

# Product data sheet

Specifications



IEC contactor, TeSys Deca, nonreversing, 20A resistive, 4 pole, 2 NO and 2 NC, low consumption 24VDC coil, open style

LC1D098BL

Product availability: Stock - Normally stocked in distribution facility

**Price\*: 165.60 USD**

## Main

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 25...400 Hz Power circuit <= 250 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	2 NO + 2 NC
Protective Cover	With
[Ith] Conventional Free Air Thermal Current	20 A (at 140 °F (60 °C)) for power circuit 10 A (at 140 °F (60 °C)) for signalling circuit
Irms Rated Making Capacity	250 A at 440 V for power circuit conforming to IEC 60947-1 140 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 104 °F (40 °C) - 10 s for power circuit 210 A 104 °F (40 °C) - 1 s for power circuit 30 A 104 °F (40 °C) - 10 min for power circuit 61 A 104 °F (40 °C) - 1 min 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 25 A 50 Hz for power circuit

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

<b>Power Dissipation Per Pole</b>	1.56 W AC-1
<b>[Ui] Rated Insulation Voltage</b>	Power circuit 690 V IEC 60947-4-1 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
<b>Overvoltage Category</b>	III
<b>Pollution Degree</b>	3
<b>[Uiimp] 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>Electrical Durability</b>	0.3 Mcycles 20 A AC-1 <= 690 V
<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 Uc -40...140 °F (-40...60 °C) drop-out DC 0.8...1.25 Uc -40...140 °F (-40...60 °C) operational DC 1...1.25 Uc 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>Connections - Terminals</b>	Power circuit: screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid without cable end
<b>Tightening Torque</b>	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 flat Ø 6 mm Control 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 MΩ 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 60947-4-1 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 60947-5-1 UL 60947-4-1 CSA C22.2 No 60947-5-1 GB/T 14048.4
<b>Product Certifications</b>	UL CCC CSA UKCA EAC CB EU-RO-MR by DNV-GL
<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 open 10 Gn for 11 ms) Shocks contactor closed 15 Gn for 11 ms)
<b>Height</b>	3.35 in (85 mm)
<b>Width</b>	1.77 in (45 mm)
<b>Depth</b>	3.90 in (99 mm)
<b>Net Weight</b>	1.16 lb(US) (0.525 kg)

## Ordering and shipping details

<b>Category</b>	US10I1222354
<b>Discount Schedule</b>	0I12
<b>Gtin</b>	3389110447095
<b>Returnability</b>	No
<b>Country Of Origin</b>	US

## Packing Units

<b>Unit Type Of Package 1</b>	PCE
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Number Of Units In Package 1	1
Package 1 Height	2.17 in (5.500 cm)
Package 1 Width	3.74 in (9.500 cm)
Package 1 Length	4.72 in (12.000 cm)
Package 1 Weight	19.51 oz (553.000 g)
Unit Type Of Package 2	S02
Number Of Units In Package 2	16
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	20.75 lb(US) (9.410 kg)

## Contractual warranty

Warranty	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](#)