

# Product datasheet

کلیک کنید

Specifications



## TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 40 A - 110 V DC standard coil

LC1D40AFD



### Main

Range	TeSys TeSys Deca
Range Of Product	TeSys Deca
Product Or Component Type	Contacteur
Device Short Name	LC1D
Contacteur Application	Motor control Resistive load
Utilisation Category	AC-3 AC-4 AC-1
Poles Description	3P
[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 40 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
[Uc] Control Circuit Voltage	110 V DC

### Complementary

Motor Power Kw	18.5 kW at 380...400 V AC 50/60 Hz (AC-3) 11 kW at 220...230 V AC 50/60 Hz (AC-3) 22 kW at 415...440 V AC 50/60 Hz (AC-3) 22 kW at 500 V AC 50/60 Hz (AC-3) 30 kW at 660...690 V AC 50/60 Hz (AC-3) 9 kW at 400 V AC 50/60 Hz (AC-4)
Motor Power Hp	5 hp at 230/240 V AC 50/60 Hz for 1 phase motors 10 hp at 230/240 V AC 50/60 Hz for 3 phases motors 30 hp at 575/600 V AC 50/60 Hz for 3 phases motors 10 hp at 200/208 V AC 50/60 Hz for 3 phases motors 3 hp at 115 V AC 50/60 Hz for 1 phase motors 30 hp at 460/480 V AC 50/60 Hz for 3 phases motors
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Contact Compatibility	M4
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

<b>Rated Breaking Capacity</b>	800 A at 440 V for power circuit conforming to IEC 60947
<b>[Icw] Rated Short-Time Withstand Current</b>	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
<b>Associated Fuse Rating</b>	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
<b>Average Impedance</b>	1.5 mOhm - Ith 60 A 50 Hz for power circuit
<b>Power Dissipation Per Pole</b>	2.4 W AC-3 5.4 W AC-1
<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 1.5 Mcycles 40 A AC-3 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 Uc (-40...70 °C):drop-out DC 0.75...1.25 Uc (-40...60 °C):operational DC 1...1.25 Uc (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 20 ±20 % 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: EverLink BTR screw connectors 1 1...35 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Power circuit: EverLink BTR screw connectors 2 1...25 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Power circuit: EverLink BTR screw connectors 1 1...35 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Power circuit: EverLink BTR screw connectors 2 1...25 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Power circuit: EverLink BTR screw connectors 1 1...35 mm <sup>2</sup> - cable stiffness: solid without cable end
	Power circuit: EverLink BTR screw connectors 2 1...25 mm <sup>2</sup> - cable stiffness: solid without cable end

<b>Tightening Torque</b>	Control 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
	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 screw clamp terminals - with screwdriver pozidriv No 2
Power circuit: 2.5 N.m - on screw clamp terminals - 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>	Plate
	Rail

## 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>	UL
	CCC
	CSA
	GOST

<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>	55 mm
<b>Depth</b>	120 mm
<b>Net Weight</b>	0.925 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>	6.2 cm
<b>Package 1 Width</b>	13.7 cm
<b>Package 1 Length</b>	15.2 cm
<b>Package 1 Weight</b>	994.0 g
<b>Unit Type Of Package 2</b>	S02
<b>Number Of Units In Package 2</b>	10
<b>Package 2 Height</b>	15 cm
<b>Package 2 Width</b>	30 cm
<b>Package 2 Length</b>	40 cm
<b>Package 2 Weight</b>	10.281 kg

## Contractual warranty

<b>Warranty</b>	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

✓ Toxic Heavy Metal Free

✓ 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