

# Product data sheet

Specifications



Contacteur, TeSys Deca, 3P(3NO),  
AC-3, <=440V, 150A , 24V AC  
50/60Hz coil, srew clamp terminals

LC1D1505B7

⚠ Discontinued on: Jan 18, 2021

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## Main

Range	TeSys
Range of product	TeSys Deca
Product or component type	Contacteur
Device short name	LC1D
Contacteur application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 1000 V AC 25...400 Hz Power circuit <= 300 V DC
[Ie] rated operational current	200 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 150 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit
[Uc] control circuit voltage	24 V AC 50/60 Hz

## Complementary

Motor power kW	40 kW at 220...230 V AC 50/60 Hz 75 kW at 380...400 V AC 50/60 Hz 80 kW at 415...440 V AC 50/60 Hz 90 kW at 500 V AC 50/60 Hz 100 kW at 660...690 V AC 50/60 Hz 75 kW at 1000 V AC 50/60 Hz
Motor power hp	40 hp at 200/208 V AC 50/60 Hz for 3 phases motors 50 hp at 230/240 V AC 50/60 Hz for 3 phases motors 100 hp at 460/480 V AC 50/60 Hz for 3 phases motors 125 hp at 575/600 V AC 50/60 Hz for 3 phases motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	Without
[Ith] conventional free air thermal current	200 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 1660 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1400 A at 440 V for power circuit conforming to IEC 60947

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>[Icw] rated short-time withstand current</b>	250 A 104 °F (40 °C) - 10 min for power circuit 580 A 104 °F (40 °C) - 1 min for power circuit 1200 A 104 °F (40 °C) - 10 s for power circuit 1400 A 104 °F (40 °C) - 1 s 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 60947-5-1 315 A gG at ≤ 690 V coordination type 1 for power circuit 250 A gG at ≤ 690 V coordination type 2 for power circuit
<b>Average impedance</b>	0.6 mOhm - lth 200 A 50 Hz for power circuit
<b>Power dissipation per pole</b>	24 W AC-1 13.5 W AC-3
<b>[U<sub>i</sub>] rated insulation voltage</b>	Power circuit 600 V CSA Power circuit 600 V UL Power circuit 1000 V IEC 60947-4-1 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>[U<sub>imp</sub>] rated impulse withstand voltage</b>	8 kV IEC 60947
<b>Safety reliability level</b>	B10d = 684932 cycles contactor with nominal load EN/ISO 13849-1 B10d = 10000000 cycles contactor with mechanical load EN/ISO 13849-1
<b>Mechanical durability</b>	8 Mcycles
<b>Electrical durability</b>	0.85 Mcycles 150 A AC-3 ≤ 440 V 1 Mcycles 200 A AC-1 ≤ 440 V
<b>Control circuit type</b>	AC 50/60 Hz
<b>Coil technology</b>	Built-in bidirectional peak limiting diode suppressor
<b>Control circuit voltage limits</b>	0.3...0.5 U <sub>c</sub> (-40...158 °F (-40...70 °C)):drop-out AC 50/60 Hz 0.8...1.15 U <sub>c</sub> (-40...131 °F (-40...55 °C)):operational AC 50/60 Hz 1...1.15 U <sub>c</sub> (131...158 °F (55...70 °C)):operational AC 50/60 Hz
<b>Inrush power in VA</b>	280...350 VA 60 Hz cos phi 0.9 (at 68 °F (20 °C)) 280...350 VA 50 Hz cos phi 0.9 (at 68 °F (20 °C))
<b>Hold-in power consumption in VA</b>	2...18 VA 60 Hz cos phi 0.9 (at 68 °F (20 °C)) 2...18 VA 50 Hz cos phi 0.9 (at 68 °F (20 °C))
<b>Heat dissipation</b>	3...4.5 W at 50/60 Hz
<b>Operating time</b>	20...35 ms closing 40...75 ms opening
<b>Maximum operating rate</b>	1200 cyc/h at 60 °C

<b>Connections - terminals</b>	Control circuit: screw clamp terminals 2 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: solid without cable end Power circuit: connector 1 0.02...0.2 in <sup>2</sup> (10...120 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Power circuit: connector 2 0.02...0.08 in <sup>2</sup> (10...50 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Power circuit: connector 1 0.02...0.2 in <sup>2</sup> (10...120 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Power circuit: connector 2 0.02...0.08 in <sup>2</sup> (10...50 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Power circuit: connector 1 0.02...0.2 in <sup>2</sup> (10...120 mm <sup>2</sup> ) - cable stiffness: solid without cable end Power circuit: connector 2 0.02...0.08 in <sup>2</sup> (10...50 mm <sup>2</sup> ) - cable stiffness: solid without cable end
<b>Tightening torque</b>	Control circuit 10.6 lbf.in (1.2 N.m) screw clamp terminals flat Ø 6 mm Control circuit 10.6 lbf.in (1.2 N.m) screw clamp terminals Philips No 2 Power circuit 106.2 lbf.in (12 N.m) connector hexagonal 0.2 in (4 mm)
<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
<b>Mounting support</b>	Plate Rail

## Environment

<b>Standards</b>	CSA C22.2 No 14 EN 60947-4-1 IEC 60947-4-1 IEC 60335-1:Clause 30.2 IEC 60335-2-40:Annex JJ UL 60335-2-40:Annex JJ UL 60947-4-1 CSA C22.2 No 60947-4-1 JIS C8201-4-1
<b>Product certifications</b>	UL CCC CSA CE UKCA Marine EAC
<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
<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...3000 m

<b>Fire resistance</b>	1562 °F (850 °C) IEC 60695-2-1
<b>Flame retardance</b>	V1 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 6 Gn for 11 ms)
<b>Height</b>	6.2 in (158 mm)
<b>Width</b>	4.7 in (120 mm)
<b>Depth</b>	5.2 in (132 mm)
<b>Net weight</b>	5.5 lb(US) (2.5 kg)

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1

## Contractual warranty

<b>Warranty (in months)</b>	18
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## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Use Longer



#### Lifetime extension

Repair

No

### Use Again



#### Repack and remanufacture

WEEE Label



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