

# LC1D18M7

contactor TeSys LC1-D - 3 poles - AC-3 440V  
18 A - coil 220 V AC



## Main

Range of product	TeSys D
Product or component type	Contacteur
Device short name	LC1D
Contacteur application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Control circuit type	AC
Coil type	Standard
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	18 A ≤ 60 °C AC AC-3 power circuit 32 A ≤ 60 °C AC AC-1 power circuit
Motor power kW	4 kW 220...240 V AC 50/60 Hz 7,5 kW 380...400 V AC 50/60 Hz 9 kW 415 V AC 50/60 Hz 9 kW 440 V AC 50/60 Hz 10 kW 500 V AC 50/60 Hz 10 kW 660...690 V AC 50/60 Hz
Motor power hp	1 hp 115 V 1P AC 60 Hz UL 1 hp 115 V 1P AC 60 Hz CSA 3 hp 230/240 V 1P AC 60 Hz UL 3 hp 230/240 V 1P AC 60 Hz CSA 5 hp 230/240 V 3P AC 60 Hz CSA 5 hp 230/240 V 3P AC 60 Hz UL 5 hp 200/208 V 3P AC 60 Hz CSA 5 hp 200/208 V 3P AC 60 Hz UL 10 hp 460/480 V 3P AC 60 Hz CSA 10 hp 460/480 V 3P AC 60 Hz UL 15 hp 575/600 V 3P AC 60 Hz CSA 15 hp 575/600 V 3P AC 60 Hz UL
Control circuit voltage	220 V AC 50/60 Hz
Connections - terminals	Screw clamp terminal control circuit 2 1...4 mm <sup>2</sup> solid without Screw clamp terminal control circuit 1 1...4 mm <sup>2</sup> solid without Screw clamp terminal control circuit 2 1...2,5 mm <sup>2</sup> flexible with Screw clamp terminal control circuit 1 1...4 mm <sup>2</sup> flexible with Screw clamp terminal control circuit 2 1...4 mm <sup>2</sup> flexible without Screw clamp terminal control circuit 1 1...4 mm <sup>2</sup> flexible without Screw clamp terminal power circuit 2 1,5...6 mm <sup>2</sup> solid without Screw clamp terminal power circuit 1 1,5...6 mm <sup>2</sup> solid without Screw clamp terminal power circuit 2 1...4 mm <sup>2</sup> flexible with Screw clamp terminal power circuit 1 1...6 mm <sup>2</sup> flexible with Screw clamp terminal power circuit 2 1,5...6 mm <sup>2</sup> flexible without Screw clamp terminal power circuit 1 1,5...6 mm <sup>2</sup> flexible without

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## Complementary

Coil technology	Without built-in bidirectional peak limiting diode suppressor
Protective cover	With
Auxiliary contacts type	Mechanically linked IEC 60947-5-1 1 NO + 1 NC Mirror contact IEC 60947-4-1 1 NC
Auxiliary contact composition	1 NO + 1 NC
Control circuit voltage limits	0.3...0.6 U <sub>c</sub> 60 °C drop-out 50/60 Hz 0.8...1.1 U <sub>c</sub> 60 °C operational 50 Hz 0.85...1.1 U <sub>c</sub> 60 °C operational 60 Hz
[U <sub>i</sub> ] rated insulation voltage	600 V UL power circuit 600 V CSA power circuit 600 V UL control circuit 600 V CSA control circuit 690 V IEC 60947-1 power circuit 690 V IEC 60947-1 control circuit
[U <sub>imp</sub> ] rated impulse withstand voltage	6 kV IEC 60947
Overvoltage category	III
Mounting support	Plate Rail
Flame retardance	V1 UL 94
Tightening torque	1,7 N.m power circuit screw clamp terminal flat Ø 6 mm 1,7 N.m control circuit screw clamp terminal flat Ø 6 mm 1,7 N.m control circuit screw clamp terminal Philips No 2 2 mm 1,7 N.m power circuit screw clamp terminal Philips No 2 2 mm
[U <sub>e</sub> ] rated operational voltage	<= 690 V AC 25...400 Hz power circuit
[I <sub>th</sub> ] conventional free air thermal current	10 A ≤ 60 °C control circuit 32 A ≤ 60 °C power circuit
I <sub>rms</sub> rated making capacity	140 A AC control circuit IEC 60947-5-1 300 A 440 V power circuit IEC 60947
Rated breaking capacity	300 A 440 V power circuit IEC 60947
Permissible short-time rating	40 A ≤ 40 °C 10 min power circuit 84 A ≤ 40 °C 1 min power circuit 100 A 1 s control circuit 120 A 500 ms control circuit 140 A 100 ms control circuit 145 A ≤ 40 °C 10 s power circuit 240 A ≤ 40 °C 1 s power circuit
Associated fuse rating	10 A gG control circuit IEC 60947-5-1 35 A gG <= 690 V type 2 power circuit 50 A gG <= 690 V type 1 power circuit
Average impedance	2,5 mOhm 50 Hz 32 A power circuit
Power dissipation per pole	0,8 W AC-3 2,5 W AC-1
Inrush power in VA	70 VA 20 °C 0,75 50 Hz 70 VA 20 °C 0,75 60 Hz
Hold-in power consumption in VA	7 VA 20 °C 0,3 50 Hz 7,5 VA 20 °C 0,3 60 Hz
Operating time	4...19 ms opening 12...22 ms closing
Mechanical durability	15000000 cycles
Operating rate	3600 cyc/h ≤ 60 °C
Minimum switching current	5 mA control circuit
Minimum switching voltage	17 V control circuit
Non-overlap time	1,5 ms on de-energisation between NC and NO contacts 1,5 ms on energisation between NC and NO contacts
Insulation resistance	> 10 MOhm control circuit
Height	77 mm
Width	45 mm
Depth	86 mm
Product weight	0,33 kg

## Environment

Standards	CSA C22-2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
Product certifications	BV CCC CSA DNV (Det Norske Veritas) GL GOST LROS RINA UL
IP degree of protection	IP2x VDE 0106 IP2x IEC 60529
Protective treatment	TH IEC 60068 3
Ambient air temperature for operation	-5...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C at U <sub>c</sub>
Operating altitude	3000 m without
Fire resistance	850 °C IEC 60695-2-1
Shock resistance	10 gn contactor opened 15 gn contactor closed
Vibration resistance	2 gn contactor opened 5...300 Hz 4 gn contactor closed 5...300 Hz
Heat dissipation	2...3 W 50/60 Hz control circuit
RoHS EUR conformity date	0914
RoHS EUR status	Compliant