

# Product data sheet

Specifications



Contactor, TeSys Deca, 4P(4 NO),  
AC-1, 0 to 440V, 80A, 72V DC  
standard coil

LC1DT80A3SD

⚠ Discontinued on: Jan 23, 2021

⚠ Discontinued

## Main

Range	TeSys TeSys Deca
Range Of Product	TeSys Deca
Product Or Component Type	Contactor
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	80 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
[Uc] Control Circuit Voltage	72 V DC

## Complementary

Compatibility Code	LC1D
Pole Contact Composition	4 NO
Contact Compatibility	M7
Protective Cover	With
[Ith] Conventional Free Air Thermal Current	10 A (at 140 °F (60 °C)) for signalling circuit 80 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 1000 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	1000 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	520 A 104 °F (40 °C) - 10 s for power circuit 900 A 104 °F (40 °C) - 1 s for power circuit 110 A 104 °F (40 °C) - 10 min for power circuit 260 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 60947-5-1 125 A gG at <= 690 V coordination type 1 for power circuit 125 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	1.6 mOhm - Ith 80 A 50 Hz for power circuit
Power Dissipation Per Pole	10.2 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.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

<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>	10 Mcycles
<b>Electrical Durability</b>	0.5 Mcycles 80 A AC-1 <= 440 V
<b>Control Circuit Type</b>	DC standard
<b>Coil Technology</b>	Built-in bidirectional peak limiting diode suppressor
<b>Control Circuit Voltage Limits</b>	0.1...0.3 Uc -40...158 °F (-40...70 °C) drop-out DC 0.75...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>	19 W 68 °F (20 °C))
<b>Hold-In Power Consumption In W</b>	7.4 W 68 °F (20 °C)
<b>Operating Time</b>	42.5...57.5 ms closing 16...24 ms opening
<b>Time Constant</b>	34 ms
<b>Maximum Operating Rate</b>	3600 cyc/h 140 °F (60 °C)
<b>Connections - Terminals</b>	Power circuit: EverLink BTR screw connectors 1 0.00...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Power circuit: EverLink BTR screw connectors 2 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Power circuit: EverLink BTR screw connectors 1 0.00...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Power circuit: EverLink BTR screw connectors 2 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Power circuit: EverLink BTR screw connectors 1 0.00...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) - cable stiffness: solid without cable end Power circuit: EverLink BTR screw connectors 2 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) - cable stiffness: solid without cable end Control circuit: spring terminals 1 0.00 in <sup>2</sup> (2.5 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Control circuit: spring terminals 2 0.00 in <sup>2</sup> (2.5 mm <sup>2</sup> ) - cable stiffness: flexible without cable end
<b>Tightening Torque</b>	Power circuit 70.81 lbf.in (8 N.m) EverLink BTR screw connectors 0.04...0.05 in <sup>2</sup> (25...35 mm <sup>2</sup> ) hexagonal 0.16 in (4 mm) Power circuit 44.25 lbf.in (5 N.m) EverLink BTR screw connectors 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) hexagonal 0.16 in (4 mm) Control circuit 15.05 lbf.in (1.7 N.m) EverLink BTR screw connectors pozidriv No 2 Power circuit 22.13 lbf.in (2.5 N.m) EverLink BTR screw connectors 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

Mounting Support	Plate
	Rail

## Environment

Standards	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
Product Certifications	RINA BV LROS (Lloyds register of shipping) UL GOST DNV CCC GL CSA
Ip Degree Of Protection	IP20 front face IEC 60529
Protective Treatment	THIEC 60068-2-30
Climatic Withstand	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat
Permissible Ambient Air Temperature Around The Device	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
Operating Altitude	0...9842.52 ft (0...3000 m)
Fire Resistance	1562 °F (850 °C) IEC 60695-2-1
Flame Retardance	V1 conforming to UL 94
Mechanical Robustness	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)
Height	4.80 in (122 mm)
Width	2.76 in (70 mm)
Depth	4.72 in (120 mm)
Net Weight	2.70 lb(US) (1.225 kg)

## Ordering and shipping details

Category	22358-CTR, TESYS D, OPEN, 40-65A DC
Discount Schedule	I12
Gtin	3389118330627
Returnability	No
Country Of Origin	FR

## Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	2.95 in (7.5 cm)
Package 1 Width	5.51 in (14 cm)
Package 1 Length	5.91 in (15 cm)

Package 1 Weight	2.43 lb(US) (1.1 kg)
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## 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 >](#)

## Well-being performance

 Reach Free Of Svhc	
 Toxic Heavy Metal Free	
 Mercury Free	
 Rohs Exemption Information	<a href="#">Yes</a>
 Pvc Free	
<b>Eu Rohs Directive</b>	Compliant <a href="#">EU RoHS Declaration</a>
<b>China Rohs Regulation</b>	<a href="#">China RoHS declaration</a> Pro-active China RoHS declaration (out of China RoHS legal scope)
<b>Weee</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
<b>California Proposition 65</b>	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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>