

# Product datasheet

Specifications



## TeSys D contactor - 4P(4 NO) - AC-1 - <= 440 V 60 A - 110 V DC standard coil

LC1DT60AFD

### Main

Range	TeSys TeSys Deca
Range Of Product	TeSys Deca
Product Or Component Type	Contactors
Device Short Name	LC1D
Contactors 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	60 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
[Uc] Control Circuit Voltage	110 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 60 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 60947-5-1 800 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	800 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	320 A 40 °C - 10 s for power circuit 720 A 40 °C - 1 s for power circuit 72 A 40 °C - 10 min for power circuit 165 A 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 80 A gG at <= 690 V coordination type 1 for power circuit 80 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	1.6 mOhm - Ith 60 A 50 Hz for power circuit
Power Dissipation Per Pole	5.8 W AC-1

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 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
<b>Overvoltage Category</b>	III
<b>Pollution Degree</b>	3
<b>[Uimp] Rated Impulse Withstand Voltage</b>	6 kV conforming to IEC 60947
<b>Safety Reliability Level</b>	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
<b>Mechanical Durability</b>	10 Mcycles
<b>Electrical Durability</b>	0.7 Mcycles 60 A AC-1 at Ue <= 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 U <sub>c</sub> (-40...70 °C):drop-out DC 0.75...1.25 U <sub>c</sub> (-40...60 °C):operational DC 1...1.25 U <sub>c</sub> (60...70 °C):operational DC
<b>Inrush Power In W</b>	19 W (at 20 °C)
<b>Hold-In Power Consumption In W</b>	7.4 W at 20 °C
<b>Operating Time</b>	50 ±15 % ms closing 16...24 ms opening
<b>Time Constant</b>	34 ms
<b>Maximum Operating Rate</b>	3600 cyc/h 60 °C
<b>Connections - Terminals</b>	Control circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminal 1 1...35 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminal 2 1...25 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminal 1 1...35 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminal 2 1...25 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminal 1 1...35 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminal 2 1...25 mm <sup>2</sup> - cable stiffness: solid without cable end
<b>Tightening Torque</b>	Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver Philips No 2 Power circuit: 8 N.m - on EverLink BTR screw connectors - cable 25...35 mm <sup>2</sup> hexagonal screw head 4 mm Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 1...25 mm <sup>2</sup> hexagonal screw head 4 mm Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver pozidriv No 2 Power circuit: 2.5 N.m - on EverLink BTR screw connectors - with screwdriver pozidriv No 2
<b>Auxiliary Contact Composition</b>	1 NO + 1 NC

<b>Auxiliary Contacts Type</b>	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to 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>	RINA BV CSA CCC UL GOST GL LROS (Lloyds register of shipping) DNV
<b>Ip Degree Of Protection</b>	IP20 front face conforming to IEC 60529
<b>Protective Treatment</b>	TH conforming to IEC 60068-2-30
<b>Climatic Withstand</b>	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
<b>Permissible Ambient Air Temperature Around The Device</b>	-40...60 °C 60...70 °C with derating
<b>Operating Altitude</b>	0...3000 m
<b>Fire Resistance</b>	850 °C conforming to 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>	122 mm
<b>Width</b>	70 mm
<b>Depth</b>	120 mm
<b>Net Weight</b>	1.165 kg

## Packing Units

<b>Unit Type Of Package 1</b>	PCE
<b>Number Of Units In Package 1</b>	1
<b>Package 1 Height</b>	7.5 cm
<b>Package 1 Width</b>	14.0 cm
<b>Package 1 Length</b>	15.0 cm

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Package 1 Weight 1.1 kg

## Contractual warranty

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Warranty 18 months

## 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

Reach Free Of Svhc

Mercury Free

Rohs Exemption Information Yes

Pvc Free

## Certifications & Standards

**Reach Regulation**

[REACH Declaration](#)

**Eu Rohs Directive**

Compliant

[EU RoHS Declaration](#)

**China Rohs Regulation**

[China RoHS declaration](#)

Pro-active China RoHS declaration (out of China RoHS legal scope)

**Environmental Disclosure**

[Product Environmental Profile](#)

**Weee**

The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

**Circularity Profile**

[End of Life Information](#)