

Characteristics

Conforming to standards	IEC 60947-4-1 and IEC 60439-1, VDE 0660-102, EN 60947
Degree of protection conforming to IEC 60529	IP 659: LE2 K IP 657: LE● D09...D35 IP 557: LE● D405...D955
Ambient air temperature	Operation: - 5...+ 40 °C
Operating positions	Same as that of the contactors
Material	Polycarbonate (2): LE2 K and LE● D09...D35 Sheet steel: LE● D405...D955

References



LE1 D12●●



LE2 D12●●

Non-reversing starters

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3							Maximum current I the up to	Basic reference, to be completed by adding the voltage code (3)	Weight kg
220 V	380 V	415 V	440 V	500 V	660 V	A			
230 V	400 V				690 V				
2.2	4	4	4	5.5	5.5	9	LE1 D09●●	0.920	
3	5.5	5.5	5.5	7.5	7.5	12	LE1 D12●●	0.920	
4	7.5	9	9	10	10	18	LE1 D18●●	1.015	
5.5	11	11	11	15	15	25	LE1 D25●●	1.015	
7.5	15	15	15	18.5	18.5	35	LE1 D35●●	4.320	
11	18.5	22	22	22	30	40	LE1 D405●●	4.820	
15	22	25	30	30	33	50	LE1 D505●●	4.850	
18.5	30	37	37	37	37	65	LE1 D655●●	4.850	
22	37	45	45	55	45	80	LE1 D805●●	5.140	
25	45	45	45	55	45	95	LE1 D955●●	5.440	

Reversing starters

1.5	2.2	2.2	3	-	-	6	LE2 K065●●	1.080
2.2	4	4	4	-	-	9	LE2 K095●●	1.080
							LE2 D09●● (4)	2.100
-	-	-	-	5.5	5.5	9	LE2 D09●●	2.100
3	5.5	5.5	5.5	7.5	7.5	12	LE2 D12●●	2.100
4	7.5	9	9	10	10	18	LE2 D18●●	2.410
5.5	11	11	11	15	15	25	LE2 D25●●	2.570
7.5	15	15	15	18.5	18.5	35	LE2 D35●●	4.100
11	18.5	22	22	22	30	40	LE2 D405●●	5.270
15	22	25	30	30	33	50	LE2 D505●●	5.470
18.5	30	37	37	37	37	65	LE2 D655●●	5.470
22	37	45	45	55	45	80	LE2 D805●●	6.700
25	45	45	45	55	45	95	LE2 D955●●	7.000

(1) Overload protection must be provided by a thermal overload relay, to be ordered separately, see pages 6/20 to 6/23.

(2) Avoid placing this material in contact with harsh substances (detergents, chlorine solvents, ketones, alcohol, aromatic hydrocarbons).

(3) Standard control circuit voltages.

Volts	24	42	48	110	115	220	230	240	380	400	415	440
~ 50/60 Hz												

LE2 K B7 D7 E7 F7 - M7 P7 U7 Q7 V7 N7 R7

LE1, LE2 D B7 D7 E7 F7 FE7 M7 P7 U7 Q7 V7 N7 R7

Other voltages: please consult your Regional Sales Office.

(4) Selection according to the number of operating cycles, please consult your Regional Sales Office.

TeSys enclosed starters

D.O.L. starters for motor control (1)

2.2 to 45 kW, without isolating device



LE1 D12...A04



LE1 D12...A05



LE1 D12...A09



LE1 D12...A13



LE1 D12...A35

Description

Standard versions comprise:

- For non-reversing starters:
 - 1 green Start button "I",
 - 1 red Stop/Reset button "O".
- For reversing starters:
 - LE2 K:
 - 1 Start button ↑,
 - 1 Start button ↓,
 - 1 red Stop/Reset button.
 - LE2 D09...D35:
 - 1 2-position spring return selector switch "I"- "II",
 - 1 red Stop/Reset button "O",
 - LE2 D405...D955:
 - 1 blue Reset button "R".

Variants (pre-assembled)

Description	Application	Suffix to be added to the starter reference (2)
No pushbuttons on cover	LE1 D09...D955 LE2 D09...D955	A04
1 green Start button "I" 1 green Start button "II" 1 red Stop/Reset button "O"	LE2 D405...D955	A11
1 blue Reset button "R"	LE1 D09...D955 LE2 K06 and K09 LE2 D09...D35	A05
1 3-position stay put selector switch ("I"- "O"- "II") ("I": Automatic Start; "O": Stop; "II": Manual Start) 1 blue Reset button "R"	LE1 D09...D35	A09
1 2-position stay put selector switch "O"- "I" ("O": Stop; "I": Manual Start) 1 blue Reset button "R"	LE1 D09...D35	A13
1 3-position selector switch "O"- "I" spring return to centre position ("I": Manual start; "O": Stop, stay put) 1 blue Reset button "R"	LE1 D09...D35	A35
1 neutral terminal Fitted as standard on LE1 and LE2 D09 to D35, LE1 and LE2 D405 to D955 starters ordered with 222 V (M7), 230 V (P7) or 240 V (U7) control supply	LE1 D405...D955 LE2 K06 and K09 LE2 D405...D955	A59
Mounting of an LC1 D09 or D12 contactor in an enclosure identical to LE1 D18 (3)	LE1 D09 LE1 D12	T

Accessory (for customer assembly)

Description	Application	Reference	Weight kg
Start pushbutton latching device for stay put operation (Start-Stop)	LE1 D405...D955	LA9 D09907	0.060

(1) See previous page.

(2) Example: **LE1 D09F7A04**.

(3) See dimensions page 2/22.

Other versions

Possible combinations of 2 variants.
Please consult your Regional Sales Office.

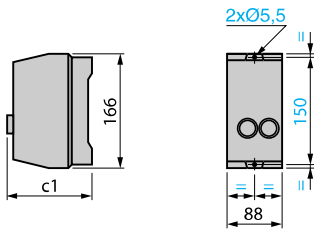
TeSys enclosed starters

D.O.L. starters for motor control
2.2 to 45 kW, without isolating device

2

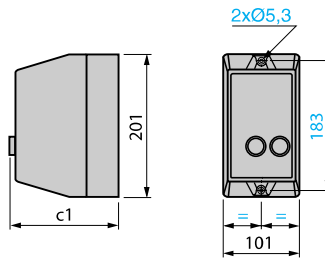
Dimensions

LE1 D09 and D12



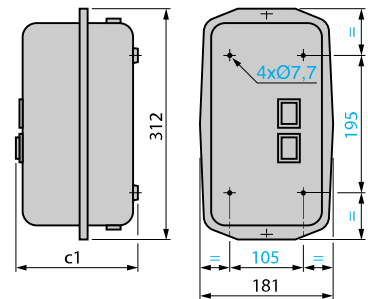
	c1
Standard version	128.5
Variant A04	135
Variant A05	128.5
Variant A09	135
Variant A13	135
Variant A35	135

LE1 D09 and D12●●T LE1 D18...D35 and LE2 D09...D35



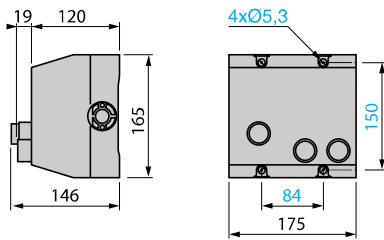
	c1	
	LE1 D	LE2 D
Standard version	153.5	160
Variant A04	145	145
Variant A05	153.5	153.5
Variant A09	160	–
Variant A13	160	–
Variant A35	160	–

LE1 D405...D655

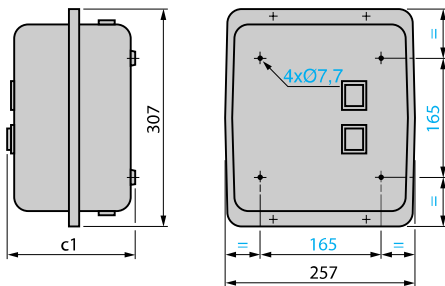


	c1
Standard version	161
Variant A04	150
Variant A05	161

LE2 K06 and K09

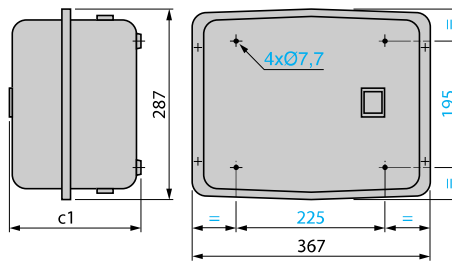


LE1 D805, LE1 D955 and LE2 D405...D655



	c1	
	LE1 D	LE2 D
Standard version	176	176
Variant A04	165	165
Variant A05	176	–
Variant A11	–	176

LE2 D805 and D955



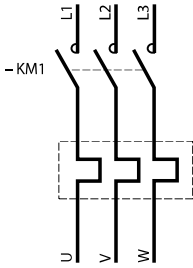
	c1
Standard version	194
Variant A04	190
Variant A05	194

Knock-outs or blanking plugs for cable glands

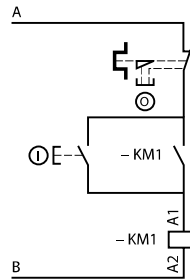
Type of enclosure	At top		At bottom	
	PG	ISO	PG	ISO
LE1 D09 and D12	–	2 x 20	2 x 13 or 2 x 16	2 x 20
LE1 D18...D35 and LE2 D09...D35	–	2 x 20 or 2 x 25	2 x 16 or 2 x 21	2 x 20 or 2 x 25
LE2 D405	1 x 13 and 1 x 21	1 x 20 and 1 x 25	1 x 13 and 2 x 21	1 x 20 and 2 x 25
LE1 D405...D655, LE2 D505 and D655	1 x 13 and 1 x 29	1 x 20 and 1 x 32	1 x 13 and 2 x 29	1 x 20 and 2 x 32
LE1 or LE2 D805 and D955	1 x 13 and 1 x 36	1 x 20 and 1 x 40	1 x 13 and 2 x 36	1 x 20 and 2 x 40
LE2 K	2 x 13 and 2 x 16	4 x 20	2 x 13 and 2 x 16	4 x 20

Schemes

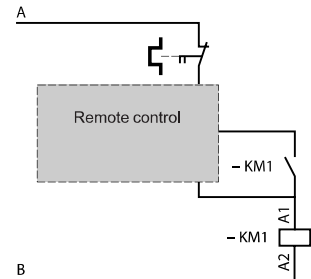
LE1 D09...D955



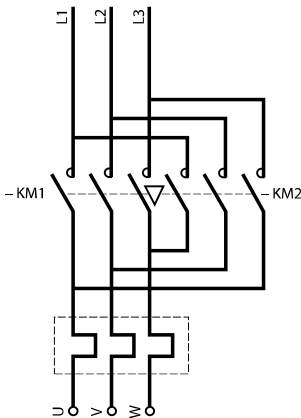
LE1 D09...D955



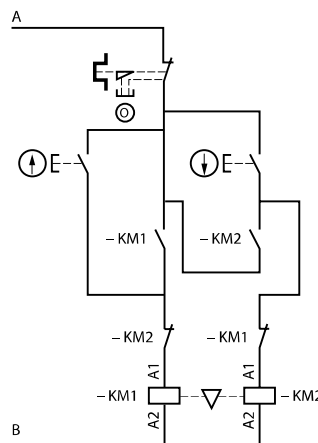
Variant A04 or A05



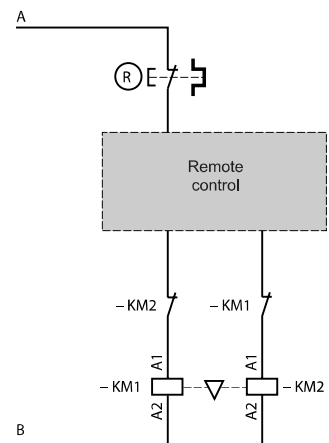
LE2 K06, K09



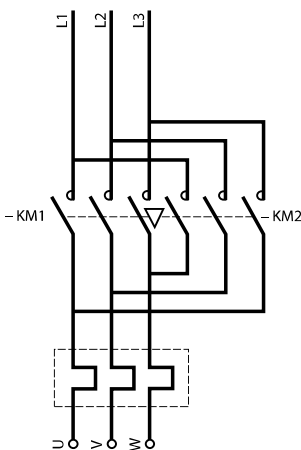
LE2 K06, K09



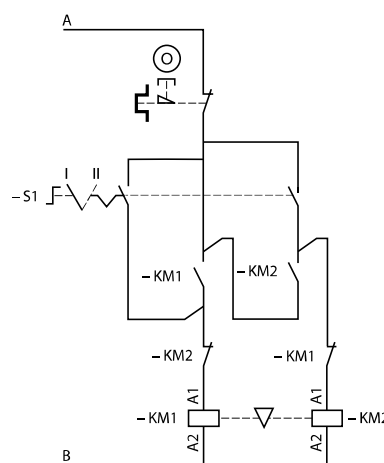
Variant A05



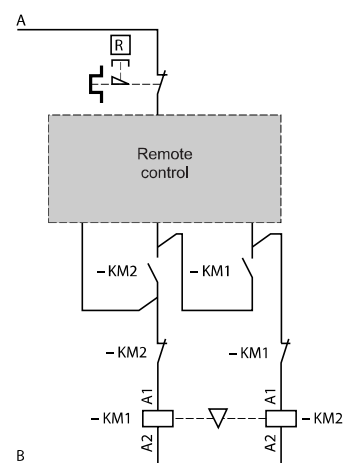
LE2 D09...D955



LE2 D09...D35



LE2 D405...D955, LE2 D09...D955 with variants A04 or A05



Connections

220 V, 230 V, 240 V

LE2 K, LE1 and LE2 D09 and D12
LE1 and LE2 D18...D955

A **B**

L3 Neutral
L3 Neutral terminal

380 V, 400 V, 415 V, 440 V

All products

L3 L1

Other voltages

LE1 and LE2 D09...D35
LE2 K, LE1 and LE2 D405 and D955

Terminal 1 Terminal 2
Direct connection