

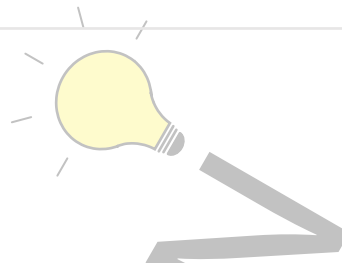
# Product data sheet

Specifications



## CONTACTOR 600VAC 50AMP IEC +OPTIONS

LC1D50M7



### Main

<b>Range of product</b>	TeSys D TeSys Deca
<b>Range</b>	TeSys
<b>Product or component type</b>	Contacteur
<b>Device short name</b>	LC1D
<b>Contacteur application</b>	Motor control Resistive load
<b>Utilisation category</b>	AC-4 AC-3 AC-1 AC-2 AC-3e
<b>Control circuit type</b>	AC at 50/60 Hz
<b>Poles description</b>	3P
<b>Pole contact composition</b>	3 NO
<b>[Ie] rated operational current</b>	50 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 80 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 50 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
<b>Motor power kW</b>	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)
<b>Complementary</b>	
<b>Coil technology</b>	Without built-in bidirectional peak limiting diode suppressor
<b>Front cover</b>	With
<b>Motor power hp</b>	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
<b>Auxiliary contacts type</b>	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1

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

type mirror contact 1 NC conforming to IEC 60947-4-1

<b>Auxiliary contact composition</b>	1 NO + 1 NC
<b>[Uc] control circuit voltage</b>	220 V AC 50/60 Hz
<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>[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>[Uimp] rated impulse withstand voltage</b>	8 kV conforming to IEC 60947
<b>Overvoltage category</b>	III
<b>Mounting support</b>	Rail Plate
<b>Connections - terminals</b>	Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> rigid Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> rigid Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end Power circuit: screw terminals 1 cable(s) 2.5...25 mm <sup>2</sup> rigid Power circuit: screw terminals 2 cable(s) 2.5...16 mm <sup>2</sup> rigid Power circuit: screw terminals 1 cable(s) 2.5...25 mm <sup>2</sup> flexible without cable end Power circuit: screw terminals 2 cable(s) 2.5...16 mm <sup>2</sup> flexible without cable end Power circuit: screw terminals 1 cable(s) 2.5...25 mm <sup>2</sup> flexible with cable end Power circuit: screw terminals 2 cable(s) 2.5...10 mm <sup>2</sup> 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>[Ue] rated operational voltage</b>	Power circuit: ≤ 690 V AC 25...400 Hz
<b>[I<sub>th</sub>] conventional free air thermal current</b>	10 A (at 60 °C) for control circuit 80 A (at 60 °C) for power circuit
<b>I<sub>rms</sub> 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>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>Operating time</b>	4...19 ms opening 12...26 ms closing
<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>Maximum operating rate</b>	3600 cyc/h 60 °C
<b>Minimum switching current</b>	5 mA for control circuit
<b>Minimum switching voltage</b>	17 V 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>Insulation resistance</b>	> 10 MOhm for control circuit
<b>Terminals description ISO n°1</b>	(21-22)NC (13-14)NO

(A1-A2)CO

<b>Height</b>	127 mm
<b>Width</b>	75 mm
<b>Depth</b>	119 mm
<b>Net weight</b>	1.4 kg

## 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>Ambient air temperature for operation</b>	-40...60 °C 60...70 °C with derating
<b>Ambient air temperature for storage</b>	-60...80 °C
<b>Operating altitude</b>	0...3000 m
<b>Fire resistance</b>	850 °C conforming to IEC 60695-2-1
<b>Shock resistance</b>	10 gn contactor opened 15 gn contactor closed
<b>Vibration resistance</b>	2 gn 5...300 Hz contactor opened 4 gn 5...300 Hz contactor closed
<b>Heat dissipation</b>	4...5 W at 50/60 Hz for control circuit

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	1.446 kg
<b>Package 1 Height</b>	9.4 cm
<b>Package 1 width</b>	14 cm
<b>Package 1 Length</b>	13.2 cm
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	5
<b>Package 2 Weight</b>	7.502 kg
<b>Package 2 Height</b>	15 cm
<b>Package 2 width</b>	30 cm
<b>Package 2 Length</b>	40 cm
<b>Package 3 Height</b>	77 cm

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
---------------------------------	-----------------------

REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a> Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & 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>Contractual warranty</b>	
Warranty	18 months

