

This document must be retained for future reference.

It is the responsibility of the person installing the electrical equipment to ensure that the installation meets the requirements of the IET wiring regulations and is therefore 'fit for purpose'. Factors such as correct selection of components, cable sizing, protective devices and Earth bonding are all critical and should be checked prior to full testing and power-up. Any other regulations applicable to the equipment being installed such as the Machinery Directive and current health and safety legislation must also be adhered to.

All connections (including factory made) must be checked for the correct tightness prior to commissioning of the electrical installation. All connections should also be inspected periodically to ensure correct tightness.

DO NOT USE POWER TOOLS ON THESE PRODUCTS



LC1 Contactor Range

3 Pole / 3 N/O

4 Pole / 4 N/O



LC1-F Contactors 3 and 4 pole		Units	
General characteristics			
Rated insulation voltage (Ui)	Conforming to IEC 60947-4-1	V	1000
Rated operational voltage (Ue)	Up to	V	1000
Rated impulse withstand voltage (Uimp)	Coil not connected to the power circuit	kV	8
Frequency limits of operational current	Sine wave without interference	Hz	16-200
IEC Product standard		-	60947-4-1
Approvals and compliance		-	CB & CE
Ambient air temperature (storage)		°C	-60 to +80
Ambient air temperature (operation)		°C	-5 to +55
Maximum operating altitude	Without derating	m	3000
Vertical operating position	In relation to vertical plane	-	+/- 30°
Degree of protection	With shrouds fitted	-	IP20
Number of poles		-	3 or 4

Pole Characteristics											
Contactor Type		Units	LC1-F115	LC1-F150	LC1-F185	LC1-F225	LC1-F265	LC1-F330	LC1-F400	LC1-F500	LC1-F630
Rated operational current (Ie) Ue ≤ 440V	In AC-3, $\theta \leq 55^\circ\text{C}$	A	115	150	185	225	265	330	400	500	630
	In AC-1, $\theta \leq 40^\circ\text{C}$	A	200	250	275	315	350	400	500	630	800
Rated operational power	AC-3 @ 415V AC	kW	59	80	100	110	140	180	220	280	375
Conventional thermal current	$\theta \leq 40^\circ\text{C}$	A	200	250	275	315	350	400	500	630	800
Rated making capacity	I rms conforming to IEC 60947-4-1	A	Making current 10 x I in AC-3 or 12 x I in AC-4								
Rated breaking capacity		A	Making and breaking current 8 x I in AC-3 or 10 x I in AC-4								
Maximum permissible current. No current flowing for the previous 60 minutes, at $\theta \leq 40^\circ\text{C}$	For 10s	A	1100	1200	1500	1800	2200	2650	3600	4200	5050
	For 30s	A	640	700	920	1000	1230	1800	2400	3200	4400
	For 1 Min	A	520	600	740	850	950	1300	1700	2400	3400
	For 3 Min	A	400	450	500	560	620	900	1200	1500	2200
	For 10 Min	A	320	350	400	440	480	750	1000	1200	1600
Average impedance per pole	At Ith 50Hz	mΩ	0.37	0.35	0.33	0.32	0.3	0.28	0.26	0.18	0.12
Power dissipation per pole for the above operational currents	AC-3	W	5	8	12	16	21	30	42	45	48
	AC-1	W	15	22	25	32	37	45	65	88	77

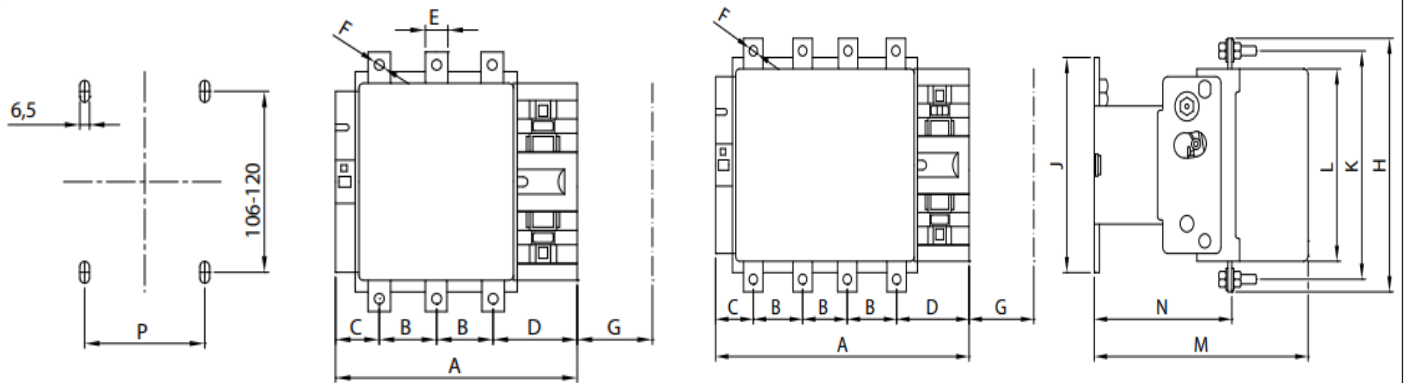
LC1 Contactor Range

3 Pole / 3 N/O
4 Pole / 4 N/O

Connection characteristics											
Contactor Type	Units	LC1-F115	LC1-F150	LC1-F185	LC1-F225	LC1-F265	LC1-F330	LC1-F400	LC1-F500	LC1-F630	
Connection bar number (max)		2	2	2	2	2	2	2	2	2	
Connection bar dimensions (max)	mm	20 x 3	25 x 3	25 x 3	32 x 3	32 x 4	30 x 5	30 x 5	40 x 5	60 x 5	
Maximum Cable size	With lug or connector	mm ²	95	120	150	185	240	240	2 x 150	2 x 240	-
Bolt Diameter	mm	Ø6	Ø8	Ø8	Ø10	Ø10	Ø10	Ø10	Ø10	Ø10	Ø12
Tightening torque	Power circuit connections	m	10	18	18	35	35	35	35	35	58

Control Circuit Characteristics											
Contactor Type	Units	LC1-F115	LC1-F150	LC1-F185	LC1-F225	LC1-F265	LC1-F330	LC1-F400	LC1-F500	LC1-F630	
Coil Type	-	LX9-FF	LX9-FF	LX9-FG	LX9-FG	LX1-FH	LX1-FH	LX1-FJ	LX1-FK	LX1-FL	
Average coil operating time (Closing)	At 20°C	ms	35	35	35	35	40-65	40-65	40-75	40-75	40-80
Average coil operating time (Opening)	At 20°C	ms	130	130	130	130	100-170	100-170	100-170	100-170	100-200
Maximum operating frequency	Cycles/hour	-	2400							1200	

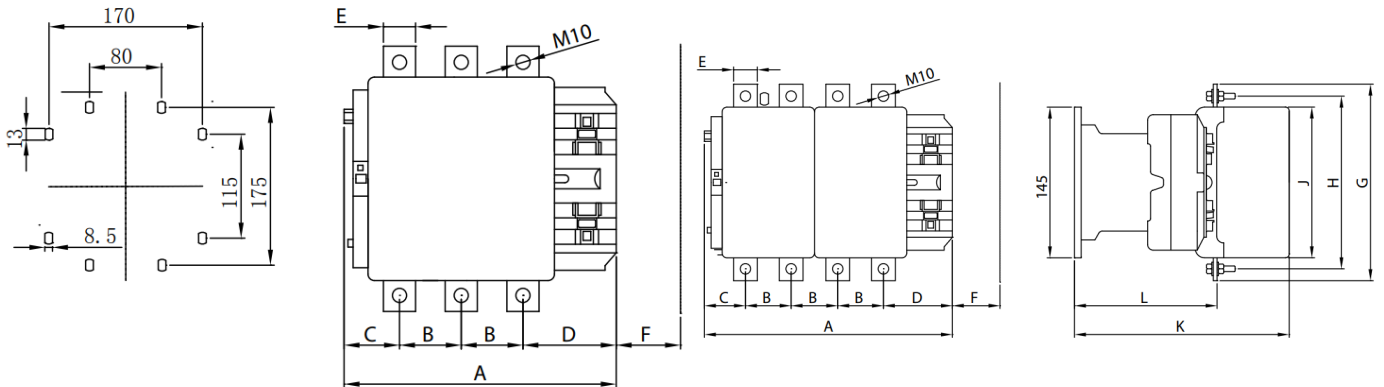
LC1-F115 - LC1-330 Dimensions



Contactor	A	B	C	D	E	F	G	H	J	K	L	M	N	P
LC1-F115	164	37	30	60	15	M6	131	162	137	147	124	171	107	80
LC1-F1154	201													
LC1-150	164	40	26	58	20	M8	130	174	137	154	127	181	114	80
LC1-1504	201													
LC1-185	169	40	30	60	20	M8	130	174	137	154	127	181	114	80
LC1-1854	209													
LC1-225	169	48	21	52	25	M10	147	197	145	178	147	213	145	96
LC1-2254	209													
LC1-265	202	48	17	48	25	M10	147	203	145	178	147	213	145	96
LC1-2654	245													
LC1-330	213	48	34	67	25	M10	147	206	145	181	158	219	145	96
LC1-3304	261													

G = distance required to remove the coil

LC1-F400 - LC1-500 Dimensions



Contactor	A	B	C	D	E	F	G	H	J	K	L
LC1-F400	213	48	69	96	25	151	206	181	158	219	145
LC1-F4004	261		43	74							
LC1-500	233	55	76	102	30	169	238	208	172	232	146
LC1-5004	288		46	77							

F = distance required to remove the coil

LC1-F630 Dimensions

