

## ELX – CONTACTORS RANGE



The ELX Range Magnetic Contactors are highly suitable for controlling various types of motors in the circuit of AC 50/60Hz for the voltage up to 1000 V and current up to 800A AC3 Rating. These contactors can be utilized as per following applications for frequent operation and harsh environments with wide band coil which assure reliable and trouble free operations.

- Heating, Lighting, DG, Transformer, Motor and Capacitors etc.
- Controlling distribution circuit, EV charger, Data centers etc.

These contactors confirm to latest IEC/EN 60947-4-1 & CE.

Type	Operation and installation conditions
Installation class	III
Pollution degree	3
Compliant standards	IEC/EN 60947-1, IEC/EN 60947-4-1, IEC/EN 60947-5-1
Certification mark	CE
Enclosure protection degree	IP20
Ambient temperature	Normal operation temperature range: -5°C~+55°C. Storage temperature range: -60°C~+80°C.
Altitude	< 2000 m above sea level
Atmospheric conditions	Up to 90%
Installation conditions	The angle between the installation surface and the vertical surface should not exceed $\pm 5^\circ$ .

### Technical performance

Main circuit parameter	
Rated insulation voltage $U_i$ (V)	800V < 95A, 1000V > 100A
Rated impulse withstand voltage $U_{imp}$ (kV)	8kV
Rated making capacity	Making current: $10 \times I_e$ (AC-3) or $12 \times I_e$ (AC-4)

Rated breaking capacity		Breaking current: 8×Ie (AC-3) or 10×Ie (AC-4)	
Electrical life (cycles)	ELX-09~18	2.8×10 <sup>6</sup>	
	ELX-25~32	2.0×10 <sup>6</sup>	
	ELX-40~65	2.0×10 <sup>6</sup>	
	ELX-80~100	2.0×10 <sup>6</sup>	
	ELX-115- 265	1.8×10 <sup>6</sup>	
	ELX-330 - 800	1.6×10 <sup>6</sup>	
	ELX-		
Mechanical life (cycles)	ELX-09~18	22×10 <sup>6</sup>	
	ELX-25~32	22×10 <sup>6</sup>	
	ELX-40~65	18×10 <sup>6</sup>	
	ELX-80~100	12×10 <sup>6</sup>	
	ELX-115- 265	11×10 <sup>6</sup>	
	ELX-330 - 800	8×10 <sup>6</sup>	
Main contact		3 P & 4 P	
Matching thermal overload relay	ELX-09~32	ETR-32	
	ELX-40~100	ETR-100	
Built-in auxiliary contact	3P	1 NO+1 NC	
	4P	-	
Coil control power supply	ELX-09~18	24,110, 220, 240, 415, Wide band.	
	ELX-25~100	24, 36, 48, 110, 220, 240, 415, Wide band.	
	ELX-150-800	24 -660V	
Control voltage	Pick up	ELX-9 to 100 (70% ~ 120%) Us, ELX-115 TO 800 (85% - 110%)	
	Drop off	ELX-9 to 100 (20% ~ 65%) Us, ELX AC - 115 to 800 ( 20% - 75%) ELX DC- (115 to 800 (10% - 75%).	
Coil average power (VA)	Inrush	ELX-09~18	40~60
		ELX-25~32	50~70
		ELX-40~65	160~120
		ELX-80~100	190~250
		115~150	550

		185~225	810
		265	1200
		330	600
		400	1000
		500	1050
		630	1500
		780	1900
		800	1600
	Hold	ELX-09~18	9.5
		ELX-25~32	8~11.4
		ELX-40~65	13~24
		ELX-80~100	17~30
		115~150	45
		185~225	55
		265	85
		330	10
		400	12
500	16		
630	20		
780	45		
800	22		

Contactor model		Conventional c thermal urrent Ith	Rated operation current Ie (A)		Rated control power
			AC-3	AC-4	AC- 3(kW)
		(A)	AC-3	AC-4	
ELX-09	220V/230V/240V	25	9	9	2.2
	380V/400V/415V	25	9	9	4
	660V/690V	25	6.6	6.6	5.5
ELX-12	220V/230V/240V	30	12	12	3
	380V/400V/415V	30	12	12	5.5
	660V/690V	30	8.9	8.9	7.5
ELX-18	220V/230V/240V	30	18	18	4
	380V/400V/415V	32	18	18	7.5
	660V/690V	32	12	12	10
ELX-25	220V/230V/240V	45	25	25	5.5
	380V/400V/415V	45	25	25	11
	660V/690V	45	18	18	15
ELX-32	220V/230V/240V	55	32	32	7.5
	380V/400V/415V	55	32	32	15
	660V/690V	55	22	22	18.5
	220V/230V/240V	55	40	40	11

ELX-40	380V/400V/415V	55	40	40	18.5
	660V/690V	55	34	34	30
	220V/230V/240V	85	50	50	15
ELX-50	380V/400V/415V	85	50	50	22
	660V/690V	85	39	39	37
	220V/230V/240V	100	65	65	18.5
ELX-70	380V/400V/415V	100	65	65	30
	660V/690V	100	42	42	37
	220V/230V/240V	100	80	80	22
ELX-80	380V/400V/415V	100	80	80	37
	660V/690V	100	49	49	45
	220V/230V/240V	160	100	100	25
ELX-100	380V/400V/415V	160	100	100	45
	660V/690V	160	49	49	45
	220V/240V	200	200	115	30
	380V/400V	200	200	115	55
	415V/440V	200	200	115	59
	500V	200	200	-	75
ELX-115	660V/690V	200	200	-	80
	1000V	200	200	-	65
	220V/240V	250	250	150	40
	380V/400V	250	250	150	75
	415V/440V	250	250	150	80
	500V	250	250	-	90
ELX-150	660V/690V	250	250	-	100
	1000V	250	250	-	65
	220V/240V	275	275	185	55
	380V/400V	275	275	185	90
	415V/440V	275	275	1.85	100
	500V	275	275	-	110
ELX-185	660V/690V	275	275	-	120
	1000V	275	275	-	100
	220V/240V	315	315	225	63
	380V/400V	315	315	225	100
	415V/440V	315	315	225	110
	500V	315	315	-	129
ELX-225	660V/690V	315	315	-	129
	1000V	315	315	-	140
	220V/240V	350	350	265	75
	380V/400V	350	350	265	132
	415V/440V	350	350	265	140
	500V	350	350	-	160
ELX-265	660V/690V	350	350	-	180
	1000V	350	350	-	147

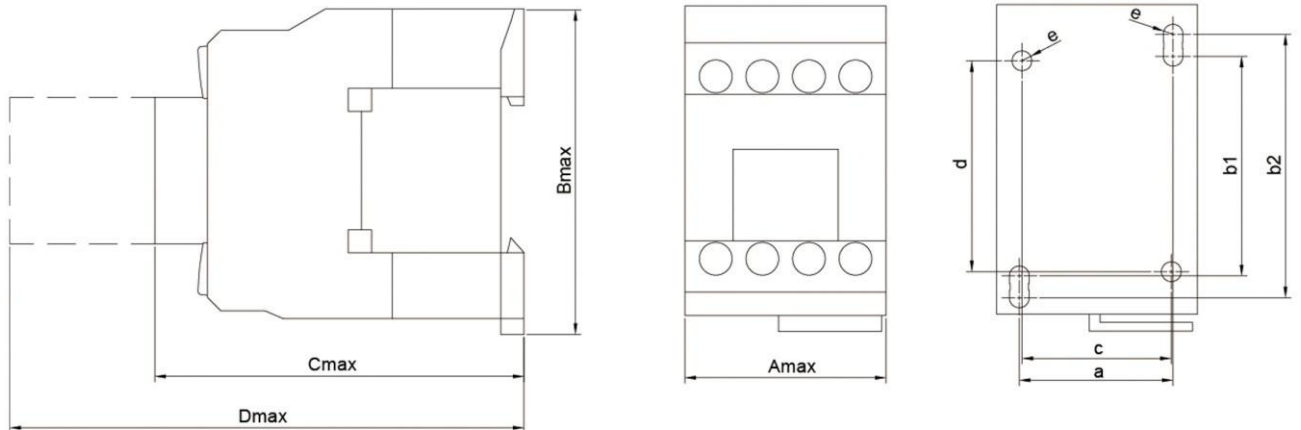
Contactor model		Conventional thermal current $I_{th}$ (A) ( $\theta \leq 40^\circ\text{C}$ )	Rated operation current $I_e$ (A)		Rated control power AC-3(kW)
			max AC-1 ( $\theta \leq 40^\circ\text{C}$ )	max AC-3 ( $\theta \leq 55^\circ\text{C}$ )	
HLC1-330F	220V/240V	400	400	330	100
	380V/400V	400	400	330	160
	415V/440V	400	400	330	180
	500V	400	400	-	200
	660V/690V	400	400	-	220
	1000V	400	400	-	160
HLC1-400F	220V/240V	500	500	400	129
	380V/400V	500	500	400	200
	415V/440V	500	500	400	220
	500V	500	500	-	257
	660V/690V	500	500	-	280
	1000V	500	500	-	185
HLC1-500F	220V/240V	700	700	500	147
	380V/400V	700	700	500	250
	415V/440V	700	700	500	280
	500V	700	700	-	335
	660V/690V	700	700	-	355
	1000V	700	700	-	335
HLC1-630F	220V/240V	900	800	630	200
	380V/400V	900	800	630	335
	415V/440V	900	800	630	275
	500V	900	800	-	400
	660V/690V	900	800	-	450
	1000V	900	800	-	450
HLC1-780F	220V/240V	1000	1000	780	220
	380V/400V	1000	1000	780	400
	415V/440V	1000	1000	265	425
	500V	1000	1000	-	450
	660V/690V	1000	1000	-	475
	1000V	1000	1000	-	450

Contactor model		Conventional thermal current I <sub>th</sub> (A) (θ≤40°C)	Rated operation current I <sub>e</sub> (A)		Rated control power AC-3(kW)
			max AC-1 (θ≤40°C)	max AC-3 (θ≤55°C)	
HLC1-800F	220V/240V	1000	1000	800	220
	380V/400V	1000	1000	800	400
	415V/440V	1000	1000	800	425
	500V	1000	1000	-	450
	660V/690V	1000	1000	-	475
	1000V	1000	1000	-	450

Contactor wiring				ELX-09~12	ELX-18~25	ELX-32~40	ELX-50~65	ELX-80~110
		Prefabricated	1	1~4	1.5~6	1.5~10	6~25	10~35
	Cable	flexible wire	2	1~2.5	1.5~4	1.5~6	4~10	6~16
	connection		1	1~4	1.5~6	1.5~6	6~25	10~35
Main circuit connection	(mm <sup>2</sup> )	Hard wire	2	1~4	1.5~6	1.5~6	4~10	6~16
	Size of fastening screw			M3.5	M3.5	M4	M8	M8
	Tightening torque (N·m)			0.8	0.8	1.2	6	6
		Prefabricated	1			1~4		
	Cable	flexible wire	2			1~2.5		
	connection		1			1~4		
Cable circuit connection	(mm <sup>2</sup> )	Hard wire	2			1~4		
	Size of fastening screw					M3.5		
	Tightening torque (N·m)					0.8		

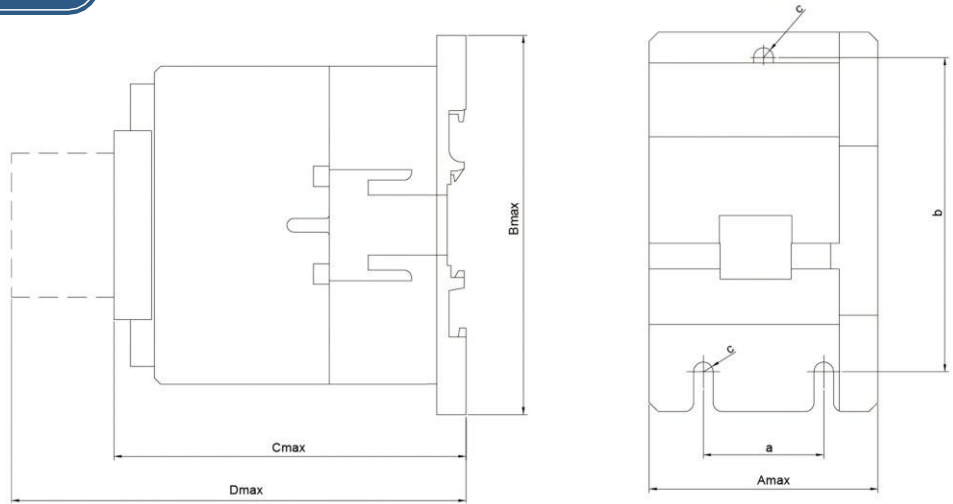
## Dimensions (mm)

ELX-09~32



Contactor model	Amax	Bmax	Cmax	Dmax	a	b1/b2	c	d	e
ELX-09~18	45	75	85	117	35	50/60	34	48	∅5
ELX-25~32	45	85	92	124	35	50/60	34	48	∅5

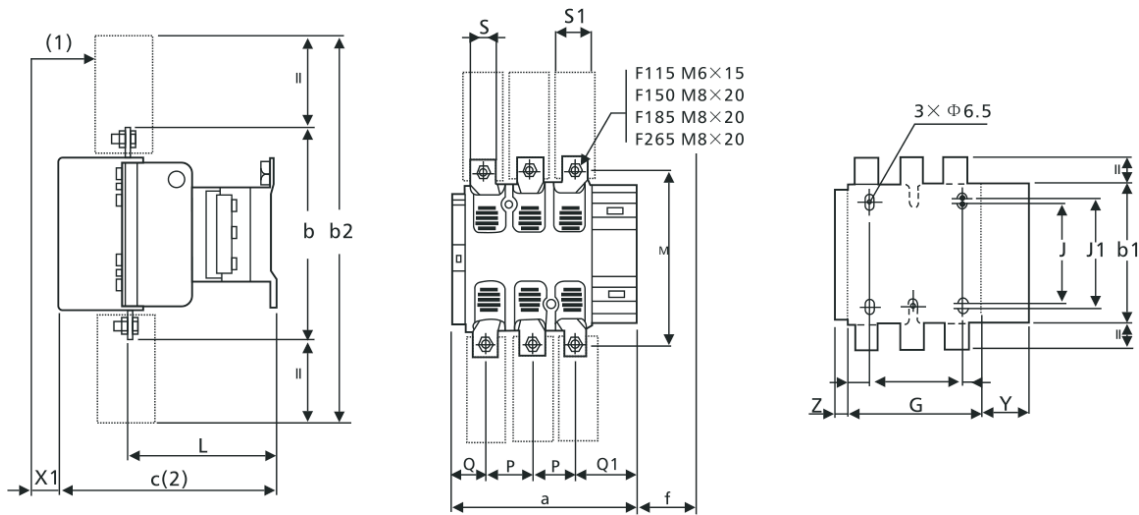
**ELX-40-110**



Contactor model	Amax	Bmax	Cmax	Dmax	a	b	c
ELX -40~65	77	127	117	151	40	100/110	Ø 6.5
ELX -80~110	86	127	125	160	40	100/110	Ø 6.5

Contactor wiring		115	150/185	225	265	330	400	500	630	780	800
Cabling	The maximum cross-sectional area number of cable (mm <sup>2</sup> )	2	2	2	2	2	2	2	2	2	2
		20×3	25×3	32×3	32×4	30×5	30×5	40×5	60×5	100×5	60×5
	Cable with tabs(mm <sup>2</sup> )	95	120/150	185	240	240	2×150	2×240	-	-	-
	Cable with connectors (mm <sup>2</sup> )	95	120/150	185	240	-	-	-	-	-	-
	Bolt diameter(mm)	Φ6	Φ8	Φ10	Φ10	Φ10	Φ10	Φ10	Φ12	Φ12	Φ12
Cable circuit connection	Tightening torque (N·m)	10	18	35	35	35	35	35	58	58	58

## Dimensions (mm)



Current	115	150	185	225	265	330	400	500	630	780	800	
Item	A	163.5	163.5	168.5	168.5	201.5	213	213	233	309	704	309
	B	162	170	174	197	203	206	206	238	304	435	304
	C	171	171	181	181	213	219	219	232	255	255	255
	F	131	131	130	130	147	147	151	169	201	201	201
	G	106	106	111	111	140	154.5	170	170	180	180	240
	J	120-106	120-106	120-106	120-106	120-106	120-106	180	180	180	180	180
	L	107	107	113.5	113.5	141	145	145	146	155	165	155
	M	147	150	154	172	178	181	181	208	264	400	264
	P	37	40	40	48	48	48	48	55	80	160	80
	Q	29.5	26	29	21	39	43	69	76	60	192	60
	S	20	20	20	25	25	25	25	30	40	60	40



## **CAPACITOR DUTY CONTACTOR**

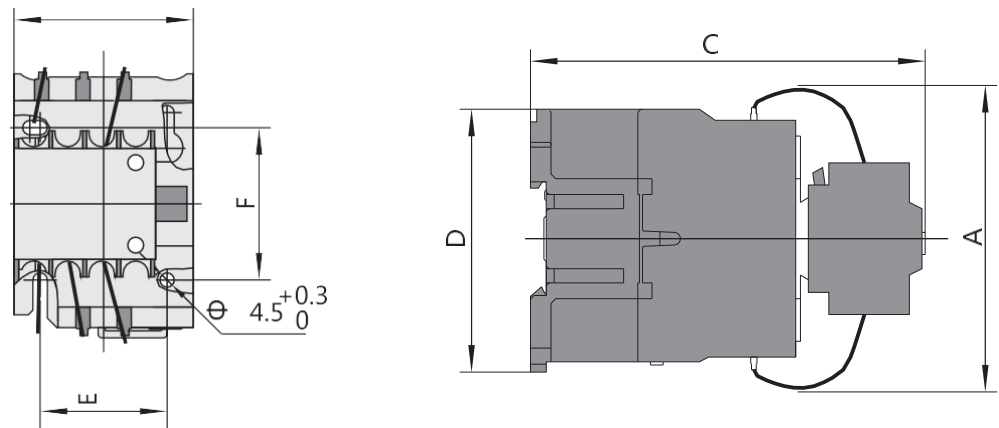
Designed for AC systems with rated voltages up to 690V with and without harmonic conditions and operating frequencies of 50Hz/60Hz, the ELX-C19 Capacitor Contactor is purpose-built for switching low-voltage shunt capacitors in parallel reactive power compensation circuits. The contactor incorporates a built-in current limiting resistor that effectively suppresses the inrush surge current generated at the moment of capacitor energization. This surge suppression mechanism significantly reduces electrical stress on the capacitors, thereby enhancing their operational reliability and extending their overall service life.

Capacitor duty contactors are available from 5kVAr to 100 kVAr with inrush current limitation factor of 250 I<sub>r</sub>.

<b>Type</b>	<b>Operation and installation conditions</b>
Installation class	III
Pollution degree	3
Compliant standards	IEC/EN 60947-1, IEC/EN 60947-4-1, IEC/EN 60947-5-1
Certification mark	CE
Enclosure protection degree	IP20
Ambient temperature	Normal operation temperature range: -5°C~+55°C. Storage temperature range: -60°C~+80°C.
Altitude	< 2000 m above sea level
Atmospheric conditions	Up to 90%
Installation conditions	The angle between the installation surface and the vertical surface should not exceed ±5°.

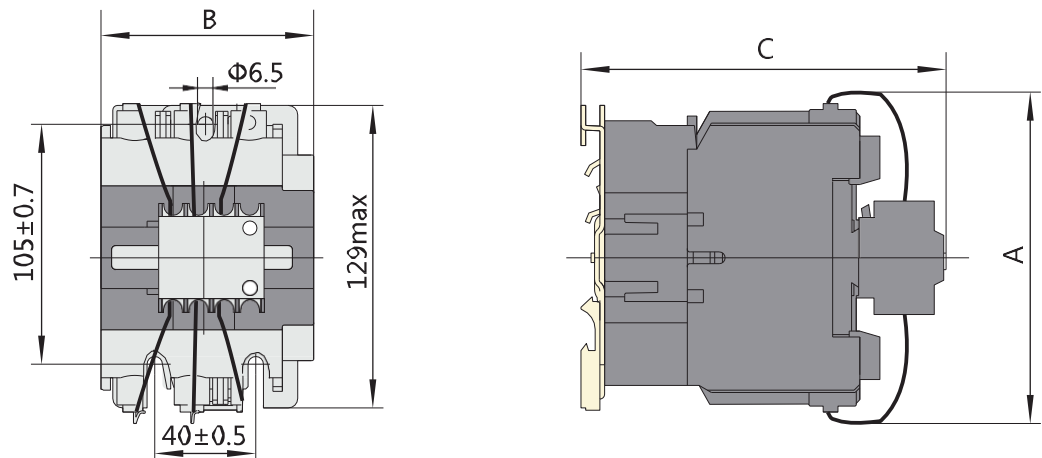
## Dimensions

### ELX-C25~32



Contacto model	Amax	Bmax	Cmax	Dmax	E	F	Note
ELX-C25~32	80	45	132	85	34	50/60	Not only fixed by screws but also could be fixed with 35mm din rail

### ELX-C40~95



Contacto model	Amax	Bmax	Cmax	Dmax	Note
ELX-40~63	132	77	153	127	Not only fixed by screws but also could be fixed with 35mm and 75mm din rail
FIX-95	135	86	153	127	

## Wiring and installation

- The connection terminals are protected through insulation cover, which is reliable and secure for installation and operation.
- For ELX-C- 25~40, screws are available for installation, as well as the DIN rail; for ELX-C- 63~95, standard rail are available for 35mm or 75mm standards rail are available for installation.