# Product datasheet Characteristics

## LC1D12ED

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 12 A - 48 V DC coil



Price\*: 61.87 GBP



#### Main

TeSys
TeSys D
Contactor
LC1D
Motor control Resistive load
AC-1 AC-3 AC-4
3P
3 NO
<= 300 V DC for power circuit <= 690 V AC 25400 Hz for power circuit
12 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit 25 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit
7.5 kW at 500 V AC 50/60 Hz AC-3 7.5 kW at 660690 V AC 50/60 Hz AC-3 5.5 kW at 380400 V AC 50/60 Hz AC-3 5.5 kW at 415440 V AC 50/60 Hz AC-3 3 kW at 220230 V AC 50/60 Hz AC-3 3.7 kW at 400 V AC 50/60 Hz AC-4
2 hp at 230/240 V AC 50/60 Hz for 1 phase motors 3 hp at 200/208 V AC 50/60 Hz for 3 phases motors 3 hp at 230/240 V AC 50/60 Hz for 3 phases motors 7.5 hp at 460/480 V AC 50/60 Hz for 3 phases motors 10 hp at 575/600 V AC 50/60 Hz for 3 phases motors 0.5 hp at 115 V AC 50/60 Hz for 1 phase motors
DC standard
48 V DC
1 NO + 1 NC
6 kV conforming to IEC 60947

Overvoltage category	
[Ith] conventional free air thermal	25 A at <= 60 °C for power circuit
current	10 A at <= 60 °C for signalling circuit
Irms rated making capacity	250 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	250 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	105 A <= 40 °C 10 s power circuit 210 A <= 40 °C 1 s power circuit 30 A <= 40 °C 10 min power circuit 61 A <= 40 °C 1 min power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit
Associated fuse rating	25 A gG at <= 690 V coordination type 2 for power circuit 40 A gG at <= 690 V coordination type 1 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	2.5 mOhm at 50 Hz - Ith 25 A for power circuit
[Ui] rated insulation voltage	600 V for power circuit certifications CSA 600 V for power circuit certifications UL 690 V for power circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-1 600 V for signalling circuit certifications CSA 600 V for signalling circuit certifications UL
Electrical durability	2 Mcycles 12 A AC-3 at Ue <= 440 V 0.8 Mcycles 25 A AC-1 at Ue <= 440 V
Power dissipation per pole	0.36 W AC-3 1.56 W AC-1
Protective cover	With
Mounting support	Plate Rail
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 GL GOST LROS (Lloyds register of shipping) RINA UL
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 12.5 mm² - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 2 cable(s) 14 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
Operating time	53.5572.45 ms closing 1624 ms opening

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
Operating rate	3600 cyc/h at <= 60 °C

### Complementary

With integral suppression device	
0.10.25 Uc drop-out at 60 °C, DC 0.71.25 Uc operational at 60 °C, DC	
28 ms	
5.4 W at 20 °C	
5.4 W at 20 °C	
Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1  Type mirror contact (1 NC) conforming to IEC 60947-4-1	
25400 Hz	
5 mA for signalling circuit	
17 V for signalling circuit	
<ul><li>1.5 ms on energisation between NC and NO contact</li><li>1.5 ms on de-energisation between NC and NO contact</li></ul>	
> 10 MOhm for signalling circuit	
	0.10.25 Uc drop-out at 60 °C, DC 0.71.25 Uc operational at 60 °C, DC  28 ms 5.4 W at 20 °C 5.4 W at 20 °C  Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1 Type mirror contact (1 NC) conforming to IEC 60947-4-1  25400 Hz 5 mA for signalling circuit  1.5 ms on energisation between NC and NO contact 1.5 ms on de-energisation between NC and NO contact

### Environment

IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-560 °C
Ambient air temperature for storage	-6080 °C
Permissible ambient air temperature around the device	-4070 °C at Uc
Operating altitude	3000 m without derating in temperature
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
Product weight	0.485 kg

## Offer Sustainability

Sustainable offer status	Green Premium product	
RoHS (date code: YYWW)	Compliant - since 0627 - Schneider Electric declaration of conformity	
	Schneider Electric declaration of conformity	
REACh	Reference not containing SVHC above the threshold	
	Reference not containing SVHC above the threshold	
Product environmental profile	Available	
	Product environmental	
Product end of life instructions	Available	
	End of life manual	

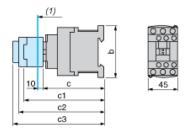
Warranty period

18 months

# Product datasheet Dimensions Drawings

## LC1D12ED

### **Dimensions**



### (1) Minimum electrical clearance

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LC1		D09D18	D093D123	D099D129
b		77	99	80
С	without cover or add-on blocks	93	93	93
with cover, without add-on blocks	95	95	95	
c1	with LAD N or C (2 or 4 contacts)	126	126	126
c2	with LA6 DK10	138	138	138
с3	with LAD T, R, S	146	146	146
with LAD T, R, S and sealing cover	150	150	150	

# Product datasheet Connections and Schema

## LC1D12ED

## Wiring

