-150	4365	80~104	CJX2-F115
	4367	95~120	CJX2-F150
	4369	110~140	CJX2-F150



JR28-25



JR28-36



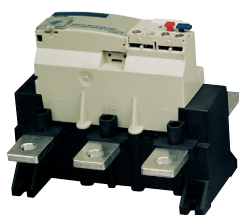
JR28-93



JR28-150



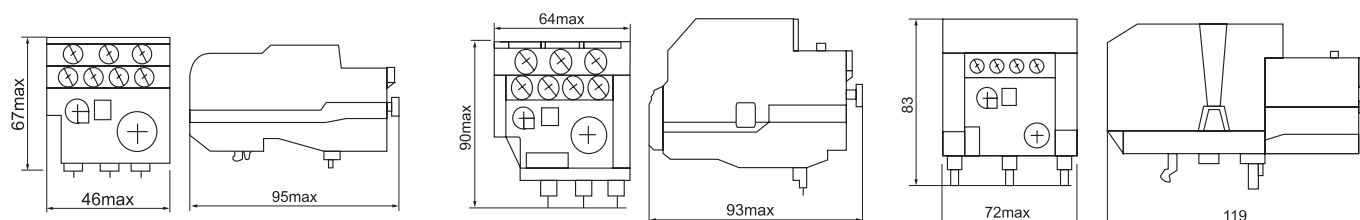
JR28-200



JR28-630

Type	Number	Setting range (A)	For contactor
JR28-150	5369	90~150	CJX2-F150
JR28-200	F5357	30~50	CJX2-F115
	F5363	48~80	CJX2-F115
	F5367	60~100	CJX2-F115
	F5369	90~150	CJX2-F150
JR28-630	F5371	132~220	CJX2-F225
	F7375	200~330	CJX2-F330
	F7379	300~500	CJX2-F500
	F7381	380~630	CJX2-F630

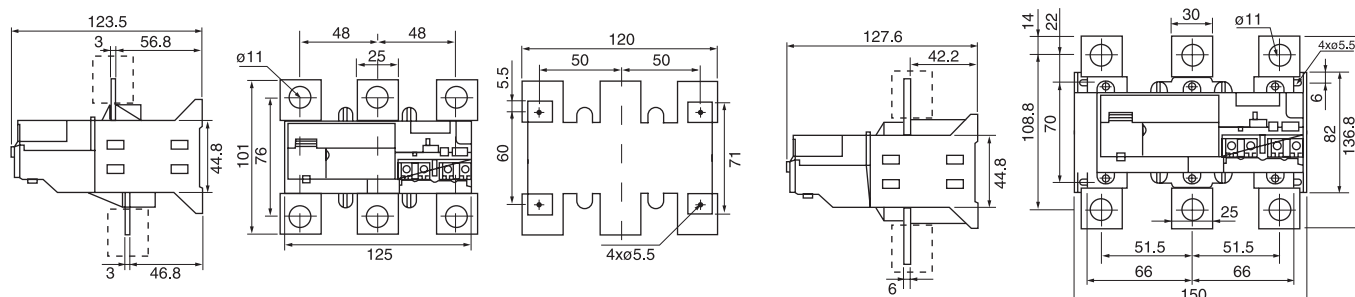
5. Outline and Mounting Dimension



JR28-25

JR28-36

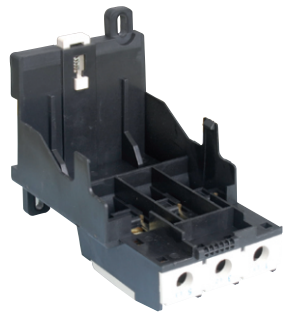
JR28-93



JR28-200

JR28-630

6. Accessories

Pic			
Description	JR28-25 mounting base	JR28-36 mounting base	JR28-93 mounting base
Application	Assembled with JR28-25 to form a complete set	Assembled with JR28-36 to form a complete set	Assembled with JR28-93 to form a complete set

JR28N Series Thermal Relay

1. Application

JR28N series thermal relay is suitable for using in the circuits rated voltage up to 660V, rated current 93A AC 50/60Hz, for over-current protection of AC motor. The relay has the differential mechanism and temperature compensation and can plug in CJX2N series AC contactor. The product conforms to IEC60947-4-1 standard.

2. Specification

Type	Number	Setting range (A)	For contactor
JR28N-25	D01	0.10~0.16	CJX2N-D09
	D02	0.16~0.25	CJX2N-D09
	D03	0.25~0.40	CJX2N-D09
	D04	0.40~0.63	CJX2N-D09
	D05	0.63~1	CJX2N-D09
	D06	1~1.7	CJX2N-D09
	D07	1.6~2.5	CJX2N-D09
	D08	2.5~4	CJX2N-D09
	D10	4~6	CJX2N-D09
	D12	5.5~8	CJX2N-D09
	D14	7~10	CJX2N-D12
	D16	9~13	CJX2N-D18
	D21	12~18	CJX2N-D18
	D22	16~24	CJX2N-D25
JR28N-36	D53	30~38	CJX2N-D40
	2353	23~32	CJX2N-D32
JR28N-93	2355	30~40	CJX2N-D40
	3322	17~25	CJX2N-D25
	3353	23~32	CJX2N-D32
	3355	30~40	CJX2N-D40
	3357	37~50	CJX2N-D50
	3359	48~65	CJX2N-D65
	3361	55~70	CJX2N-D80
	3363	63~80	CJX2N-D80
	3365	80~93	CJX2N-D95

3. Outline and Mounting Dimension



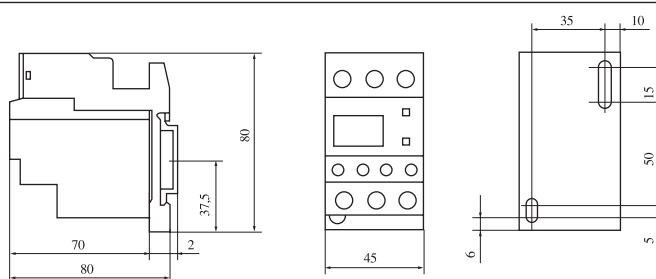
JR28N-25



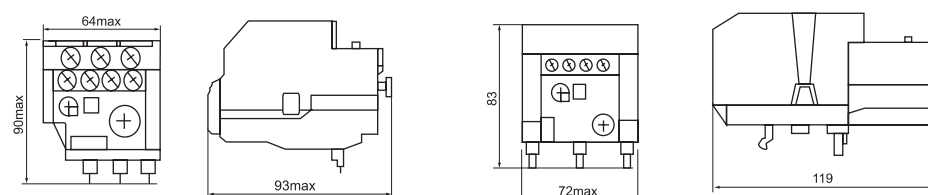
JR28N-36



JR28N-93



JR28N-25



JR28N-36

JR28N-93

General Relay

1. Main Technical Parameter

Model		60.12	60.13	MY2
Specifications				
Terminal layout		2Z	3Z	2Z
Contact capacity	AC	10A 220V	10A 220V	5A 250V
	DC	10A 28V	10A 28V	5A 30V
Contact resistance(mΩ)		≤ 50mΩ	≤ 50mΩ	≤ 50mΩ
Insulation resistance(MΩ)		≥ 500MΩ	≥ 500MΩ	≥ 100MΩ
Dielectric strength	BOC	2000VAC	2000VAC	1000VAC
	BCC	2000VAC	2000VAC	1500VAC
Coil nominal voltage	AC	6 to 240V	6 to 240V	6 to 240V
	DC	6 to 125V	6 to 125V	6 to 220V
Coil nominal power	AC	≤ 3.5VA	≤ 3.5VA	0.9VA to 1.2VA
	DC	≤ 2W	≤ 2W	≤ 0.9W
Electrical life(OPS)		20 ⁵	20 ⁵	10 ⁵
Mechanical life(OPS)		20 ⁷ /50 ⁷	20 ⁷ /50 ⁷	10 ⁷
Operating temperature(°C)		-40~+70	-40~+70	-40~+60
Weight(g)		≤ 125	≤ 125	≤ 35
Mounting methods		Outlet	Outlet	PCB, Outlet



60.12

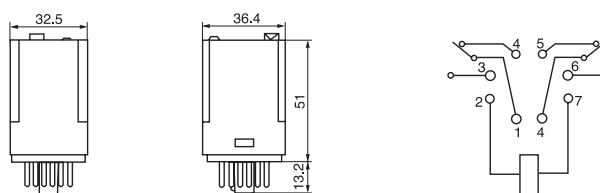


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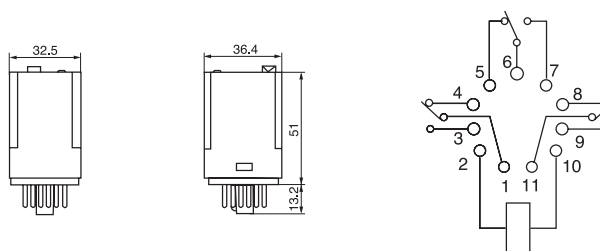


MY2

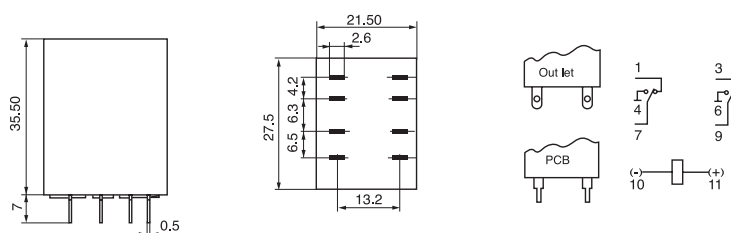
2. Dimension



60.12



60.13



MY2

General Relay

1. Main Technical Parameter

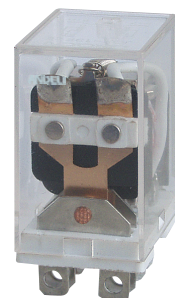
Model		MY3	MY4	LY1
Specifications				
Terminal layout		3Z	4Z	1Z
Contact capacity	AC	5A 250V	3A 250V	15A 250V
	DC	5A 30V	3A 30V	15A 30V
Contact resistance(mΩ)		≤ 50mΩ	≤ 50mΩ	≤ 50mΩ
Insulation resistance(MΩ)		≥ 100MΩ	≥ 100MΩ	≥ 100MΩ
Dielectric strength	BOC	1000VAC	1000VAC	1000VAC
	BCC	1500VAC	1500VAC	1500VAC
Coil nominal voltage	AC	6 to 240V	6 to 240V	6 to 240V
	DC	6 to 220V	6 to 220V	6 to 220V
Coil nominal power	AC	0.9VA to 1.2VA	0.9VA to 1.2VA	0.9VA to 1.2VA
	DC	≤ 0.9W	≤ 0.9W	≤ 0.9W
Electrical life(OPS)		10 ⁵	10 ⁵	10 ⁵
Mechanical life(OPS)		10 ⁷	10 ⁷	10 ⁷
Operating temperature(°C)		-40~+60	-40~+60	-40~+60
Weight(g)		≤ 35	≤ 35	≤ 35
Mounting methods		Printed-circuit board, Outlet	Printed-circuit board, Outlet	Printed-circuit board, Flange, Outlet



MY3

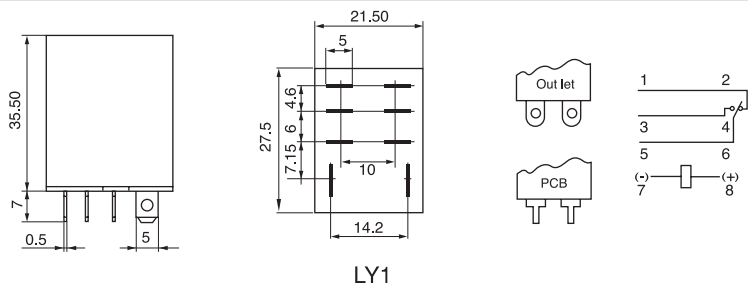
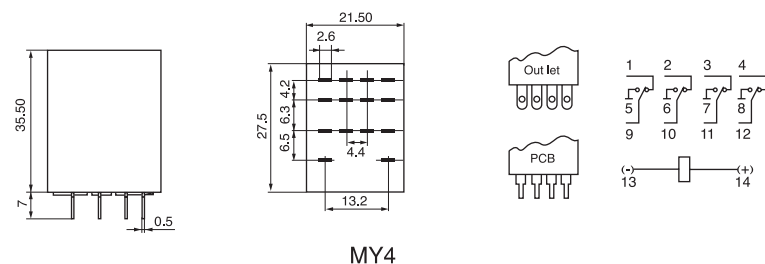
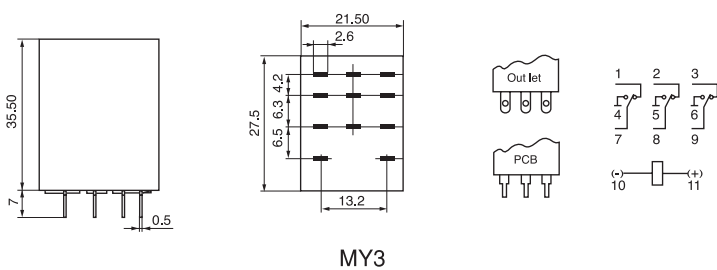


MY4



LY1

2. Dimension

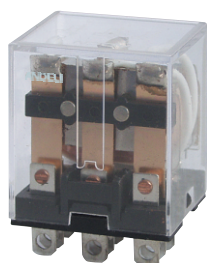


General Relay

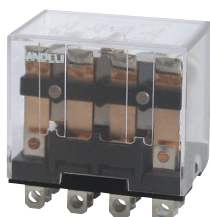
1. Main Technical Parameter



LY2



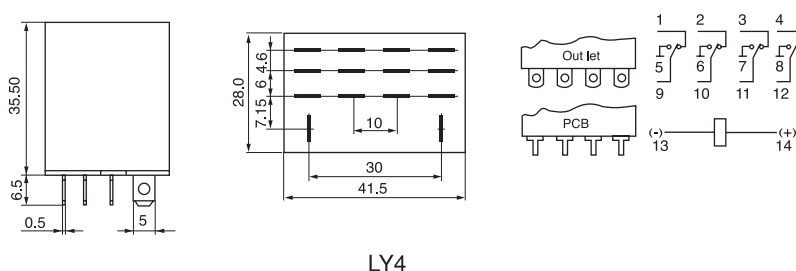
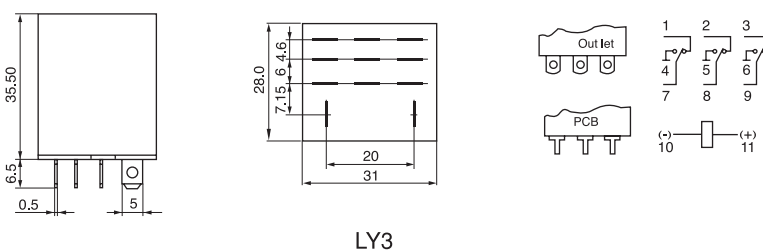
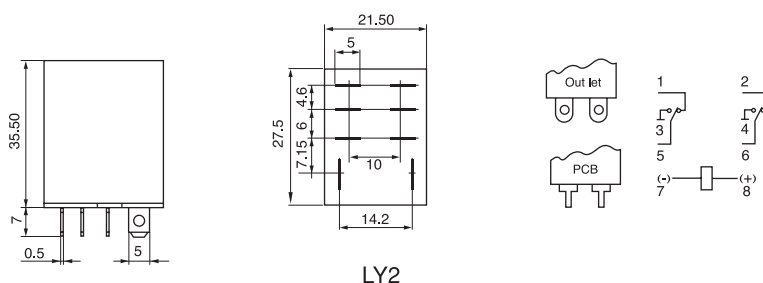
LY3



LY4

Model		LY2	LY3	LY4
Specifications				
Terminal layout		2Z	4Z	2Z
Contact capacity	AC	10A 250V	10A 250V	10A 250V
	DC	10A 30V	10A 28V	10A 30V
Contact resistance(mΩ)		≤ 50mΩ	≤ 50mΩ	≤ 50mΩ
Insulation resistance(MΩ)		≥ 100MΩ	≥ 100MΩ	≥ 500MΩ
Dielectric strength	BOC	1000VAC	1000VAC	1500VAC
	BCC	1500VAC	1500VAC	1500VAC
Coil nominal voltage	AC	6 to 240V	6 to 240V	6 to 380V
	DC	6 to 220V	6 to 110V	6 to 220V
Coil nominal power	AC	0.9VA to 1.2VA	≤ 2.5VA	≤ 2.8VA
	DC	≤ 0.9W	≤ 1.6W	≤ 1.6W
Electrical life(OPS)		10 ⁵	10 ⁵	10 ⁵
Mechanical life(OPS)		10 ⁷	10 ⁷	10 ⁷
Operating temperature(°C)		-40~+60	-40~+70	-40~+60
Weight(g)		≤ 35	≤ 70	≤ 80
Mounting methods		Printed-circuit board, Flange, Outlet	Printed-circuit board, Flange, Outlet	Outlet

2. Dimension



Multi Range Timer

1. Main Technical Parameter



ST2P



ST3PA



H3BA-8/H3BA-11

Classification		Timer	Multi range timer		Multi range timer		
Specification		Model	ST2P	ST3PA	H3BA-8/H3BA-11		
Dimension		50H x 40W x 57.5D		55H x 40.5W x 57.5D		48H x 48W x 93.5D	
Mounting & socket	Surface(-N)	PF083A(E)		PF-083A(E)		PF113A(E)	PF083A PS-08
	Flush(-Y)	US-08 P3G-08		US-08 P3G-08		US-11	US-08 P3G-08
Full timing range		SEC: 1,3,6,10,12,30,60 MIN: 3,6,10,12,30,60 HR: 3,6,10,12,30		A: 0.05-0.5s/5s/30s/3min B: 0.1-10s/60s/6min C: 0.5-5s/50s/5min/30min D: 1-10s/100s/100min/60min E: 5-60s/10s/60min/6h F: 0.25-2min/20min/2h/12h G: 0.5-4min/40min/4h/24h		0.1SEC~100HRS	
Rated voltage (V)		AC: 12,24,110,220(50/60Hz) DC: 12~24		AC: 24,48,110,220 (50/60Hz) DC: 24,48		24 to 240 DC/AC AC: 24,48,110,220 DC: 12,24,48	
Indicator operating		ON-UP operating		ON-UP operating		Time operating flicker	
O/P Contact	Model	ST2P-E		ST3PA	ST3PC	H3BA	H3BA-8 H3BA-8H
	Time limit 1C	5A			5A		5A
	Time limit 2C	5A		5A		5A	5A
	Instantaneous 1C	5A			5A		5A
Life	Mechanical	5 x 10 ⁷ Times		5 x 10 ⁷ Times		10 ⁷ Times	
	Electrical	10 ⁵ Times		10 ⁵ Times		10 ⁵ Times	
Accuracy	Repeat error	±2% max		±2% max		±2% max	
	Setting error	±5% max		±5% max		±5% max	
	Voltage error	±5% max		±5% max		±5% max	
	Temp error	±2% max		±2% max		±2% max	
Reset time		0.5 sec max		0.5 sec max		0.5 sec max	
Consumed power		3VA		3VA		100~240VAC:10VA 12VDC,24~240VDC:1.5W	
Ambient temperature		-10°C~+55°C		-10°C~+55°C		-10°C~+55°C	
Ambient humidity		35~85% RH		35~85% RH		35~85% RH	
Weight		100g		100g		100g	

Timer Relay

1. Main Technical Parameter

Classification	Timer relay			
Model	ST3PF	ST3PK	ST3PY	ST3PR
Specification				
Dimension	55H x 40.5W x 57.5D	55H x 40.5W x 57.5D	55H x 40.5W x 57.5D	55H x 40.5W x 57.5D
Function	Off delay	Breaking delay	Delaying of star-delta starter	On-off delaying repetitive
Delaying accuracy	1%	1%	0.5%±10ms	1%
Contact amount	Timed 1 Spdt	Timed 1 Spdt	Timed star-delta transfer Inst. 1 normally open	Timed 1 Spdt
Contact capacity	AC220V 3A	AC220V 3A	AC220V 3A	AC220V 2A
Delaying range	0.1~1s 0.2~2s 0.5~5s 1~10s 2.5~30s 5~60s	0.1~1s 0.25~2s 0.5~5s 1~10s 2.5~30s 5~60s 15~180s	1~10s 2.5~30s 5~60s	0.5~6s/60s 1~10s/10min 2.5~30s/30min
Rated voltage	AC110, 220V DC24, 48, 110V	AC110, 220V DC24V	AC110, 220V	AC110, 220V DC24V



ST3PF



ST3PK

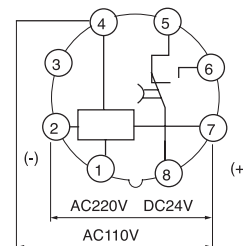
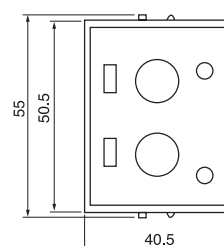
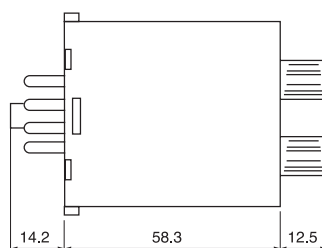
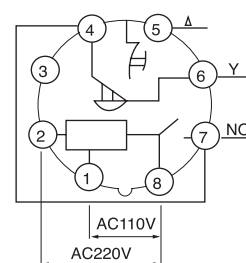
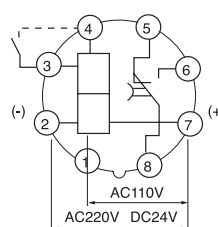
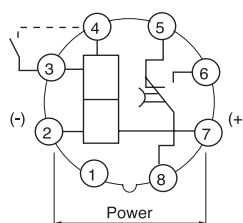


ST3PY



ST3PR

2. Dimension



Timer Relay

1. Main Technical Parameter

Classification	Timer	Timer	Timer	Timer
Model	TB-388	TB-35	SUL181h	E8
Specification				
Contact capacity	AC220V 10A	AC220V 10A	AC220V 16A	AC220V 10A
Full timing range	24h	24h	24h	7m
Contact resistance	$\leq 50\text{m}\Omega$	$\leq 50\text{m}\Omega$	$\leq 50\text{m}\Omega$	$\leq 50\text{m}\Omega$
Insulation resistance	$\geq 100\text{M}\Omega$	$\geq 100\text{M}\Omega$	$\geq 100\text{M}\Omega$	$\geq 100\text{M}\Omega$
Coil voltage	100~240V AC	100~240V AC	110,230V AC	110,230V AC
Life	Electrical	10^5 Times	10^5 Times	10^5 Times
	Mechanical	10^7 Times	10^7 Times	10^7 Times
Operating temperature	$-40^\circ\text{C}\sim+55^\circ\text{C}$	$-40^\circ\text{C}\sim+55^\circ\text{C}$	$-40^\circ\text{C}\sim+55^\circ\text{C}$	$-40^\circ\text{C}\sim+55^\circ\text{C}$
Storage battery (Working reserve)	Time 150h	Without battery	Time 150h	—
Minimum setting unit	15Minutes	15Minutes	30Minutes	0.5Minutes
Set up times	15 m/per times	15 m/per times	30 m/per times	1M, 1.5M, 2M, 2.5M,
	96 times	96 times	48 times	3M, 3.5M, 4.5M, 5M, 5.5M, 6M, 6.5M, 7M



TB-388



TB-35

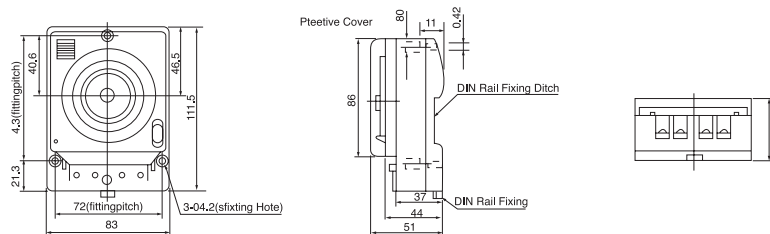


SUL181H

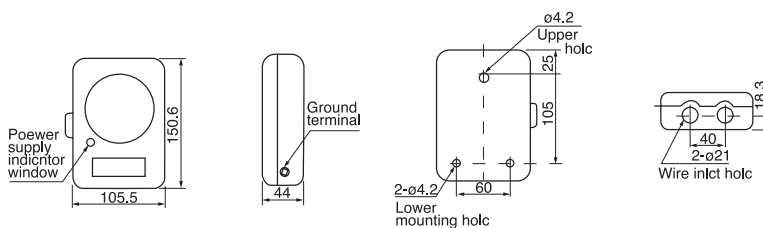


E8

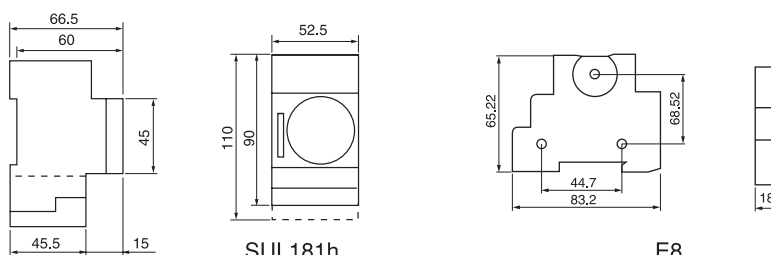
2. Dimension



TB-35



TB-35B



SUL181h

E8

Relay Socket



PTF08A
(LY2)



PTF08A-E
(LY2)



PTF11A
(LY3)



PTF14A-E



PYF08A
(MY2,57.02,H3Y-2)



PYF08A-E
(MY2)



PYF14A
(MY4,57.04,55.34,55.04)



PYF14A-E
(MY4)



PF-083BE



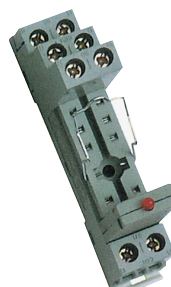
MT740(Black)



RT704
(57.04,55.34,55.04)



RT624



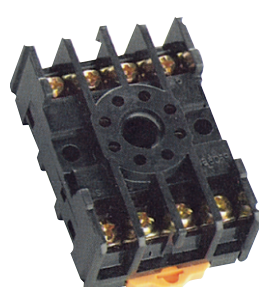
PSF-14AE/L



TYPE 90.22
(60.12)



TYPE 90.23
(60.13)



PF085A



PF113A
(MK3P,H3BA,
JQX-10F-3Z,JTX-3C)



PF113A-E
(MK3P,JQX-10F-3Z,
JTX-3C)



PF083A
(MK2P,ST3P,AH3-3,
H3BA-8,DH48S,
JQX-10F-2Z,JTX-2C)



PF083A-E
(MK2P,JQX-10F-2Z,
JTX-2C)

Solid State Relay

1. Main Technical Parameter



SSR-40DA



ZG3NC-325A



ZG3NC-340B

Type	ZG3NA	ZG3NC	ZG3V
Dimensions(mm)	58 x 43 x 27	57 x 44 x 22	104 x 73.5 x 24
Function	Many kinds of input standards SSR, With operation display		
Output	Insulation	Photoelectric coupler	
	Load voltage	3-32VDC / 90-420VAC	
	Current	10~40A	10~80A
	Leakage current	• 100VAC 5mA • 200VAC 10mA	
	VoRmVceo	1000	
	di/dt(A/us)	200	
	dv/dt(v/us)	400	
	I ² t(A ² S)	25~3000	
	Tj(°C)Max.TJ(C)	100	
Input	Input voltage	3-32VDC / 90-250VAC	
	Input current	<40mA	
	Off voltage	1VDC	
	On voltage	3VDC	
	Off time	0.5ms DC / 10msAC	
	On time	0.5ms DC / 10msAC	
Dielectric strength		50Hz, 60S 2500VAC	
Ambient temperature		-30°C~80°C(Under non-ice / dewfall condition)	
Efficiency of safety working current		Dissipative load is 60% / Inductive load is 40%	

Type	Input voltage	Output voltage	Output current (A)
ZG3T-203B	3-32VDC	30-240VAC	3
ZG3T-303B	3-32VDC	90-480VAC	3
ZG3M-301B	3-32VDC	90-480VAC	1
ZG3N-203B	3-32VDC	30-240VAC	3
ZG3M-208B	3-32VDC	30-240VAC	8
ZG3V-301B	3-32VDC	90-480VAC	1
SSR-25DA	3-32VDC	24-380VAC	25
SSR-40DA	3-32VDC	24-380VAC	40
SSR-25AA(VA)	80-250VAC	24-380VAC	25
SSR-40AA(VA)	80-250VAC	24-380VAC	40
ZG3NC-210B	3-32VDC	30-240VAC	10
ZG3NC-310B	3-32VDC	90-480VAC	10
ZG3NC-220B	3-32VDC	30-240VAC	20
ZG3NC-320B	3-32VDC	90-480VAC	20
ZG3NC-225B	3-32VDC	30-240VAC	25
ZG3NC-325-B	3-32VDC	90-480VAC	25

CJX1 Series AC Contactors

1. Application

CJX1 series AC contactors are suitable for frequency 50/60Hz, rated insulation voltage up to 1000V, rated operation current 9~475A under AC-3 duty. It is mainly used for making/breaking electric circuit at a long distance & for frequent starting/stopping & with thermal relay to compose a magnetic motor starter. The product conforms to IEC60947-4-1 standard.

2. Specification

Type	CJX1-9 CJX1-12	CJX1-16 CJX1-22	CJX1-32	CJX1-45 CJX1-63	CJX1-75 CJX1-85	CJX1-110 CJX1-140	CJX1-170 CJX1-205	CJX1-250 CJX1-300	CJX1-400 CJX1-475
Mechanical endurance($\times 10^6$)	10	10	10	8	8	8	8	8	8
Conventional thermal current(A)	20	30	45	80	100	160	210	300	400/550
Rated insulation voltage(V)	660	660	660	1000	1000	1000	1000	1000	1000
Rated(380V) operating current(A)	AC-3	9/12	16/22	32	45/63	75/85	110/140	170/205	250/300
	AC-4	3.3/4.3	7.7/8.5	15.6	24/28	34/42	54/68	75/96	110/125
Power of controllable motor(kW) AC-3	380V	4/5.5	7.5/11	15	22/30	37/45	55/75	90/110	132/160
	660V	5.5/7.5	11	23	39/55	67	100	156	235
Power of controllable motor(kW) AC-4	380V	1.4/1.9	3.5/4	7.5	12/14	17/21	27/35	38/50	58/66
	660V	2.4/3.3	6/6.6	13	20.8/24	29.5/36	46.9/60	66/86	100/114
Frequency of operation (l/h)	AC3	1000	750	750	1200/1000	1000/850	1000/750	700/500	700/500
	AC4	250	250	250	400/300	300/250	300/200	200/130	200/130
Electrical endurance ($\times 10^6$)	AC3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
	AC4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Operating voltage range of coil	(0.8~1.1)U _e								
Power consumption of coil	Attracting (VA)	10	10	12.1	17	32	39	58	84
	Starting (VA)	68	69	101	183	330	550	910	1430
Rated insulation voltage of auxiliary contacts(V)	690	690	690	690	690	690	690	690	690
Conventional thermal current of auxiliary contacts(A)	10	10	10	10	10	10	10	10	10
Rated operating current of auxiliary contacts(A)	AC15 380/220	6/10	6/10	4/6	4/6	4/6	4/6	4/6	4/6
	DC13 220V	0.45	0.45	0.48	0.48	0.48	0.48	0.48	0.48
Rated voltage of the control coil(V)	50Hz	24,36,48,110,127,220,380,etc							
	60Hz	24,110,220,440,etc.							



CJX1-9,12



CJX1-16,22



CJX1-32

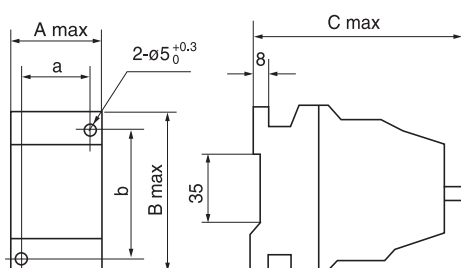


CJX1-45~85

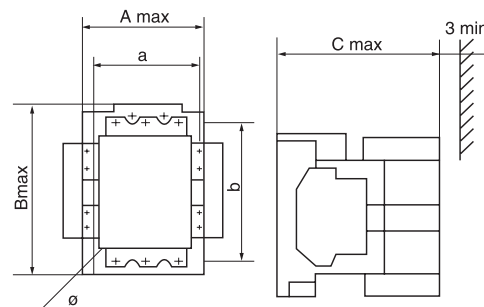
3. Outline and Mounting Dimension



CJX1-110,140



CJX1-0.9~32 (Table 1)



CJX1-45~475 (Table 2)

Table 1

Type	A max	B max	C max	a	b
CJX1-9,12	45	78.5	104(90)	35+0.31	60+0.37
CJX1-16,22	46	85	114	35+0.31	75+0.37
CJX1-32	74	88	108	50+0.31	75+0.37

Table 2

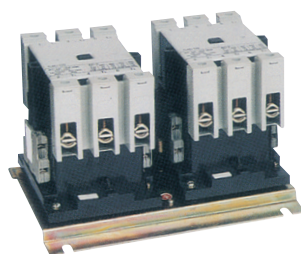
Type	A max	B max	C max	a	b	
CJX1-45,63	91(114)	120	124	70+0.6	100+0.2	4.8
CJX1-75,85	102(125)	135	142	80+0.6	100+0.2	5.5
CJX1-110,140	122(145)	156	154	100+0.2	130+0.8	6.5
CJX1-170,205	140(163)	185	190	100+0.2	160+0.8	7
CJX1-250,300	150(173)	205	200	120+0.2	180+0.8	9
CJX1-400,475	165(188)	205	225	130+0.8	180+0.8	9



CJX1-170~475



CJX1-09~32N



CJX1-45~400N

CJX1-N Mechanical Interlocking Contactor

Type	Rated thermal current (A)	Rated operation current (A)		Controllable power of motor (kW)			
				AC 3		AC 4	
		380V	660V	380V	660V	380V	660V
CJX1-09N	20	9	3.3	4	5.5	1.4	2.4
CJX1-12N	20	12	4.3	5.5	7.5	1.9	3.3
CJX1-16N	30	16	7.7	7.5	11	3.5	6
CJX1-22N	30	22	8.5	11	11	4	6.6
CJX1-32N	45	32	15.6	15	23	7.5	13
CJX1-45N	45	38	18.5	18.5	23	9	15.5
CJX1-63N	70	45	24	22	39	12	20.8
CJX1-75N	70	63	28	30	55	14	24.3
CJX1-85N	90	75	34	37	67	17	29.5
CJX1-110N	90	85	42	45	67	21	36
CJX1-140N	150	110	54	55	100	27	46.9
CJX1-170N	150	140	68	75	100	35	60
CJX1-205N	180	170	75	90	156	38	66
CJX1-250N	220	205	96	110	156	50	86
CJX1-300N	300	250	110	132	235	58	100
CJX1-400N	300	300	125	160	235	66	114

CJX2 Series AC Contactor

1. Application

CJX2 series AC Contactor is suitable for using in the circuits up to the rated voltage 660V AC 50/60Hz, rated current up to 620A, for making, breaking, frequently starting & controlling the AC motor. Combined with the auxiliary contact block, timer delay & machine-interlocking device etc, it becomes the delay contactor, mechanical interlocking contactor, star-delta starter. With the thermal relay, it is combined into the electromagnetic starter. The product conforms to IEC60947-4-1 standard.

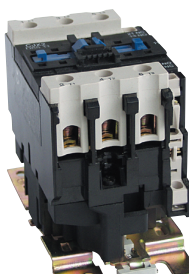
2. Specification



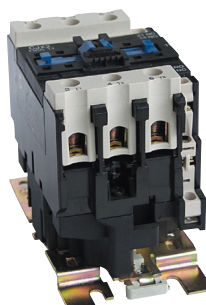
CJX2-D09



CJX2-D25



CJX2-D50



CJX2-D95

Type		CJX2-D09	CJX2-D12	CJX2-D18	CJX2-D25	CJX2-D32	CJX2-D40	CJX2-D50	CJX2-D65	CJX2-D80	CJX2-D95
Rated working current (A)	AC3	9	12	18	25	32	40	50	65	80	95
	AC4	3.5	5	7.7	8.5	12	18.5	24	28	37	44
Standard power ratings of 3-phase motors 50/60Hz in category AC-3 (kW)	220/230V	2.2	3	4	5.5	7.5	11	15	18.5	22	25
	380/400V	4	5.5	7.5	11	15	18.5	22	30	37	45
	415V	4	5.5	9	11	15	22	25	37	45	45
	500V	5.5	7.5	10	15	18.5	22	30	37	55	55
	660/690V	5.5	7.5	10	15	18.5	30	33	37	45	55
Rated heat current (A)		20	20	32	40	50	60	80	80	125	125
Electrical life	AC3 (x10 ⁴)	100	100	100	100	80	80	60	60	60	60
	AC4 (x10 ⁴)	20	20	20	20	20	15	15	15	10	10
Mechanical life (x10 ⁴)		1000	1000	1000	1000	800	800	800	800	600	600
Number of the contacts		3P+NO					3P+NC+NO				
		3P+NC									

Type		CJX2-D115	CJX2-D150	CJX2-D170	CJX2-D205	CJX2-D245	CJX2-D300	CJX2-D410	CJX2-D475	CJX2-D620
Rated working current (A)	AC3	115	150	170	205	245	300	410	475	620
	AC4	52	60	75	85	105	117	138	147	180
Standard power ratings of 3-phase motors 50/60Hz in category AC-3(kW)	220/230V	30	40	55	63	75	100	110	147	200
	380/400V	55	75	90	110	132	160	220	265	335
	415V	59	80	100	110	132	180	220	280	375
	500V	75	90	110	129	160	200	250	355	400
	660/690V	80	100	110	129	160	220	280	355	450
Rated heat current (A)		200	250	250	275	315	400	500	700	1000
Electrical life	AC3 (x10 ⁴)	200	60	60	50	50	50	30	30	20
	AC4 (x10 ⁴)	15	15	15	15	15	15	8	8	5
Mechanical life (x10 ⁴)		300	300	300	300	300	300	100	100	100

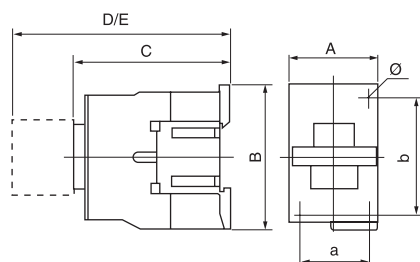
3. Standard Control Circuit Voltage

Volts	24	42	48	110	220	230	240	380	400	415	440	500	660
50Hz	B5	D5	E5	F5	M5	P5	U5	Q5	V5	N5	R5	S5	Y5
60Hz	B6	D6	E6	F6	M6	-	U6	Q6	-	-	R6	-	-
50/60Hz	B7	D7	E7	F7	M7	P7	U7	Q7	V7	N7	R7	-	-

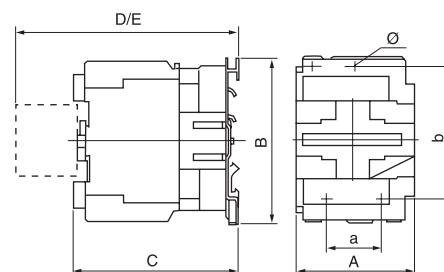
4. Outline and Mounting Dimension



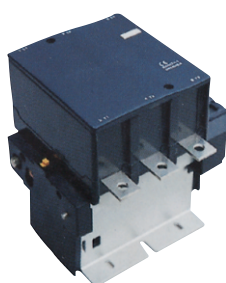
CJX2-D115



CJX2-D09~32

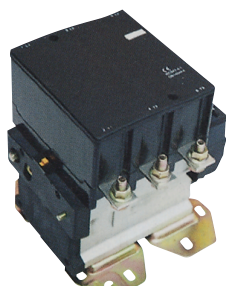


CJX2-D40~95

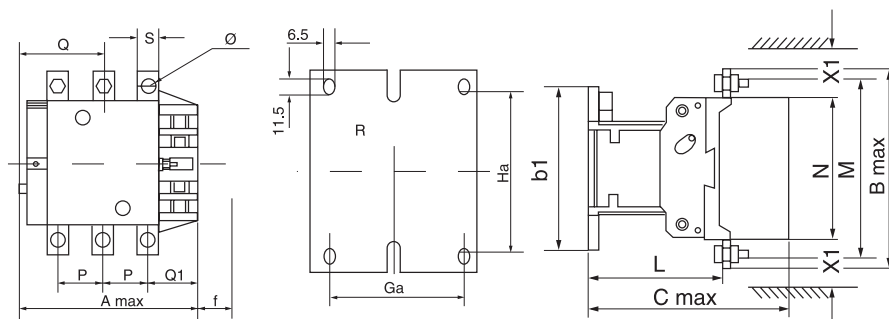


CJX2-D205

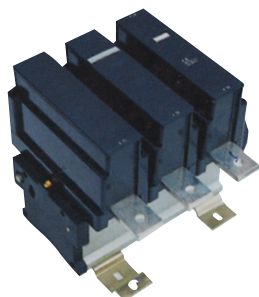
Type	A	B	C	D	E	a	b	
CJX2-D09~12	47	76	82	113	133	34/35	50/60	4.5
CJX2-D18	47	76	87	118	138	34/35	50/60	4.5
CJX2-D25	57	86	95	126	146	40	48	4.5
CJX2-D32	57	86	100	131	151	40	48	4.5
CJX2-D40~65	77	129	116	145	165	40	100/110	6.5
CJX2-D80~95	87	129	127	175	195	40	100/110	6.5



CJX2-D300



CJX2-D115~620



CJX2-D620

Type	A	B	C	b1	P	Q	S	Q1	M	N	L		Ga	Ha
CJX2-D115	158	120	132	158	35	60	17	25	134	96.2	75	M6	-	-
CJX2-D150	158	120	132	158	35	60	17	25	134	96.2	75	M6	-	-
CJX2-D170	158	120	132	158	35	60	17	25	134	96.2	75	M6	-	-
CJX2-D205	168.5	174	181	137	40	69	20	59.4	154	127	113.5	M8	80	120-106
CJX2-D245	168.5	197	181	137	48	69	25	51.5	172	127	113.5	M10	80	120-106
CJX2-D300	213	206	219	145	48	91	25	74	181	158	145	M10	80	120-106
CJX2-D410	213	206	219	209	48	91	25	74	181	158	145	M10	80	120-106
CJX2-D475	233	238	232	209	55	108	30	77	208	172	146	M10	80	180
CJX2-D620	309	304	255	280	80	140	40	89	264	202	155	M12	80	180

5. Auxiliary Contact Block



LA1-DN11



LA1-DN22



LA8-DN11



LA2-DT2

Appellation	Type	
Auxiliary instantaneous contactor block, contactor I	LA1-DN10C	
	LA1-DN01C	

Appellation	Type	
Auxiliary instantaneous contactor block, contactor II	LA1-DN11C	
	LA1-DN20C	
	LA1-DN02C	

Appellation	Type	
Auxiliary instantaneous contactor block, contactor IV	LA1-DN40C	
	LA1-DN31C	
	LA1-DN22C	
	LA1-DN13C	
	LA1-DN04C	

Appellation	Type	
Auxiliary instantaneous contactor block, contactor IV	LA1-DN40C	
	LA1-DN31C	
	LA1-DN22C	
	LA1-DN13C	
	LA1-DN04C	

Appellation	Type	
Side-mounted auxiliary module	LA8-DN11C	

6. Time Delay Auxiliary Contact Block

Appellation	Type	
Auxiliary instantaneous contactor block, contactor IV	0.1...3S LA2-DT0	
	0.1...30S LA2-DT2	
	10...180S LA2-DT4	
	1...30S LA2-DS2	

Appellation	Type	
Time delay auxiliary contactor block releasing and delay	0.1...3S LA3-DT0	
	0.1...30S LA3-DT2	
	10...180S LA3-DT4	

CJX2N Series AC Contactors

1. Application

CJX2N series AC contactor is suitable for frequency 50/60Hz, rated insulation voltage up to 1000V, rated operation current 9~150A under AC-3 duty. It is mainly used for making/breaking electric circuits at a long distance & for frequent starting/stopping & controlling AC Motors. It is used in combination with thermal relay to compose a magnetic motor starter. The products comply with IEC60947-4-1 standard.

2. Specification

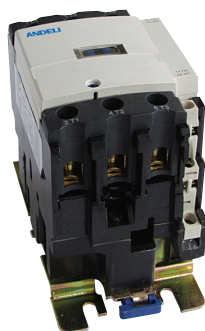
Type		CJX2N -09	CJX2N -12	CJX2N -18	CJX2N -25	CJX2N -32	CJX2N -38	CJX2N -40
Rated working current Ie (A) AC-3 Ue ≤440V		9	12	18	25	32	38	40
Rated heat current Ith (A)		25	25	32	40	50	50	60
Rated insulation voltage Ui (V)		690	690	690	690	690	690	1000
Rated operating voltage Ue (V) Max		690	690	690	690	690	690	1000
Rated operational power in AC-3 Pe (kW)	220/230V	2.2	3	4	5.5	7.5	9	11
	380/400V	4	5.5	7.5	11	15	18.5	18.5
	415/440V	4	5.5	9	11	15	18.5	22
	500V	5.5	7.5	10	15	18.5	18.5	22
	660/690V	5.5	7.5	10	15	18.5	18.5	30
Rated operational power in AC-4 Pe (kW)	220/230V	1.5	1.5	2.2	3	4	4	4
	380/400V	2.2	3.7	4	5.5	7.5	7.5	9
	415/440V	2.2	3	3.7	5.5	7.5	7.5	9/11
	500V	3	4	5.5	7.5	9	9	11
	660/690V	4	5.5	7.5	10	11	11	15
Frequency of operation (I/h)			1200	1200	1200	1200	1000	1000
Electrical endurance (x10 ⁴)	AC-3	100	100	100	100	80	80	80
	AC-4	20	20	20	20	20	20	15
Mechanical endurance (x10 ⁶)			15	15	15	15	15	6
Operating voltage range of coil		Close voltage:(0.85~1.1)Us				Open voltage:(20%~75%)Us		
Power consumption of coil (VA)	Atracting	7	7	7	7	7	7	20
	Starting	70	70	70	70	70	70	200
Rated insulation voltage of auxiliary contacts (V)		690	690	690	690	690	690	690
Conventional thermal current of auxiliary contacts (A)		10	10	10	10	10	10	10
Auxiliary contacts specification		AC-15:360VA				DC-13:33W		



CJX2N-09



CJX2N-25



CJX2N-50



CJX2N-80



CJX2N-115



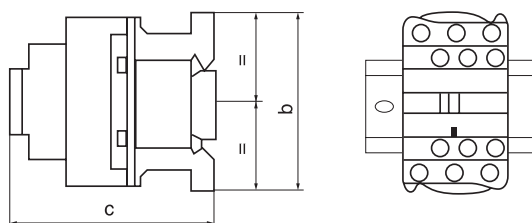
CJX2N-150

Type		CJX2N -50	CJX2N -65	CJX2N -80	CJX2N -95	CJX2N -115	CJX2N -150
Rated working current I _e (A) AC-3 U _e ≤ 440V		50	65	80	95	115	150
Rated heat current I _{th} (A)		80	80	125	125	200	200
Rated insulation voltage U _i (V)		1000	1000	1000	1000	1000	1000
Rated operating voltage U _e (V) Max		1000	1000	1000	1000	1000	1000
Rated operational power in AC-3 P _e (kW)	220/230V	15	18.5	22	25	30	40
	380/400V	22	30	37	45	55	75
	415/440V	25/30	37	45	45	59	80
	500V	30	37	55	55	75	90
	660/690V	33	37	45	45	80	100
Rated operational power in AC-4 P _e (kW)	220/230V	5.5	7.5	7.5	9	9	11
	380/400V	11	11	15	15	18.5	22
	415/440V	11	11/15	15	15	18.5	22
	500V	15	18.5	22	22	30	37
	660/690V	18.5	22	25	25	30	45
Frequency of operation (I/h)		1000	1000	750	750	750	750
Electrical endurance (x10 ⁴)	AC-3	60	60	60	60	60	60
	AC-4	15	15	10	10	15	15
Mechanical endurance (x10 ⁶)		6	6	4	4	4	4
Operating voltage range of coil		Close voltage:(0.85~1.1)U _s			Open voltage:(20%~75%)U _s		
Power consumption of coil (VA)	Attracting	20	20	20	20	22	22
	Starting	200	200	200	200	300	300
Rated insulation voltage of auxiliary contacts (V)	690	690	690	690	690	690	690
Conventional thermal current of auxiliary contacts (A)	10	10	10	10	10	10	10
Auxiliary contacts specification		AC-15:360VA			DC-13:33W		

3. Standard Control Circuit Voltage

Volts	24	42	48	110	220	230	240	380	400	415	440	500	660
50Hz	B5	D5	E5	F5	M5	P5	U5	Q5	V5	N5	R5	S5	Y5
60Hz	B6	D6	E6	F6	M6	-	U6	Q6	-	-	R6		
50/60Hz	B7	D7	E7	F7	M7	P7	U7	Q7	V7	N7	R7		

4. Outline and Mounting Dimension



	09	12	18	25	32	38	40	50	65	80	95	115	150
b	76.6	76.6	76.6	76.6	76.6	76.6	127	127	127	127	127	158	158
c	87	87	87	94	94	94	116	116	116	123.8	123.8	132	132

CJX2-F AC Contactor

1. Application

CJX2-F AC contactor is suitable for using in the circuits up to the rated voltage 380V AC 50/60Hz, current 800A, for long distance breaking circuit and frequently starting or controlling the motor. It also can be used for the control of distribution circuits of rated current from 115A to 800A. It conforms to IEC60947-4-1 standard.

2. Specification

Type	Rated operational current in AC-3(A)	Max power ratings of 3-phase motors in category AC-3(kW)							Operating frequency (time/hour) AC-3	Electrical life AC-3 x10 ⁴	Mechanical life x10 ⁴
		220V 230V	380V 400V	415V	440V	500V	660V 690V	1000V			
CJX2-F115	115	30	55	59	59	75	80	65	1200	120	1000
CJX2-F1154	115	30	55	59	59	75	80	65	1200	120	1000
CJX2-F150	150	40	75	80	80	90	100	65	1200	120	1000
CJX2-F1504	150	40	75	80	80	90	100	65	1200	120	1000
CJX2-F185	185	55	90	100	100	110	110	100	600	100	600
CJX2-F1854	185	55	90	100	100	110	110	100	600	100	600
CJX2-F225	225	63	110	110	110	130	129	100	600	100	600
CJX2-F2254	225	63	110	110	110	130	129	100	600	100	600
CJX2-F265	265	75	132	140	140	160	160	147	600	80	600
CJX2-F2654	265	75	132	140	140	160	160	147	600	80	600
CJX2-F330	330	100	160	180	200	200	220	160	600	80	600
CJX2-F3304	330	100	160	180	200	200	220	160	600	80	600
CJX2-F400	400	110	200	220	250	257	280	185	600	80	600
CJX2-F4004	400	110	200	220	250	257	280	185	600	80	600
CJX2-F500	500	147	250	280	295	355	335	335	600	80	600
CJX2-F5004	500	147	250	280	295	355	335	335	600	80	600
CJX2-F630	630	200	335	375	400	400	450	450	600	80	600
CJX2-F6304	630	200	335	375	400	400	450	450	600	80	600
CJX2-F780	780	220	400	425	425	450	475	40	600	80	600
CJX2-F7804	780	220	400	425	425	450	475	450	600	80	600
CJX2-F800	800	250	450	450	450	450	470	450	600	80	600



CJX2-F115



CJX2-F150



CJX2-F630



CJX2-F780

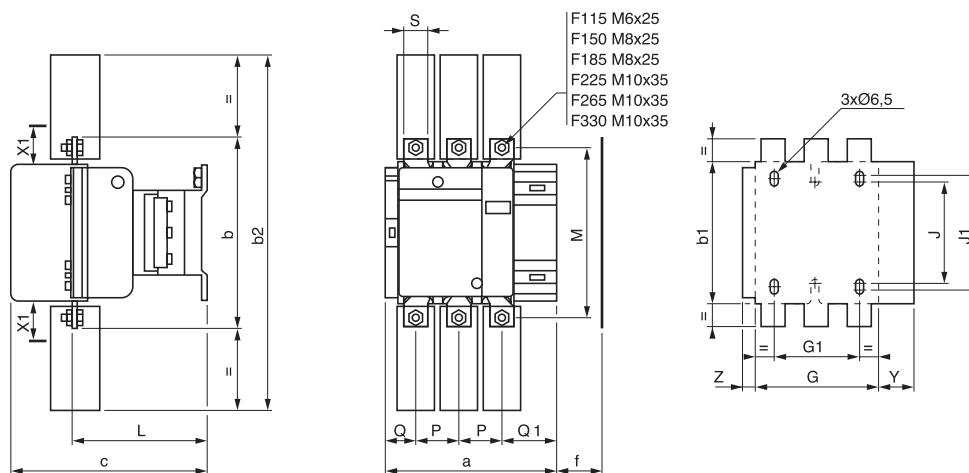


CJX2-F1154



CJX2-F5004

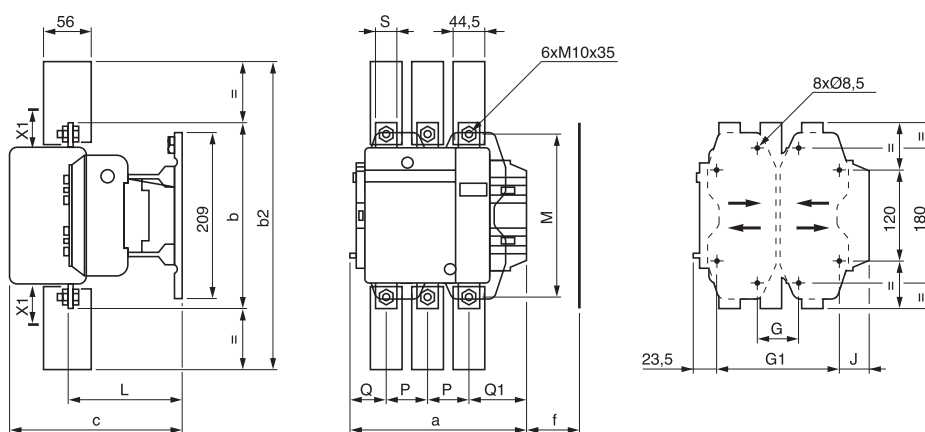
3. Outline and Mounting Dimension



CJX2-F115 to F330

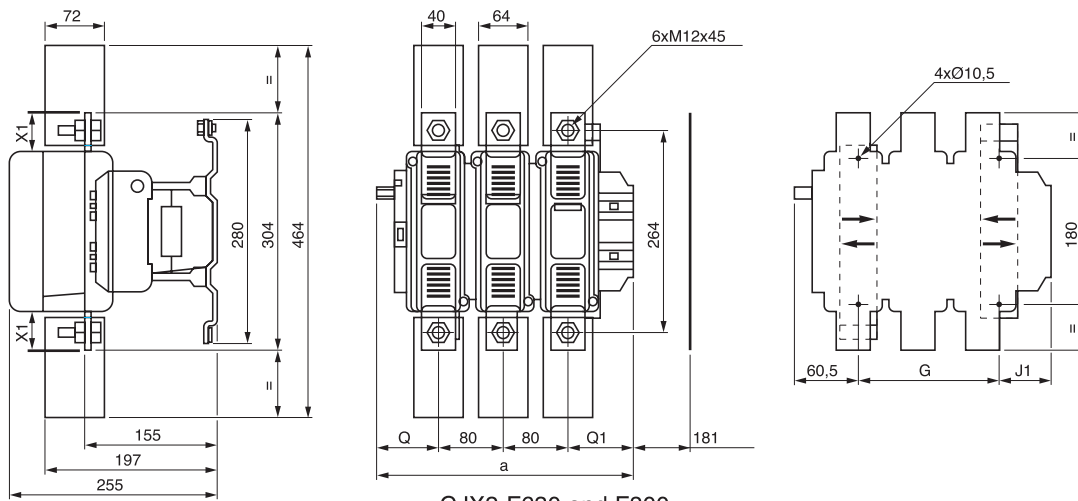
CJX2-		a	b	b1	b2	c	f	G	G1	J	J1	L	M	P	Q	Q1	S	1	Y	Z
F115	3P	163.5	162	137	265	171	131	106	80	106	120	107	147	37	29.5	60	20	26	44	13.5
	4P	200.5	162	137	265	171	131	143	80	106	120	107	147	37	29.5	60	20	26	44	13.5
F150	3P	163.5	170	137	301	171	131	106	80	106	120	107	150	40	26	57.5	20	34	44	13.5
	4P	200.5	170	137	301	171	131	143	80	106	120	107	150	40	26	55.5	20	34	44	13.5
F185	3P	168.5	174	137	305	181	130	111	80	106	120	113.5	154	40	29	59.5	20	34	44	13.5
	4P	208.5	174	137	305	181	130	151	80	106	120	113.5	154	40	29	59.5	20	34	44	13.5
F225	3P	168.5	197	137	364	181	130	111	80	106	120	113.5	172	48	21	51.5	25	44.5	44	13.5
	4P	208.5	197	137	364	181	130	151	80	106	120	113.5	172	48	17	47.5	25	44.5	44	13.5
F265	3P	201.5	203	145	375	213	147	142	96	106	120	141	178	48	39	66.5	25	44.5	38	21.5
	4P	244.5	203	145	375	213	147	190	96	106	120	141	178	48	34	66.5	25	44.5	38	21.5
F330	3P	213	206	145	375	219	147	154.5	96	106	120	145	181	48	43	74	25	44.5	38	20.5
	4P	261	206	145	375	219	147	202.5	96	106	120	145	181	48	43	74	25	44.5	38	20.5

f = minimum distance required for coil removal



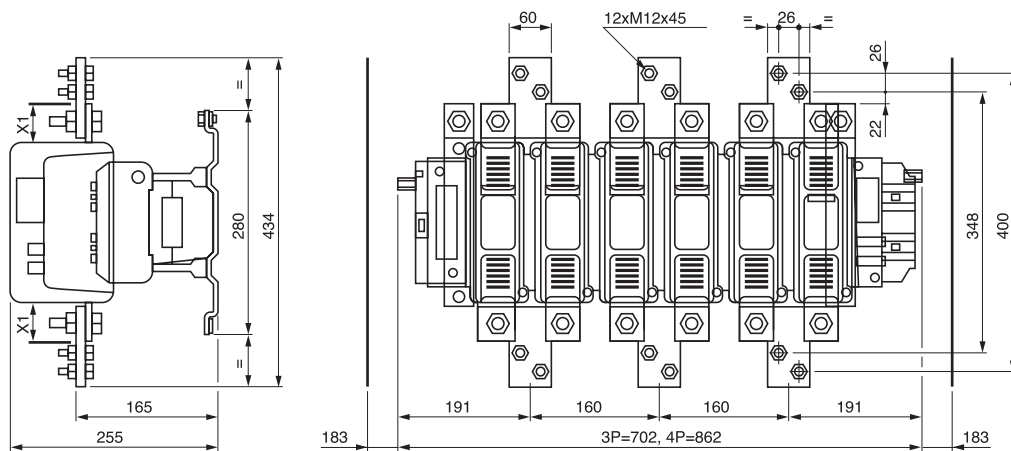
CJX2-F400 and F500

CJX2-		a	b	b2	c	f	G *	G min.	G max.	G1 *	G1 min.	G1 max.	J	L	M	P	Q	Q1	S
F400	2P	213	206	375	219	119	80	66	102	170	156	192	19.5	145	181	48	69	96	25
	3P	213	206	375	219	119	80	66	102	170	156	192	19.5	145	181	48	43	74	25
	4P	261	206	375	219	119	80	66	150	170	156	240	67.5	145	181	48	43	74	25
F500	2P	233	238	400	232	141	80	66	120	170	156	210	39.5	146	208	55	76	102	30
	3P	233	238	400	232	141	80	66	120	170	156	210	39.5	146	208	55	46	77	30
	4P	288	238	400	232	141	140	66	175	230	156	265	34.5	146	208	55	46	77	30



CJX2-F630 and F800

CJX2-		a	G	G min.	G max.	J1	Q	Q1
F630	2P	309	180	100	195	68,5	102	127
F630, F800	3P	309	180	100	195	68,5	60	89
F630	4P	389	240	150	275	68,5	60	89



CJX2-F780

4. Bobbin of AC Contactor CJX2-F

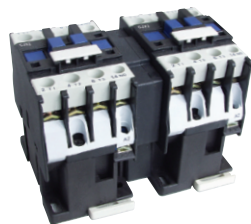
Type	Used for contactor
LX1-FF	CJX2-F115~F150
LX1-FG	CJX2-F185~F225
LX1-FH	CJX2-F265~F330
LX1-FJ	CJX2-F400
LX1-FK	CJX2-F500
LX1-FL	CJX2-F630/CJX2-F800
LX1-FX	CJX2-F780

CJX2-N Mechanical Interlocking Contactor

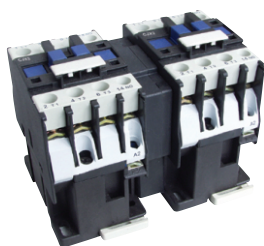
1. Application

CJX2-N mechanical interlocking contactor is suitable for using in the circuits up to the rated voltage 660V AC 50/60Hz, current 620A, for convertible controlling the motor. This mechanical interlocking device ensures contact changeover of the two convertible contactors. It conforms to IEC60947-4-1 standard.

2. Specification



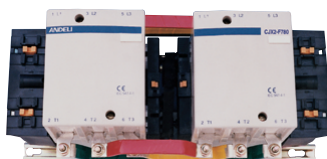
CJX2-09~12N



CJX2-25~32N



CJX2-40~95N

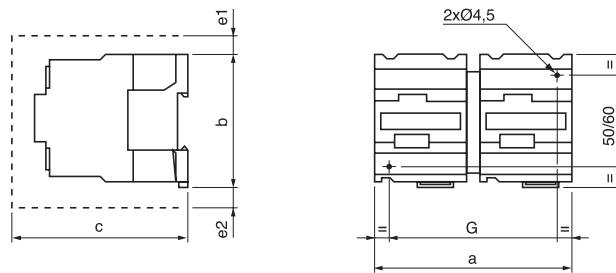


CJX2-115~800N

Type	Rated current AC-3(A)	Controlled power (kW)				
		220V	380V	415V	440V	660V
CJX2-09N	9	2.2	4	4	4	5.5
CJX2-12N	12	5.5	5.5	5.5	5.5	7.5
CJX2-18N	18	7.5	7.5	9	9	10
CJX2-25N	25	5.5	11	11	11	15
CJX2-32N	32	7.5	15	15	15	18.5
CJX2-40N	40	18.5	18.5	22	22	30
CJX2-50N	50	15	22	25	30	33
CJX2-65N	63	18.5	30	37	37	37
CJX2-80N	80	22	37	45	45	45
CJX2-95N	95	22	45	45	45	41
CJX2-115N	115	30	55	59	59	80
CJX2-150N	150	40	75	80	80	100
CJX2-170N	170	55	90	100	100	110
CJX2-205N	205	63	110	110	110	129
CJX2-245N	245	75	132	132	132	160
CJX2-300N	300	100	160	200	200	220
CJX2-410N	410	110	220	250	250	280
CJX2-475N	475	147	265	280	280	355
CJX2-620N	620	200	335	400	400	450

Type	Number of poles	Rated current AC-3(A)	Rated current In/A	Controlled power(kW)	
				220V	380V
CJX2-F115N	3P	115	250	200	55
CJX2-F1154N	4P	115	250	200	55
CJX2-F150N	3P	150	355	250	75
CJX2-F1504N	4P	150	355	250	75
CJX2-F185N	3P	185	425	275	90
CJX2-F1854N	4P	185	425	275	90
CJX2-F225N	3P	225	500	315	110
CJX2-F2254N	4P	225	500	315	110
CJX2-F265N	3P	265	630	350	132
CJX2-F2654N	4P	265	630	350	132
CJX2-F330N	3P	330	800	400	160
CJX2-F3304N	4P	330	800	400	160
CJX2-F400N	3P	400	800	500	200
CJX2-F4004N	4P	400	800	500	200
CJX2-F500N	3P	500	1000	700	250
CJX2-F5004N	4P	500	1000	700	250
CJX2-F630N	3P	630	1250	1000	335
CJX2-F6304N	4P	630	1250	1000	335
CJX2-F800N	3P	800	1250	1000	400

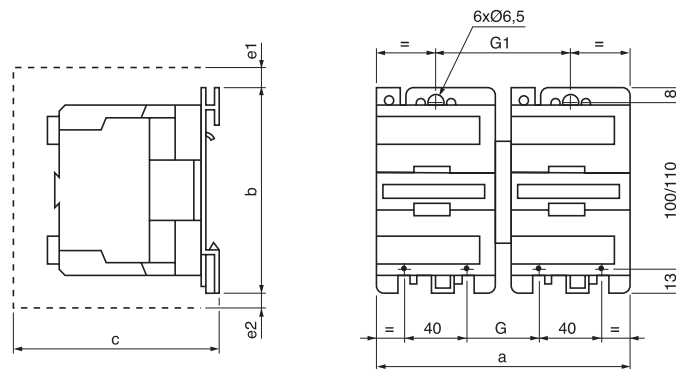
3. Outline and Mounting Dimension



CJX2-09N~38N

CJX2-N	a	b	c	e1(3P)	e2(4P)	G
09N, 12N	105	74	84	7	6	95
18N	106	74	92	8	-	95
25N	127	84	99	8	7	111
32N, 38N	127	84	117	10	-	111

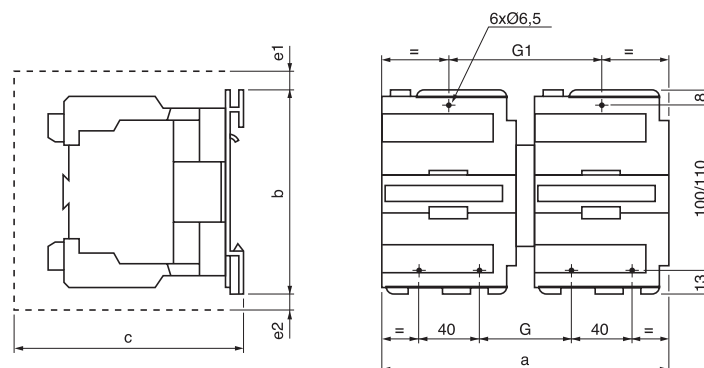
c, e1 and e2 including cabling



CJX2-40N~65N

CJX2-N(3-pole)	a	b	c	e1	GG	1
40N, 50N, 55N	165	127	142	5	50	90
CJX2-N(4-pole)	a	b	c	e2	GG	1
40N, 65N	182	127	133	11	57	97

c, e1 and e2 including cabling

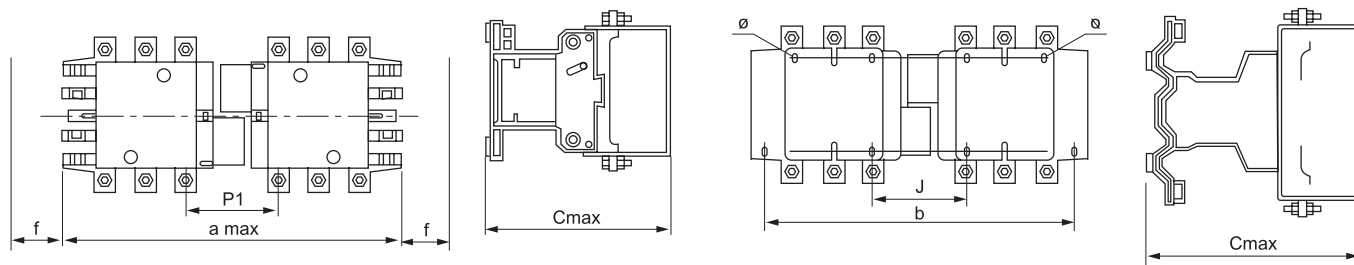


CJX2-80N~95N

CJX2-N(3-pole)	a	b	c	e1	GG	1
80N, 95N	182	127	158	13	57	90
CJX2-N(4-pole)	a	b	c	e2	GG	1
80N	207	127	158	20	71	11

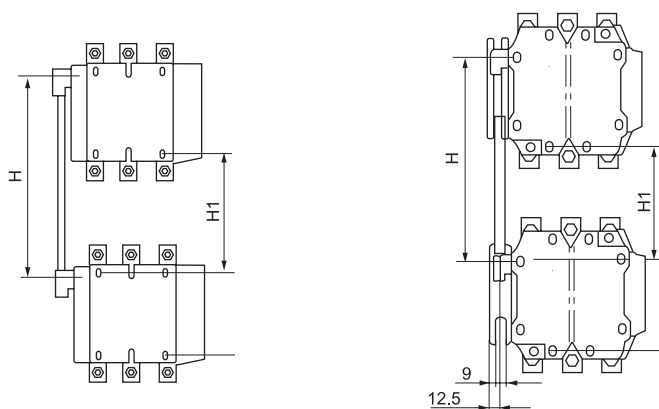
c, e1 and e2 including cabling

Horizontal mounting



Type	Amax	J	P1	f	b		Cmax
CJX2-F115N	350	71	77	131	330	6.5	182
CJX2-F1154N	425	105	77	131	370	6.5	182
CJX2-F150N	350	71	71	131	330	6.5	182
CJX2-F1504N	425	105	71	131	370	6.5	182
CJX2-F185N	350	78	71	130	330	6.5	193
CJX2-F1854N	430	114	71	130	370	6.5	193
CJX2-F225N	350	78	55	130	330	6.5	193
CJX2-F2254N	430	118	54	130	370	6.5	193
CJX2-F265N	450	109	96	147	428	6.5	225
CJX2-F2654N	546	157	100	147	485	6.5	225
CJX2-F330N	450	124	112	147	428	6.5	232.5
CJX2-F3304N	546	166	107	147	485	6.5	232.5
CJX2-F400N	485	157	110	146	460	8.5	232.5
CJX2-F4004N	485	157	107	146	485	8.5	232.5
CJX2-F500N	485	156	115	150	460	8.5	245.5
CJX2-F630N	650	139	140	181	625	10.5	268.5
CJX2-F6304N	810	139	137	181	785	10.5	268.5

Vertical mounting



CJX2-F115N~CJX2-F225N

CJX2-F265N~CJX2-F630N

Type	H	H	H	H
	Min	Max	Min	Max
CJX2-F115N, CJX2-F150N	200	310	80	190
CJX2-F185N, CJX2-F225N	220	310	100	190
CJX2-F265N	250	380	130	260
CJX2-F330N	260	380	60	200
CJX2-F400N	280	380	100	200
CJX2-F500N	300	380	120	200
CJX2-F630N	380	380	200	200

CJX2-K Series AC Contactor

1. Application

CJX2-K series AC contactor is suitable for use in the circuit up to the rate and frequent starting, controlling the AC motor. The addition of auxiliary contact group to the contactor, combined with the proper thermal relay, can act to protect the circuit to overload. It conforms to IEC60947-4-1 standard.

2. Specification

Type			CJX2-K06	CJX2-K09	CJX2-K12
Rating working voltage(V)			660(690)		
Rated working current(A)	380V	AC-3	6	9	12
		AC-4	2.6	3.5	5
Rated heating current(A)			16	20	20
The max current when turn on(A)		380V	60	90	120
		660V	72	108	144
The max current for turn off(A)		380V	48	72	96
		660V	60	90	120
Three phases cage motors power which can be pulled AC3(kW)		220v	1.5	2.2	3
		380v	2.2	4	5.5
		660v	3	4	4
Operation frequency (time/hour)	Electricity lif(x10 ⁴)	AC-3	1200		
		AC-4	300		
Electrical lifie	AC-3		5x10 ⁶		
	AC-4		1x10 ⁵		
Mechanical life			3x10 ⁶		

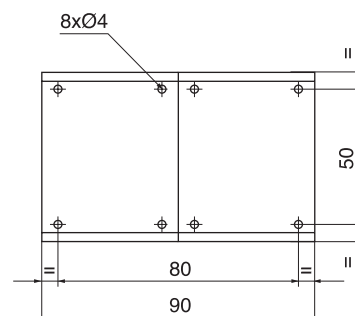
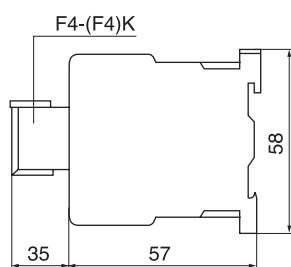
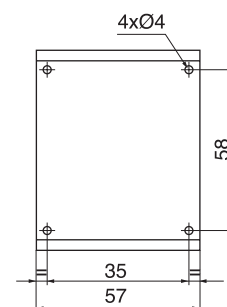
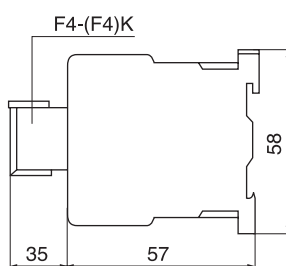


CJX2-K06, 09, 12



CJX2-K06, 09, 12N

3. Outline and Mounting Dimension



QCX2 Series Magnetic Starter

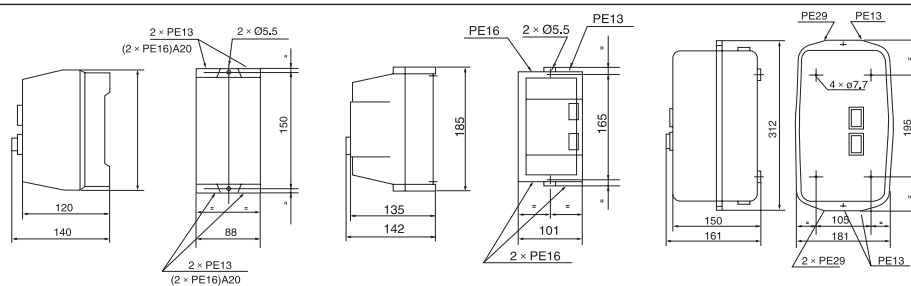
1. Application

QCX2 series magnetic starter is mainly applied to circuit of AC 50 or 60Hz, voltage up to 550V for far distance making and breaking circuit and frequently starting and controlling motor. It has the features of small volume, light weight, low power consumption, high efficiency, safe and reliable performance. It complies to IEC947-4-1 standard.

2. Specification

Type	Rated current (A)	Maximum power AC3 duty (kW)						Suitable thermal relay (A)
		220/230V	380/400V	415V	440V	500V	660/690V	
QCX2-9	9	2.2	4	4	4	5.5	5.5	JR28 D1312/1314
QCX2-12	12	3	5.5	5.5	5.5	7.5	7.5	JR28 D1316
QCX2-18	18	4	7.5	9	9	10	10	JR28 D1321
QCX2-25	25	5.5	11	11	11	15	15	JR28 D1322/2353
QCX2-32	32	7.5	15	15	15	18.5	18.5	JR28 D2355
QCX2-40	40	11	18.5	22	22	22	30	JR28 D3353/3355
QCX2-50	50	15	22	25	30	30	33	JR28 D3357/3359
QCX2-65	65	18.5	30	37	37	37	37	JR28 D3359
QCX2-80	80	22	37	45	45	55	45	JR28 D3363/3365
QCX2-95	95	25	45	45	45	55	45	JR28 D3365

3. Dimension & Mounting Size



QCX2-09/12/18

QCX2-25/32

QCX2-40/50/65/80/95



QCX2-09,12,18



QCX2-25,32



QCX2-40~95

QS5 Series Cam Starter

1. Application

QS5 cam starter is mainly used to start forward or backward and stop directly three-phase asynchronous electric motor with AC 50/60Hz, voltage up to 500V and capacity up to 7.5KW. It can also be used for changeover from one end of circuit to the other.

2. Specification

Model	Mark	Rated current (A)	Motor control capacity (HP)	Mechanical life (times)	Frequency of operation (per hr)	Applications	Position of lever
QS5-15A	I-O	15	5.5	250000	200	ON-OFF switching	0-60
QS5-30A		30	10			Forward & reverse for 3 pole two circuit	60-0-60
QS5-15N	I-O-I	15	5.5				
QS5-30N		30	10				
QS5-15P/3	I-O-II	15	5.5	200000	180	ON-OFF switching	0-60
QS5-30P/3		30	10				
QS5-63A	I-O	63	22			Forward & reverse for 3 pole two circuit	60-0-60
QS5-100A		100	30				
QS5-63N	I-O-I	63	22				
QS5-100N		100	30				
QS5-63P/4	I-O-II	63	22				
QS5-100P/4		100					



QS5-15N



QS5-63A

Universal Frequency Converter of ADL980 Series

1. Introduction



The universal frequency converter of ADL 980 series, produced by our company based on independent R&D technologies, featuring high quality, multifunction, low frequency, high torque and flux vector control, quick torque response, good load adaptability, reliable operation, high accuracy and reliability, provided with functions as automatic parameter tuning, zero-servo null-speed sensor, vector control and V/F control switch, perfect user password protection, quick menu design, rotation speed tracking, built-in PID controller, signal setting / feedback disconnection monitoring & switching, underload protection, fault signal tracking, automatic restart upon fault, built-in braking unit, 25 fault protection modes, fault monitoring, different I/O terminals, different speed setting modes, automatic voltage adjustment, wobble frequency control and multi-speed control, can help to increase the power factor and efficiency as much as possible and meet requirement of different load to motion control. The keyboard is provided with a LED for display of running data and fault codes. The LCD can show state information and operation description in Chinese and help to copy and download parameters; The powerful background commissioning and monitoring software can be used through the built-in standard RS485 interface network; The MODBUS bus protocol and expansion card are compatible with on-site bus control such as PROFIBUS, DEVICENET and CANOPEN etc.

Application:

OEM machinery: Machinery used for textile industry, plastics industry, food industry, printing industry, package industry, carpentry, winding, mining and hoisting etc.

Heavy industry: Industries such as metallurgy, chemical industry, cement, electric power, coal, petroleum, paper making, water supply, heating & ventilation and sewage treatment etc.



2. Feature

- 2.1. Multiple control modes, good versatility.
- 2.2. Automatic identification of motor parameter.
- 2.3. 150% torque output under 0.5Hz.
- 2.4. Powerful low speed / reliable high speed running.
- 2.5. Null-speed torque output.
- 2.6. Silent running.
- 2.7. Trip control, realizing powerful and stable running.
- 2.8. Quick menu design.
- 2.9. Easy PLC, PID adjustment.
- 2.10. Built-in flexible PWM power consumption brake for quick shutdown.
- 2.11. Compact and handy structure.
- 2.12. Customized design with good stability and high anti-interference ability
- 2.13. Built-in RS-485 communication interface, standard MODBUS protocol.
- 2.14. 25 protection modes.

3. Nameplate

Model →
Input power supply →
Output power supply →
Freq. setting range →
Serial no. and barcode →

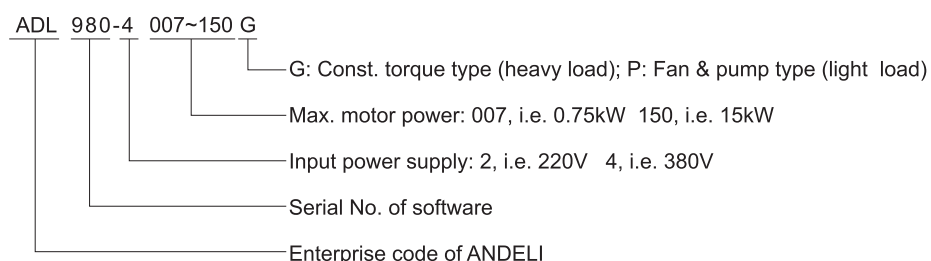
Manufacturer →

MODEL: ADL980-4015G
INPUT: 3PH AC380V 50/60Hz
OUTPUT: 3PH AC0-380V 1.5kW 3.7A
FREQUENCY RANGE: 0-600Hz
A94015G110100001

GROUP CO.,LTD.

Universal Frequency Converter of ADL980 Series

4. Model



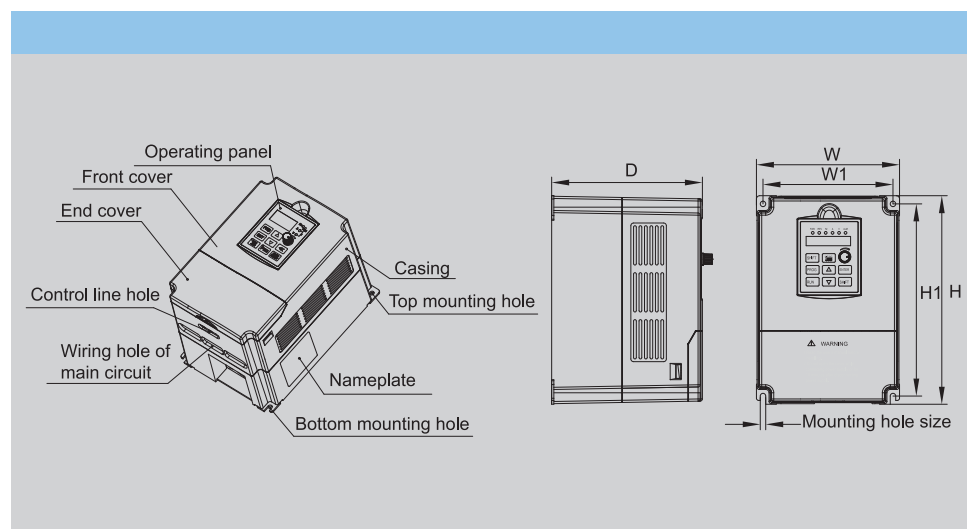
5. Technical specification

Item		Spec.
Input	Rated voltage / freq.	380V or 220V 50Hz/60Hz
	Variable volt range	Variation range: $\leq 20\%$ voltage unbalance rate: $< 3\%$ freq. range: $< \pm 5\%$
Output	Voltage	0~380V or 0~220V
	Freq.	0~600Hz
	Overload capacity	G type: 150% rated current-1min, 180% -1s, 200%-instantaneous protection P type: 120% rated current -1min, 150% -1s, 180% - instantaneous protection
Main control	Control mode	Standard V/F control, flux vector control
	Modulation mode	Space voltage vector PWM modulation
	Speed control range	1:50
	Start torque	$\geq 150\%$ rated torque under 2.0Hz
	Freq. accuracy	Digital setting: max. freq. $\times \pm 0.01\%$ Analog setting: max. freq. $\times \pm 0.2\%$
	Freq. resolution	Digital setting: 0.01Hz analog setting: max. freq. $\times 0.05\%$
	Torque increase	Automatic torque increase, manual torque increase 0.1%~30.0%
	V/F curve	Three modes: One customized V/F curve, quadratic V/F curve and linear V/F curve
	Acc. / dec. curve	Three modes: Linear acc. / dec. S-shaped acc./dec.; four acc./dec. durations, optional time unit (min/s), the longest duration: 60h
	DC braking	Initial freq. for shutdown DC braking: 0.00Hz~max. output freq. Braking duration: 0.0~30.0s Braking current: 0.0%~100.0% rated current
	Automatic voltage regulation (AVR)	When the grid voltage changes, the constant output voltage can be kept
	Slip comp.	Available slip setting can help to compensate speed change caused by load, realizing higher speed control accuracy
	Automatic current limiting	Automatic current limiting during operation, preventing fault trip caused by frequent overcurrent
	Overvoltage stall	Automatic voltage limiting during operation, preventing fault trip caused by deceleration overvoltage
Customized function	Textile wobble freq.	Textile wobble freq. control, realizing fixed wobble freq. and variable wobble freq.
	Freq. combination	The running command channels and freq. setting channels can combine at random
	Length setting	Length reaching shutdown, max. length: 65.535KM
	Inching	Inching freq. range: 0.00 Hz~max. output freq.; Inching acc./dec. duration: 0.1~3600.0s, settable; inching interval: 0.1~3600.0s, settable
	Multi-speed running	Multi-speed running through PLC or control terminals

Universal Frequency Converter of ADL980 Series

Item	Spec.
Built-in closed-loop process control	A closed-loop control system can be formed easily
Running function	Running command channel
	Operation panel, control terminal and serial port setting switchable through different ways
	Freq. setting channel
	Digital setting, analog voltage setting, analog current setting, impulse setting, serial port setting, terminal setting and multi-speed setting switchable through different ways.
	Auxiliary freq. setting
	Free auxiliary freq. trimming and synthesis
Operating panel	Impulse output terminal
	0 ~ 50kHz rectangular impulse signal output, realizing output of set freq. and output freq. etc.
	Analog output terminal
	One line analog signal output, 0/4 ~ 20mA or 0/2 ~ 10V optional, realizing output of set freq. and output freq. etc.
	LED display
	61 types of parameters such as set freq., output freq., output voltage and output current etc. can be displayed
Environment	LCD display
	Optional, Chinese / English guidance
	Parameter copy
	Quick upload and download of parameters through the operation panel are allowed
	Key function selection
	Part of the keys can be customized for fear of misoperation
Structure	Protection
	Open-phase protection (optional), overcurrent protection, overvoltage protection, undervoltage protection, overheat protection, overload protection and underload protection etc.
	Place
	Indoor, free from direct light, dust, corrosive gas, inflammable gas, oil mist, steam, water drop or salt etc.
	Altitude
	The rated value shall be lowered for places with the altitude being over 1000m. 10% of the rated value shall be lowered per 1000m
	Ambient temp.
	-10℃ ~ + 40℃ (the rated value shall be lowered when the ambient temp. is within 40℃ ~ 50℃)
Structure	Humidity
	5% ~ 95% RH, without condensate
	Vibration
	Below 5.9m / (0.6g)
	Storage temp.
	-40℃ ~ + 70℃
Structure	Protection class
	IP 20
	Cooling mode
	Air cooling, with fan control
Structure	Efficiency
	45kW or lower ≥ 93%; 55kW or higher ≥ 95%

6. Exterior structure



Universal Frequency Converter of ADL980 Series

7. Exterior structure

Installation dimension of wall hanging plastic casing equipment

Note: G: Constant torque load (heavy) P: Fan & pump load (light)

Model	Output freq. (KW)	W	W1	H	H1	D	Installation dim.
ADL980-4007G/4015P	0.75/1.5	126	111	170	157	165	Φ 4.5
ADL980-4015G/4022P	1.5/2.2	126	111	170	157	165	Φ 4.5
ADL980-4022G/4037P	2.2/3.7	126	111	170	157	165	Φ 4.5
ADL980-4037G/4055P	3.7/5.5	152	137	220	208	170	Φ 5
ADL980-4055G/4075P	5.5/7.5	152	137	220	208	170	Φ 5
ADL980-4075G/4110P	7.5/11	217	205	300	286	217	Φ 6.5
ADL980-4110G/4150P	11/15	217	205	300	286	217	Φ 6.5
ADL980-4150G/4185P	15/18.5	217	205	300	286	217	Φ 6.5

Installation dimension of wall hanging iron casing equipment

Note: G: Constant torque load (heavy) P: Fan & pump load (light)

Model	Output freq. (KW)	W	W1	H	H1	D	Installation dim.
ADL980-4185G/4220P	18.5/22	260	180	440	422	275	Φ 9
ADL980-4220G/4300P	22/30	260	180	440	422	275	Φ 9
ADL980-4300G/4370P	30/37	320	220	530	512	310	Φ 11
ADL980-4370G/4450P	37/45	320	220	530	512	310	Φ 11
ADL980-4450G/4550P	45/55	320	220	530	512	310	Φ 11
ADL980-4550G/4750P	55/75	435	260	680	656	370	Φ 11
ADL980-4750G/4900P	75/90	435	260	680	656	370	Φ 11
ADL980-4900G/41100P	90/110	435	260	680	656	370	Φ 11
ADL980-41100G/41320P	110/132	490	315	810	782	360	Φ 11
ADL980-41320G/41600P	132/160	490	315	810	782	360	Φ 11
ADL980-41600G/41850P	160/185	620		1300		445	Φ 11
ADL980-41850G/42000P	185/200	620		1300		445	Φ 11
ADL980-42000G/42200P	200/220	760		1550		450	Φ 11
ADL980-42200G/42500P	220/250	760		1550		450	Φ 11
ADL980-42500G/42850P	250/285	760		1550		450	Φ 11
ADL980-42850G/43150P	285/315	850		1700		500	Φ 13
ADL980-43150G/43500P	315/350	850		1700		500	Φ 13
ADL980-43500G/44000P	350/400	850		1700		500	Φ 13

8. Notification before ordering

8.1 The ADL980G is an universal high performance FC. The product is available for hoisting equipment and mining / building / packaging / printing machines etc.

8.2 The ADL980P is a light load type FC being available for different pumps and fans etc.

8.3 If external keyboards and extension lines are required, please inform us during ordering.