# **Product datasheet**

Specifications





## TeSys; TeSys Deca, Contactor, 4P(4 NO) , AC-1 , <= 440V, 32A , 48V DC low cons coil

LC1DT32EL

- Discontinued on: 1 Jan 2008
- (!) End-of-service on: 10 Oct 2020

#### Main

Range	TeSys	
Range Of Product	TeSys Deca	
Product Or Component Type	Contactor	
Device Short Name	LC1D	
Contactor Application	Resistive load	
Utilisation Category	AC-1 AC-3 AC-3e AC-4	
Poles Description	4P	
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC	
[le] Rated Operational Current	32 A (at <60 °C) at <= 440 V AC AC-1 for power circuit	
[Uc] Control Circuit Voltage	48 V DC	

### Complementary

Compatibility Code	LC1D
Pole Contact Composition	4 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
[Icw] Rated Short-Time Withstand Current	40 A 40 °C - 10 min for power circuit 84 A 40 °C - 1 min for power circuit 145 A 40 °C - 10 s for power circuit 240 A 40 °C - 1 s 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

[Ui] Rated Insulation Voltage	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 Power circuit: 690 V conforming to IEC 60947-4-1	
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 Mcycles 32 A AC-1 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 60 °C	
<b>Connections - Terminals</b>	Control circuit: screw clamp terminals 2 12.5 mm <sup>2</sup> - cable stiffness: flexible with	
	cable end Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.516 mm <sup>2</sup> - cable stiffness: solid without cable end	
Tightening Torque	Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 2.516 mm <sup>2</sup> - cable stiffness: solid without cable end	
Tightening Torque	Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.516 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.516 mm <sup>2</sup> - cable stiffness: solid without cable end Power 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 Power circuit: 1.8 N.m - on screw clamp terminals - with screwdriver Philips No 2	
	Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.516 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.516 mm <sup>2</sup> - cable stiffness: solid without cable end Power 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 Philips No 2 Power circuit: 1.8 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 1.8 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 1.8 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 1.8 N.m - on screw clamps terminals - with screwdriver Philips No 2 Power circuit: 1.8 N.m - on screw clamps terminals - with screwdriver Philips No 2 Power circuit: 1.8 N.m - on screw clamps terminals - with screwdriver Philips No 2	
Auxiliary Contact Composition	Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.516 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.516 mm <sup>2</sup> - cable stiffness: solid without cable end Power 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 Philips No 2 Power circuit: 1.8 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 1.8 N.m - on screw clamp terminals - with screwdriver philips No 2 Power circuit: 1.8 N.m - on screw clamp terminals - with screwdriver philips No 2 Power circuit: 1.8 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 1.8 N.m - on screw clamp terminals - with screwdriver philips No 2 Power circuit: 1.8 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 1.8 N.m - on scr	

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

LINIOIIIIeill		
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	CCC GL BV CSA GOST UL DNV LROS (Lloyds register of shipping) RINA	
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 closed (15 Gn for 11 ms) Shocks contactor open (8 Gn for 11 ms)	
Height	91 mm	
Width	45 mm	
Depth	107 mm	
Net Weight	0.425 kg	

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	9.08 cm
Package 1 Width	4.5 cm
Package 1 Length	9.95 cm
Package 1 Weight	435 g

### **Contractual warranty**

Warranty

18 months

# Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



RoHS/REACh

#### Well-being performance

Reach Free Of Svhc
Toxic Heavy Metal Free
Mercury Free
Rohs Exemption Information Yes
Pvc Free

### **Certifications & Standards**

Eu Rohs Directive	Compliant
	EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
	Pro-active China RoHS declaration (out of China RoHS legal scope)
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins