Product data sheet

Specifications

Contactor, TeSys Deca, 3P(3NO), AC-3/3e, <=440V, 32A, 230V AC 50/60Hz coil, snap-in terminals

LC1D32AJL

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

Main

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-3 AC-3e AC-4
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz Power circuit <= 300 V DC
[Ie] rated operational current	32 A (at <140 °F (60 °C)) at <= 440 V AC-3 for power circuit 32 A (at <140 °F (60 °C)) at <= 440 V AC-3e for power circuit 40 A (at <140 °F (60 °C)) at <= 440 V AC-1 for power circuit
[Uc] control circuit voltage	12 V DC

Complementary

Motor power kW	7.5 kW at 220...230 V AC 50/60 Hz (AC-3) 15 kW at 380...400 V AC 50/60 Hz (AC-3) 15 kW at 415...440 V AC 50/60 Hz (AC-3) 18.5 kW at 500 V AC 50/60 Hz (AC-3) 18.5 kW at 660...690 V AC 50/60 Hz (AC-3) 7.5 kW at 400 V AC 50/60 Hz (AC-4) 7.5 kW at 220...230 V AC 50/60 Hz (AC-3e) 15 kW at 380...400 V AC 50/60 Hz (AC-3e) 15 kW at 415...440 V AC 50/60 Hz (AC-3e) 18.5 kW at 500 V AC 50/60 Hz (AC-3e) 18.5 kW at 660...690 V AC 50/60 Hz (AC-3e)
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	40 A (at 140 °F (60 °C)) for power circuit 10 A (at 140 °F (60 °C)) for signalling circuit
Irms rated making capacity	550 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	550 A at 440 V for power circuit conforming to IEC 60947

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

[Icw] rated short-time withstand current	60 A 104 °F (40 °C) - 10 min for power circuit 138 A 104 °F (40 °C) - 1 min for power circuit 260 A 104 °F (40 °C) - 10 s for power circuit 430 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 63 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2 mOhm - Ith 50 A 50 Hz for power circuit
Power dissipation per pole	2 W AC-3 2 W AC-3e 5 W AC-1
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-1
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	30 Mcycles
Electrical durability	1.65 Mcycles 32 A AC-3 <= 440 V 2 Mcycles 40 A AC-1 <= 440 V 1.65 Mcycles 32 A AC-3e <= 440 V
Control circuit type	DC low consumption
Coil technology	Without 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 0.8...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 VA	2.4 W (at 68 °F (20 °C))
Inrush power in W	2.4 W 68 °F (20 °C))
Operating time	77 ±15 % ms closing 25 ±20 % ms opening
Time constant	40 ms
Maximum operating rate	3600 cyc/h at 60 °C
Connections - terminals	Control circuit: snap-in terminal 1 0.0008…0.006 in² (0.5…4 mm²) - cable stiffness: flexible without cable end Control circuit: snap-in terminal 2 0.0008…0.006 in² (0.5…4 mm²) - cable stiffness: flexible without cable end Control circuit: snap-in terminal 1 0.0008…0.004 in² (0.5…2.5 mm²) - cable stiffness: flexible with cable end Control circuit: snap-in terminal 2 0.0008…0.004 in² (0.5…2.5 mm²) - cable stiffness: flexible with cable end Control circuit: snap-in terminal 1 0.0008…0.004 in² (0.5…2.5 mm²) - cable stiffness: solid without cable end Control circuit: snap-in terminal 2 0.0008…0.004 in² (0.5…2.5 mm²) - cable stiffness: solid without cable end Power circuit: snap-in terminal 1 0.001…0.009 in² (0.75…6 mm²) - cable stiffness: flexible without cable end Power circuit: snap-in terminal 2 0.001…0.009 in² (0.75…6 mm²) - cable stiffness: flexible without cable end Power circuit: snap-in terminal 1 0.001…0.006 in² (0.75…4 mm²) - cable stiffness: flexible with cable end Power circuit: snap-in terminal 2 0.001…0.006 in² (0.75…4 mm²) - cable stiffness: flexible with cable end Power circuit: snap-in terminal 1 0.001…0.006 in² (0.75…4 mm²) - cable stiffness: solid without cable end Power circuit: snap-in terminal 2 0.001…0.006 in² (0.75…4 mm²) - cable stiffness: solid without cable end

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	EN 60947-4-1 IEC 60947-4-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 IEC 60335-1:Clause 30.2 IEC 60335-2-40:Annex JJ UL 60335-2-40:Annex JJ
Product Certifications	CB Scheme CCC cULus CE UKCA
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
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	4.3 in (110 mm)
Width	1.8 in (45 mm)
Depth	4.0 in (101 mm)
Net Weight	22.01 oz (624 g)

Ordering and shipping details

Category	US10I1222354
Discount Schedule	0I12
GTIN	3606487540557
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.244 in (5.700 cm)
Package 1 Width	4.291 in (10.900 cm)
Package 1 Length	4.567 in (11.600 cm)
Package weight(Lbs)	23.069 oz (654.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	15
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	21.991 lb(US) (9.975 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	240
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	370.597 lb(US) (168.100 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	**5 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**
Carbon footprint of the manufacturing phase [A1 to A3]	**3 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.2 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**0 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**2 kg CO2 eq.**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
EU RoHS Directive	**Compliant with Exemptions**
SCIP Number	**50ae7612-fd2e-41e4-a369-50d0dea6e592**
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**

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

Recyclability potential, in %	**75**
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