

VAC

electrical suppliers

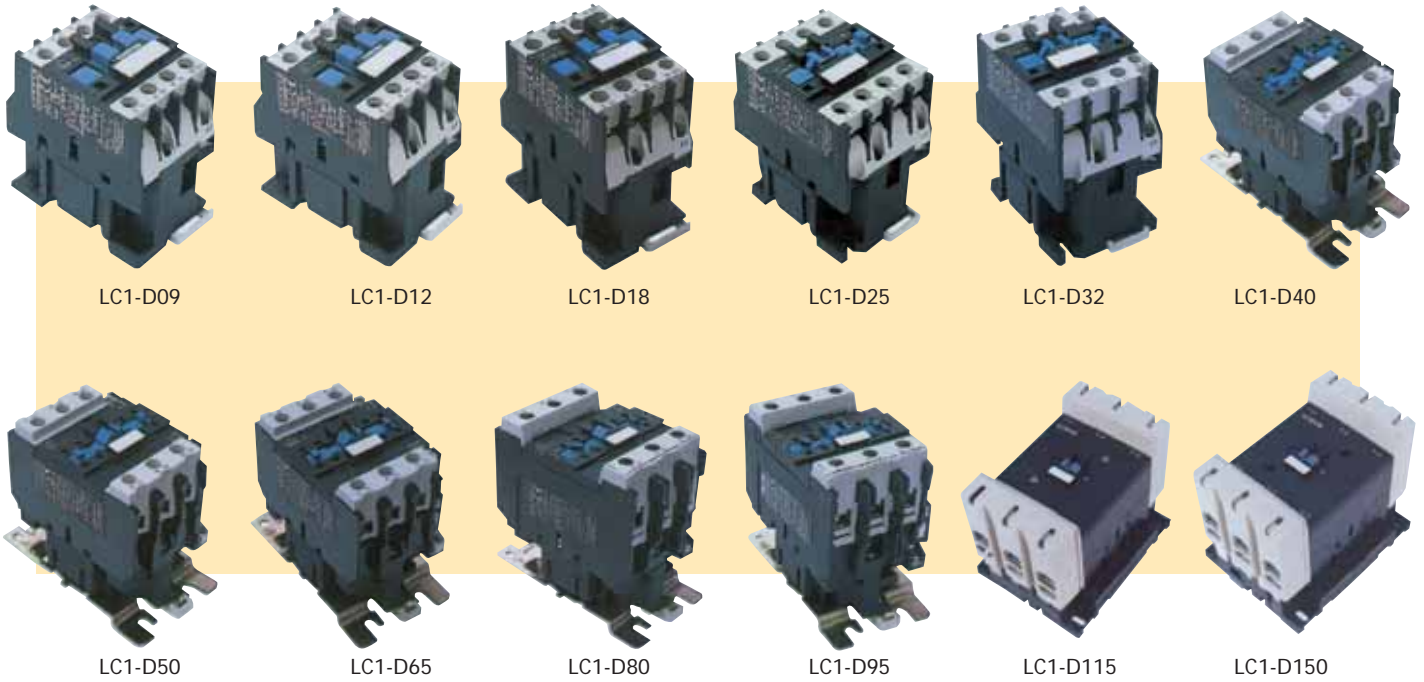
Contactors & Thermal Overload Relays

3 Pole and 4 Pole (9A - 1000A)

AC or DC



LC1-D AC Contactor



LC1-D series AC contactor is suitable for using in the circuits up to the rated voltage 600V AC 50Hz or 60Hz, rated current up to 95A, for making, breaking, frequently starting and controlling the AC motor. Combined with the auxiliary contact block, time delay and machine-interlocking device etc, it becomes the delay contact or, mechanical interlocking contactor, star-delta starter. With the thermal relay, it is combined into the electromagnetic starter. The contactor is produced according to IEC 947-2, VDE0660 and BS5452

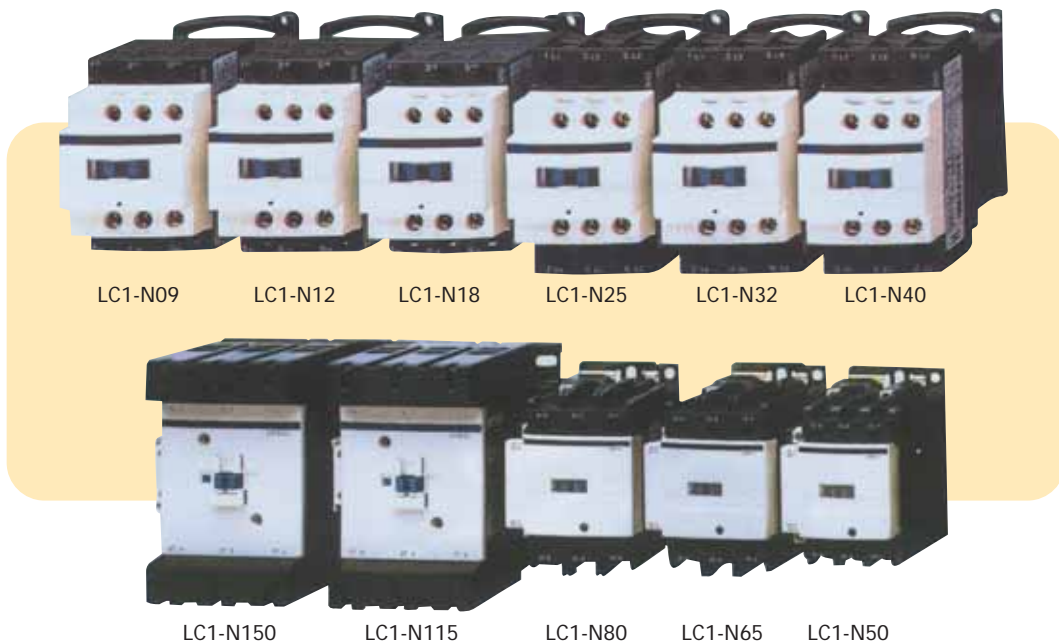
Specifications

Type		LC1-D09	LC1-D12	LC1-D18	LC1-D25	LC1-D32
Rated Working Current (A)	AC3	9	12	18	25	32
	AC4	3.5	5	7.7	8.5	12
AC3 Capacity of phase 3 Squirrel-cage Motor AC3(KW)	220/230V	2.2	3	4	5.5	7.5
	380/400V	4	5.5	7.5	11	15
	415V	4	5.5	9	11	15
	440V	4	5.5	9	11	15
	500V	5.5	7.5	10	15	18.5
	660/690V	30	33	10	15	18.5
Rated Heat Current (A)		20	20	32	40	50
Electrical life	AC4 x10 ⁴	10-7	7	20-7	15-7	15-7
	AC3x10 ⁶	2	2	2	2	2
Mechanical life x 10 ⁶		20	20	20	20	20
Number of the Contact		3P+NC+NO				
		3P + NC				

Specifications

Type		LC1-D40	LC1-D50	LC1-D65	LC1-D80	LC1-D95
Rated Working Current (A)	AC3	40	50	65	80	95
	AC4	18.5	24	28	37	44
AC3 Capacity of phase 3 Squirrel-cage Motor AC3(kW)	220V	11	15	18.5	22	25
	380V	18.5	22	30	37	45
	415V	22	25	37	45	45
	440V	22	30	37	45	45
	500V	22	30	37	55	55
	660V	30	33	37	45	45
Rated Heat Current (A)		60	80	80	125	125
Electrical life	AC4 x10 ⁴	10-7	7	7-6	7-5	7-5
	AC3x10 ⁶	2	2	1.6	1.6	1.6
Mechanical life x 10 ⁶		20	20	20	10	10
Number of the Contact		3P+NC+NO				

LC1-N AC Contactor



LC1-N is an update for LC1-D with improved performance. The new contactor from 9 to 150 amps represents the latest in motor control technology. In addition to a new look, the new LC1-N (up to 32 amps only, or 30 HP at 600 VAC) is only 45mm wide and dramatically smaller in the depth dimension by over 25%, reducing demand on valuable panel space. New, DC low consumption coils can cut energy demand by up to 75%, and the unique Quickfit technology can reduce installation time by up to 50%.

Standard Control Circuit Voltages

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	E6	F6	M5	-	Q6	U6	-	-	R6	-	-	-
50/60Hz	B7	D7	E7	F7	M7	P7	U7	Q7	V7	N7	R7	-	-

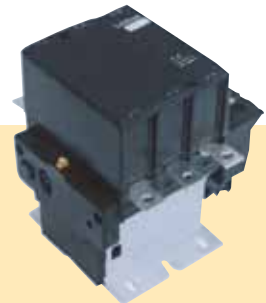
LC1-D AC Contactors



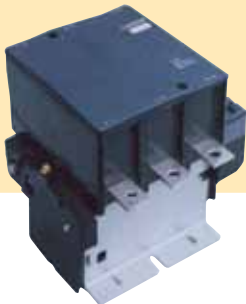
LC1-D115



LC1-D150



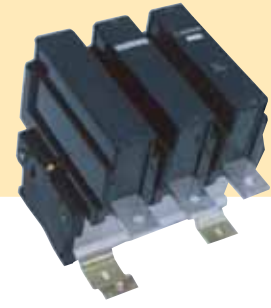
LC1-D205



LC1-D300



LC1-D410



LC1-D620

LC1-D115 / LC1-D150 / LC1-D175 / LC1-D205 / LC1-D245 / LC1-300 / LC1-D410 / LC1-D475 / LC1-D620

LC1-F 4P AC Contactors



LC1-F1154



LC1-F1854



LC1-F2654



LC1-F3304



LC1-F4004



LC1-F5004

LC1-F1154 / LC1-1504 / LC1-F1854 / LC1-F2254 / LC1-F2654 / LC1-F3304 / LC1-F4004 / LC1-F5004 / LC1-F6304 / LC1-F8004

LC1-F AC Contactors



LC1-F115



LC1-F150



LC1-F185



LC1-F225



LC1-F265



LC1-F330



LC1-F400



LC1-F500



LC1-F630



LC1-F800

LC1-F series AC contactors are applicable to the circuits up to the rated voltage 1000V AC 50Hz or 60Hz, rated current up to 800A, for long distance breaking circuit and frequent starting or control of the motor, it also can be used for the control of distributing circuits or rated current from 220A to 1600A.

Type		LC1-F115	LC1-F150	LC1-F185	LC1-F225	LC1-F265	LC1-F330	LC1-F400	LC1-F500	LC1-F630	LC1-F800
Rated operation current (A)	AC-3	115	150	185	225	265	330	400	500	630	800
	AC-1	200	250	275	315	350	400	500	700	1000	1600
Standard power ratings of 3 phase motor AC 3 (Kw)	220/230V	30	40	55	63	75	100	110	147	200	220
	380/400V	55	75	90	110	132	160	200	250	335	400
	415V	59	80	100	110	140	180	200	280	375	425
	440V	59	80	100	110	140	200	250	295	400	425
	500V	75	90	110	129	160	200	257	355	400	450
	660/690V	80	100	110	129	160	200	280	335	450	475
1000V	65	65	100	100	147	160	185	335	450	450	

LRD Thermal Overload Relay



3 Pole Differential Thermal Overload Relays with Screw-clamp Terminals					
Article Number	Relay setting Range	Fuse to be used with Selected relay			for use with Contactor LC1
		AM	gl	BS88	
	A	A	A	A	
LRD01	0.10 to 0.16	0.25	2	-	D09-D38
LRD02	0.16 to 0.25	0.5	2	-	D09-D38
LRD03	0.25 to 0.40	1	2	-	D09-D38
LRD04	0.40 to 0.63	1	2	-	D09-D38
LRD05	0.63 to 1	2	4	-	D09-D38
LRD06	1 to 1.7	2	4	6	D09-D38
LRD 07	1.6 to 2.5	4	6	10	D09-D38
LRD08	2.5 to 4	6	10	16	D09-D38
LRD10	4 to 6	8	16	16	D09-D38
LRD12	5.5 to 8	12	20	20	D09-D38
LRD14	7 to 10	12	20	20	D09-D38
LRD16	9 to 13	16	25	25	D12-D38
LRD21	12 to 18	20	35	32	D18-D38
LRD22	16 to 24	25	50	50	D25-D38
LRD32	23 to 32	40	63	63	D25-D38
LRD35	30 to 38	50	80	80	D32 & D38
LRD3353	23 to 32	40	63	63	D40 to D95
LRD3355	30 to 40	40	100	80	D40 to D95
LRD3357	37 to 50	63	100	100	D40 to D95
LRD3359	48 to 65	63	100	100	D40 to D95
LRD3361	55 to 70	80	125	125	D40 to D95
LRD3363	63 to 80	80	125	125	D65 & D95
LRD 3365	80 to 104	100	160	160	D85 & D95
LRD4365	80 to 104	125	200	160	D115 & D150
LRD 4367	95 to 120	125	200	200	D115 & D150
LRD 4369	110 to 140	160	250	200	D150

Class 10 or 10A with connection using bars or connectors

3 Pole Differential Thermal Overload Relays with Screw-clamp Terminals				
Article Number	Relay setting Range	Fuse to be used with Selected relay		for use with Contactor LC1
		AM	gl	
	A	A	A	
LR9D5367	60 to 100	100	160	D115 & D150
LR9D5369	90 to 150	160	250	D115 & D150

Class 10 or 20A Selectable with connection using bars or connectors

3 Pole Differential Thermal Overload Relays with Screw-clamp Terminals				
Article Number	Relay setting Range	Fuse to be used with Selected relay		for use with Contactor LC1
		AM	gl	
	A	A	A	
LR9D67	60 to 100	100	160	D115 & D150
LR9D69	90 to 150	160	250	D115 & D150

LR2 Thermal Overload Relay



This series of thermal relays can be used in the circuit of 50Hz or 60Hz, rated insulation voltage 660V, rated current 0.1-93A for protecting the phase break when the electric motor is overloaded. The relay has a different mechanism for temperature compensation and can be plugged on to an LC1-D series AC Contactor. At present, it is the most advanced thermal relay in the world.

Type	Rated Working Current of Thermal Relay	Thermal Component		
		Rated Current (A)	Regular or Scale of Rated Current (A)	
LR2-D13	25	LR2-D1301	0.16	0.10 - 0.16
		1302	0.25	0.16-0.25
		1303	0.40	0.25-0.40
		1304	0.63	0.40 - 0.63
		1305	1.0	0.63-1.0
		1306	1.6	1.0-1.6
		13x6 2.0	1.25-20	1.25 - 2.0
		1307	2.5	1.6 - 2.5
		1308	4.0	2.5 - 4.0
		1310	6.0	4.0 - 6.0
		1312	8.0	5.5 - 8.0
		1314	10.0	7.0 - 10.0
		1316	13.0	9.0 - 13.0
1321	18.0	12.0 - 18.0		
1322	25.0	17.0 - 25.0		
LR2-D23	36	LR2-D2353	32	23.0 - 32.0
		2355	36	28.0 - 36.0
LR2-D33	93	LR2-D3353	32	23.0 - 32.0
		3355	40	30.0 - 40.0
		3357	50	37.0 - 50.0
		3359	65	48.0 - 65.0
		3361	70	55.0 - 70.0
		3363	80	63.0 - 80.0
		3365	93	80.0 - 93.0

Characteristics

A Fundamental Parameter of the Main Circuit

i. Rated insulation voltage 660V

- Rated working current 25, 36, 93A separately
- The regulator seal of rated setting current
- Current of the thermal component (*see list 1*)

ii. Auxiliary Circuit

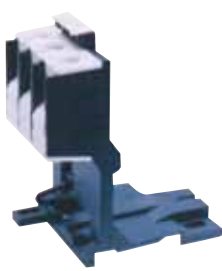
- There are one pair of N/O and N/C contact with electric insulation
- Rated insulation voltage 500V
- Rated frequency 50 - 60 Hz
- Use group, rated working voltage

iii. Appoint Thermal Current and Rated Current

Use Group	ACLL			DCLL	
Rated Working Voltage V	220	380	500	200	110
Rated Working Current A	4	3	2	0.1	0.22
Appointed Thermal Current A	5				



LA7-D1064



LA7-D2064



LA7-D3064



LR9-F53



LR9-F73