Product data sheet

Specifications

IEC contactor, TeSys Deca, nonreversing, 65A, 40HP at 480VAC, 3 phase, 3 pole, 3 NO, 24VDC coil, open style

LC1D65A3BD

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

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	80 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 65 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 65 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	11 kW at 400 V AC 50/60 Hz (AC-4) 18.5 kW at 220...230 V AC 50/60 Hz (AC-3) 30 kW at 380...400 V AC 50/60 Hz (AC-3) 37 kW at 500 V AC 50/60 Hz (AC-3) 37 kW at 660...690 V AC 50/60 Hz (AC-3) 18.5 kW at 220...230 V AC 50/60 Hz (AC-3e) 30 kW at 380...400 V AC 50/60 Hz (AC-3e) 37 kW at 500 V AC 50/60 Hz (AC-3e) 37 kW at 660...690 V AC 50/60 Hz (AC-3e)
Maximum Horse Power Rating	40 hp at 460/480 V AC 50/60 Hz for 3 phase motors 5 hp at 115 V AC 50/60 Hz for 1 phase motors 10 hp at 230/240 V AC 50/60 Hz for 1 phase motors 20 hp at 200/208 V AC 50/60 Hz for 3 phase motors 20 hp at 230/240 V AC 50/60 Hz for 3 phase motors 50 hp at 575/600 V AC 50/60 Hz for 3 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for signalling circuit 80 A (at 140 °F (60 °C)) for power circuit

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

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 1000 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	640 A 104 °F (40 °C) - 10 s for power circuit 900 A 104 °F (40 °C) - 1 s for power circuit 110 A 104 °F (40 °C) - 10 min for power circuit 260 A 104 °F (40 °C) - 1 min 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 60947-5-1 125 A gG at <= 690 V coordination type 1 for power circuit 125 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	1.5 mOhm - Ith 80 A 50 Hz for power circuit
Power dissipation per pole	9.6 W AC-1 6.3 W AC-3 6.3 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	10 Mcycles
Electrical durability	0.5 Mcycles 80 A AC-1 <= 440 V 1.45 Mcycles 65 A AC-3 <= 440 V 1.45 Mcycles 50 A AC-3e <= 440 V
Control circuit type	DC standard
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 0.75...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	19 W 68 °F (20 °C))
Hold-in power consumption in W	7.4 W 68 °F (20 °C)
Operating time	50 ±15 % ms closing 16...24 ms opening
Time constant	34 ms
Maximum operating rate	3600 cyc/h at 60 °C

Connections - terminals	Control circuit: spring terminals 1 0.004 in² (2.5 mm²) - cable stiffness: flexible without cable end Control circuit: spring terminals 2 0.004 in² (2.5 mm²) - cable stiffness: flexible without cable end Power circuit: EverLink BTR screw connectors 1 0.002…0.05 in² (1…35 mm²) - cable stiffness: flexible without cable end Power circuit: EverLink BTR screw connectors 2 0.002…0.04 in² (1…25 mm²) - cable stiffness: flexible without cable end Power circuit: EverLink BTR screw connectors 1 0.002…0.05 in² (1…35 mm²) - cable stiffness: flexible with cable end Power circuit: EverLink BTR screw connectors 2 0.002…0.04 in² (1…25 mm²) - cable stiffness: flexible with cable end Power circuit: EverLink BTR screw connectors 1 0.002…0.05 in² (1…35 mm²) - cable stiffness: solid without cable end Power circuit: EverLink BTR screw connectors 2 0.002…0.04 in² (1…25 mm²) - cable stiffness: solid without cable end
Tightening torque	Power circuit 70.8 lbf.in (8 N.m) screw clamp terminals 0.04…0.05 in² (25…35 mm²) hexagonal 0.2 in (4 mm) Power circuit 44.3 lbf.in (5 N.m) screw clamp terminals 0.004…0.04 in² (2.5…25 mm²) hexagonal 0.2 in (4 mm) Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Power circuit 22.1 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	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 CSA C22.2 No 14 UL 60947-4-1 IEC 60335-2-40:Annex JJ UL 60335-2-40:Annex JJ IEC 60335-1:Clause 30.2
Product Certifications	CCC UL CB Scheme CSA CE UKCA Marine EAC
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 10 Gn for 11 ms)
Height	4.8 in (122 mm)
Width	2.2 in (55 mm)
Depth	4.7 in (120 mm)
Net Weight	2.061 lb(US) (0.935 kg)

Ordering and shipping details

Category	US10I1222358
Discount Schedule	0I12
GTIN	3389119409193
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.4 in (6.2 cm)
Package 1 Width	5.4 in (13.7 cm)
Package 1 Length	6.0 in (15.2 cm)
Package weight(Lbs)	35.0 oz (992.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	10
Package 2 Height	5.9 in (15.0 cm)
Package 2 Width	11.8 in (30.0 cm)
Package 2 Length	15.7 in (40.0 cm)
Package 2 Weight	22.705 lb(US) (10.299 kg)

Contractual warranty

Warranty	18 months

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Carbon footprint (kg CO2 eq, Total Life cycle)	89
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant
REACh Regulation	REACh Declaration
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
PVC free	Yes

Use Again

Repack and remanufacture

Recyclability potential, in %	62
Circularity Profile	End of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Offer Marketing Illustration

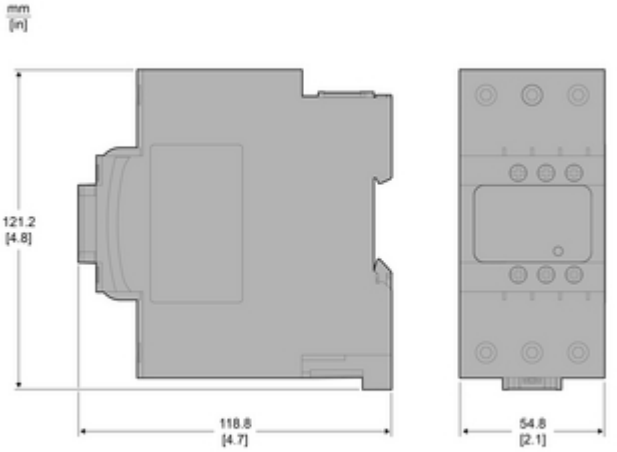
Product benefits / Features

Offer Marketing Illustration

Product benefits / Features

Offer Marketing Illustration

Product benefits / Features

Technical Illustration

Assembly's dimensions