



Main

Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3 AC-4
Poles description	3P
Power pole contact composition	3 NO
System Voltage	<= 300 V DC power circuit <= 1000 V AC 25...400 Hz power circuit
[Ie] rated operational current	200 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 power circuit 115 A (<= 140 °F (60 °C)) at <= 440 V AC AC-3 power circuit
Motor power kW	55 kW at 380...400 V AC 50/60 Hz AC-3 75 kW at 500 V AC 50/60 Hz AC-3 80 kW at 660...690 V AC 50/60 Hz AC-3 30 kW at 220...230 V AC 50/60 Hz AC-3 59 kW at 415...440 V AC 50/60 Hz AC-3 65 kW at 1000 V AC 50/60 Hz AC-3 18.5 kW at 400 V AC 50/60 Hz AC-4
Motor power HP (UL / CSA)	30 hp at 200/208 V AC 50/60 Hz 3 phases motors 40 hp at 230/240 V AC 50/60 Hz 3 phases motors 75 hp at 460/480 V AC 50/60 Hz 3 phases motors 100 hp at 575/600 V AC 50/60 Hz 3 phases motors
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	120 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	Conforming to IEC 60947

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Overvoltage category	III
[I _{th}] conventional free air thermal current	200 A at ≤ 140 °F (60 °C) power circuit
I _{rms} rated making capacity	1260 A at 440 V power circuit conforming to IEC 60947 140 A AC signalling circuit conforming to IEC 60947-5-1 250 A DC signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	1100 A at 440 V power circuit conforming to IEC 60947
[I _{cw}] rated short-time withstand current	1100 A ≤ 104 °F (40 °C) 1 s power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit 250 A ≤ 104 °F (40 °C) 10 min power circuit 550 A ≤ 104 °F (40 °C) 1 min power circuit 950 A ≤ 104 °F (40 °C) 10 s power circuit
Associated fuse rating	200 A gG at ≤ 690 V coordination type 2 power circuit 250 A gG at ≤ 690 V coordination type 1 power circuit 10 A gG signalling circuit
Average impedance	0.6 mOhm at 50 Hz - I _{th} 200 A power circuit
[U _i] rated insulation voltage	1000 V power circuit conforming to IEC 60947-4-1 600 V power circuit certifications CSA 600 V power circuit certifications UL 690 V signalling circuit conforming to IEC 60947-1 600 V signalling circuit certifications CSA 600 V signalling circuit certifications UL
Electrical durability	0.8 Mcycles 200 A AC-1 at U _e ≤ 440 V 0.95 Mcycles 115 A AC-3 at U _e ≤ 440 V
Power dissipation per pole	24 W AC-1 7.9 W AC-3
Safety cover	With
Mounting support	Plate Rail
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
Product certifications	BV CCC CSA DNV GL GOST LROS (Lloyds register of shipping) RINA UL
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 0...0 in ² (1...2.5 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0 in ² (1...2.5 mm ²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable(s) 0...0 in ² (1...2.5 mm ²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0 in ² (1...2.5 mm ²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0 in ² (1...2.5 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0 in ² (1...2.5 mm ²) - cable stiffness: solid - without cable end Power circuit: connector 1 cable(s) 0.02...0.19 in ² (10...120 mm ²) - cable stiffness: flexible - without cable end Power circuit: connector 2 cable(s) 0.02...0.08 in ² (10...50 mm ²) - cable stiffness: flexible - without cable end Power circuit: connector 1 cable(s) 0.02...0.19 in ² (10...120 mm ²) - cable stiffness: flexible - with cable end Power circuit: connector 2 cable(s) 0.02...0.08 in ² (10...50 mm ²) - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 0.02...0.19 in ² (10...120 mm ²) - cable stiffness: solid - without cable end

Power circuit: connector 2 cable(s) 0.02...0.08 in² (10...50 mm²) - cable stiffness: solid - without cable end

Tightening torque	Control circuit: 10.62 lbf.in (1.2 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 10.62 lbf.in (1.2 N.m) - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 106.19 lbf.in (12 N.m) - on connector hexagonal 0.16 in (4 mm)
Operating time	6...20 ms opening 20...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	8 Mcycles
Operating rate	2400 cyc/h at ≤ 140 °F (60 °C)

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.3...0.5 U _c drop-out at 131 °F (55 °C), AC 50/60 Hz 0.8...1.15 U _c operational at 131 °F (55 °C), AC 50/60 Hz
Inrush power in VA	280...350 VA at 68 °F (20 °C) (cos φ 0.8) 60 Hz 280...350 VA at 68 °F (20 °C) (cos φ 0.8) 50 Hz
Hold-in power consumption in VA	2...18 VA at 68 °F (20 °C) (cos φ 0.3) 60 Hz 2...18 VA at 68 °F (20 °C) (cos φ 0.3) 50 Hz
Heat dissipation	3...8 W at 50/60 Hz
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 current	5 mA signalling circuit
Minimum switching voltage	17 V 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)
Insulation resistance	> 10 MOhm signalling circuit

Environment

IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	23...140 °F (-5...60 °C)
Ambient air temperature for storage	-76...176 °F (-60...80 °C)
Permissible ambient air temperature around the device	-40...158 °F (-40...70 °C) at U _c
Operating altitude	9842.52 ft (3000 m) without derating in temperature
Fire resistance	1562 °F (850 °C) conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
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 6 Gn for 11 ms
Height	6.22 in (158 mm)
Width	4.72 in (120 mm)
Depth	5.35 in (136 mm)
Product weight	5.51 lb(US) (2.5 kg)

Ordering and shipping details

Category	22345 - CTR,D-LINE,OPEN,NONREV-NEW
Discount Schedule	I12
GTIN	00785901213499
Nbr. of units in pkg.	1
Package weight(Lbs)	5.4500000000000002

Returnability	Y
Country of origin	CZ

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0742 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available Product Environmental Profile
Product end of life instructions	Available
California proposition 65	WARNING: This product can expose you to chemicals including:
----- Substance 1	Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer.
----- More information	For more information go to www.p65warnings.ca.gov

Contractual warranty

Warranty period	18 months
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