# Product datasheet Characteristics

# LC1DT32BD

TeSys D contactor - 4P(4 NO) - AC-1 - <= 440 V 32 A - 24 V DC standard 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 standard	
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	Rail Plate	
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 CCC BV UL CSA LROS DNV GOST RINA	
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 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: 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 - with cable end Power circuit: connector 1 cable(s) 2.510 mm² - cable stiffness: flexible - with cable end	
Tightening torque	Power circuit: connector 1 cable(s) 2.516 mm² - cable stiffness: solid - without cable end Power circuit: connector 2 cable(s) 2.516 mm² - cable stiffness: solid - without cable end  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	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 Coil technology Control circuit voltage limits	Built-in bidirectional peak limiting diode suppressor  0.10.25 Uc drop-out at 60 °C, DC  0.71.25 Uc operational at 60 °C, DC	
Time constant	28 ms	
Inrush power in W	5.4 W at 20 °C	
Hold-in power consumption in W	5.4 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

Green Premium product	
Compliant - since 0709 - Schneider Electric declaration of conformity	
Schneider Electric declaration of conformity	
Reference not containing SVHC above the threshold	
Reference not containing SVHC above the threshold	
Available	
Product environmental	
Available	
☑ End of life manual	
	Compliant - since 0709 - Schneider Electric declaration of conformity  Schneider Electric declaration of conformity  Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold  Available  Product environmental  Available

#### Contractual warranty

Warranty period	18 months