# Product datasheet Characteristics

# LC1DT32BL

TeSys D contactor - 4P(4 NO) - AC-1 - <= 440 V 32 A - 24 V DC low cons coil



#### Main

Main		
Range of product	TeSys D	
Range	TeSys	
Product name	TeSys D	
Product or component type	Contactor	;
Device short name	LC1D	
Contactor application	Resistive load	
Utilisation category	AC-1	
Poles description	4P	
Pole contact composition	4 NO	
[Ue] rated operational voltage	<= 300 V DC for power circuit <= 690 V AC 25400 Hz for power circuit	
[le] rated operational current	32 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit	
Control circuit type	DC low consumption	
Control circuit voltage	24 V DC	
Auxiliary contact composition	1 NO + 1 NC	
[Uimp] rated impulse withstand voltage	Conforming to IEC 60947	,
Overvoltage category	III	
[lth] conventional free air thermal current	32 A at <= 60 °C for power circuit 10 A at <= 60 °C for signalling circuit	
Irms rated making capacity	300 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	300 A at 440 V for power circuit conforming to IEC 60947	
[lcw] rated short-time withstand current	145 A <= 40 °C 10 s power circuit 240 A <= 40 °C 1 s power circuit 40 A <= 40 °C 10 min power circuit 84 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	35 A gG at <= 690 V coordination type 2 for power circuit	

	50 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 32 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	1 Mcycles 32 A AC-1 at Ue <= 440 V	
Power dissipation per pole	2.5 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	GL LROS GOST BV DNV RINA UL CSA CCC	
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 12.5 mm² - cable stiffness: flexible - with 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 Control circuit: connector 1 cable(s) 2.510 mm² - cable stiffness: flexible - without cable end Power circuit: connector 2 cable(s) 2.510 mm² - cable stiffness: flexible - without cable end Power circuit: connector 1 cable(s) 2.510 mm² - cable stiffness: flexible - with cable end Power circuit: connector 2 cable(s) 2.510 mm² - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 2.510 mm² - cable stiffness: solid - without cable end Power circuit: connector 1 cable(s) 2.510 mm² - cable stiffness: flexible - with cable end Power circuit: connector 2 cable(s) 2.510 mm² - cable stiffness: solid - without cable end Power circuit: connector 2 cable(s) 2.510 mm² - cable stiffness: solid - without cable end Power circuit: connector 2 cable(s) 2.510 mm² - cable stiffness: solid - without cable end	
Tightening torque	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 Power circuit: 1.7 N.m - on connector - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on connector - with screwdriver Philips No 2	
Operating time	65.4588.55 ms closing 2030 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 Coil technology Control circuit voltage limits	Built-in bidirectional peak limiting diode suppressor  0.10.3 Uc drop-out at 60 °C, DC  0.81.25 Uc operational at 60 °C, DC	
Time constant	40 ms	
Inrush power in W	2.4 W at 20 °C	
Hold-in power consumption in W	2.4 W at 20 °C	
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 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)
Insulation resistance	> 10 MOhm for signalling circuit

### Environment

IP degree of protection	IP2x 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 closed 15 Gn for 11 ms Shocks contactor open 8 Gn for 11 ms
Height	91 mm
Width	45 mm
Depth	107 mm
Product weight	0.425 kg

## Offer Sustainability

Sustainable offer status	Green Premium product	
RoHS (date code: YYWW)	Compliant - since 0721 - 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	

#### Contractual warranty

Warranty period	18 months