

Contactor, TeSys Deca, 3P(3NO), AC-3/3e, <=440V, 18A, 220V AC 50/60Hz coil, screw clamp terminals

LC1D18M7

Main

Range of product	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 25400 Hz Power circuit: <= 300 V DC
[le] 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
[Uc] control circuit voltage	220 V AC 50/60 Hz

Complementary

Motor power kW	4 kW at 220230 V AC 50/60 Hz (AC-3) 7.5 kW at 380400 V AC 50/60 Hz (AC-3) 9 kW at 415440 V AC 50/60 Hz (AC-3) 10 kW at 500 V AC 50/60 Hz (AC-3) 10 kW at 660690 V AC 50/60 Hz (AC-3) 4 kW at 400 V AC 50/60 Hz (AC-4) 4 kW at 220230 V AC 50/60 Hz (AC-3e) 7.5 kW at 380400 V AC 50/60 Hz (AC-3e) 9 kW at 415440 V AC 50/60 Hz (AC-3e)			
	10 kW at 500 V AC 50/60 Hz (AC-3e) 10 kW at 660690 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			
Compatibility code	LC1D			
Pole contact composition	3 NO			
Protective cover	With			
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 32 A (at 60 °C) for power circuit			
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			

[lcw] rated short-time withstand	145 A 40 °C - 10 s for power circuit			
current	240 A 40 °C - 1 s for power circuit			
	40 A 40 °C - 10 min for power circuit			
	84 A 40 °C - 1 min for power circuit			
	100 A - 1 s for signalling circuit			
	120 A - 500 ms for signalling circuit			
	140 A - 100 ms for signalling circuit			
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1			
	50 A gG at <= 690 V coordination type 1 for power circuit			
	35 A gG at <= 690 V coordination type 2 for power circuit			
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			
[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			
Overvoltage category	III			
pollution degree	3			
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947			
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			
Mechanical durability	15 Mcycles			
Electrical durability	1.65 Mcycles 18 A AC-3 at Ue <= 440 V			
	1 Mcycles 32 A AC-1 at Ue <= 440 V			
	1.65 Mcycles 18 A AC-3e at Ue <= 440 V			
Control circuit type	AC at 50/60 Hz standard			
Coil technology	Without built-in suppressor module			
Control circuit voltage limits	0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz			
_	0.81.1 Uc (-4060 °C):operational AC 50 Hz			
	0.851.1 Uc (-4060 °C):operational AC 60 Hz			
	11.1 Uc (6070 °C):operational AC 50/60 Hz			
Inrush power in VA	70 VA 60 Hz cos phi 0.75 (at 20 °C)			
den pener in m	70 VA 50 Hz cos phi 0.75 (at 20 °C)			
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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)			
Heat dissipation	7 VA 50 Hz cos phi 0.3 (at 20 °C) 23 W at 50/60 Hz			
Heat dissipation	23 W at 50/60 Hz			
Heat dissipation	23 W at 50/60 Hz 1222 ms closing			

Connections - terminals	Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible without		
	cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible without		
	cable end		
	Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible with cable end		
	Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with cable end		
	Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without		
	cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without cable end		
	Power circuit: screw clamp terminals 1 1.56 mm² - cable stiffness: flexible without		
	cable end Power circuit: screw clamp terminals 2 1.56 mm² - cable stiffness: flexible without		
	cable end Power circuit: screw clamp terminals 1 16 mm² - cable stiffness: flexible with cable		
	end		
	Power circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible with cable end		
	Power circuit: screw clamp terminals 1 1.56 mm ² - cable stiffness: solid without cable end		
	Power circuit: screw clamp terminals 2 1.56 mm² - cable stiffness: solid without		
	cable end		
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		
Auxiliary contact composition	1 NO + 1 NC		
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		
Signalling circuit frequency	25400 Hz		
Minimum switching voltage	17 V for signalling circuit		
Minimum switching current	5 mA for signalling circuit		
Insulation resistance	> 10 MOhm 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		
Mounting support	Plate Rail		
Environment			
Standards	CSA C22.2 No 14		
	EN 60947-4-1 EN 60947-5-1		
	IEC 60947-4-1		
	IEC 60947-5-1		
	UL 60947-4-1 IEC 60335-1:Clause 30.2		
	IEC 60335-1.Clause 30.2 IEC 60335-2-40:Annex JJ		
	UL 60335-2-40:Annex JJ		
	CSA C22.2 No 60947-4-1		
Product certifications	UL CCC		
	CCC CSA		
	Marine		
	UKCA		
	EAC CB Scheme		
IP degree of protection	IP20 front face conforming to IEC 60529		
Protective treatment	TH conforming to IEC 60068-2-30		
Climatic withstand	conforming to IACS E10 exposure to damp heat		
	conforming to IEC 60947-1 Annex Q category D exposure to damp heat		

conforming to IEC 60947-1 Annex Q category D exposure to damp heat

Permissible ambient air temperature around the device	-4060 °C 6070 °C with derating	
Operating altitude	03000 m	
Fire resistance	850 °C conforming to IEC 60695-2-1	
Flame retardance	V1 conforming to UL 94	
Mechanical robustness	Vibrations contactor open (2 Gn, 5300 Hz) Vibrations contactor closed (4 Gn, 5300 Hz) Shocks contactor open (10 Gn for 11 ms) Shocks contactor closed (15 Gn for 11 ms)	
Height	77 mm	
Width	45 mm	
Depth	86 mm	
Net weight	0.33 kg	

Packing Units

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.000 cm
Package 1 Width	9.200 cm
Package 1 Length	11.200 cm
Package 1 Weight	352.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	20
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	7.415 kg
Unit Type of Package 3	P06
Number of Units in Package 3	320
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	128.420 kg

Contractual warranty

Warranty 18 months



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

☑ Environmental footprint	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	21
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant
REACh Regulation	REACh Declaration
PVC free	Yes

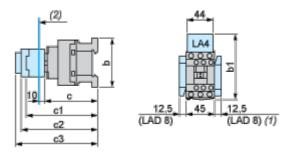
Use Again

○ Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

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Dimensions Drawings

Dimensions



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

LC1		D09D18	D093D123	D099D129
b	without add-on blocks	77	99	80
	with LAD 4BB	94	107	95.5
b1	with LA4 D●2	110 ⁽¹⁾	123 ⁽¹⁾	_{111.5} (1)
	with LA4 DF, DT	119 ⁽¹⁾	132 ⁽¹⁾	_{120.5} (1)
	with LA4 DW, DL	₁₂₆ (1)	139 ⁽¹⁾	_{127.5} (1)
С	without cover or add-on blocks	84	84	84
	with cover, without add-on blocks	86	86	86
с1	with LAD N or C (2 or 4 contacts)	117	117	117
c2	with LA6 DK10, LAD 6K10	129	129	129
с3	with LAD T, R, S	137	137	137
	with LAD T, R, S and sealing cover	141	141	141
(1)	Including LAD 4BB.			

Connections and Schema

Wiring

