

Product data sheet

Specifications



IEC contactor, TeSys Deca,
nonreversing, 40A resistive, 4 pole,
4 NO, 48VAC 50/60Hz coil, open
style

LC1DT40E7

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

Main

Range	TeSys TeSys Deca
Range of Product	TeSys Deca
Product or Component Type	Contactors
Device short name	LC1D
Contactors application	Resistive load
Utilisation category	AC-1
Poles description	4P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz Power circuit <= 300 V DC
[Ie] rated operational current	40 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	48 V AC 50/60 Hz

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 40 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 60947-5-1 450 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	450 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	50 A 104 °F (40 °C) - 10 min for power circuit 120 A 104 °F (40 °C) - 1 min for power circuit 240 A 104 °F (40 °C) - 10 s for power circuit 380 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 63 A gG at <= 690 V coordination type 1 for power circuit 40 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2 mOhm - Ith 40 A 50 Hz for power circuit
Power dissipation per pole	3.2 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 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	15 Mcycles
Electrical durability	1.4 Mcycles 40 A AC-1 <= 440 V
Control circuit type	AC 50/60 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 U _c (-40...158 °F (-40...70 °C)):drop-out AC 50/60 Hz 0.8...1.1 U _c (-40...140 °F (-40...60 °C)):operational AC 50 Hz 0.85...1.1 U _c (-40...140 °F (-40...60 °C)):operational AC 60 Hz 1...1.1 U _c (140...158 °F (60...70 °C)):operational AC 50/60 Hz
Inrush power in VA	70 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C)) 70 VA 50 Hz cos phi 0.75 (at 68 °F (20 °C))
Hold-in power consumption in VA	7.5 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) 7 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))
Heat dissipation	2...3 W at 50/60 Hz
Operating time	4...19 ms opening 12...22 ms closing
Maximum operating rate	3600 cyc/h at 60 °C
Connections - terminals	Control circuit: screw clamp terminals 2 0.002...0.004 in ² (1...2.5 mm ²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.002...0.006 in ² (1...4 mm ²) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 0.004...0.02 in ² (2.5...10 mm ²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 0.004...0.02 in ² (2.5...10 mm ²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 0.004...0.02 in ² (2.5...10 mm ²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 0.004...0.02 in ² (2.5...10 mm ²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 0.004...0.02 in ² (2.5...16 mm ²) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 0.004...0.02 in ² (2.5...16 mm ²) - 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 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Power circuit 15.9 lbf.in (1.8 N.m) screw clamps terminals flat Ø 6 mm Power circuit 15.9 lbf.in (1.8 N.m) screw clamps terminals Philips No 2 Power circuit 15.9 lbf.in (1.8 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	Plate Rail

Environment

Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 60947-4-1 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	3.6 in (91 mm)
Width	1.8 in (45 mm)
Depth	3.9 in (99 mm)
Net Weight	0.937 lb(US) (0.425 kg)

Ordering and shipping details

Category	US10I1222354
Discount Schedule	0112
GTIN	3389110244656
Returnability	No
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.283 in (5.800 cm)
Package 1 Width	3.740 in (9.500 cm)
Package 1 Length	4.724 in (12.000 cm)
Package weight(Lbs)	16.755 oz (475.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	16
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	17.708 lb(US) (8.032 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	256
Package 3 Height	29.528 in (75.000 cm)
Package 3 Width	23.622 in (60.000 cm)
Package 3 Length	31.496 in (80.000 cm)
Package 3 Weight	300.076 lb(US) (136.112 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)	208
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	
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.

Technical Illustration

Assembly's dimensions

