

# Product data sheet

Specifications



## Contactors, TeSys Deca, 4P(4NO), AC-1, 440V, 125A, 220V AC 50/60Hz coil

LC1D80004M7

### Main

Range	TeSys
Range of product	TeSys Deca
Product or component type	Contactors
Device short name	LC1D
Contactors application	Resistive load
Utilisation category	AC-1 AC-3 AC-3e AC-4
Poles description	4P
[Ue] rated operational voltage	Power circuit: $\leq 300$ V DC 25...400 Hz Power circuit: $\leq 690$ V AC
[Ie] rated operational current	125 A (at $\leq 60$ °C) at $\leq 440$ V AC AC-1 for power circuit 80 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-3e for power circuit 55 A (at $\leq 60$ °C) at $\leq 400$ V AC AC-4 for power circuit
[Uc] control circuit voltage	220 V AC 50/60 Hz

### Complementary

Motor power kW	22 kW at 220...230 V AC 50/60 Hz 37 kW at 380...400 V AC 50/60 Hz 45 kW at 660...690 V AC 50/60 Hz 55 kW at 500 V AC 50/60 Hz 45 kW at 415...440 V AC 50/60 Hz
Compatibility code	LC1D
Pole contact composition	4 NO
Contact compatibility	M1
Protective cover	Without
[Ith] conventional free air thermal current	125 A (at 60 °C) for power circuit
Rms rated making capacity	1100 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1100 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	640 A 40 °C - 10 s for power circuit 990 A 40 °C - 1 s for power circuit 135 A 40 °C - 10 min for power circuit 320 A 40 °C - 1 min for power circuit
Associated fuse rating	200 A gG at $\leq 690$ V coordination type 1 for power circuit 160 A gG at $\leq 690$ V coordination type 2 for power circuit

<b>Average impedance</b>	0.8 mOhm - lth 125 A 50 Hz for power circuit
<b>Power dissipation per pole</b>	12.5 W AC-1
<b>[Ui] rated insulation voltage</b>	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Power circuit: 1000 V conforming to IEC 60947-4-1
<b>Overvoltage category</b>	III
<b>Pollution degree</b>	3
<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>	4 Mcycles
<b>Electrical durability</b>	0.8 Mcycles 125 A AC-1 at $U_e \leq 440$ V
<b>Control circuit type</b>	AC at 50/60 Hz
<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	0.85...1.1 $U_c$ (-40...55 °C):operational AC 60 Hz 0.3...0.6 $U_c$ (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 $U_c$ (-40...55 °C):operational AC 50 Hz 1...1.1 $U_c$ (55...70 °C):operational AC 50/60 Hz
<b>Inrush power in VA</b>	245 VA 60 Hz cos phi 0.75 (at 20 °C) 245 VA 50 Hz cos phi 0.75 (at 20 °C)
<b>Hold-in power consumption in VA</b>	26 VA 60 Hz cos phi 0.3 (at 20 °C) 26 VA 50 Hz cos phi 0.3 (at 20 °C)
<b>Heat dissipation</b>	6...10 W at 50/60 Hz
<b>Operating time</b>	20...35 ms closing 6...20 ms opening
<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...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: solid without cable end Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: connector 1 4...50 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: connector 2 4...25 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: connector 1 4...50 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: connector 2 4...16 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: connector 1 4...50 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: connector 2 4...25 mm <sup>2</sup> - cable stiffness: solid without cable end
<b>Tightening torque</b>	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 12 N.m - on connector - with screwdriver flat Ø 6 to Ø 8 mm Power circuit: 12 N.m - on connector hexagonal screw head 4 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
<b>Mounting support</b>	Rail Plate
<b>Environment</b>	
<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
<b>Product certifications</b>	DNV LROS (Lloyds register of shipping) GL CSA CCC RINA UL GOST BV
<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
<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) Shocks contactor open (8 Gn for 11 ms) Vibrations contactor closed (3 Gn, 5...300 Hz) Shocks contactor closed (10 Gn for 11 ms)
<b>Height</b>	127 mm
<b>Width</b>	96 mm
<b>Depth</b>	125 mm
<b>Net weight</b>	1.76 kg

## Packing Units

<b>Unit Type of Package 1</b>	Db
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	11.0 cm
<b>Package 1 Width</b>	13.5 cm
<b>Package 1 Length</b>	15.5 cm
<b>Package 1 Weight</b>	1.701 kg
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	5
<b>Package 2 Height</b>	15.0 cm
<b>Package 2 Width</b>	30.0 cm
<b>Package 2 Length</b>	40.0 cm
<b>Package 2 Weight</b>	8.805 kg

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>REACH free of SVHC</b>	Yes
<b>EU RoHS Directive</b>	Compliant <a href="#">EU RoHS Declaration</a>
<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a> Pro-active China RoHS declaration (out of China RoHS legal scope)
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>PVC free</b>	Yes
<b>California proposition 65</b>	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>

# Contractual warranty

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Warranty 18 months

Recommended replacement(s)