



Main

Range	TeSys
Range of product	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-4 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 300 V DC 25...400 Hz Power circuit: <= 690 V AC
[Ie] rated operational current	125 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 80 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 80 A (at <60 °C) at <= 440 V AC AC-3e for power circuit

Complementary

Motor power kW	22 KW at 220...230 V AC 50/60 Hz (AC-3) 37 KW at 380...400 V AC 50/60 Hz (AC-3) 45 KW at 415...440 V AC 50/60 Hz (AC-3) 55 KW at 500 V AC 50/60 Hz (AC-3) 45 KW at 660...690 V AC 50/60 Hz (AC-3) 45 KW at 1000 V AC 50/60 Hz (AC-3) 15 KW at 400 V AC 50/60 Hz (AC-4)
Motor power hp	7.5 Hp at 120 V AC 50/60 Hz for 1 phase motors 15 Hp at 230/240 V AC 50/60 Hz for 1 phase motors 30 Hp at 200/208 V AC 50/60 Hz for 3 phases motors 30 Hp at 230/240 V AC 50/60 Hz for 3 phases motors 60 Hp at 460/480 V AC 50/60 Hz for 3 phases motors 60 Hp at 575/600 V AC 50/60 Hz for 3 phases motors
Pole contact composition	3 NO
Contact compatibility	M11
Protective cover	With
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

[Ui] rated insulation voltage	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Power circuit: 1000 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified
[Uimp] rated impulse withstand voltage	8 KV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 125 A (at 60 °C) for power circuit
Irms 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 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
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 200 A gG at ≤ 690 V coordination type 1 for power circuit 160 A gG at ≤ 690 V coordination type 2 for power circuit
Control circuit type	AC at 50/60 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	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
Average impedance	0.8 MOhm - Ith 125 A 50 Hz for power circuit
Power dissipation per pole	5.1 W AC-3 12.5 W AC-1 5.1 W AC-3e
Minimum switching current	5 MA for signalling circuit
Minimum switching voltage	17 V 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
Maximum operating rate	3600 Cyc/H 60 °C
Inrush power in VA	245 VA 60 Hz cos phi 0.75 (at 20 °C) 245 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	26 VA 60 Hz cos phi 0.3 (at 20 °C) 26 VA 50 Hz cos phi 0.3 (at 20 °C)
Insulation resistance	> 10 MOhm for signalling circuit
Tightening torque	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
Mounting support	Plate Rail
Electrical durability	0.8 Mcycles 125 A AC-1 at $U_e \leq 440$ V 1.5 Mcycles 80 A AC-3 at $U_e \leq 440$ V 1.5 Mcycles 80 A AC-3e at $U_e \leq 440$ V
Mechanical durability	4 Mcycles
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
Operating altitude	0...3000 m
Compatibility code	LC1D
Product certifications	DNV GOST CCC RINA CSA GL BV LROS (Lloyds register of shipping) UL

Environment

Climatic withstand	Conforming to IACS E10
Ambient air temperature for storage	-60...80 °C
Fire resistance	850 °C conforming to IEC 60695-2-1
Mechanical robustness	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
Height	127 Mm
Width	85 Mm
Depth	130 Mm
Net weight	1.59 Kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	1.55 Kg
Package 1 Height	9.5 Cm
Package 1 width	13.5 Cm
Package 1 Length	14 Cm
Unit Type of Package 2	S02
Number of Units in Package 2	5
Package 2 Weight	8.075 Kg
Package 2 Height	15 Cm
Package 2 width	30 Cm
Package 2 Length	40 Cm
Unit Type of Package 3	P06
Number of Units in Package 3	80
Package 3 Weight	139.78 Kg
Package 3 Height	75 Cm
Package 3 width	60 Cm
Package 3 Length	80 Cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
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
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**