

## Product data sheet

## Characteristics

## LC1D18M7

TeSys Deca contactor, 3P(3NO), AC-3/  
AC-3e, ≤440V 18A, 220V AC coil



## Main

Range	TeSys TeSys Deca
Range of product	TeSys D TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-4 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit: ≤ 690 V AC 25...400 Hz Power circuit: ≤ 300 V DC
[Ie] rated operational current	18 A (at <60 °C) at ≤ 440 V AC AC-3 for power circuit 32 A (at <60 °C) at ≤ 440 V AC AC-1 for power circuit 18 A (at <60 °C) at ≤ 440 V AC AC-3e for power circuit

## Complementary

Motor power kW	4 kW at 220...230 V AC 50/60 Hz (AC-3) 7.5 kW at 380...400 V AC 50/60 Hz (AC-3) 9 kW at 415...440 V AC 50/60 Hz (AC-3) 10 kW at 500 V AC 50/60 Hz (AC-3) 10 kW at 660...690 V AC 50/60 Hz (AC-3) 4 kW at 400 V AC 50/60 Hz (AC-4) 4 kW at 220...230 V AC 50/60 Hz (AC-3e) 7.5 kW at 380...400 V AC 50/60 Hz (AC-3e) 9 kW at 415...440 V AC 50/60 Hz (AC-3e) 10 kW at 500 V AC 50/60 Hz (AC-3e) 10 kW at 660...690 V AC 50/60 Hz (AC-3e)
Motor power hp	1 Hp at 115 V AC 50/60 Hz for 1 phase motors 3 Hp at 230/240 V AC 50/60 Hz for 1 phase motors 5 Hp at 200/208 V AC 50/60 Hz for 3 phases motors 5 Hp at 230/240 V AC 50/60 Hz for 3 phases motors 10 Hp at 460/480 V AC 50/60 Hz for 3 phases motors 15 hp at 575/600 V AC 50/60 Hz for 3 phases motors
Pole contact composition	3 NO
Contact compatibility	M2
Protective cover	With
Auxiliary contacts type	Type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 Type mirror contact 1 NC conforming to IEC 60947-4-1
Auxiliary contact composition	1 NO + 1 NC
[Ui] rated insulation voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 32 A (at 60 °C) for power circuit

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 300 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	300 A at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 50 A gG at $\leq 690$ V coordination type 1 for power circuit 35 A gG at $\leq 690$ V coordination type 2 for power circuit
Control circuit type	AC at 50/60 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 U <sub>c</sub> (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 U <sub>c</sub> (-40...60 °C):operational AC 50 Hz 0.85...1.1 U <sub>c</sub> (-40...60 °C):operational AC 60 Hz 1...1.1 U <sub>c</sub> (60...70 °C):operational AC 50/60 Hz
Average impedance	2.5 mOhm - Ith 32 A 50 Hz for power circuit
Power dissipation per pole	2.5 W AC-1 0.8 W AC-3 0.8 W AC-3e
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Non-overlap time	1.5 Ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
Maximum operating rate	3600 cyc/h 60 °C
Inrush power in VA	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	7.5 VA 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
Insulation resistance	> 10 MOhm for signalling circuit
Tightening torque	Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
Mounting support	Plate Rail
Electrical durability	1.65 Mcycles 18 A AC-3 at U <sub>e</sub> $\leq 440$ V 1 Mcycles 32 A AC-1 at U <sub>e</sub> $\leq 440$ V 1.65 Mcycles 18 A AC-3e at U <sub>e</sub> $\leq 440$ V
Mechanical durability	15 Mcycles
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Operating altitude	0...3000 m
Compatibility code	LC1D
Product certifications	GOST UL RINA CCC DNV BV GL CSA LROS (Lloyds register of shipping) UKCA

## Environment

Climatic withstand	Conforming to IACS E10 Conforming to IEC 60947-1 Annex Q category D
Ambient air temperature for storage	-60...80 °C
Fire resistance	850 °C conforming to IEC 60695-2-1
Height	77 mm
Width	45 mm
Depth	86 mm
Net weight	0.33 kg

## Packing Units

Unit Type of Package 1	PCE
Package 1 Length	11.2 cm
Number of Units in Package 1	1
Package 3 Width	60.0 cm
Package 3 Weight	124.976 kg
Package 2 Width	30.0 cm
Package 2 Height	15.0 cm
Package 2 Weight	7.338 kg
Number of Units in Package 3	320
Unit Type of Package 3	P06
Package 3 Height	75.0 cm
Package 3 Length	80.0 cm
Package 1 Width	9.2 cm
Package 1 Height	5.0 cm
Package 1 Weight	352.0 g
Number of Units in Package 2	20
Unit Type of Package 2	S02
Package 2 Length	40.0 cm

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

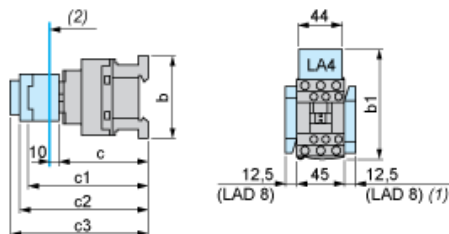
## Contractual warranty

Warranty	18 months
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# Product data sheet

## Dimensions Drawings

### Dimensions



- (1) Including LAD 4BB  
(2) Minimum electrical clearance

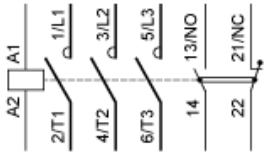
LC1		D09...D18	D093...D123	D099...D129
b	without add-on blocks	77	99	80
b1	with LAD 4BB	94	107	95.5
with LA4 D•2	110 <sup>(1)</sup>	123 <sup>(1)</sup>	111.5 <sup>(1)</sup>	
with LA4 DF, DT	119 <sup>(1)</sup>	132 <sup>(1)</sup>	120.5 <sup>(1)</sup>	
with LA4 DW, DL	126 <sup>(1)</sup>	139 <sup>(1)</sup>	127.5 <sup>(1)</sup>	
c	without cover or add-on blocks	84	84	84
with cover, without add-on blocks	86	86	86	
c1	with LAD N or C (2 or 4 contacts)	117	117	117
c2	with LA6 DK10, LAD 6K10	129	129	129
c3	with LAD T, R, S	137	137	137
with LAD T, R, S and sealing cover	141	141	141	
(1)	Including LAD 4BB.			

# Product data sheet

## Connections and Schema

# LC1D18M7

### Wiring





# ⚠ ⚠ DANGER / 危险

## HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Disconnect all power before servicing equipment.

Failure to follow these instructions will result in death or serious injury.

## 电击、爆炸或弧闪的危险

在此电力设备上工作时, 请先切断所有电源。

不遵循上述规定将可能导致人员伤亡。

# ⚠ ⚠ WARNING / 警告

## RISK OF FIRE OR ELECTRIC SHOCK (FOR CONTACTOR WITH UL HI-FAULT SHORT CIRCUIT CURRENT RATINGS ONLY)

■ The opening of the branch-circuit protective device may be an indication that a fault current has been interrupted.

■ To reduce the risk of fire or electric shock, current-carrying parts and the other components of the controller should be examined and replaced if damaged.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

## 可能有火灾或者触电的危险 (仅限UL高故障短路电流额定值的接触器)

■ 支路保护设备断开, 表明故障电流已被中断。

■ 为降低火灾或触电风险, 应检查带电部件和 其他控制元件, 如有损坏, 需及时更换。

不遵循上述说明可能导致人员伤亡或设备损坏。

"For motor starting use Schneider Electric TeSys Protect - Deca overload relays."

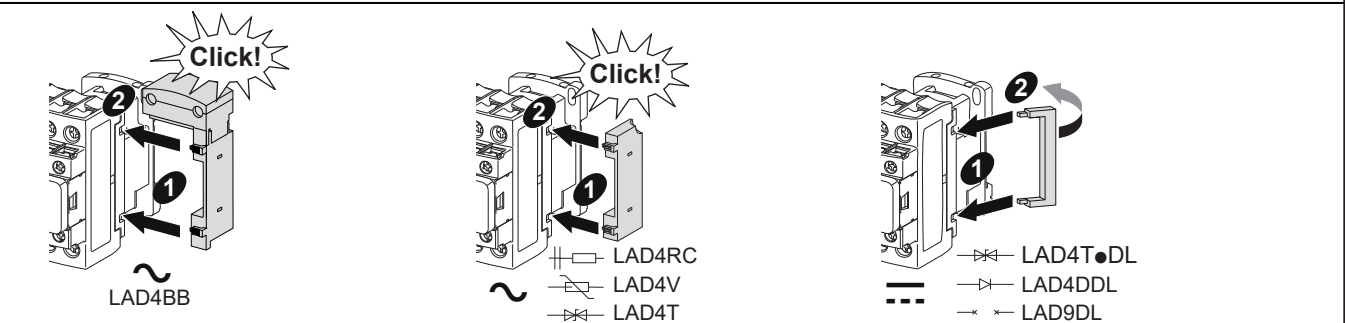
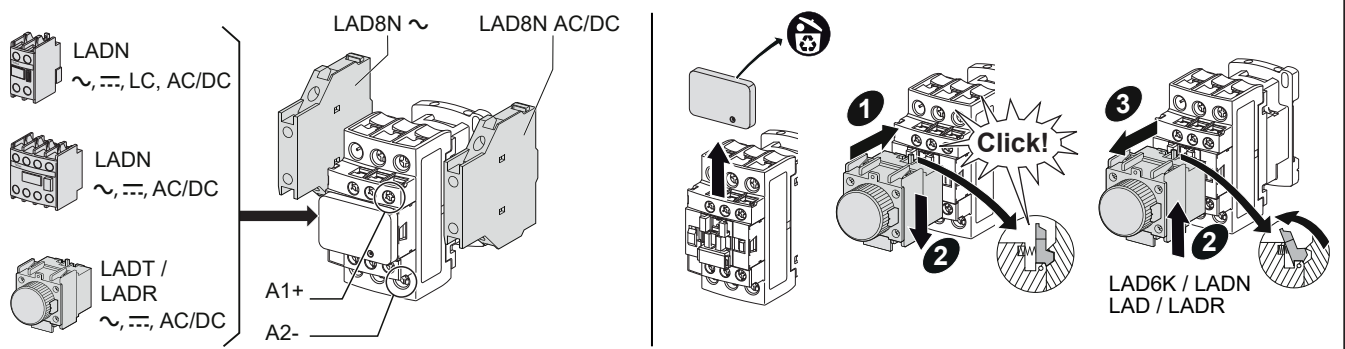
电动机启动请使用施耐德电气TeSys保护Deca系列热过载继电器。

3P AC TeSys Deca contactors are grade 3 (LC1D09 -> LC1D18) and grade 2 (LC1D25 -> LC1D38) according to GB 21518.

Maximum power consumption lower than 9.5 VA.

根据GB 21518标准, 三相TeSys Deca 系列交流接触器能效等级为3级 (LC1D09 -> LC1D18)和2级(LC1D25 -> LC1D38),

产品最大吸持 功率低于9.5 VA



## AC/DC

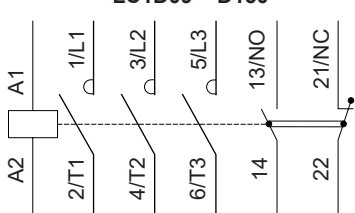
■ use of this product in EMC environment B may require mitigation measures to avoid unwanted disturbance.

■ full open AC at 10%Us.

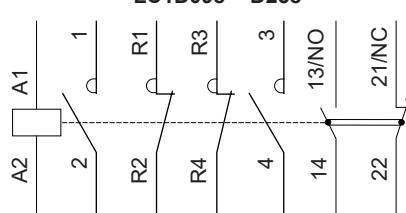
■ 在EMC环境B中使用 此产品可能需要采取缓解 措施以避免不 必要的干扰。

■ 交流情况需在10%Us下完全释放。

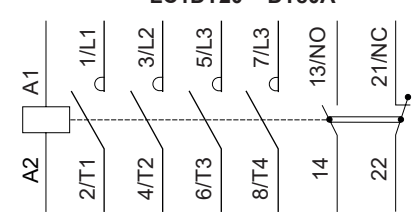
## LC1D09 - D150












## LC1D098 - D258



## LC1DT20 - DT80A



	d					i
mm in.	LC1D09/D12	LC1DT20/DT25/ D098/D128	LC1D18	LC1D25/D32/D38/ T02AN13/T02BN13/ T02CN13	LC1DT32/DT40/ D188/D258	LC1D●●/LA●●/ T02AN13/T02BN13/ T02CN13
	8 mm 5/16"	12 mm 6/13"	8 mm 5/16"	10 mm 3/8"	12 mm 6/13"	8 mm 5/16"
 [mm²]	1...4	1...4	1.5...6	2.5...10	2.5...10	1...4
 [mm²]	1...4	1...4	1.5...6	2.5...10	2.5...10	1...4
 [mm²]	1...4	1...4	1...6	1...10	2.5...10	1...4
 [mm²]	1...2.5	1...2.5	1...4	1.5...6	2.5...10	1...2.5
 [mm²]	1...4	1...4	1.5...6	1.5...10	2.5...16	1...4
 [mm²]	1...4	1...4	1.5...6	2.5...10	2.5...16	1...4
AWG	10-18 Cu 75°C	10-18 Cu 75°C	8-18 Cu 75°C	6-14 Cu 75°C	8-12 Cu 75°C	10-18 Cu 75°C
	6 mm	6 mm	6 mm	6 mm	6 mm	6 mm
 C	1.7 N.m 15 lb-in	1.7 N.m 15 lb-in	1.7 N.m 15 lb-in	2.5 N.m 22 lb-in	1.8 N.m 16 lb-in	1.7 N.m 15 lb-in

UL/CSA Lighting Ratings / UL/CSA 照明电流额定值

Device / 设备	Ballast, 600 V / 镇流器	Tungsten, 480 V / 277 V 钨丝灯
LC1D09	20 A	20 A
LC1D12	25 A	25 A CSA only
LC1D18	32 A	25 A
LC1D25/T02AN13/T02BN13	40 A	40 A
LC1D32 / T02CN13	50 A	50 A
LC1DT20	20 A	20 A
LC1DT25	25 A	25 A CSA only
LC1DT32	32 A	25 A
LC1DT40	40 A	40 A

Only applicable for UL/CSA marked products except DC coil.

**Definite Purpose ratings, 3 Phase, Load wiring: breaking all lines**  
 Hermetic refrigeration compressor  
**特定用途额定值, 3相, 断开所有线路**  
 封闭式制冷压缩机设备

Device / 设备	FLA	LRA		
		240 V	480 V	600 V
LC1D09	9	54	45	36
LC1D12	12	72	60	48
LC1D18	18	108	90	72
LC1D25/T02AN13/T02BN13	25	150	125	100
LC1D32/T02CN13	32	192	160	128

Elevator Duty HP ratings / 电梯专用马力 (HP) 额定值

	One Phase / 单相	Three Phases / 三相			
	230 V	200/208 V	230 V	460 V	575 V
LC1D12	1.5	2	3	7.5	7.5
LC1D18	3	5	5	-	-
LC1D25/ T02AN13/ T02BN13	3	5	7.5	15	20
LC1D32/ T02CN13	5	10	7.5	-	-