

Main

Range of product	TeSys D
Range	TeSys
Product or component type	Contactors
Device short name	LC1D
Contactors application	Motor control Resistive load
Utilisation category	AC-1 AC-2 AC-3 AC-4
Control circuit type	DC standard
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	80 A ($\leq 140^{\circ}\text{F}$ (60°C)) at $\leq 440\text{ V AC AC-1}$ power circuit 65 A ($\leq 140^{\circ}\text{F}$ (60°C)) at $\leq 440\text{ V AC AC-3}$ power circuit
Motor power kW	30 kW at 380...400 V AC 50/60 Hz 30 kW at 415 V AC 50/60 Hz 30 kW at 440 V AC 50/60 Hz 37 kW at 1000 V AC 50/60 Hz 37 kW at 500 V AC 50/60 Hz 37 kW at 660...690 V AC 50/60 Hz 18.5 kW at 220...230 V AC 50/60 Hz
Motor power hp	10 hp at 230/240 V AC 60 Hz 1P motors conforming to CSA 10 hp at 230/240 V AC 60 Hz 1P motors conforming to UL 20 hp at 200/208 V AC 60 Hz 3P motors conforming to CSA 20 hp at 200/208 V AC 60 Hz 3P motors conforming to UL 20 hp at 230/240 V AC 60 Hz 3P motors conforming to CSA 20 hp at 230/240 V AC 60 Hz 3P motors conforming to UL 5 hp at 115 V AC 60 Hz 1P motors conforming to CSA 5 hp at 115 V AC 60 Hz 1P motors conforming to UL 50 hp at 460/480 V AC 60 Hz 3P motors conforming to CSA 50 hp at 460/480 V AC 60 Hz 3P motors conforming to UL 50 hp at 575/600 V AC 60 Hz 3P motors conforming to CSA 50 hp at 575/600 V AC 60 Hz 3P motors conforming to UL
[Uc] control circuit voltage	24 V DC
Connections - terminals	Control circuit: ring lugs 1 - external diameter: 0.31 in (8 mm) Power circuit: ring lugs 1 - external diameter: 0.65 in (16.5 mm)

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
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
Control circuit voltage limits	0.1...0.3 Uc at 140°F (60°C) drop-out 0.75...1.25 Uc at 140°F (60°C) operational
Time constant	34 ms
[Ui] rated insulation voltage	600 V control circuit certifications CSA 600 V control circuit certifications UL 600 V power circuit certifications CSA 600 V power circuit certifications UL 690 V control circuit conforming to IEC 60947-1 690 V power circuit conforming to IEC 60947-1
[Uimp] rated impulse withstand voltage	8 kV IEC 60947
Overvoltage category	III
Mounting support	Plate

	Rail
Flame retardance	V1 conforming to UL 94
Tightening torque	Control circuit: 10.62 lbf.in (1.2 N.m) - on ring lugs - with screwdriver flat Ø 6 mm M3.5 Control circuit: 10.62 lbf.in (1.2 N.m) - on ring lugs - with screwdriver Philips No 2 M3.5 Power circuit: 44.25 lbf.in (5 N.m) - on ring lugs - with screwdriver flat Ø 8 mm M6 Power circuit: 44.25 lbf.in (5 N.m) - on ring lugs - with screwdriver Philips No 3 M6
System Voltage	<= 690 V AC 25...400 Hz power circuit
[I _{th}] conventional free air thermal current	10 A at <= 140 °F (60 °C) control circuit 80 A at <= 140 °F (60 °C) power circuit
Irms rated making capacity	1000 A at 440 V power circuit conforming to IEC 60947 250 A DC control circuit conforming to IEC 60947-5-1
Rated breaking capacity	1000 A at 440 V power circuit conforming to IEC 60947
Associated fuse rating	10 A gG control circuit conforming to IEC 60947-5-1 125 A gG at <= 690 V coordination type 1 power circuit 125 A gG at <= 690 V coordination type 2 power circuit
Power dissipation per pole	4.2 W AC-3 6.4 W AC-1
Inrush power in W	19 W at 68 °F (20 °C)
Hold-in power consumption in W	7.4 W at 68 °F (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
Operating rate	3600 cyc/h at <= 140 °F (60 °C)
Minimum switching current	5 mA control circuit
Minimum switching voltage	17 V 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 control circuit
Rated operational power in W	14 W at 24 V DC-13 - electrical durability: 10000000 cycles - for control circuit 48 W at 24 V DC-13 - electrical durability: 3000000 cycles - for control circuit 96 W at 24 V DC-13 - electrical durability: 1000000 cycles - for control circuit
Height	5 in (127 mm)
Width	3.35 in (85 mm)
Depth	6.93 in (176 mm)
Product weight	4.82 lb(US) (2.185 kg)

Environment

standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 CSA C22.2 No 14
product certifications	BV CCC CSA DNV GL GOST LROS (Lloyds register of shipping) RINA UL
IP degree of protection	IP2x conforming to IEC 60529 IP2x conforming to VDE 0106
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
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

Offer Sustainability

Green Premium product	Green Premium product
Compliant - since 0716 - Schneider Electric declaration of conformity	Compliant - since 0716 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Available	Available
WARNING: This product can expose you to chemicals including:	WARNING: This product can expose you to chemicals including:
Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer.	Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer.
For more information go to www.p65warnings.ca.gov	For more information go to www.p65warnings.ca.gov

Contractual warranty

Warranty period	18 months
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