

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 18 A - 24 V DC coil

LC1D18BL

Main

Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control
Contactor approacion	Resistive load
Utilisation category	AC-1
	AC-3
	AC-4
	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	24 V DC

Complementary

Joinplan ontary			
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	30 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	DC low consumption		
Coil technology	Built-in bidirectional peak limiting diode suppressor		
Control circuit voltage limits	0.10.3 Uc (-4070 °C):drop-out DC		
	0.81.25 Uc (-4060 °C):operational DC		
	11.25 Uc (6070 °C):operational DC		
Inrush power in W	2.4 W (at 20 °C)		
Hold-in power consumption in W	2.4 W at 20 °C		
Operating time	77 ±15 % ms closing		
	25 ±20 % ms opening		
Time constant	40 ms		
Maximum operating rate	3600 cyc/h at 60 °C		
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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 mm² - cable stiffness: solid without cable end		
	Power circuit: screw clamp terminals 2 1.56 mm ² - 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		
Auxiliary contact composition	Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 1 NO + 1 NC		
Auxiliary contacts type			
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		
nsulation 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			
Environment Standards	CSA C22.2 No 14		
	EN 60947-4-1		
	EN 60947-5-1 IEC 60947-4-1		
	IEC 60947-4-1 IEC 60947-5-1		
	UL 60947-4-1		
	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		
	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

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	95 mm		
Net weight	0.49 kg		

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.100 cm
Package 1 Width	8.700 cm
Package 1 Length	10.500 cm
Package 1 Weight	530.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	8.284 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)	22
Environmental Disclosure	Product Environmental Profile

Use Better

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	50ae7612-fd2e-41e4-a369-50d0dea6e592
PVC free	Yes

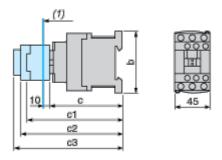
Use Again

○ Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No

LC1D18BL

Dimensions Drawings

Dimensions



(1) Minimum electrical clearance

LC1		D09D18	D093D123	D099D129
b		77	99	80
	without cover or add-on blocks	93	93	93
С	with cover, without add-on blocks	95	95	95
с1	with LAD N or C (2 or 4 contacts)	126	126	126
c2	with LA6 DK10	138	138	138
23	with LAD T, R, S	146	146	146
с3	with LAD T, R, S and sealing cover	150	150	150

Connections and Schema

Wiring

