



Main

Range of product	TeSys D
Range	TeSys
Product or component type	Contacteur
Device short name	LC1D
Contacteur application	Motor control Resistive load
Utilisation category	AC-4 AC-1 AC-2 AC-3
Control circuit type	DC standard
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	50 A (at $\leq 60\text{ }^\circ\text{C}$) at $\leq 440\text{ V AC AC-3}$ for power circuit 80 A (at $\leq 60\text{ }^\circ\text{C}$) at $\leq 440\text{ V AC AC-1}$ for power circuit
Motor power kW	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)

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Protective cover	With
Motor power hp	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
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
Auxiliary contact composition	1 NO + 1 NC
[Uc] control circuit voltage	48 V DC
Time constant	34 Ms

[Ui] rated insulation voltage	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
[Uimp] rated impulse withstand voltage	8 KV conforming to IEC 60947
Overvoltage category	III
Mounting support	Plate Rail
Flame retardance	V1 conforming to UL 94
Connections - terminals	Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² rigid Control circuit: screw clamp terminals 2 cable(s) 1...4 mm ² rigid Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm ² flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm ² flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm ² flexible with cable end Power circuit: screw terminals 1 cable(s) 2.5...25 mm ² rigid Power circuit: screw terminals 2 cable(s) 2.5...16 mm ² rigid Power circuit: screw terminals 1 cable(s) 2.5...25 mm ² flexible without cable end Power circuit: screw terminals 2 cable(s) 2.5...16 mm ² flexible without cable end Power circuit: screw terminals 1 cable(s) 2.5...25 mm ² flexible with cable end Power circuit: screw terminals 2 cable(s) 2.5...10 mm ² flexible with cable end
Tightening torque	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 terminal - with screwdriver flat Ø 6 to Ø 8 mm
[Ue] rated operational voltage	Power circuit: ≤ 690 V AC 25...400 Hz
[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	250 A DC for control 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
Associated fuse rating	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
Power dissipation per pole	3.7 W AC-3 9.6 W AC-1
Inrush power in W	19 W (at 20 °C)
Hold-in power consumption in W	7.4 W at 20 °C
Operating time	20 ms opening 50 ms closing
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	10000000 Cycles
Maximum operating rate	3600 Cyc/H 60 °C
Minimum switching current	5 MA for control circuit
Minimum switching voltage	17 V for control circuit
Non-overlap time	1.5 Ms on de-energisation between NC and NO contacts 1.5 Ms on energisation between NC and NO contacts
Insulation resistance	> 10 MOhm for control circuit
Rated operational power in W	12 W at 48 V DC-13 - electrical durability: 10000000 cycles - for control circuit 38 W at 48 V DC-13 - electrical durability: 3000000 cycles - for control circuit 76 W at 48 V DC-13 - electrical durability: 1000000 cycles - for control circuit
Height	127 Mm
Width	85 Mm
Depth	176 Mm
Net weight	2.185 Kg
Compatibility code	LC1D

Environment

Standards	IEC 60947-4-1 EN 60947-4-1 IEC 60947-5-1 EN 60947-5-1 CSA C22.2 No 14 UL 508
Product certifications	CSA CCC GL RINA UL DNV LROS (Lloyds register of shipping) BV GOST
IP degree of protection	IP2x conforming to IEC 60529 IP2x conforming to VDE 0106
Ambient air temperature for storage	-60...80 °C
Operating altitude	3000 m without derating
Fire resistance	850 °C conforming to IEC 60695-2-1
Shock resistance	10 gn contactor opened 15 gn contactor closed
Vibration resistance	2 gn 5...300 Hz contactor opened 4 gn 5...300 Hz contactor closed

Packing Units

Package 1 Weight	2.172 Kg
Package 1 Height	1.850 Dm
Package 1 width	1.450 Dm
Package 1 Length	0.900 Dm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
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**

LC1D50ED may be replaced by any of the following products:



LC1D50ABNE

TeSys D contactor 3P 50A AC-3 up to 440V coil 24-60V AC/DC EverLink

Qty 1

Reason for Substitution: End of life | Substitution date: 09 Jan 2008 |



LC1D50AED

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 50 A - 48 V DC standard coil

Qty 1

Reason for Substitution: End of life | Substitution date: 09 Jan 2008 |



LC1D50AED

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 50 A - 48 V DC standard coil

Qty 1

Reason for Substitution: End of life | Substitution date: 08 Sep 2010 |
