Product data sheet

Specification





IEC contactor, TeSys D, nonreversing, 20A resistive, 4 pole, 4 NO, 48VDC coil, open style

LC1DT20ED

! Discontinued on: Mar 13, 2024

! Discontinued

Product availability: Non-Stock - Not normally stocked in distribution facility

Price*: 133.00 USD

Main

Range	TeSys
Range Of Product	TeSys Deca
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Resistive load
Utilisation Category	AC-1
Poles Description	4P
[Ue] Rated Operational Voltage	Power circuit <= 690 V AC 25400 Hz Power circuit <= 300 V DC
[le] Rated Operational Current	20 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
[Uc] Control Circuit Voltage	48 V DC

Complementary

Compatibility Code	LC1D
Pole Contact Composition	4 NO
Protective Cover	With
[Ith] Conventional Free Air Thermal Current	10 A (at 140 °F (60 °C)) for signalling circuit 20 A (at 140 °F (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 60947-5-1 250 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	250 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	30 A 104 °F (40 °C) - 10 min for power circuit 61 A 104 °F (40 °C) - 1 min for power circuit 105 A 104 °F (40 °C) - 10 s for power circuit 210 A 104 °F (40 °C) - 1 s for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit
Associated Fuse Rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 25 A gG at <= 690 V coordination type 1 for power circuit 20 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	2.5 mOhm - Ith 20 A 50 Hz for power circuit
Power Dissipation Per Pole	1.56 W AC-1

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

[Ui] Rated Insulation Voltage	Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL
Overveltege Cetagory	Power circuit 690 V IEC 60947-4-1
Overvoltage Category	III
Pollution Degree	3
[Uimp] Rated Impulse Withstand Voltage	6 kV IEC 60947
Safety Reliability Level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical Durability	30 Mcycles
Control Circuit Type	DC standard
Coil Technology	Built-in bidirectional peak limiting diode suppressor
Control Circuit Voltage Limits	0.10.25 Uc -40158 °F (-4070 °C) drop-out DC 0.71.25 Uc -40140 °F (-4060 °C) operational DC 11.25 Uc 140158 °F (6070 °C) operational DC
Inrush Power In W	5.4 W 68 °F (20 °C))
Hold-In Power Consumption In W	5.4 W 68 °F (20 °C)
Operating Time	20 ±20 % ms opening 63 ±15 % ms closing
Time Constant	28 ms
Maximum Operating Rate	3600 cyc/h 140 °F (60 °C)
Connections - Terminals	Control circuit: screw clamp terminals 2 0.000.00 in² (12.5 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.000.01 in² (14 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.000.01 in² (14 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.000.01 in² (14 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.000.01 in² (14 mm²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.000.01 in² (14 mm²) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 0.000.01 in² (14 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 0.000.01 in² (14 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 0.000.01 in² (14 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 0.000.00 in² (12.5 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 0.000.01 in² (14 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 0.000.01 in² (14 mm²) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 0.000.01 in² (14 mm²) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 0.000.01 in² (14 mm²) - cable stiffness: solid without cable end
Tightening Torque	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2
Auxiliary Contact Composition	1 NO + 1 NC
Auxiliary Contacts Type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
Signalling Circuit Frequency	25400 Hz
Minimum Switching Voltage	17 V for signalling circuit
Minimum Switching Current	5 mA for signalling circuit

Insulation Resistance	> 10 MOhm 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	
Mounting Support	Plate Rail	

Environment

Environment		
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	DNV GL CCC LROS (Lloyds register of shipping) RINA BV GOST UL CSA CB	
Ip Degree Of Protection	IP20 front face IEC 60529	
Protective Treatment	THIEC 60068-2-30	
Climatic Withstand	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat	
Permissible Ambient Air Temperature Around The Device	-40140 °F (-4060 °C) 140158 °F (6070 °C) with derating	
Operating Altitude	09842.52 ft (03000 m)	
Fire Resistance	1562 °F (850 °C) IEC 60695-2-1	
Flame Retardance	V1 conforming to UL 94	
Mechanical Robustness	Vibrations contactor open 2 Gn, 5300 Hz) Vibrations contactor closed 4 Gn, 5300 Hz) Shocks contactor closed 15 Gn for 11 ms) Shocks contactor open 10 Gn for 11 ms)	
Height	3.35 in (85 mm)	
Width	1.77 in (45 mm)	
Depth	3.90 in (99 mm)	
Net Weight	0.80 lb(US) (0.365 kg)	

Ordering and shipping details

Category	US10I1222355	
Discount Schedule	0112	
Gtin	3389110247718	
Returnability	No	
Country Of Origin	ID	

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	2.17 in (5.5 cm)

Package 1 Width	3.66 in (9.3 cm)
Package 1 Length	4.65 in (11.8 cm)
Package 1 Weight	19.65 oz (557 g)
Unit Type Of Package 2	S02
Number Of Units In Package 2	16
Package 2 Height	5.91 in (15 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	20.74 lb(US) (9.408 kg)

Contractual warranty

Warranty 18 months



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Transparency RoHS/REACh

Well-being performance

②	Mercury Free	
	Rohs Exemption Information	Yes
	Pvc Free	

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information.
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
California Proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov