

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 80 A - 24 V DC standard coil

Local distributor code: 381820938

LC1D80BD

EAN Code: 3389110439977

Main

Range	TeSys
Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-3e AC-4 AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 300 V DC 25400 Hz Power circuit: <= 690 V AC
[le] rated operational current	125 A (at <60 °C) at <= 1000 V AC AC-1 for power circuit 80 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 80 A (at <60 °C) at <= 440 V AC-3e for power circuit
[Uc] control circuit voltage	24 V DC

Complementary

Motor power kW	22 kW at 220230 V AC 50 Hz (AC-3) 37 kW at 380400 V AC 50 Hz (AC-3) 45 kW at 415440 V AC 50 Hz (AC-3) 55 kW at 500 V AC 50 Hz (AC-3) 45 kW at 660690 V AC 50 Hz (AC-3) 15 kW at 400 V AC 50 Hz (AC-4) 22 kW at 220230 V AC 50 Hz (AC-3e) 37 kW at 380400 V AC 50 Hz (AC-3e) 45 kW at 415440 V AC 50 Hz (AC-3e) 45 kW at 500 V AC 50 Hz (AC-3e) 45 kW at 660690 V AC 50 Hz (AC-3e)
Motor power hp	7.5 hp at 120 V AC 50/60 Hz for 1 phase motors 15 hp at 230/240 V AC 50/60 Hz for 1 phase motors 30 hp at 200/208 V AC 50/60 Hz for 3 phases motors 30 hp at 230/240 V AC 50/60 Hz for 3 phases motors 60 hp at 460/480 V AC 50/60 Hz for 3 phases motors 60 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 125 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 1100 A at 440 V for power circuit conforming to IEC 60947

Rated breaking capacity	1100 A at 440 V for power circuit conforming to IEC 60947
[lcw] rated short-time withstand	640 A 40 °C - 10 s for power circuit
current	990 A 40 °C - 10 s for power circuit
	135 A 40 °C - 10 min for power circuit
	320 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 oG for cignalling circuit conforming to IEC 60047 5.1
Associated luse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 200 A gG at <= 690 V coordination type 1 for power circuit
	160 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	0.8 mOhm - Ith 125 A 50 Hz for power circuit
Power dissipation per pole	5.1 W AC-3
	12.5 W AC-1 5.1 W AC-3e
FIRE makes the second s	
[Ui] rated insulation voltage	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified
	Power circuit: 1000 V conforming to IEC 60947-4-1
	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	8 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	4 Mcycles
Electrical durability	0.8 Mcycles 125 A AC-1 at Ue <= 440 V
	1.5 Moycles 80 A AC-3 at Ue <= 440 V 1.5 Moycles 80 A AC-3e at Ue <= 440 V
Control circuit type	DC standard
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.10.3 Uc (-4070 °C):drop-out DC
	0.851.1 Uc (-4055 °C):operational DC
	11.1 Uc (5570 °C):operational DC
Inrush power in W	22 W (at 20 °C)
Hold-in power consumption in W	22 W at 20 °C
Operating time	95130 ms closing
	2035 ms opening
Time constant	75 ms
Maximum operating rate	3600 cyc/h at 60 °C
Connections - terminals	Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with
	cable end Control circuit: screw clamp terminals 1 12.5 mm² - cable stiffness: flexible with
	cable end
	Control circuit: screw clamp terminals 1 14 mm ² - 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: solid without
	Control circuit: screw clamp terminals 1 14 mm cable stiffness: solid without cable end
	Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without
	cable end
	Power circuit: connector 1 450 mm² - cable stiffness: flexible without cable end
	Power circuit: connector 2 425 mm² - cable stiffness: flexible without cable end Power circuit: connector 1 450 mm² - cable stiffness: flexible with cable end
	Power circuit: connector 2 416 mm² - cable stiffness: flexible with cable end
	Power circuit: connector 1 450 mm² - cable stiffness: solid without cable end
	Power circuit: connector 2 425 mm² - cable stiffness: solid without cable end

Tightening torque	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 12 N.m - on connector - with screwdriver flat Ø 6 to Ø 8 mm Power circuit: 12 N.m - on connector hexagonal screw head 4 mm Control circuit: 1.2 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 5098	
Product certifications	CCC UL CB Scheme CSA CE UKCA Marine EAC	
P 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	
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) Shocks contactor open (8 Gn for 11 ms) Vibrations contactor closed (3 Gn, 5300 Hz) Shocks contactor closed (10 Gn for 11 ms)	
Height	127 mm	
Width	85 mm	
Depth	186 mm	
Depth Net weight	186 mm 2.59 kg	

Number of Units in Package 1

Package 1 Height	11.000 cm
Package 1 Width	16.200 cm
Package 1 Length	22.000 cm
Package 1 Weight	2.585 kg
Unit Type of Package 2	S02
Number of Units in Package 2	2
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	5.466 kg
Unit Type of Package 3	P06
Number of Units in Package 3	32
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	97.700 kg

Logistical informations

Country of origin C

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	
Total lifecycle Carbon footprint	176
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
PVC free	Yes

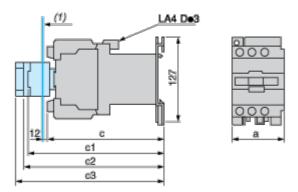
Use Again

○ Repack and remanufacture		
End of life manual availability	No need of specific recycling operations	
Take-back	No	
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	

LC1D80BD

Dimensions Drawings

Dimensions

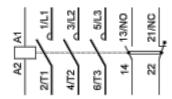


(1) Minimum electrical clearance

LC1		D80 and D95
а		85
b1	with LAD 4BB3	_
D1	with LA4 DF, DT	_
	without cover or add-on blocks	181
С	with cover, without add-on blocks	186
с1	with LAD N (1 contact)	204
CI	with LAD N or C (2 or 4 contacts)	210
c2	with LA6 DK10	221
сЗ	with LAD T, R, S	229
Co	with LAD T, R, S and sealing cover	233

Connections and Schema

Wiring



Product datasheet

LC1D80BD

Image of product / Alternate images

Alternative



LC1D80BD

Technical Illustration

Assembly's dimensions

