



## Main

Range of product	TeSys D
Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
Pole contact composition	4 NO
System Voltage	<= 690 V AC power circuit <= 300 V DC 25...400 Hz power circuit
[Ie] rated operational current	125 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 power circuit
Control circuit type	AC 60 Hz
[Uc] control circuit voltage	24 V AC 60 Hz
[Uimp] rated impulse withstand voltage	Conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	125 A at <= 140 °F (60 °C) power circuit
Irms rated making capacity	1100 A at 440 V power circuit conforming to IEC 60947
Rated breaking capacity	1100 A at 440 V power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	135 A <= 104 °F (40 °C) 10 min power circuit 640 A <= 104 °F (40 °C) 10 s power circuit 990 A <= 104 °F (40 °C) 1 s power circuit 320 A <= 104 °F (40 °C) 1 min power circuit
Associated fuse rating	160 A gG at <= 690 V coordination type 2 power circuit 200 A gG at <= 690 V coordination type 1 power circuit
Average impedance	0.8 mOhm at 50 Hz - Ith 125 A power circuit
[Ui] 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
Electrical durability	0.8 Mcycles 125 A AC-1 at $U_e \leq 440$ V
Power dissipation per pole	12.5 W AC-1
Protective cover	Without
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 <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 0.01...0.08 in <sup>2</sup> (4...50 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end Power circuit: connector 2 cable(s) 0.01...0.04 in <sup>2</sup> (4...25 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end Power circuit: connector 1 cable(s) 0.01...0.08 in <sup>2</sup> (4...50 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end Power circuit: connector 2 cable(s) 0.01...0.02 in <sup>2</sup> (4...16 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 0.01...0.08 in <sup>2</sup> (4...50 mm <sup>2</sup> ) - cable stiffness: solid - without cable end Power circuit: connector 2 cable(s) 0.01...0.04 in <sup>2</sup> (4...25 mm <sup>2</sup> ) - cable stiffness: solid - without cable end
Tightening torque	Power circuit: 79.65 lbf.in (9 N.m) - on connector - with screwdriver flat $\varnothing$ 6 to $\varnothing$ 8 mm Power circuit: 79.65 lbf.in (9 N.m) - on connector hexagonal 0.16 in (4 mm) Control circuit: 10.62 lbf.in (1.2 N.m) - on screw clamp terminals - with screwdriver flat $\varnothing$ 6 mm Control circuit: 10.62 lbf.in (1.2 N.m) - on screw clamp terminals - with screwdriver Philips No 2
Operating time	20...35 ms closing 6...20 ms opening
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	10 Mcycles
Operating rate	3600 cyc/h at $\leq 140$ °F (60 °C)

## Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.85...1.1 $U_c$ operational at 131 °F (55 °C), AC 60 Hz 0.3...0.6 $U_c$ drop-out at 131 °F (55 °C), AC 60 Hz
Inrush power in VA	220 VA at 68 °F (20 °C) ( $\cos \phi$ 0.75) 60 Hz
Hold-in power consumption in VA	22 VA at 68 °F (20 °C) ( $\cos \phi$ 0.3) 60 Hz
Heat dissipation	6...10 W at 60 Hz

## Environment

IP degree of protection	IP2x 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 Uc
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 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	5 in (127 mm)
Width	3.78 in (96 mm)
Depth	4.92 in (125 mm)
Product weight	3.88 lb(US) (1.76 kg)

## Ordering and shipping details

Category	22345 - CTR,D-LINE,OPEN,NONREV-NEW
Discount Schedule	I12
Nbr. of units in pkg.	1
Package weight(Lbs)	3.8500000000000001
Returnability	N
Country of origin	CZ

## Offer Sustainability

Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Will not be compliant Will not be compliant
Product environmental profile	Available
Product end of life instructions	Need no specific recycling operations

## Contractual warranty

Warranty period	18 months
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