

# Product data sheet

Specifications



## Contacteur, TeSys Deca, 3P(3NO),AC-3/AC-3e/<=440V 50A, 120V AC 60Hz coil, screw clamp terminals

LC1D50G6

### 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-3 AC-1 AC-4 AC-2 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	80 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 50 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 50 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	120 V AC 60 Hz

### Complementary

Motor power kW	22 kW at 380...400 V AC 50/60 Hz 25 kW at 415 V AC 50/60 Hz 30 kW at 440 V AC 50/60 Hz 30 kW at 500 V AC 50/60 Hz 33 kW at 660...690 V AC 50/60 Hz 15 kW at 220...230 V AC 50/60 Hz
Motor power hp	3 hp at 115 V AC 60 Hz for 1 phase motors conforming to CSA 3 hp at 115 V AC 60 Hz for 1 phase motors conforming to UL 15 hp at 200/208 V AC 60 Hz for 3 phases motors conforming to CSA 15 hp at 200/208 V AC 60 Hz for 3 phases motors conforming to UL 15 hp at 230/240 V AC 60 Hz for 3 phases motors conforming to CSA 15 hp at 230/240 V AC 60 Hz for 3 phases motors conforming to UL 40 hp at 460/480 V AC 60 Hz for 3 phases motors conforming to CSA 40 hp at 460/480 V AC 60 Hz for 3 phases motors conforming to UL 40 hp at 575/600 V AC 60 Hz for 3 phases motors conforming to CSA 40 hp at 575/600 V AC 60 Hz for 3 phases motors conforming to UL 7.5 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to CSA 7.5 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to UL
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 60 °C) for control circuit 80 A (at 60 °C) for power circuit
Irms rated making capacity	140 A AC for control circuit conforming to IEC 60947-5-1 900 A at 440 V for power circuit conforming to IEC 60947

<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>Average impedance</b>	1.5 mOhm - lth 80 A 50 Hz 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>	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>	6000000 cycles
<b>Control circuit type</b>	AC at 60 Hz
<b>Coil technology</b>	Without built-in bidirectional peak limiting diode suppressor
<b>Control circuit voltage limits</b>	0.85...1.1 Uc (60 °C):operational AC 60 Hz 0.3...0.6 Uc (60 °C):drop-out AC 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 50 Hz cos phi 0.3 (at 20 °C) 15 VA 60 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>	12...26 ms closing 4...19 ms opening
<b>Maximum operating rate</b>	3600 cyc/h at 60 °C
<b>Connections - terminals</b>	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 Control circuit: screw clamp terminals 1 1...2.5 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...2.5 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 2 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: connector 1 2.5...35 mm <sup>2</sup> - cable stiffness: solid with cable end Power circuit: connector 2 2.5...35 mm <sup>2</sup> - cable stiffness: solid with cable end Power circuit: connector 1 2.5...35 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: connector 2 2.5...25 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: connector 1 2.5...35 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: connector 2 2.5...35 mm <sup>2</sup> - cable stiffness: flexible with cable end
<b>Tightening torque</b>	Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 8 mm Control circuit: 1.2 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 mirror contact 1 NC conforming to IEC 60947-4-1 type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1
<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>	EN 60947-4-1 UL 60947-4-1 IEC 60947-4-1 CSA C22.2 No 14 EN 60947-5-1 IEC 60947-5-1
<b>Product certifications</b>	CCC RINA DNV BV LROS (pending) GOST CSA UL GL 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>Permissible ambient air temperature around the device</b>	-5...60 °C -40...70 °C at U <sub>c</sub>
<b>Operating altitude</b>	3000 m without derating
<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>	122 mm
<b>Width</b>	55 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>	14.000 cm
<b>Package 1 Width</b>	9.600 cm
<b>Package 1 Length</b>	13.200 cm
<b>Package 1 Weight</b>	1.448 kg
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	5
<b>Package 2 Height</b>	15.000 cm

---

Package 2 Width	30.000 cm
-----------------	-----------

---

Package 2 Length	40.000 cm
------------------	-----------

---

Package 2 Weight	7.610 kg
------------------	----------

## Contractual warranty

---

Warranty	18 months
----------	-----------



## 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 >](#)

### Environmental footprint

Total lifecycle Carbon footprint	74
----------------------------------	----

## Use Better

### Materials and Substances

Packaging made with recycled cardboard	Yes
--	-----

Packaging without single use plastic	Yes
--------------------------------------	-----

<a href="#">EU RoHS Directive</a>	Compliant
-----------------------------------	-----------

REACH Regulation	<a href="#">REACH Declaration</a>
------------------	-----------------------------------

California proposition 65	<b>WARNING: This product can expose you to chemicals including: Antimony oxide &amp; 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></b>
---------------------------	--

PVC free	Yes
----------	-----

## Use Again

### Repack and remanufacture

End of life manual availability	No need of specific recycling operations
---------------------------------	--

Take-back	No
-----------	----

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

Technical Illustration

Assembly's dimensions

---

