Product data sheet

Specifications

Green Premium™

IEC contactor, TeSys Deca, nonreversing, 38A, 20HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, low consumption 24VDC coil

LC1D38BL

Product availability: Stock - Normally stocked in distribution facility

Price*: 289.20 USD

Main

Range	TeSys TeSys Deca
Range Of Product	TeSys Deca
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Motor control Resistive load
Utilisation Category	AC-4 AC-1 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	50 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 38 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 38 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
[Uc] Control Circuit Voltage	24 V DC

Complementary

Motor Power Kw	18.5 kW at 500 V AC 50/60 Hz (AC-3) 18.5 kW at 660...690 V AC 50/60 Hz (AC-3) 7.5 kW at 400 V AC 50/60 Hz (AC-4) 18.5 kW at 380...400 V AC 50/60 Hz (AC-3) 9 kW at 220...230 V AC 50/60 Hz (AC-3) 18.5 kW at 415...440 V AC 50/60 Hz (AC-3) 18.5 kW at 500 V AC 50/60 Hz (AC-3e) 18.5 kW at 660...690 V AC 50/60 Hz (AC-3e) 18.5 kW at 380...400 V AC 50/60 Hz (AC-3e) 9 kW at 220...230 V AC 50/60 Hz (AC-3e) 18.5 kW at 415...440 V AC 50/60 Hz (AC-3e)
Maximum Horse Power Rating	10 hp at 230/240 V AC 50/60 Hz for 3 phase motors 10 hp at 200/208 V AC 50/60 Hz for 3 phase motors 5 hp at 240 V AC 50/60 Hz for 1 phase motors 20 hp at 480 V AC 50/60 Hz for 3 phase motors 25 hp at 600 V AC 50/60 Hz for 3 phase motors
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Protective Cover	With

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

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

[Ith] Conventional Free Air Thermal Current	10 A (at 140 °F (60 °C)) for signalling circuit 50 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 60947-5-1 550 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	550 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	60 A 104 °F (40 °C) - 10 min for power circuit 430 A 104 °F (40 °C) - 1 s for power circuit 150 A 104 °F (40 °C) - 1 min for power circuit 310 A 104 °F (40 °C) - 10 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 63 A gG at <= 690 V coordination type 1 for power circuit 63 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	2 mOhm - Ith 50 A 50 Hz for power circuit
Power Dissipation Per Pole	5 W AC-1 3 W AC-3 3 W AC-3e
[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 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
Electrical Durability	1.4 Mcycles 50 A AC-1 <= 440 V 1.4 Mcycles 38 A AC-3 <= 440 V 1.4 Mcycles 38 A AC-3e <= 440 V
Control Circuit Type	DC low consumption
Coil Technology	Built-in bidirectional peak limiting diode suppressor
Control Circuit Voltage Limits	0.1...0.3 Uc -40…158 °F (-40…70 °C) drop-out DC 0.8...1.25 Uc -40…140 °F (-40…60 °C) operational DC 1...1.25 Uc 140…158 °F (60…70 °C) operational DC
Inrush Power In W	2.4 W 68 °F (20 °C))
Hold-In Power Consumption In W	2.4 W 68 °F (20 °C)
Operating Time	77 ±15 % ms closing 25 ±20 % ms opening
Time Constant	40 ms
Maximum Operating Rate	3600 cyc/h 140 °F (60 °C)

Connections - Terminals	Control circuit: screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 0.00…0.02 in² (2.5…10 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 0.00…0.02 in² (2.5…10 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 0.00…0.02 in² (1…10 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 0.00…0.01 in² (1.5…6 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 0.00…0.02 in² (1.5…10 mm²) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 0.00…0.02 in² (2.5…10 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 22.13 lbf.in (2.5 N.m) screw clamp terminals flat Ø 6 mm Power circuit 22.13 lbf.in (2.5 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 22.13 lbf.in (2.5 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	25...400 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	Rail Plate

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 IEC 60335-1
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	-40…140 °F (-40…60 °C) 140…158 °F (60…70 °C) with derating
Operating Altitude	0...9842.52 ft (0...3000 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, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz) Shocks contactor closed 15 Gn for 11 ms) Shocks contactor open 8 Gn for 11 ms)
Height	3.35 in (85 mm)
Width	1.77 in (45 mm)
Depth	3.98 in (101 mm)
Net Weight	1.19 lb(US) (0.54 kg)

Ordering and shipping details

Category	US10I1222354
Discount Schedule	0I12
Gtin	3389110361896
Returnability	Yes
Country Of Origin	SG

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	1.97 in (5.000 cm)
Package 1 Width	3.62 in (9.200 cm)
Package 1 Length	4.41 in (11.200 cm)
Package 1 Weight	20.95 oz (594.000 g)
Unit Type Of Package 2	S02
Number Of Units In Package 2	15
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	20.17 lb(US) (9.148 kg)

Contractual warranty

Warranty	18 months

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency RoHS/REACh

Well-being performance

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
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
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