Product data sheet

Specifications



IEC contactor, TeSys D, nonreversing, 65A, 40HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 24VAC 50/60Hz coil, open

LC1D65B7

Product availability: Stock - Normally stocked in distribution facility

Main

Range	TeSys
Range of Product	TeSys Deca Advanced
Product or Component Type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-3e AC-1 AC-1 AC-4 AC-2
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz
[Ie] rated operational current	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 65 A (at <140 °F (60 °C)) at 24 V AC AC-3 for power circuit 80 A (at <140 °F (60 °C)) at 24 V AC AC-1 for power circuit
[Uc] control circuit voltage	24 V AC 50/60 Hz

Complementary

Motor power kW	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) 30 kW at 415 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) 37 kW at 1000 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) 30 kW at 415 V AC 50/60 Hz (AC-3e) 30 kW at 440 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) 37 kW at 1000 V AC 50/60 Hz (AC-3e) 11 kW at 400 V AC 50/60 Hz (AC-4)
Maximum Horse Power Rating	10 hp at 230/240 V AC 60 Hz for 1 phase motors 20 hp at 200/208 V AC 60 Hz for 3 phase motors 20 hp at 230/240 V AC 60 Hz for 3 phase motors 40 hp at 460/480 V AC 60 Hz for 3 phase motors 50 hp at 575/600 V AC 60 Hz for 3 phase motors 5 hp at 115 V AC 60 Hz for 1 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO

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

Protective cover	With
[Ith] conventional free air thermal current	80 A (at 140 °F (60 °C)) for power circuit 10 A (at 140 °F (60 °C)) for control circuit
Irms rated making capacity	140 A at 440 V AC for control circuit conforming to IEC 60947-5-1 140 A AC for control circuit conforming to IEC 60947-5-1 1000 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1000 kA at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	520 A 104 °F (40 °C) - 10 s for power circuit 900 A 104 °F (40 °C) - 1 s for power circuit
Associated fuse rating	125 A gG at <= 690 V coordination type 2 for power circuit 160 A gG at <= 690 V coordination type 1 for power circuit conforming to IEC 60947-5-1 125 A gG at <= 690 V coordination type 1 for power circuit 10 A gG for control circuit conforming to IEC 60947-5-1
Average impedance	1.5 Ohm - Ith 80 A 50 Hz for power circuit
Power dissipation per pole	6.4 W AC-1 4.2 W AC-3e 6.3 W AC-3 9.6 W AC-1
[Ui] rated insulation voltage	Control circuit 600 V UL Power circuit 600 V CSA Power circuit 600 V UL IEC 60947-1 Control circuit 690 V IEC 60947-1 Power circuit 690 V CSA IEC 60947-1 Control circuit 600 V CSA
Overvoltage category	III
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Safety reliability level	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
Control circuit voltage limits	0.8...1.1 Uc (-40…140 °F (-40…60 °C)):operational AC 50 Hz 0.85...1.1 Uc (-40…140 °F (-40…60 °C)):operational AC 60 Hz 1...1.1 Uc (140…158 °F (60…70 °C)):operational AC 50/60 Hz 0.3...0.6 Uc (-40…158 °F (-40…70 °C)):drop-out AC 50/60 Hz
Inrush power in VA	160 VA cos phi 0.75 (at 68 °F (20 °C)) 140 VA 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 for control circuit
Operating time	12...26 ms closing 4...19 ms opening
Maximum operating rate	3600 cyc/mn at 60 °C

Connections - terminals	Control circuit: screw clamp terminals 2 0.002…0.006 in² (1…4 mm²) - cable stiffness: rigid without 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…0.004 in² (1…2.5 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 Power circuit: screw clamp terminals 1 0.004…0.04 in² (2.5…25 mm²) - cable stiffness: rigid Power circuit: screw clamp terminals 2 0.004…0.02 in² (2.5…16 mm²) - cable stiffness: rigid without cable end Power circuit: screw clamp terminals 1 0.004…0.04 in² (2.5…25 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 0.004…0.02 in² (2.5…16 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 0.004…0.04 in² (2.5…25 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 0.004…0.02 in² (2.5…10 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.002…0.006 in² (1…4 mm²) - cable stiffness: rigid Control circuit: screw clamp terminals 1 0.002…0.006 in² (1…4 mm²) - cable stiffness: rigid
Tightening torque	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 terminal flat Ø 6 to Ø 8 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal pozidriv No 2 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal flat Ø 6 mm
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	Mirror contact 1 NC IEC 60947-4-1 Mechanically linked 1 NO + 1 NC IEC 60947-5-1
Minimum switching voltage	17 V for control circuit
Minimum switching current	5 mA for control circuit
Insulation resistance	> 10 MOhm for control circuit
Non-overlap time	1.5 ms on energisation between NC and NO contacts 1.5 ms on de-energisation between NC and NO contacts
Mounting Support	Rail Rail

Environment

Standards	UL 60947-4-1 EN 60947-5-1 EN 60947-4-1 IEC 60947-5-1 CSA C22.2 No 14
Product Certifications	UL CCC BV GL GOST RINA LROS (Lloyds register of shipping) DNV UKCA GL
IP degree of protection	IP2X VDE 0106 IP2X IEC 60529
Protective treatment	TH 3)IEC 60068-2-30
Climatic withstand	IACS E10 exposure to damp heat
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	Shocks contactor closed 15 Gn for 11 ms) Vibrations contactor opened 2 Gn, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz) Shocks contactor opened 10 Gn for 11 ms)
Height	4.8 in (122 mm)
Width	2.8 in (70 mm)
Depth	4.6 in (118 mm)
Net Weight	4.817 lb(US) (2.185 kg)
Quantity per Set	Set of 10

Ordering and shipping details

Category	US1CTR121252
Discount Schedule	CTR1
GTIN	3389110436211
Returnability	Yes
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	3.7 in (9.5 cm)
Package 1 Width	5.2 in (13.2 cm)
Package 1 Length	5.5 in (14.0 cm)
Package weight(Lbs)	3.201 lb(US) (1.452 kg)
Unit Type of Package 2	S02
Number of Units in Package 2	5
Package 2 Height	5.9 in (15 cm)
Package 2 Width	11.8 in (30 cm)
Package 2 Length	15.7 in (40 cm)
Package 2 Weight	16.724 lb(US) (7.586 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	**77 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**14 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.3 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0.4 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**57 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	**Yes**
EU RoHS Directive	**Compliant**
REACh Regulation	**Free of Substances of Very High Concern above the threshold**
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 and/or birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.**
PVC free	**Yes**

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.**