

# Product data sheet

Specifications



IEC contactor, TeSys Deca, nonreversing, 20A resistive, 4 pole, 4 NO, low consumption 24VDC coil, open style

LC1DT20BL

Product availability: Stock - Normally stocked in distribution facility

Price\*: 159.60 USD

## Main

Range	TeSys TeSys Deca
Range of Product	TeSys Deca
Product or Component Type	Contactors
Device short name	LC1D
contactor application	Resistive load
Utilisation category	AC-1
poles description	4P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz Power circuit <= 300 V DC
[Ie] rated operational current	20 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	24 V DC

## Complementary

Compatibility code	LC1D
Pole contact composition	4 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for signalling circuit 20 A (at 140 °F (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 60947-5-1 250 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	250 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	30 A 104 °F (40 °C) - 10 min for power circuit 61 A 104 °F (40 °C) - 1 min for power circuit 105 A 104 °F (40 °C) - 10 s for power circuit 210 A 104 °F (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 25 A gG at <= 690 V coordination type 1 for power circuit 20 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2.5 mOhm - Ith 20 A 50 Hz for power circuit
Power dissipation per pole	1.56 W AC-1

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

<b>[Ui] rated insulation voltage</b>	Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL Power circuit 690 V IEC 60947-4-1
<b>Overvoltage category</b>	III
<b>Pollution degree</b>	3
<b>[Uimp] rated impulse withstand voltage</b>	6 kV IEC 60947
<b>Safety reliability level</b>	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
<b>Mechanical durability</b>	30 Mcycles
<b>Control circuit type</b>	DC low consumption
<b>Coil technology</b>	Built-in bidirectional peak limiting diode suppressor
<b>Control circuit voltage limits</b>	0.1...0.3 U <sub>c</sub> -40...158 °F (-40...70 °C) drop-out DC 0.8...1.25 U <sub>c</sub> -40...140 °F (-40...60 °C) operational DC 1...1.25 U <sub>c</sub> 140...158 °F (60...70 °C) operational DC
<b>Inrush power in W</b>	2.4 W 68 °F (20 °C))
<b>Hold-in power consumption in W</b>	2.4 W 68 °F (20 °C)
<b>Operating time</b>	77 ±15 % ms closing 25 ±20 % ms opening
<b>Time constant</b>	40 ms
<b>Maximum operating rate</b>	3600 cyc/h 140 °F (60 °C)
<b>Maximum operating rate</b>	3600 cyc/h at 60 °C
<b>Connections - terminals</b>	Control circuit: screw clamp terminals 2 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid without cable end
<b>Tightening torque</b>	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2
<b>Auxiliary contact composition</b>	1 NO + 1 NC
<b>Auxiliary contacts type</b>	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
<b>Signalling circuit frequency</b>	25...400 Hz
<b>Minimum switching voltage</b>	17 V for signalling circuit

<b>Minimum switching current</b>	5 mA for signalling circuit
<b>Insulation resistance</b>	> 10 MOhm for signalling circuit
<b>Non-overlap time</b>	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
<b>Mounting Support</b>	Rail Plate

## Environment

<b>Standards</b>	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 IEC 60335-1
<b>Product Certifications</b>	DNV GL CCC LROS (Lloyds register of shipping) RINA BV GOST UL CSA CB
<b>IP degree of protection</b>	IP20 front face IEC 60529
<b>Protective treatment</b>	THIEC 60068-2-30
<b>Climatic withstand</b>	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat
<b>Permissible ambient air temperature around the device</b>	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
<b>Operating altitude</b>	0...9842.52 ft (0...3000 m)
<b>Fire resistance</b>	1562 °F (850 °C) IEC 60695-2-1
<b>Flame retardance</b>	V1 conforming to UL 94
<b>Mechanical robustness</b>	Vibrations contactor open 2 Gn, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz) Shocks contactor closed 15 Gn for 11 ms) Shocks contactor open 10 Gn for 11 ms)
<b>Height</b>	3.3 in (85 mm)
<b>Width</b>	1.8 in (45 mm)
<b>Depth</b>	3.9 in (99 mm)
<b>Net Weight</b>	0.805 lb(US) (0.365 kg)

## Ordering and shipping details

<b>Category</b>	US10I1222354
<b>Discount Schedule</b>	0112
<b>GTIN</b>	3389110248296
<b>Returnability</b>	Yes
<b>Country of origin</b>	ID

## Packing Units

<b>Unit Type of Package 1</b>	PCE
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<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	2.2 in (5.5 cm)
<b>Package 1 Width</b>	3.7 in (9.5 cm)
<b>Package 1 Length</b>	4.7 in (12.0 cm)
<b>Package 1 Weight</b>	19.5 oz (554.0 g)

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## **Contractual warranty**

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<b>Warranty</b>	18 months
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class 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 >](#)



Transparency RoHS/REACH

## Well-being performance

✓ Toxic Heavy Metal Free

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

✓ Pvc Free

## Certifications & Standards

**Reach Regulation** [REACH Declaration](#)

**Eu Rohs Directive** Compliant with Exemptions

**China Rohs Regulation** [China RoHS declaration](#)  
Product out of China RoHS scope. Substance declaration for your information.

**Environmental Disclosure** [Product Environmental Profile](#)

**Circularity Profile** [End of Life Information](#)

**California Proposition 65** WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Image of product / Alternate images

Alternative

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