

# Product datasheet

Specifications



Contactor, TeSys Deca,  
3P(3NO),AC-3/AC-3e/ $\leq$ 440V  
50A,220V AC 50/60Hz coil, screw  
clamp terminals

LC1D50M7

## Main

Range	TeSys
Range Of Product	TeSys Deca
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Motor control Resistive load
Utilisation Category	AC-4 AC-3 AC-1 AC-2 AC-3e
Poles Description	3P
[Ue] Rated Operational Voltage	Power circuit: $\leq$ 690 V AC 25...400 Hz
[Ie] Rated Operational Current	50 A (at $\leq$ 60 °C) at $\leq$ 440 V AC AC-3 for power circuit 80 A (at $\leq$ 60 °C) at $\leq$ 440 V AC AC-1 for power circuit 50 A (at $\leq$ 60 °C) at $\leq$ 440 V AC AC-3e for power circuit
[Uc] Control Circuit Voltage	220 V AC 50/60 Hz

## Complementary

Motor Power Kw	22 kW at 380...400 V AC 50 Hz (AC-3) 25 kW at 415 V AC 50 Hz (AC-3) 30 kW at 440 V AC 50 Hz (AC-3) 30 kW at 500 V AC 50 Hz (AC-3) 33 kW at 660...690 V AC 50 Hz (AC-3) 15 kW at 220...230 V AC 50 Hz (AC-3) 11 kW at 400 V AC 50 Hz (AC-4) 30 kW at 1000 V AC 50 Hz (AC-3) 22 kW at 380...400 V AC 50 Hz (AC-3e) 25 kW at 415 V AC 50 Hz (AC-3e) 30 kW at 440 V AC 50 Hz (AC-3e) 30 kW at 500 V AC 50 Hz (AC-3e) 33 kW at 660...690 V AC 50 Hz (AC-3e) 15 kW at 220...230 V AC 50 Hz (AC-3e) 30 kW at 1000 V AC 50 Hz (AC-3e)
Motor Power Hp	3 hp at 115 V AC 60 Hz for 1 phase motors 7.5 hp at 230/240 V AC 60 Hz for 1 phase motors 15 hp at 200/208 V AC 60 Hz for 3 phases motors 15 hp at 230/240 V AC 60 Hz for 3 phases motors 40 hp at 460/480 V AC 60 Hz for 3 phases motors 40 hp at 575/600 V AC 60 Hz for 3 phases motors
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Protective Cover	With

<b>[Ith] Conventional Free Air Thermal Current</b>	10 A (at 60 °C) for control circuit 80 A (at 60 °C) for power circuit
<b>Irms Rated Making Capacity</b>	900 A at 440 V for power circuit conforming to IEC 60947 140 A AC for control circuit conforming to IEC 60947-5-1
<b>Rated Breaking Capacity</b>	900 A at 440 V for power circuit conforming to IEC 60947
<b>Associated Fuse Rating</b>	10 A gG for control circuit conforming to IEC 60947-5-1 100 A gG at ≤ 690 V coordination type 1 for power circuit 100 A gG at ≤ 690 V coordination type 2 for power circuit
<b>Power Dissipation Per Pole</b>	3.7 W AC-3 9.6 W AC-1 3.7 W AC-3e
<b>[Ui] Rated Insulation Voltage</b>	Control circuit: 600 V CSA certified Control circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Control circuit: 690 V conforming to IEC 60947-1 Power circuit: 690 V conforming to IEC 60947-1
<b>Overvoltage Category</b>	III
<b>[Uimp] Rated Impulse Withstand Voltage</b>	8 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>	6000000 cycles
<b>Control Circuit Type</b>	AC at 50/60 Hz
<b>Coil Technology</b>	Without built-in bidirectional peak limiting diode suppressor
<b>Control Circuit Voltage Limits</b>	0.3...0.6 U <sub>c</sub> (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 U <sub>c</sub> (-40...60 °C):operational AC 50 Hz 0.85...1.1 U <sub>c</sub> (-40...60 °C):operational AC 60 Hz 1...1.1 U <sub>c</sub> (60...70 °C):operational AC 50/60 Hz
<b>Inrush Power In Va</b>	140 VA cos phi 0.75 (at 20 °C) 160 VA cos phi 0.75 (at 20 °C)
<b>Hold-In Power Consumption In Va</b>	13 VA 60 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 20 °C)
<b>Heat Dissipation</b>	4...5 W at 50/60 Hz for control circuit
<b>Operating Time</b>	4...19 ms opening 12...26 ms closing
<b>Maximum Operating Rate</b>	3600 cyc/h 60 °C
<b>Connections - Terminals</b>	Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: rigid Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: rigid 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...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw terminals 1 2.5...25 mm <sup>2</sup> - cable stiffness: rigid Power circuit: screw terminals 2 2.5...16 mm <sup>2</sup> - cable stiffness: rigid Power circuit: screw terminals 1 2.5...25 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw terminals 2 2.5...16 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw terminals 1 2.5...25 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw terminals 2 2.5...10 mm <sup>2</sup> - cable stiffness: flexible with cable end
<b>Tightening Torque</b>	Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 5 N.m - on screw terminal - with screwdriver flat Ø 6 to Ø 8 mm Control circuit: 1.7 N.m - on screw clamp terminal - 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>Terminals Description Iso N°1</b>	(21-22)NC (13-14)NO (A1-A2)CO
<b>Minimum Switching Voltage</b>	17 V for control circuit
<b>Minimum Switching Current</b>	5 mA for control circuit
<b>Insulation Resistance</b>	> 10 MOhm for control circuit
<b>Non-Overlap Time</b>	1.5 ms on de-energisation between NC and NO contacts 1.5 ms on energisation between NC and NO contacts
<b>Mounting Support</b>	Rail Plate

## Environment

<b>Standards</b>	UL 508 IEC 60947-5-1 EN 60947-4-1 IEC 60947-4-1 EN 60947-5-1 CSA C22.2 No 14
<b>Product Certifications</b>	UL BV GL RINA CSA LROS (Lloyds register of shipping) GOST DNV CCC UKCA
<b>Ip Degree Of Protection</b>	IP2X conforming to IEC 60529 IP2X conforming to VDE 0106
<b>Climatic Withstand</b>	conforming to IACS E10 exposure to damp heat
<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>	Shocks contactor opened (10 Gn for 11 ms) Shocks contactor closed (15 Gn for 11 ms) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz)
<b>Height</b>	127 mm
<b>Width</b>	75 mm
<b>Depth</b>	119 mm
<b>Net Weight</b>	1.4 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>	9.4 cm
<b>Package 1 Width</b>	14.0 cm
<b>Package 1 Length</b>	13.2 cm
<b>Package 1 Weight</b>	1.446 kg

<b>Unit Type Of Package 2</b>	S02
<b>Number Of Units In Package 2</b>	5
<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>	7.502 kg

## **Contractual warranty**

<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

✓ 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** No need of specific recycling operations