

Contactors

d 3-pole contactors for motor control, 9 to 95 A
Utilisation category AC-3
Control circuit : a.c.



References



LC1-D0910●●



LC1-D2510●●



LC1-D9511●●

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3 ($\theta \leq 55^\circ\text{C}$)							Rated operational current in AC-3 up to 440V A	Instantaneous auxiliary contacts 	Basic reference. Complete with code indicating control circuit voltage (2) Fixing, cabling (1)	Weight kg
220V kW	380V kW	415V kW	440V kW	500V kW	660V kW					
2.2	4	4	4	5.5	5.5	9	–	–	LC1-D0900●● (3)	0.320
							1	–	LC1-D0910●●	0.320
							–	1	LC1-D0901●●	0.320
3	5.5	5.5	5.5	7.5	7.5	12	–	–	LC1-D1200●● (3)	0.320
							1	–	LC1-D1210●●	0.320
							–	1	LC1-D1201●●	0.320
4	7.5	9	9	10	10	18	–	–	LC1-D1800●● (3)	0.320
							1	–	LC1-D1810●●	0.350
							–	1	LC1-D1801●●	0.350
5.5	11	11	11	15	15	25	–	–	LC1-D2500●● (3)	0.320
							1	–	LC1-D2510●●	0.505
							–	1	LC1-D2501●●	0.505
7.5	15	15	15	18.5	18.5	32	–	–	LC1-D3200●● (3)	0.320
							1	–	LC1-D3210●●	0.525
							–	1	LC1-D3201●●	0.525
11	18.5	22	22	22	30	40	1	1	LC1-D4011●●	1.150
15	22	25	30	30	33	50	1	1	LC1-D5011●●	1.150
18.5	30	37	37	37	37	65	1	1	LC1-D6511●●	1.150
22	37	45	45	55	45	80	1	1	LC1-D8011●●	1.500
25	45	45	45	55	45	95 (4)	1	1	LC1-D9511●●	1.500

Note : Add-on auxiliary contact blocks and modules : see pages 1/32 to 1/43.

(1) For LC1-D09 to D32 : clip-on mounting onto 35 mm \sim rail AM1-DP.

For LC1-D40 to D95 : clip-on mounting onto 35 mm or 75 mm \sim rail AM1-DL.

Power terminals : LC1-D09 to D95 protected against direct finger contact. Ready-to-tighten terminals.

(2) Standard control circuit voltages (for other voltages, please consult your Regional customer centre).

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

(3) 3-pole contactors without auxiliary contact (standard EN 50012).

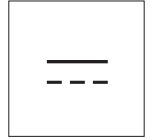
(4) 95 A rated operational current in AC-3 up to 400 V.

Other versions

Contactors with non-protected power terminals enabling "power" and "control" connections to be made using ring type terminals. Please consult your Regional customer centre.

Contactors

d 3-pole contactors for motor control, 9 to 80 A
 Utilisation category AC-3
 Control circuit : d.c.



References



LP1-D0910●●



LP1-D3210●●

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3 ($\theta \leq 55^\circ\text{C}$)						Rated operational current in AC-3 up to 440V A	Instantaneous auxiliary contacts 	Basic reference. Complete with code indicating control circuit voltage (2) Fixing, cabling (1)	Weight kg
220V kW	380V kW	415V kW	440V kW	500V kW	660V 690V kW				
2.2	4	4	4	5.5	5.5	9	1 -	LP1-D0910●●	0.580
							- 1	LP1-D0901●●	0.580
3	5.5	5.5	5.5	7.5	7.5	12	1 -	LP1-D1210●●	0.580
							- 1	LP1-D1201●●	0.580
4	7.5	9	9	10	10	18	1 -	LP1-D1810●●	0.600
							- 1	LP1-D1801●●	0.600
5.5	11	11	11	15	15	25	1 -	LP1-D2510●●	0.850
							- 1	LP1-D2501●●	0.850
7.5	15	15	15	18.5	18.5	32	1 -	LP1-D3210●●	0.880
							- 1	LP1-D3201●●	0.880
11	18.5	22	22	22	30	40	1 1	LP1-D4011●●	2.100
15	22	25	30	30	33	50	1 1	LP1-D5011●●	2.120
18.5	30	37	37	37	37	65	1 1	LP1-D6511●●	2.160
22	37	45	45	55	45	80	1 1	LP1-D8011●●	2.220

Note : Add-on auxiliary contact blocks and modules, see pages 1/32 to 1/43.

(1) For LP1-D09 to D25 : clip-on mounting on 35 mm rail AM1-DP.
 For LP1-D40 to D80 : clip-on mounting on 75 mm rail AM1-DL.

Power terminals : LP1-D09 to D80 protected against direct finger contact. Ready-to-tighten terminals.

(2) Standard control circuit voltages (for other voltages, please consult your Regional customer centre).

Volts $\overline{\text{---}}$	12	24	36	48	60	72	110	125	220	250	440
U 0.8...1.1 Uc (3)	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
U 0.7...1.25 Uc (4)	JW	BW	CW	EW	-	SW	FW	-	MW	-	-

(3) LP1-D40 to D80 : 0.85...1.1 Uc.

(4) LP1-D40 to D80 : 0.75...1.2 Uc.

Other versions

Contactors with non-protected power terminals enabling "power" and "control" connections to be made using ring type terminals.
 Please consult your Regional customer centre.

Contactors

d 3 and 4-pole contactors for heating, lighting, etc., 25 to 125 A
 Utilisation category AC-1
 Control circuit : a.c.

References



LC1-D0910●●



LC1-D12004●●



LC1-D65004●●

Non inductive loads Maximum operational current Utilisation category AC-1 ($\theta \leq 55^\circ\text{C}$)	Number of poles	Instantaneous auxiliary contacts	Basic reference. Complete with code indicating control circuit voltage (2) Fixing, cabling (1)	Weight kg
		N/O N/C		
25	3	-	- - LC1-D0900●● 0.320	
			- - or LC1-D1200●● (3) 0.320	
			1 - LC1-D0910●● 0.320	
			1 - or LC1-D1210●● (3) 0.320	
			- 1 LC1-D0901●● 0.320	
			- 1 or LC1-D1201●● (3) 0.320	
4	-	-	LC1-D12004●● 0.320	
			LC1-D12008●● 0.320	
32	3	-	LC1-D1800●● 0.320	
			1 - LC1-D1810●● 0.350	
			- 1 LC1-D1801●● 0.350	
40	3	-	LC1-D2500●● 0.320	
			1 - LC1-D2510●● 0.505	
			- 1 LC1-D2501●● 0.505	
			4 - LC1-D25004●● 0.505	
2	2	-	LC1-D25008●● 0.505	
			50	3
1 - LC1-D3210●● 0.525				
- 1 LC1-D3201●● 0.525				
60	3	-	1 1 LC1-D4011●● 1.150	
			4 - LC1-D40004●● 1.150	
			2 2 LC1-D40008●● 1.150	
80	3	-	1 1 LC1-D5011●● 1.150	
			1 1 or LC1-D6511●● (3) 1.150	
			4 - LC1-D65004●● 1.150	
			2 2 LC1-D65008●● 1.150	
125	3	-	1 1 LC1-D8011●● 1.500	
			1 1 or LC1-D9511●● (3) 1.500	
			4 - LC1-D80004●● 1.530	
2	2	-	LC1-D80008●● 1.530	

Note : Add-on auxiliary contact blocks and modules, see pages 1/32 to 1/43.

(1) For LC1-D09 to D32 : clip-on mounting on 35 mm rail AM1-DP.

For LC1-D40 to D95 : clip-on mounting on 35 mm or 75 mm rail AM1-DL.

Power terminals : LC1-D09 to D95 protected against direct finger contact. Ready-to-tighten terminals.

(2) Standard control circuit voltages (for other voltages, please consult your Regional customer centre).

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

(3) Selection according to number of operating cycles.

Contactors

d 3 and 4-pole contactors for heating, lighting, etc., 25 to 125 A
 Utilisation category AC-1
 Control circuit : d.c.

References



LP1-D0910●●



LP1-D3210●●

Non inductive loads Maximum operational current Utilisation category AC-1 ($\theta \leq 55^\circ\text{C}$)	Number of poles		Instantaneous auxiliary contacts		Basic reference. Complete with code indicating control circuit voltage (2) Fixing, cabling (1)	Weight kg
	d	b	N/O	N/C		
25	3	-	1	-	LP1-D0910●●	0.580
			1	-	or LP1-D1210●● (5)	0.580
			-	1	LP1-D0901●●	0.580
			-	1	or LP1-D1201●● (5)	0.580
			-	-	LP1-D12004●●	0.580
			2	2	LP1-D12008●●	0.580
32	3	-	1	-	LP1-D1810●●	0.600
			-	1	LP1-D1801●●	0.600
40	3	-	1	-	LP1-D2510●●	0.850
			-	1	LP1-D2501●●	0.850
			4	-	LP1-D25004●●	0.850
50	3	-	-	-	LP1-D25008●●	0.850
			2	2	LP1-D25008●●	0.850
			3	-	LP1-D3210●●	0.880
60	3	-	1	-	LP1-D3201●●	0.880
			1	1	LP1-D4011●●	2.100
			4	-	LP1-D40004●●	2.100
80	3	-	2	2	LP1-D40008●●	2.100
			1	1	LP1-D5011●●	2.120
			1	1	or LP1-D6511●● (5)	2.160
125	3	-	4	-	LP1-D65004●●	2.180
			2	2	LP1-D65008●●	2.180
			1	1	LP1-D8011●●	2.220
125	4	-	-	-	LP1-D80004●●	2.250
			2	2	LP1-D80008●●	2.250

Note : Add-on auxiliary contact blocks and modules, see pages 1/32 to 1/43.

(1) For LP1-D12 to D32 : clip-on mounting on 35 mm rail AM1-DP.

For LP1-D40 to D80 : clip-on mounting on 75 mm rail AM1-DL.

Power terminals : LP1-D12 to D80 protected against direct finger contact. Ready-to-tighten terminals.

(2) Standard control circuit voltages (for other voltages, please consult your Regional customer centre).

Volts ---	12	24	36	48	60	72	110	125	220	250	440
U 0.8...1.1 Uc (3)	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
U 0.7...1.25 Uc (4)	JW	BW	CW	EW	-	SW	FW	-	MW	-	-

(3) For LP1-D40 to D80 : 0.85...1.1 Uc.

(4) For LP1-D40 to D80 : 0.75...1.2 Uc.

(5) Selection according to number of operating cycles.

Contactors

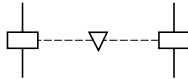
d 3 and 4-pole contactors
 Components for assembling reversing contactors and
 changeover contactor pairs (horizontally mounted), for customer assembly

Combinations

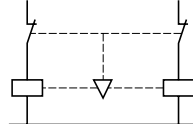
Contactors Mechanical interlocks Set of power connections

Assembled using 2 identical contactors horizontally mounted, type :

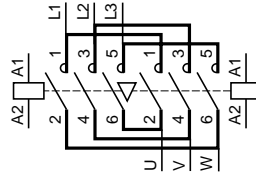
Without electrical interlocking



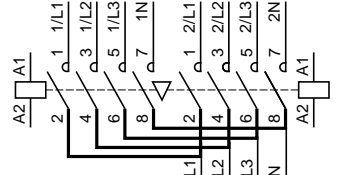
With integral electrical interlocking (2 N/C contacts)



3-pole reversing contactors



4-pole changeover contactor pairs



LC1-D09
 LC1-D12
 LC1-D18
 LC1-D25
 LC1-D32

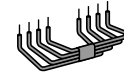
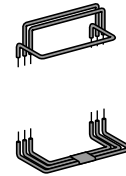
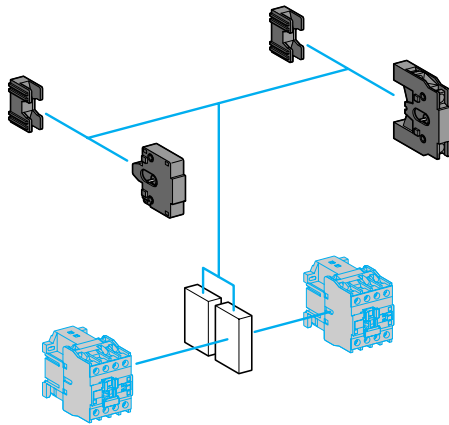
LA9-D09978

LA9-D0902

LA9-D1269
 LA9-D1869
 LA9-D2569
 LA9-D3269

LA9-D1270
 LA9-D2570

LP1-D09
 LP1-D12
 LP1-D18
 LP1-D25
 LP1-D32



LC1-D40
 LC1-D50
 LC1-D65

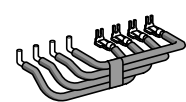
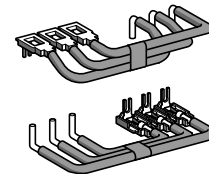
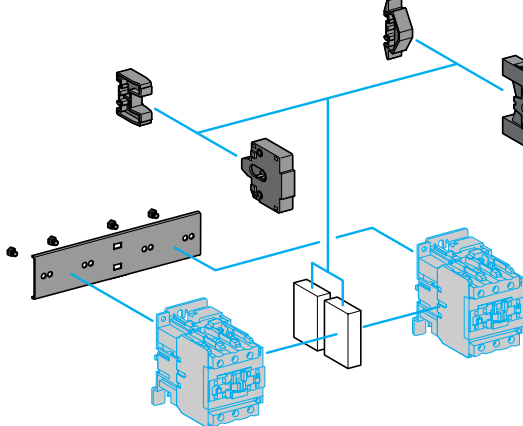
LA9-D50978

LA9-D4002

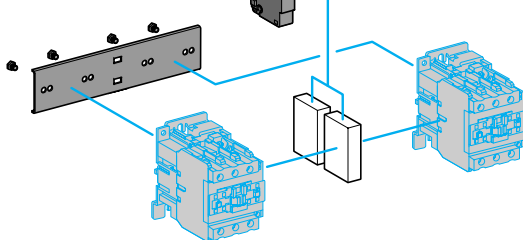
LA9-D6569

LA9-D6570

LP1-D40
 LP1-D50
 LP1-D65

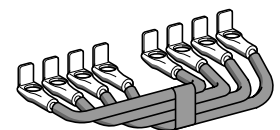
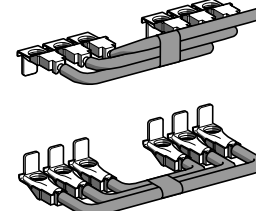


LC1-D80
 LC1-D95



LA9-D8069

LA9-D8070



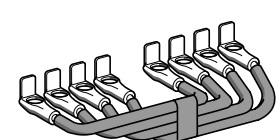
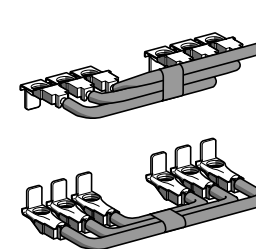
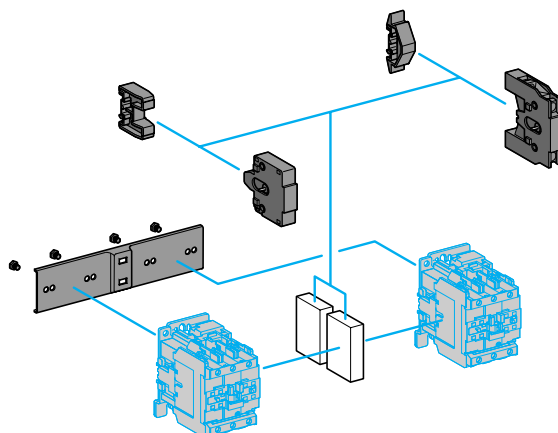
LP1-D80

LA9-D80978

LA9-D8002

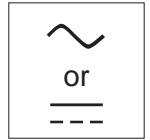
LA9-D8069

LA9-D8070



Contactors

d 3 and 4-pole contactors
 Components for assembling reversing contactors and
 changeover contactor pairs (horizontally mounted),
 for customer assembly
 References



Component parts (including mechanical interlock with integral electrical interlocking)

With 2 identical contactors (1)	Set of power connections Reference	Weight kg	Mechanical interlock Kit reference	Weight kg
For assembly of 3-pole reversing contactors for motor control				
LC1/LP1-D09●●●●● LC1/LP1-D12●●●●●	LA9-D1269	0.015	LA9-D0902	0.060
LC1/LP1-D18●●●●●	LA9-D1869	0.030	LA9-D0902	0.060
LC1/LP1-D25●●●●●	LA9-D2569	0.030	LA9-D0902	0.060
LC1/LP1-D32●●●●●	LA9-D3269	0.040	LA9-D0902	0.060
LC1/LP1-D4011●● LC1/LP1-D5011●● LC1/LP1-D6511●●	LA9-D6569	0.290	LA9-D4002	0.170
LC1-D8011●●	LA9-D8069	0.490	LA9-D4002	0.170
LP1-D8011●●	LA9-D8069	0.490	LA9-D8002	0.170
LC1-D9511●●	LA9-D8069	0.490	LA9-D4002	0.170
For assembly of 4-pole changeover contactor pairs for distribution (3-phase + neutral distribution system)				
LC1/LP1-D12004●●	LA9-D1270	0.010	LA9-D0902	0.060
LC1/LP1-D25004●●	LA9-D2570	0.020	LA9-D0902	0.060
LC1/LP1-D40004●● LC1/LP1-D65004●●	LA9-D6570	0.150	LA9-D4002	0.170
LC1-D80004●●	LA9-D8070	0.280	LA9-D4002	0.170
LP1-D80004●●	LA9-D8070	0.280	LA9-D8002	0.170

Component parts (including mechanical interlock, without electrical interlocking)

For assembly of 3-pole reversing contactors for motor control				
LC1/LP1-D0901●● LC1/LP1-D1201●●	LA9-D1269	0.015	LA9-D09978	0.030
LC1/LP1-D1801●●	LA9-D1869	0.030	LA9-D09978	0.030
LC1/LP1-D2501●●	LA9-D2569	0.030	LA9-D09978	0.030
LC1/LP1-D3201●●	LA9-D3269	0.040	LA9-D09978	0.030
LC1/LP1-D4011●● LC1/LP1-D5011●● LC1/LP1-D6511●●	LA9-D6569	0.290	LA9-D50978	0.155
LC1-D8011●●	LA9-D8069	0.490	LA9-D50978	0.155
LP1-D8011●●	LA9-D8069	0.490	LA9-D80978	0.180
LC1-D9511●●	LA9-D8069	0.490	LA9-D50978	0.155
For assembly of 4-pole changeover contactor pairs for distribution (3-phase + neutral distribution system) (2)				
LC1/LP1-D12004●●	LA9-D1270	0.010	LA9-D09978	0.030
LC1/LP1-D25004●●	LA9-D2570	0.020	LA9-D09978	0.030
LC1/LP1-D40004●● LC1/LP1-D65004●●	LA9-D6570	0.150	LA9-D50978	0.155
LC1-D80004●●	LA9-D8070	0.280	LA9-D50978	0.155
LP1-D80004●●	LA9-D8070	0.280	LA9-D80978	0.180

Thermal overload relays

d 3-pole thermal overload relays (class 10 A)
adjustable from 0.1 to 93 A, for motor protection

References

Thermal overload relays to be used with fuses

Thermal overload relays
- compensated with manual or automatic reset,
- relay trip indicator,
- for a.c. or d.c.

Relay setting range	Fuses to be used with selected relay Type		For direct mounting beneath contactor	Reference	Weight
	aM	gG (BS88)	LC1, LP1		
A	A	A			kg

Class 10 A (1)

0.10...0.16	0.25	2	D09...D32	LR2-D1301	0.165
0.16...0.25	0.5	2	D09...D32	LR2-D1302	0.165
0.25...0.40	1	2	D09...D32	LR2-D1303	0.165
0.40...0.63	1	4	D09...D32	LR2-D1304	0.165
0.63...1	2	4	D09...D32	LR2-D1305	0.165
1...1.6	2	6	D09...D32	LR2-D1306	0.165
1.6...2.5	4	10	D09...D32	LR2-D1307	0.165
2.5...4	6	16	D09...D32	LR2-D1308	0.165
4...6	8	16	D09...D32	LR2-D1310	0.165
5.5...8	12	20	D09...D32	LR2-D1312	0.165
7...10	12	20	D09...D32	LR2-D1314	0.165
9...13	16	25	D12...D32	LR2-D1316	0.165
12...18	20	32	D18...D32	LR2-D1321	0.165
17...25	25	50	D25 and D32	LR2-D1322	0.165
23...32	40	63	D25 and D32	LR2-D2353	0.320
30...40	40	80	D32	LR2-D2355	0.320
17...25	25	50	D40...D95	LR2-D3322	0.510
23...32	40	63	D40...D95	LR2-D3353	0.510
30...40	40	80	D40...D95	LR2-D3355	0.510
37...50	63	100	D50...D95	LR2-D3357	0.510
48...65	63	100	D50...D95	LR2-D3359	0.510
55...70	80	125	D65...D95	LR2-D3361	0.510
63...80	80	125	D80 and D95	LR2-D3363	0.510
80...93	100	160	D95	LR2-D3365	0.510



LR2-D1301



LR2-D2355



LR2-D3365

3-pole thermal overload relays for use with unbalanced loads

Class 10 A : Change the prefix in the references above from **LR2** to **LR3**. Example : **LR3-D1301**.

(1) Standard IEC 947-4 specifies a tripping time for 7.2 times the setting current I_R :

class 10 A : between 2 and 10 seconds.

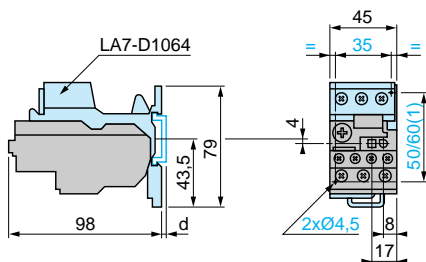
Other versions

Thermal overload relays

- for distribution circuits,
 - with flat terminals for ring type connectors (except LR2-D3365).
- Please consult your Regional customer centre.

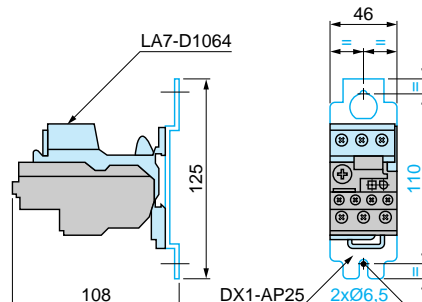
LR2, LR3-D1

Independent mounting on 50 mm centres
or on rail AM1-DP200 or DE200

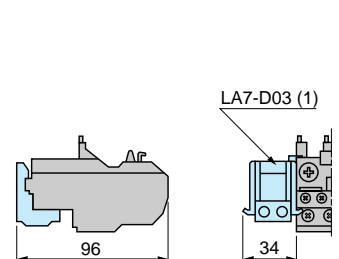


AM1-DP200	AM1-DE200
d	2
(1)	+ 5 mm for LR2-D1501

Independent mounting on 110 mm centres



Remote trip or electrical reset



(1) Can be mounted on RH or LH side of relays LR2, LR3-D1

Thermal overload relays

d 3-pole thermal overload relays (class 20)
adjustable from 0.1 to 93 A, for motor protection

References

Thermal overload relays to be used with fuses



LR2-D15●●



LR2-D25●●



LR2-D35●●

Thermal overload relays
- compensated with manual or automatic reset,
- relay trip indicator,
- for a.c. or d.c.

Relay setting range	Fuses to be used with selected relay Type	For direct mounting beneath contactor	Reference	Weight
A	aM gG (BS88)	LC1, LP1		kg

Class 20 (1)

2.5...4	6	16	D09...D32	LR2-D1508	0.190
4...6	8	16	D09...D32	LR2-D1510	0.190
5.5...8	12	20	D09...D32	LR2-D1512	0.190
7...10	16	25	D09...D32	LR2-D1514	0.190
9...13	16	25	D12...D32	LR2-D1516	0.190
12...18	25	40	D18...D32	LR2-D1521	0.190
17...25	32	50	D25 and D32	LR2-D1522	0.190
23...32	40	63	D25 and D32	LR2-D2553	0.345
17...25	32	50	D40...D95	LR2-D3522	0.535
23...32	40	63	D40...D95	LR2-D3553	0.535
30...40	50	80	D40...D95	LR2-D3555	0.535
37...50	63	100	D50...D95	LR2-D3557	0.535
48...65	80	100	D50...D95	LR2-D3559	0.535
55...70	100	125	D65...D95	LR2-D3561	0.535
63...80	100	125	D80 and D95	LR2-D3563	0.535

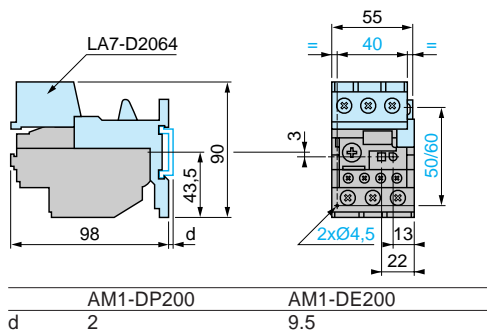
(1) Standard IEC 947-4 specifies a tripping time for 7.2 times the setting current I_r :
class 20 : between 6 and 20 seconds.

Other versions

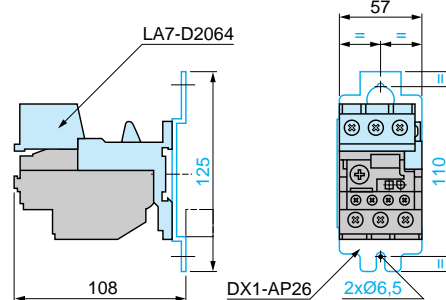
Thermal overload relays
- for distribution circuits,
- with flat terminals for ring type connectors.
Please consult your Regional customer centre.

LR2, LR3-D2

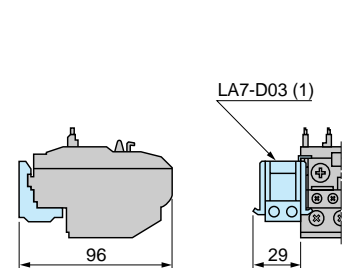
Independent mounting on 50 mm centres
or on rail AM1-DP200 or DE200



Independent mounting on 110 mm centres



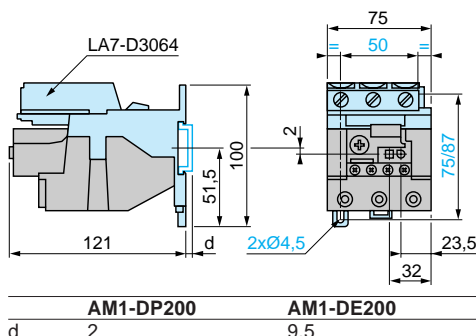
Remote trip or electrical reset device



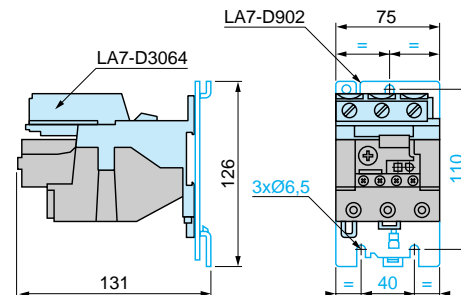
(1) Can be mounted on RH or LH side of relays LR2, LR3-D2

LR2, LR3-D3

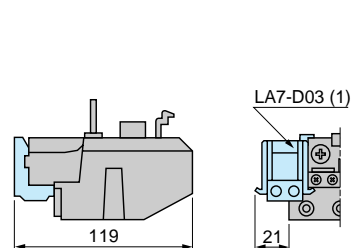
Independent mounting on 50 mm centres
or on rail AM1-DP200 or DE200



Independent mounting on 110 mm centres



Remote trip or electrical reset device



(1) Can be mounted on RH or LH side of relays LR2-D, LR3-D3

Thermal overload relays

d 3-pole thermal overload relays
adjustable from 0.1 to 93 A

References

Accessories (to be ordered separately)

Description	For use on overload relays	Sold in lots of	Unit reference	Weight kg
Terminal blocks (1) for clip-on mounting on 35 mm rail (AM1-DP200) or screw fixing. See pages 1/26 and 1/27 for fixing centres	LR2-D1	1	LA7-D1064	0.100
	LR3-D1			
	LR2-D2	1	LA7-D2064	0.120
	LR3-D2			
Power terminals adaptor for mounting an LR●-D13 overload relay beneath an LC1-D40, D50 or D65 contactor	LR2-D1	1	LA7-D1058	0.080
	LR3-D1			
Mounting plates (3) for screw fixing on 110 mm centres	LR2-D1	10	DX1-AP25	0.065
	LR3-D1			
	LR2-D2	10	DX1-AP26	0.082
	LR3-D2			
Marker holder snap-in	LR2-D3	1	LA7-D902	0.130
	LR3-D3			
Marker holder snap-in	LR2-D	100	LA7-D903	0.001
	LR3-D			
Bag of 400 labels (blank, self-adhesive) 7 x 16 mm	–	1	LA9-D91	0.001
Locking device for "Stop" button	LR2-D	10	LA7-D901	0.005
	LR3-D			
Remote tripping and electrical reset device (4)	LR2-D	1	LA7-D03● (5)	0.090
	LR3-D			

Remote control

"Reset" function

By flexible cable (length = 0.5 m)	LR2-D	1	LA7-D305	0.075
	LR3-D			

" Stop" and/or " Reset" function

For fitting, remove the terminal protection shrouds and order the following 3 products :

Adaptor for door mounted operator	LR2-D	1	LA7-D1020	0.005
	LR3-D			
Rod (snap-off end to obtain required length between 17 and 120 mm)	LR2-D	10	ZA2-BZ13	0.100
	LR3-D			
Operating head for spring return pushbutton	LR2-D	1	ZA2-B●●●● (6)	0.012
	LR3-D			

(1) Terminal blocks are supplied with terminals protected against direct finger contact. Ready-to-tighten screws.

(2) With terminals for ring type connectors, the reference becomes LA7-D30646.

(3) Remember to order the terminal block corresponding to the overload relay size.

(4) The time for which the coil of remote tripping and electrical resetting device **LA7-D03** can remain energised depends on its rest time : 1 s pulse duration with 9 s rest time ; 5 s pulse duration with 30 s rest time ; 10 s pulse duration with 90 s rest time ; maximum pulse duration of 20 s with a rest time of 300 s. Minimum impulse time : 200 ms.

(5) Reference to be completed by adding the coil voltage code.

Standard control circuit voltages (for other voltages, please consult your Regional customer centre).

Volts ~	12	24	48	96	110	220/230	380/400	415/440
50/60 Hz	–	B	E	–	F	M	Q	N

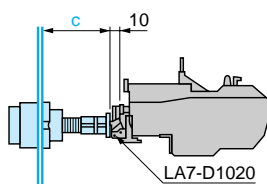
Consumption, inrush and sealed : < 100 VA

Volts =	J	B	E	DD	F	M	–	–
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Consumption, inrush and sealed : < 100 W.

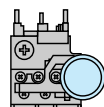
(6) Reference to be completed, please refer to chapter 5.

LA7-D1020
Adaptor for door mounted operator

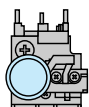


c : adjustable from 17 to 120 mm

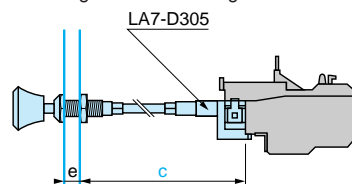
Stop



Reset

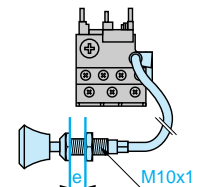


LA7-D305
"Reset" by flexible cable
Mounting with cable straight



c : up to 550 mm
e : up to 20 mm

Mounting with cable bent



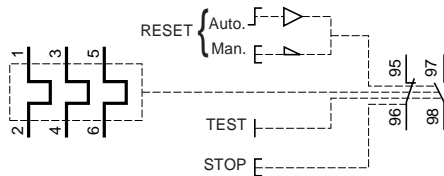
e : up to 20 mm

Thermal overload relays

d 3-pole thermal overload relays
adjustable from 0.1 to 93 A

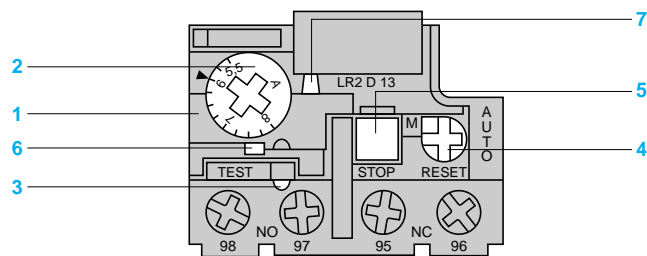
Scheme, setting-up

Scheme
LR2-D
LR3-D



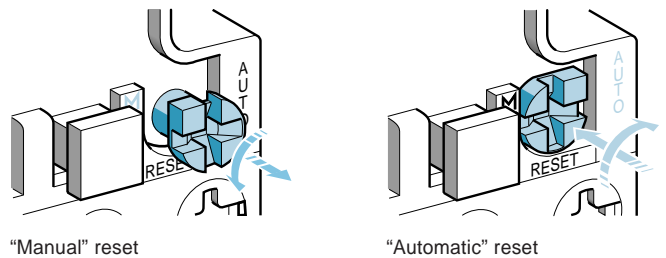
Setting-up the special functions of LR2-D and LR3-D thermal overload relays

Setting the relay



- Lift the transparent cover **1** to gain access to the settings and controls.
- Adjustment is achieved by turning dial **2** which is graduated directly in Amperes.
- The setting can be locked by sealing **3** of the cover.

"Manual-Automatic" selection **4**

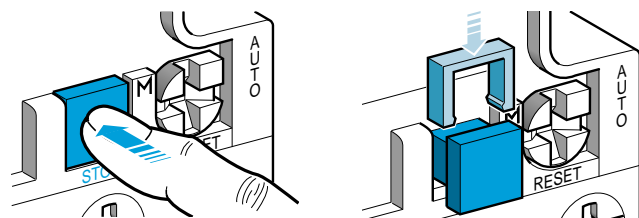


"Manual" reset

"Automatic" reset

- After having lifted the transparent cover, the type of reset operation can be selected by turning the blue "RESET" selector **4** :
 - turn to the left for manual reset,
 - push and turn to the right for automatic reset.
- The selector is then held in the automatic position and is released by turning the selector to the left (return to manual operation).
- With the cover folded down, the selector is locked.
- Manual resetting of the relay is achieved by pressing the blue "RESET" button.

"Stop" function **5**

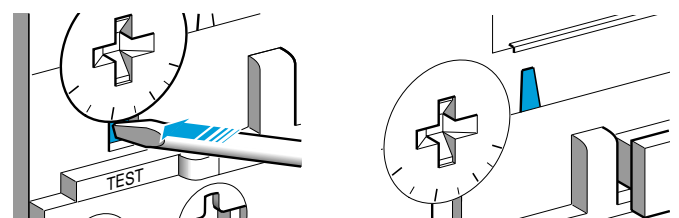


Stop

Locking

- The "Stop" function is obtained by pressing the red "STOP" button **5**.
- Pressing the "STOP" button :
 - actuates the N/C contact,
 - does not affect the N/O contact.
- The "STOP" button can be locked by fitting a "U" clip (ref. LA7-D901). With the cover folded down, the device is locked.

"Test" function **6**



Test

Trip indicator

- The "Test" function is obtained by pressing the red "TEST" button **6** with a screwdriver.
- Operation of the "TEST" button simulates tripping of the relay and :
 - actuates both N/O and N/C contacts,
 - actuates the trip indicator **7**.

Thermal overload relays

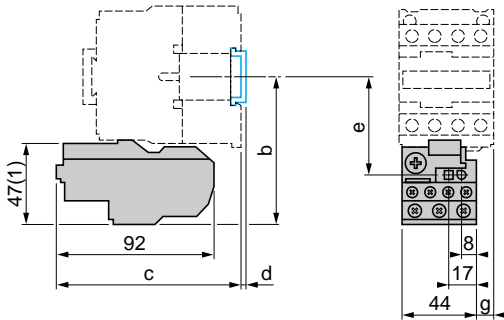
d 3-pole thermal overload relays
adjustable from 0.1 to 93 A

Dimensions

LR2, LR3-D1

Direct mounting beneath contactors

LC1-D09 to D32, LP1-D09 to D32 and LP4-D12



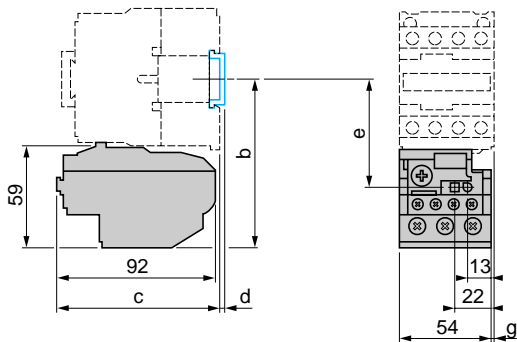
	AM1-DP200	AM1-DE200		
d	2	9.5		
			b (1)	c
			e	g
LC1-D09, D12, D18	81	98	50	0
LC1-D25	86	108	55	10.7
LC1-D32	86	109	55	8.1
LP1-D09, D12, D18	81	133	50	0
LP1-D25	86	152	55	10.7
LP1-D32	86	153	55	8.1
LP4-D12	81	98	50	0

(1) + 5 mm for LR2-D15●●

LR2, LR3-D2

Direct mounting beneath contactors

LC1-D25 and D32, LP1-D25 and D32

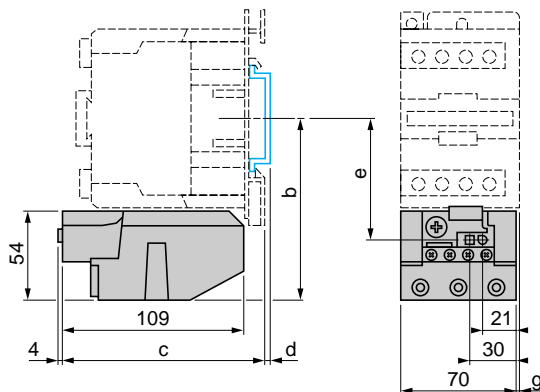


	AM1-DP200	AM1-DE200		
d	2	9.5		
			b	c
			e	g
LC1-D25	97.5	98	60	1.5
LC1-D32	97.5	98	60	0.5
LP1-D25	97.5	155	60	1.5
LP1-D32	97.5	155	60	0.5

LR2, LR3-D3

Direct mounting beneath contactors

LC1-D40 to D95 and LP1-D40 to D80



	AM1-DL201	AM1-DL200		
d	7	17		
			b	c
			e	g (3P) g (4P)
LC1-D40	111	119	72.4	4.5 13
LC1-D50	111	119	72.4	4.5 -
LC1-D65	111	119	72.4	4.5 13
LC1-D80	115.5	124	76.9	9.5 22
LC1-D95	115.5	124	76.9	9.5 -
LP1-D40	111	176	72.4	4.5 13
LP1-D50	111	176	72.4	4.5 -
LP1-D65	111	176	72.4	4.5 13
LP1-D80	115.5	179.4	76.9	9.5 22





Contactors

d 3 and 4-pole contactors, reversing and changeover contactors
 Auxiliary contact blocks and accessories
 Control circuit : a.c.

References

Instantaneous auxiliary contact blocks (1)

For use in normal operating environments

Number of contacts	Max. number of blocks per contactor		Composition				Reference	Weight kg
	Clip-on mounting Front	Side						
1	1 (D25 and D32) or 2 (D40...D95)	-	-	-	1	-	LA1-DN10	0.020
			-	-	-	1	LA1-DN01	0.020
2	1 (D09...D95)	-	-	-	1	1	LA1-DN11	0.030
			-	-	2	-	LA1-DN20	0.030
	-	-	-	-	2	-	LA1-DN02	0.030
	-	2 (D09...D95)	-	-	1	1	LA8-DN11	0.030
4	1 (D09...D95)	-	-	-	2	2	LA1-DN22	0.050
			-	-	1	3	LA1-DN13	0.050
			-	-	4	-	LA1-DN40	0.050
			-	-	-	4	LA1-DN04	0.050
			-	-	3	1	LA1-DN31	0.050
			-	-	2	2 (2)	LA1-DC22	0.050

With terminal referencing conforming to standard EN 50012

2	1 (D0910...D3210)	-	-	-	1	1	LA1-DN11M	0.030
	1 (D0900...D3200)	-	-	-	1	1	LA1-DN11P	0.030
	1 (D40...D95)	-	-	-	1	1	LA1-DN11G	0.030
4	1 (D0910...D3210)	-	-	-	2	2	LA1-DN22M	0.050
	1 (D0900...D3200)	-	-	-	2	2	LA1-DN22P	0.050
	1 (D40...D95)	-	-	-	2	2	LA1-DN22G	0.050

Instantaneous auxiliary contact blocks with dust and damp protected contacts (1)

For use in harsh industrial environments

2	1 (D09...D95)	-	2	-	-	-	LA1-DX20	0.040
			-	2 (3)	-	-	LA1-DY20	0.040
4	1 (D09...D95)	-	2	-	2	-	LA1-DZ40	0.050
			2	-	1	1	LA1-DZ31	0.060

(1) Maximum mounting capacity, depending on type of coil.

Device type	Coil type	Operation guaranteed from	Maximum number of add-on blocks		
			Clip-on mounting front	side	side
LC1-D	50 or 60 Hz	0.8...1.1 Uc	1	+	2
	50/60 Hz	0.8...1.1 Uc	1	or	2
		0.85...1.1 Uc	1	+	2

(2) Including 1 N/O and 1 N/C make before break.

(3) Device fitted with 4 terminals for earth screen continuity.

Contactors

d 3 and 4-pole contactors, reversing and changeover contactors
 Auxiliary contact blocks and accessories
 Control circuit : a.c.

References

Time delay auxiliary contact blocks (1)

Number of contacts	Maximum number of blocks per contactor Front clip-on mounting	Time delay		Reference	Weight kg
		Type	Setting range		
1 N/O + 1 N/C	1 (D09...D95)	On-delay	0.1...3 s (2)	LA2-DT0	0.060
			0.1...30 s	LA2-DT2	0.060
			10...180 s	LA2-DT4	0.060
			1...30 s (3)	LA2-DS2	0.060
		Off-delay	0.1...3 s (2)	LA3-DR0	0.060
			0.1...30 s	LA3-DR2	0.060
			10...180 s	LA3-DR4	0.060

Mechanical latch blocks (1)

Unlatching control	Clip-on front mounting	Basic reference. To be completed (4)	Weight kg
Manual or electric	LC1-D09...D65	LA6-DK10●	0.070
	LC1-D80...D95	LA6-DK20●	0.090

(1) Maximum mounting capacity, depending on type of coil.

Device type	Coil type	Operation guaranteed from	Maximum number of add-on blocks		
			Clip-on mounting front	side	
LC1-D	50 or 60 Hz	0.8...1.1 Uc	1	+	2
	50/60 Hz	0.8...1.1 Uc	1	or	2
		0.85...1.1 Uc	1	+	2

(2) With extended scale from 0.1 to 0.6 s.

(3) With switching time of 40 ms ± 15 ms between opening of the N/C contact and closing of the N/O contact.

(4) Standard control circuit voltages (for other voltages, please consult your Regional customer centre).

Volts ~ or ---	12	24	32/36	42/48	60/72	100	110/127	220/240	255/277	380/415
Code	J	B	C	E	EN	K	F	M	U	Q





Contactors

d 3 and 4-pole contactors, reversing and changeover contactors
 Auxiliary contact blocks and accessories
 Control circuit : d.c.

References





Instantaneous auxiliary contact blocks (1)

For use in normal operating environments

Number of contacts	Max. number of blocks per contactor		Composition				Reference	Weight kg
	Clip-on mounting Front	Side						
1	1 (D25 and D32)	–	–	–	1	–	LA1-DN10	0.020
	2 (D40...D80)	–	–	–	–	1	LA1-DN01	0.020
2	1 (D09...D80)	–	–	–	1	1	LA1-DN11	0.030
					2	–	LA1-DN20	0.030
					–	2	LA1-DN02	0.030
2	2 (D09...D32)	–	–	–	1	1	LA8-DN11	0.030
					2	–	LA8-DN20	0.030
4	1 (D09...D80)	–	–	–	2	2	LA1-DN22	0.050
					1	3	LA1-DN13	0.050
					4	–	LA1-DN40	0.050
					–	4	LA1-DN04	0.050
					3	1	LA1-DN31	0.050
					2	2 (2)	LA1-DC22	0.050

Instantaneous auxiliary contact blocks with dust and damp protected contacts (1)

For use in harsh industrial environments

Number of contacts	Max. number of blocks per contactor		Composition				Reference	Weight kg
	Clip-on mounting Front	Side						
2	1 (D09...D80)	–	2	–	–	–	LA1-DX20	0.040
			2	2 (3)	–	–	LA1-DY20	0.040
4	1 (D09...D80)	–	2	–	2	–	LA1-DZ40	0.050
			2	–	1	1	LA1-DZ31	0.060

Time delay auxiliary contact blocks (1)

Number of contacts	Max. number of blocks per contactor		Time delay		Reference	Weight kg
	Clip-on mounting Front	Side	Type	Setting range(s)		
1 N/O + 1 N/C	1 (D09...D80)	–	On delay	0.1...3 (4)	LA2-DT0	0.060
				0.1...30	LA2-DT2	0.060
				10...180	LA2-DT4	0.060
				1...30 (5)	LA2-DS2	0.060
				Off delay	0.1...3 (4)	LA3-DR0
0.1...30	LA3-DR2	0.060				
10...180	LA3-DR4	0.060				

Mechanical latch blocks (Manual or electric unlatching control)

Front clip-on mounting	Basic reference. To be completed (6)	Weight kg
LP1-D09...D65	LA6-DK10●	0.070
LP1-D80	LA6-DK20●	0.090

(1) Either of the following may be fitted, as required: 2 side-mounting contact blocks or 1 front mounting contact block.

(2) Including 1 N/O + 1 N/C make before break.

(3) Device fitted with 4 terminals for earth screen continuity.

(4) With extended scale from 0.1 to 0.6 s.

(5) With switching time of 40 ms ± 15 ms between opening of the N/C contact and closing of the N/O contact.

(6) Standard control circuit voltages (for other voltages, please consult your Regional customer centre).

Volts ~ or =	12	24	32/36	42/48	60/72	100	110/127	220/240	255/277	380/415
Code	J	B	C	E	EN	K	F	M	U	Q

Contactors

d 3 and 4-pole contactors, reversing and changeover contactors
Accessories

References

Electronic serial timer modules (1)

Operational voltage (2) ~ LC1- 24...250 V 100...250 V	== LP1- 24...250 V	Time delay	Reference	Weight kg
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On-delay type

D09...D32 D40...D95	D09...D32	0.1...2 s	LA4-DT0U	0.040
		1.5...30 s	LA4-DT2U	0.040
		25...500 s	LA4-DT4U	0.040

Off-delay type

D09...D18 D25...D95	-	0.1...2 s	LA4-DR0U	0.050
		1.5...30 s	LA4-DR2U	0.050
		25...500 s	LA4-DR4U	0.050

Interface modules (1)

Operational voltage ~ LC1- 24...250 V 100...250 V 380...415 V	== LP1- 24...250 V	Supply voltage E1-E2 (---)	Reference	Weight kg
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Relay interface

-	-	D09...D95	-	24 V	LA4-DFBQ	0.055
D09...D95	-	-	D09...D32	24 V	LA4-DFB	0.050
				48 V	LA4-DFE	0.050

Relay interface with manual override switch (output forced "ON")

D09...D95	-	-	D09...D32	24 V	LA4-DLB	0.045
				48 V	LA4-DLE	0.045

Solid state interface

D09...D32 D40...D95	-	-	-	24 V	LA4-DWB	0.045
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Auto-Man-Stop control modules (1)

For local override operation tests with 2-position "Auto-Man" switch and "O-I" switch

Operational voltage ~ LC1- 24...100 V 100...250 V	== LP1- 24...100 V 100...250 V	Reference	Weight kg
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D09...D95	-	D09...D32	-	LA4-DMK	0.040
-	D09...D95	-	D09...D32	LA4-DMU	0.040

Indicators (contactor state)

Red LED

For mounting on contactors LC1 and LP1	Supply voltage (˘ and ==)	Sold in lots of	Unit reference	Weight kg
Clips into legend plate location on all contactor sizes	12...72 V	5	LA4-DVE	0.010
	72...250 V	5	LA4-DVM	0.010
	250...440 V	5	LA4-DVR	0.010

(1) Mounted at top on terminals A1 and A2 (screw fixing).

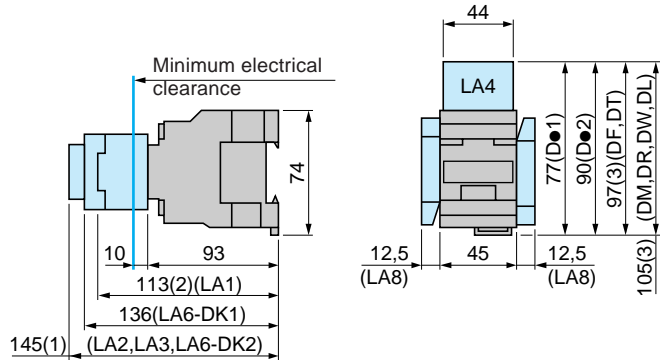
(2) For 24 V operation, the contactor must be fitted with a 21 V coil (code Z). See pages 1/49 to 1/52.

Contactors

d 3 and 4-pole contactors, type LC1-D

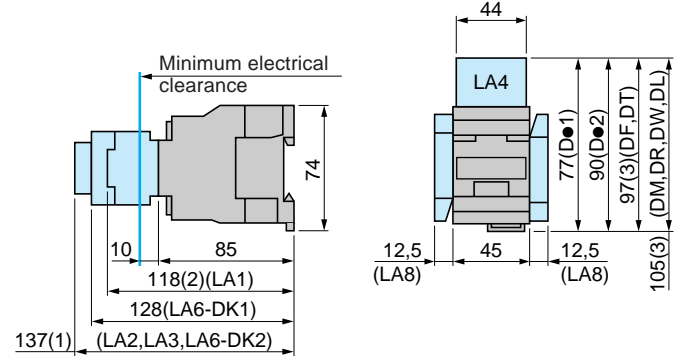
Dimensions

LC1-D09, D12



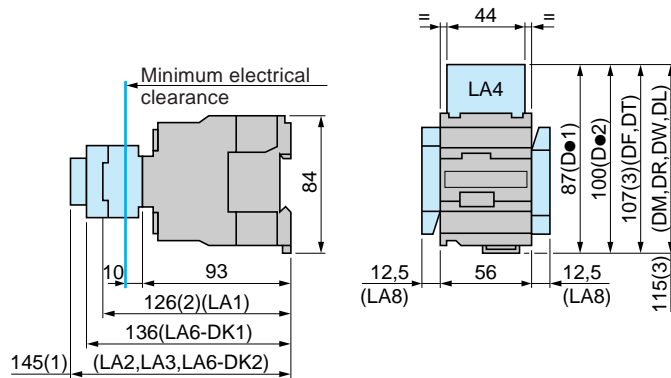
- (1) + 4 mm with lead sealing kit
 - (2) With 2 or 4 contacts
 - (3) With or without combined use of a coil suppressor module
- LA4-DA1, DE1

LC1-D18
LC1-D2500



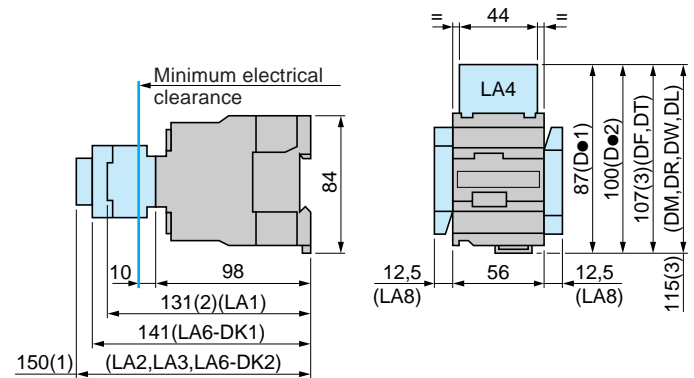
- (1) + 4 mm with lead sealing kit
 - (2) With 2 or 4 contacts
 - (3) With or without combined use of a coil suppressor module
- LA4-DA1, DE1

LC1-D2510, D2501, D25004



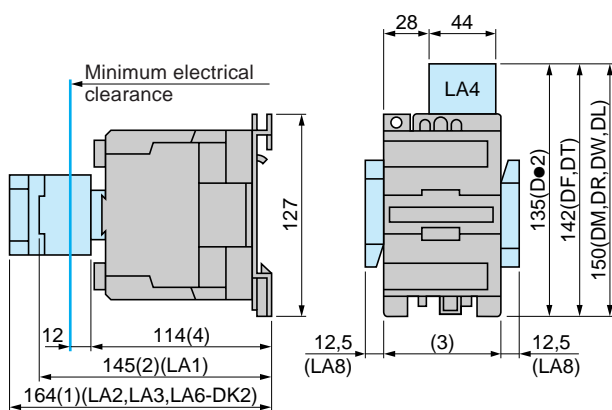
- (1) + 4 mm with lead sealing kit
 - (2) With 2 or 4 contacts; 1 contact = 120 (LA1-DN10 or DN01)
 - (3) With or without combined use of a coil suppressor module
- LA4-DA1, DE1

LC1-D32



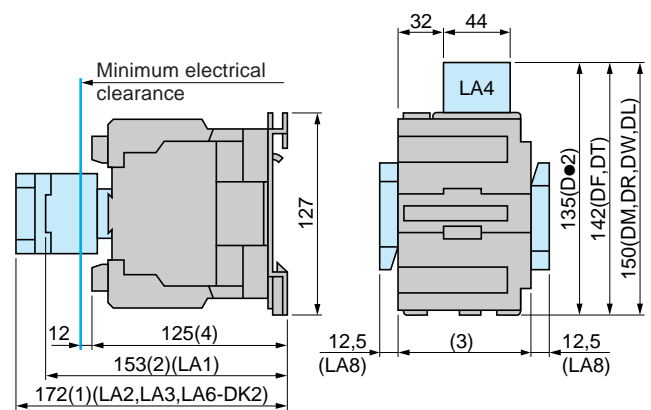
- (1) + 4 mm with lead sealing kit
 - (2) With 2 or 4 contacts; 1 contact = 125 (LA1-DN10 or DN01)
 - (3) With or without combined use of a coil suppressor module
- LA4-DA1, DE1

LC1-D40, D50, D65



- (1) + 4 mm with lead sealing kit
- (2) With 2 or 4 contacts; 1 contact = 139 (LA1-DN10 or DN01)
- (3) 75 : 3 poles, 85 : 4 poles
- (4) 125 : LC1-D●●008

LC1-D80, D95



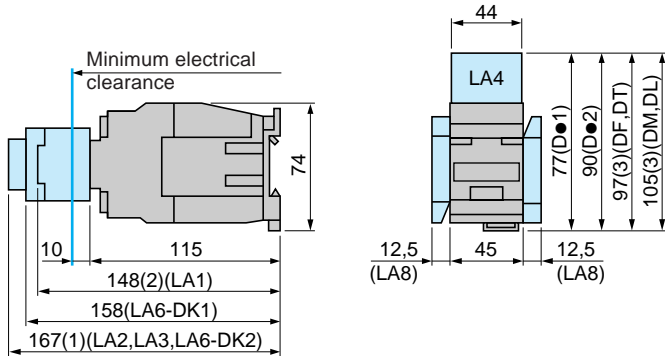
- (1) + 4 mm with lead sealing kit
- (2) With 2 or 4 contacts; 1 contact = 147 (LA1-DN10 or DN01)
- (3) 85 : 3 poles, 96 : 4 poles
- (4) 140 : LC1-D●●008

Contactors

d 3 and 4-pole contactors, type LP1-D

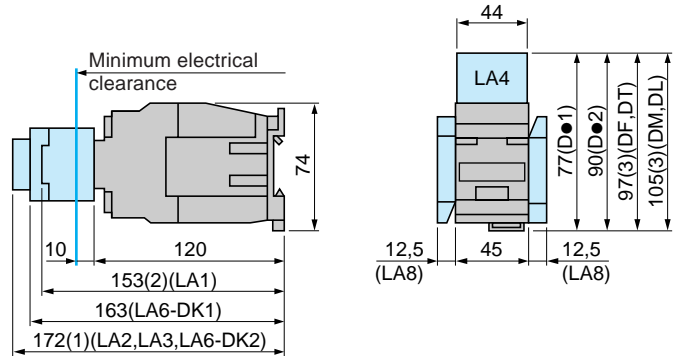
Dimensions

LP1-D09, D12



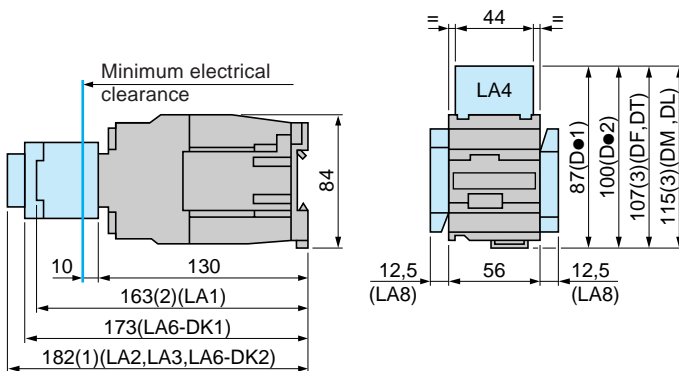
- (1) + 4 mm with lead sealing kit
- (2) With 2 or 4 contacts
- (3) With or without combined use of a coil suppressor module LA4-DC1, DE1.

LP1-D18



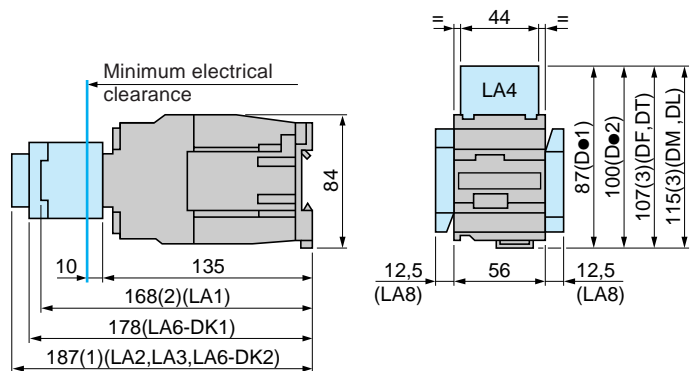
- (1) + 4 mm with lead sealing kit
- (2) With 2 or 4 contacts
- (3) With or without combined use of a coil suppressor module LA4-DC1, DE1.

LP1-D25



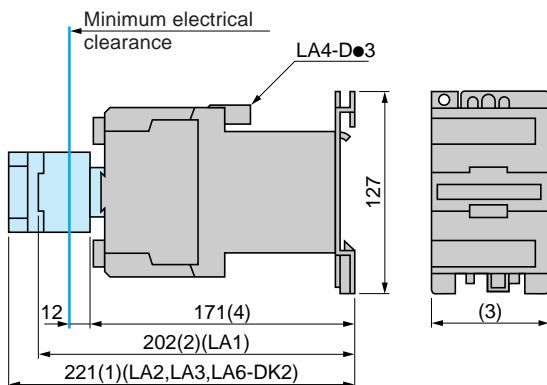
- (1) + 4 mm with lead sealing kit
- (2) With 2 or 4 contacts; 1 contact : 157 (LA1-DN10 or DN01)
- (3) With or without combined use of a coil suppressor module LA4-DC1, DE1.

LP1-D32



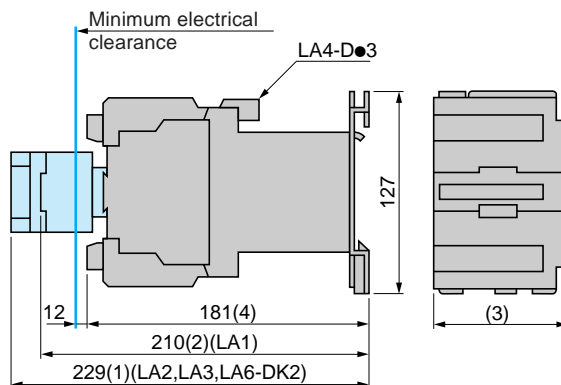
- (1) + 4 mm with lead sealing kit
- (2) With 2 or 4 contacts; 1 contact : 162 (LA1-DN10 or DN01)
- (3) With or without combined use of a coil suppressor module LA4-DC1, DE1.

LP1-D40, D50, D65



- (1) + 4 mm with lead sealing kit
- (2) With 2 or 4 contacts; 1 contact : 196 (LA1-DN10 or DN01)
- (3) 75 : 3 poles, 85 : 4 poles
- (4) 182 : LP1-D●●008

LP1-D80



- (1) + 4 mm with lead sealing kit
- (2) With 2 or 4 contacts; 1 contact : 204 (LA1-DN10 or DN01)
- (3) 85 : 3 poles, 96 : 4 poles
- (4) 196 : LP1-D●●008