



Main

Range	TeSys TeSys Deca
Range of product	TeSys D TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-4 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit: 690 V AC 25...400 Hz Power circuit: 300 V DC
[Ie] rated operational current	80 A (at <60 °C) at ≤ 440 V AC-1 for power circuit 66 A (at <60 °C) at ≤ 440 V AC-3 for power circuit 66 A (at <60 °C) at ≤ 440 V AC-3e for power circuit

Complementary

Motor power kW	18.5 KW at 220...230 V AC 50 Hz (AC-3) 37 KW at 380...400 V AC 50 Hz (AC-3) 37 KW at 415 V AC 50 Hz (AC-3) 37 KW at 440 V AC 50 Hz (AC-3) 37 KW at 500 V AC 50 Hz (AC-3) 37 KW at 660...690 V AC 50 Hz (AC-3)
Motor power hp	5 Hp at 115 V AC 60 Hz for 1 phase motors 10 Hp at 230/240 V AC 60 Hz for 1 phase motors 20 Hp at 200/208 V AC 60 Hz for 3 phases motors 20 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 50 Hp at 575/600 V AC 60 Hz for 3 phases motors
Pole contact composition	3 NO
Contact compatibility	M2
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	Signalling circuit: 690 V conforming to IEC 60947-1 Power circuit: 690 V conforming to IEC 60947-4-1
[Uimp] rated impulse withstand voltage	6 KV conforming to IEC 60947
Overvoltage category	III

[I _{th}] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 80 A (at 60 °C) for power circuit
I _{rms} 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 1000 A at 440 V AC for power circuit conforming to IEC 60947
Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 125 A gG at ≤ 690 V coordination type 1 for power circuit 125 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	0.3...0.6 U _c (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 U _c (-40...60 °C):operational AC 50 Hz 0.85...1.1 U _c (-40...60 °C):operational AC 60 Hz 1...1.1 U _c (60...70 °C):operational AC 50/60 Hz
Average impedance	1.5 MOhm - I _{th} 80 A 50 Hz for power circuit
Power dissipation per pole	9.6 W AC-1 6.5 W AC-3 6.5 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	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)
Insulation resistance	> 10 MOhm for signalling circuit
Tightening torque	Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 8 N.m - on EverLink BTR screw connectors - cable 25...35 m- m ² hexagonal screw head 4 mm Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 1...25 m- m ² hexagonal screw head 4 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver- pozidriv No 2 Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver- pozidriv No 2
Mounting support	Rail Plate
Electrical durability	0.7 Mcycles 80 A AC-1 at U _e ≤ 440 V 1 Mcycles 66 A AC-3 at U _e ≤ 440 V 1 Mcycles 66 A AC-3e at U _e ≤ 440 V
Mechanical durability	6 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	CCC CSA EAC UL KC DNV-GL LROS (Lloyds register of shipping)

Environment

Climatic withstand	Conforming to IACS E10 conforming to IEC 60947-1 Annex Q category D
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 Vibrations contactor closed: 4 Gn, 5...300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 10 Gn for 11 ms
Height	122 Mm
Width	55 Mm
Depth	120 Mm
Net weight	0.86 Kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	850.0 G
Package 1 Height	6.2 Cm
Package 1 Width	14.0 Cm
Package 1 Length	15.5 Cm
Unit Type of Package 2	CAR
Number of Units in Package 2	1
Package 2 Weight	957.0 G
Package 2 Height	6.0 Cm
Package 2 Width	12.5 Cm
Package 2 Length	13.0 Cm
Unit Type of Package 3	S02
Number of Units in Package 3	10
Package 3 Weight	9.57 Kg
Package 3 Height	15.0 Cm
Package 3 Width	30.0 Cm
Package 3 Length	40.0 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**