Product data sheet

Specifications

IEC contactor, TeSys D, nonreversing, 40A, 30HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 240VAC 50/60Hz coil, open

LC1D40U7M

Product availability: Stock - Normally stocked in distribution facility

Main

Range	TeSys
Range of Product	TeSys Deca
Product or Component Type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-4 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz
[Ie] rated operational current	60 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 40 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 40 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	240 V AC 50/60 Hz

Complementary

Motor power kW	18.5 kW at 380...400 V AC 50/60 Hz (AC-3) 22 kW at 500 V AC 50/60 Hz (AC-3) 30 kW at 660...690 V AC 50/60 Hz (AC-3) 22 kW at 1000 V AC 50/60 Hz (AC-3) 22 kW at 415 V AC 50/60 Hz (AC-3) 22 kW at 440 V AC 50/60 Hz (AC-3) 11 kW at 220...230 V AC 50/60 Hz (AC-3) 9 kW at 400 V AC 50/60 Hz (AC-4) 18.5 kW at 380...400 V AC 50/60 Hz (AC-3e) 22 kW at 500 V AC 50/60 Hz (AC-3e) 30 kW at 660...690 V AC 50/60 Hz (AC-3e) 22 kW at 1000 V AC 50/60 Hz (AC-3e) 22 kW at 415 V AC 50/60 Hz (AC-3e) 22 kW at 440 V AC 50/60 Hz (AC-3e) 11 kW at 220...230 V AC 50/60 Hz (AC-3e)
Maximum Horse Power Rating	10 hp at 200/208 V AC 60 Hz for 3 phase motors conforming to CSA 10 hp at 200/208 V AC 60 Hz for 3 phase motors conforming to UL 10 hp at 230/240 V AC 60 Hz for 3 phase motors conforming to CSA 10 hp at 230/240 V AC 60 Hz for 3 phase motors conforming to UL 5 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to CSA 5 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to UL 3 hp at 115 V AC 60 Hz for 1 phase motors conforming to CSA 3 hp at 115 V AC 60 Hz for 1 phase motors conforming to UL 30 hp at 460/480 V AC 60 Hz for 3 phase motors conforming to CSA 30 hp at 460/480 V AC 60 Hz for 3 phase motors conforming to UL 30 hp at 575/600 V AC 60 Hz for 3 phase motors conforming to CSA 30 hp at 575/600 V AC 60 Hz for 3 phase motors conforming to UL

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

Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	Without
[Ith] conventional free air thermal current	60 A (at 140 °F (60 °C)) for power circuit 10 A (at 140 °F (60 °C)) for signalling circuit
Irms rated making capacity	800 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	800 A at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	80 A gG at <= 690 V coordination type 1 for power circuit 80 A gG at <= 690 V coordination type 2 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Power dissipation per pole	5.4 W AC-1 2.4 W AC-3 2.4 W AC-3e
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 600 V CSA Signalling circuit 600 V UL Signalling circuit 690 V IEC 60947-1
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	8 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	6 Mcycles
Control circuit type	AC 50/60 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 Uc (-40…158 °F (-40…70 °C)):drop-out AC 50/60 Hz 0.8...1.1 Uc (-40…131 °F (-40…55 °C)):operational AC 50 Hz 0.85...1.1 Uc (-40…131 °F (-40…55 °C)):operational AC 60 Hz 1...1.1 Uc (131…158 °F (55…70 °C)):operational AC 50/60 Hz
Inrush power in VA	160 VA 50 Hz cos phi 0.75 (at 68 °F (20 °C)) 140 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C))
Hold-in power consumption in VA	15 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C)) 13 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C))
Heat dissipation	4…5 W at 50/60 Hz
Operating time	4...19 ms opening 12...26 ms closing
Maximum operating rate	3600 cyc/h at 60 °C

Connections - terminals	Power circuit: screw clamp terminals 1 0.002…0.05 in² (1…35 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 0.002…0.04 in² (1…25 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 0.002…0.05 in² (1…35 mm²) - cable stiffness: solid 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 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: solid Control circuit: screw clamp terminals 2 0.002…0.006 in² (1…4 mm²) - cable stiffness: solid Control circuit: screw clamp terminals 1 0.002…0.004 in² (1…2.5 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 0.002…0.05 in² (1…35 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 0.002…0.05 in² (1…35 mm²) - cable stiffness: solid
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal Philips No 2 Power circuit 44.3 lbf.in (5 N.m) screw clamp terminal flat Ø 6 to Ø 8 mm 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	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 60947-4-1
Product Certifications	BV CCC CSA DNV GL LROS (Lloyds register of shipping) UL GOST RINA UKCA
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 3 Gn, 5...300 Hz) Shocks contactor open 8 Gn for 11 ms) Shocks contactor closed 10 Gn for 11 ms)
Height	5 in (127 mm)
Width	3.0 in (75 mm)
Depth	4.7 in (119 mm)
Net Weight	3.09 lb(US) (1.4 kg)

Ordering and shipping details

Category	US10I1222357
Discount Schedule	0I12
GTIN	3606480561368
Returnability	Yes
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	5.6 in (14.2 cm)
Package 1 Width	3.7 in (9.5 cm)
Package 1 Length	4.1 in (10.5 cm)
Package weight(Lbs)	3.172 lb(US) (1.439 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	**52 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**
Carbon footprint of the manufacturing phase [A1 to A3]	**9 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.2 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]	**40 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**3 kg CO2 eq.**

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**
PVC free	**Yes**

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

Recyclability potential, in %	**76**
Circularity Profile	**No need of specific recycling operations**
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