



## Main

Range	TeSys TeSys Deca
Range of product	TeSys Deca
Product or component type	Contacteur
Device short name	LC1D
Contacteur application	Motor control Resistive load
Utilisation category	AC-4 AC-1 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit: $\leq 690$ V AC 25...400 Hz Power circuit: $\leq 300$ V DC
[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	240 V AC 50/60 Hz

## Complementary

Motor power kW	15 KW at 220...230 V AC 50/60 Hz (AC-3) 22 KW at 380...400 V AC 50/60 Hz (AC-3) 30 KW at 500 V AC 50/60 Hz (AC-3) 33 KW at 660...690 V AC 50/60 Hz (AC-3) 25 KW at 415 V AC 50/60 Hz (AC-3) 30 KW at 440 V AC 50/60 Hz (AC-3) 11 KW at 400 V AC 50/60 Hz (AC-4) 15 KW at 220...230 V AC 50/60 Hz (AC-3e) 22 KW at 380...400 V AC 50/60 Hz (AC-3e) 30 KW at 500 V AC 50/60 Hz (AC-3e) 33 KW at 660...690 V AC 50/60 Hz (AC-3e) 25 KW at 415 V AC 50/60 Hz (AC-3e) 30 KW at 440 V AC 50/60 Hz (AC-3e)
Motor power hp	3 Hp at 115 V AC 50/60 Hz for 1 phase motors 7.5 Hp at 230/240 V AC 50/60 Hz for 1 phase motors 15 Hp at 200/208 V AC 50/60 Hz for 3 phases motors 15 Hp at 230/240 V AC 50/60 Hz for 3 phases motors 40 Hp at 460/480 V AC 50/60 Hz for 3 phases motors 40 Hp at 575/600 V AC 50/60 Hz for 3 phases motors
Compatibility code	LC1D
Pole contact composition	3 NO
Contact compatibility	M2

Protective cover	With
[I <sub>th</sub> ] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 80 A (at 60 °C) for power circuit
I <sub>rms</sub> rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 900 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	900 A at 440 V for power circuit conforming to IEC 60947
[I <sub>cw</sub> ] rated short-time withstand current	400 A 40 °C - 10 s for power circuit 810 A 40 °C - 1 s for power circuit 84 A 40 °C - 10 min for power circuit 208 A 40 °C - 1 min for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit
Associated fuse rating	10 A gG for signalling 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
Average impedance	1.5 MOhm - I <sub>th</sub> 80 A 50 Hz for power circuit
Power dissipation per pole	3.7 W AC-3 9.6 W AC-1 3.7 W AC-3e
[U <sub>i</sub> ] rated insulation voltage	Power circuit: 600 V CSA certified[RETURN]Power circuit: 600 V UL certified[RE- TURN]Signalling circuit: 690 V conforming to IEC 60947-1[RETURN]Signalling- circuit: 600 V CSA certified[RETURN]Signalling circuit: 600 V UL certified[RE- TURN]Power circuit: 690 V conforming to IEC 60947-4-1
Overvoltage category	III
Pollution degree	3
[U <sub>imp</sub> ] rated impulse withstand voltage	6 KV conforming to IEC 60947
Safety reliability level	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
Mechanical durability	6 Mcycles
Electrical durability	1.45 Mcycles 50 A AC-3 at U <sub>e</sub> ≤ 440 V 1.1 Mcycles 80 A AC-1 at U <sub>e</sub> ≤ 440 V 1.45 Mcycles 50 A AC-3e at U <sub>e</sub> ≤ 440 V
Control circuit type	AC at 50/60 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	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
Inrush power in VA	140 VA 60 Hz cos phi 0.75 (at 20 °C) 160 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	13 VA 60 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	4...5 W at 50/60 Hz
Operating time	4...19 ms opening 12...26 ms closing
Maximum operating rate	3600 Cyc/H 60 °C

Connections - terminals	<p>Control circuit: screw clamp terminals 2 1...2.5 mm<sup>2</sup> - cable stiffness: flexible with-cable end</p> <p>Control circuit: screw clamp terminals 1 1...4 mm<sup>2</sup> - cable stiffness: flexible without cable end</p> <p>Control circuit: screw clamp terminals 2 1...4 mm<sup>2</sup> - cable stiffness: flexible without cable end</p> <p>Control circuit: screw clamp terminals 1 1...4 mm<sup>2</sup> - cable stiffness: flexible with-cable end</p> <p>Control circuit: screw clamp terminals 1 1...4 mm<sup>2</sup> - cable stiffness: solid without-cable end</p> <p>Control circuit: screw clamp terminals 2 1...4 mm<sup>2</sup> - cable stiffness: solid without-cable end</p> <p>Power circuit: screw connection 1 1...35 mm<sup>2</sup> - cable stiffness: flexible without cable end</p> <p>Power circuit: screw connection 2 1...25 mm<sup>2</sup> - cable stiffness: flexible without cable end</p> <p>Power circuit: screw connection 1 1...35 mm<sup>2</sup> - cable stiffness: flexible with cable end</p> <p>Power circuit: screw connection 2 1...25 mm<sup>2</sup> - cable stiffness: flexible with cable end</p> <p>Power circuit: screw connection 1 1...35 mm<sup>2</sup> - cable stiffness: solid without cable end</p> <p>Power circuit: screw connection 2 1...25 mm<sup>2</sup> - cable stiffness: solid without cable end</p>
Tightening torque	<p>Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver-flat Ø 6 mm</p> <p>Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver-Philips No 2</p> <p>Power circuit: 8 N.m - on EverLink BTR screw connectors - cable 25...35 mm<sup>2</sup> hexagonal screw head 4 mm</p> <p>Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 1...25 mm<sup>2</sup> hexagonal screw head 4 mm</p> <p>Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver-pozidriv No 2</p> <p>Power circuit: 2.5 N.m - on EverLink BTR screw connectors - with screwdriver-pozidriv No 2</p>
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	Type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1
Signalling circuit frequency	25...400 Hz
Minimum switching voltage	17 V for signalling circuit
Minimum switching current	5 MA for signalling circuit
Insulation resistance	> 10 MOhm for signalling circuit
Non-overlap time	1.5 Ms on de-energisation between NC and NO contact 1.5 Ms on energisation between NC and NO contact
Mounting support	Rail Plate

## Environment

Standards	<p>CSA C22.2 No 14</p> <p>EN 60947-4-1</p> <p>EN 60947-5-1</p> <p>IEC 60947-4-1</p> <p>IEC 60947-5-1</p> <p>UL 508</p> <p>IEC 60335-1</p>
Product certifications	CSA[RETURN]BV[RETURN]GL[RETURN]RINA[RETURN]DNV[RETURN]UL[RETURN]GOST[RETURN]LROS (Lloyds register of shipping)[RETURN]CCC
IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Climatic withstand	Conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
Permissible ambient air temperature around the device	-40...60 °C 60...70 °C with derating
Operating altitude	0...3000 m
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	<p>Vibrations contactor open (2 Gn, 5...300 Hz)</p> <p>Vibrations contactor closed (4 Gn, 5...300 Hz)</p> <p>Shocks contactor closed (15 Gn for 11 ms)</p> <p>Shocks contactor open (10 Gn for 11 ms)</p>

Height	122 Mm
Width	55 Mm
Depth	120 Mm
Net weight	0.855 Kg

### Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.3 Cm
Package 1 Width	13.7 Cm
Package 1 Length	15.3 Cm
Package 1 Weight	926 G
Unit Type of Package 2	S02
Number of Units in Package 2	10
Package 2 Height	15 Cm
Package 2 Width	30 Cm
Package 2 Length	40 Cm
Package 2 Weight	9.975 Kg
Unit Type of Package 3	S06
Number of Units in Package 3	160
Package 3 Height	73.5 Cm
Package 3 Width	60 Cm
Package 3 Length	80 Cm
Package 3 Weight	180.28 Kg

### Offer Sustainability

Sustainable offer status	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
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
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

### Contractual warranty

Warranty	18 months
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Product Life Status : **Commercialised**