Product data sheet

Specifications



Contactor, Tesys Deca Advanced, 3P(3NO), 100hp at 480V, 150A, 48-130V AC/DC coil, Everlink

LC1D150AEHE

Product availability: Stock - Normally stocked in distribution facility

Main

Range	TeSys Deca
Range of Product	TeSys Deca Advanced
Product or Component Type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-3e AC-1 AC-4 DC-1 DC-3 DC-5
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 1000 V AC 16.67...400 Hz Power circuit <= 300 V DC
[Ie] rated operational current	150 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 150 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit 200 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	48...130 V AC 50/60 Hz 48...130 V DC

Complementary

Motor power kW	40 kW at 230 V AC 50/60 Hz (AC-3) 75 kW at 400 V AC 50/60 Hz (AC-3) 80 kW at 415 V AC 50/60 Hz (AC-3) 90 kW at 440 V AC 50/60 Hz (AC-3) 90 kW at 500 V AC 50/60 Hz (AC-3) 100 kW at 690 V AC 50/60 Hz (AC-3) 75 kW at 1000 V AC 50/60 Hz (AC-3) 40 kW at 230 V AC 50/60 Hz (AC-3e) 75 kW at 400 V AC 50/60 Hz (AC-3e) 80 kW at 415 V AC 50/60 Hz (AC-3e) 90 kW at 440 V AC 50/60 Hz (AC-3e) 90 kW at 500 V AC 50/60 Hz (AC-3e) 100 kW at 690 V AC 50/60 Hz (AC-3e) 75 kW at 1000 V AC 50/60 Hz (AC-3e) 37 kW at 230 V AC 50/60 Hz (AC-4) 75 kW at 400 V AC 50/60 Hz (AC-4) 75 kW at 440 V AC 50/60 Hz (AC-4) 75 kW at 500 V AC 50/60 Hz (AC-4) 80 kW at 690 V AC 50/60 Hz (AC-4) 65 kW at 1000 V AC 50/60 Hz (AC-4)
Maximum Horse Power Rating	40 hp at 200/208 V 60 Hz 50 hp at 230/240 V 60 Hz 100 hp at 460/480 V 60 Hz 125 hp at 575/600 V 60 Hz
Compatibility code	LC1D

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

Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	200 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	1885 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	1440 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	350 A 104 °F (40 °C) - 10 min for power circuit 600 A 104 °F (40 °C) - 1 min for power circuit 1280 A 104 °F (40 °C) - 10 s for power circuit 1800 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	160 A aM at <= 440 V for power circuit 125 A aM at <= 690 V for power circuit 250 A gG at <= 690 V for power circuit 10 A gG for signalling circuit 0.63 A gG for control circuit
Average impedance	0.45 mOhm - Ith 200 A 50 Hz for power circuit
Power dissipation per pole	8 W AC-3 8 W AC-3e 22 W AC-1
[Ui] rated insulation voltage	Power circuit 600 V CSA Power circuit 600 V UL Power circuit 1000 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	8 kV IEC 60947
Safety reliability level	B10d = 684932 cycles contactor with nominal load EN/ISO 13849-1 B10d = 10000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	8 Mcycles
Electrical durability	0.85 Mcycles 150 A AC-3 <= 440 V 0.85 Mcycles 150 A AC-3e <= 440 V 0.5 Mcycles 200 A AC-1 <= 440 V
Control circuit type	AC 50/60 Hz DC
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.8 Uc Min...1.1 Uc Max (-40…140 °F (-40…60 °C)):operational AC/DC 0.1 Uc Max (-40…140 °F (-40…60 °C)):drop-out AC/DC
Inrush power in VA	170 VA (at 68 °F (20 °C))
Inrush power in W	120 W 68 °F (20 °C))
Hold-in power consumption in VA	7.5 VA (at 68 °F (20 °C))
Hold-in power consumption in W	5.1 W 68 °F (20 °C)
Heat dissipation	1.5 W at 20 °C
Operating time	10...80 ms opening 20...90 ms closing
Maximum operating rate	2400 cyc/h at 60 °C 3600 cyc/h at Uc at 20 ºC

Connections - terminals	Power circuit: connector 1 0.02…0.2 in² (10…120 mm²) - cable stiffness: flexible without cable end Power circuit: connector 2 0.02…0.08 in² (10…50 mm²) - cable stiffness: flexible without cable end Power circuit: connector 1 0.02…0.2 in² (10…120 mm²) - cable stiffness: flexible with cable end Power circuit: connector 2 0.02…0.08 in² (10…50 mm²) - cable stiffness: flexible with cable end Power circuit: connector 1 0.02…0.2 in² (10…120 mm²) - cable stiffness: solid without cable end Power circuit: connector 2 0.02…0.08 in² (10…50 mm²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 0.002…0.006 in² (1…4 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.002…0.004 in² (1…2.5 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.002…0.006 in² (1…4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.002…0.006 in² (1…4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.002…0.006 in² (1…4 mm²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.002…0.006 in² (1…4 mm²) - cable stiffness: solid without cable end
Tightening torque	Power circuit 106.2 lbf.in (12 N.m) connector hexagonal 0.2 in (4 mm) 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 Control 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	16.67...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	Plate

Environment

Standards	EN IEC 60947-4-1 EN IEC 60947-5-1 UL 60947-4-1 UL 60947-5-1 CSA C22.2 No 60947-4-1 CSA C22.2 No 60947-5-1 JIS C8201-4-1 JIS C8201-5-1 GB/T 14048.4 GB/T 14048.5
Product Certifications	CB Scheme CCC cULus CE UKCA EU-RO-MR by DNV-GL
IP degree of protection	IP20 front face IEC 60529
Protective treatment	NoneIEC 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) operation 140…158 °F (60…70 °C) with derating -76…176 °F (-60…80 °C) storage

Operating altitude	0...9842.52 ft (0...3000 m) without derating
Fire resistance	1562 °F (850 °C) IEC 60695-2-11
Mechanical robustness	Vibrations contactor open 2 Gn, 5...300 Hz) IEC 60068-2-6 Vibrations contactor closed 4 Gn, 5...300 Hz) IEC 60068-2-6 Shocks contactor open 10 Gn for 11 ms) IEC 60068-2-27 Shocks contactor closed 15 Gn for 11 ms) IEC 60068-2-27
Height	6.0 in (152 mm)
Width	3.8 in (97 mm)
Depth	6.1 in (155 mm)
Net Weight	5.3 lb(US) (2.4 kg)

Ordering and shipping details

Category	US1CTR121252
Discount Schedule	CTR1
GTIN	3606486977040
Returnability	Yes
Country of origin	CN

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	7.4 in (18.9 cm)
Package 1 Width	5.2 in (13.2 cm)
Package 1 Length	7.2 in (18.2 cm)
Package weight(Lbs)	5.75 lb(US) (2.61 kg)
Unit Type of Package 2	S03
Number of Units in Package 2	4
Package 2 Height	11.8 in (30 cm)
Package 2 Width	11.8 in (30 cm)
Package 2 Length	15.7 in (40 cm)
Package 2 Weight	24.1951 lb(US) (10.9747 kg)
Unit Type of Package 3	S06
Number of Units in Package 3	48
Package 3 Height	28.9 in (73.5 cm)
Package 3 Width	23.6 in (60 cm)
Package 3 Length	31.5 in (80 cm)
Package 3 Weight	306.1110 lb(US) (138.8495 kg)

Contractual warranty

Warranty (in months)	18

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

Total lifecycle Carbon footprint	**366 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**26 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.4 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0.3 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**334 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**5 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**
SCIP Number	**608af421-265e-4dfd-b0b3-1192c9364536**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
California proposition 65	**WARNING: This product can expose you to chemicals including: Styrene, which is known to the State of California to cause cancer, and Bisphenol A (BPA), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov**
Halogen content performance	**Halogen free plastic parts product**

Use Again

Repack and remanufacture

Recyclability potential, in %	**78**
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.**

Image of product / Alternate images

Alternative








1 L1
3 L2
5 L3
LC1D150A
TeSys
Schneider Electric
EHE
48-130V
AC/DC
2 T1
4 T2
6 T3