

# Product data sheet

Specifications



IEC contactor, TeSys Deca, nonreversing, 65A, 40HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 230VAC 50/60Hz coil, open

LC1D65AP7

**Product availability: Stock - Normally stocked in distribution facility**

## Main

<b>Range</b>	TeSys TeSys Deca
<b>Range of Product</b>	TeSys Deca
<b>Product or Component Type</b>	Contacteur
<b>Device short name</b>	LC1D
<b>Contacteur application</b>	Resistive load Motor control
<b>Utilisation category</b>	AC-4 AC-1 AC-3 AC-3e
<b>Poles description</b>	3P
<b>[Ue] rated operational voltage</b>	Power circuit $\leq 690$ V AC 25...400 Hz Power circuit $\leq 300$ V DC
<b>[Ie] rated operational current</b>	80 A (at $\leq 140$ °F (60 °C)) at $\leq 440$ V AC AC-1 for power circuit 65 A (at $\leq 140$ °F (60 °C)) at $\leq 440$ V AC AC-3 for power circuit 65 A (at $\leq 140$ °F (60 °C)) at $\leq 440$ V AC AC-3e for power circuit
<b>[Uc] control circuit voltage</b>	230 V AC 50/60 Hz

## Complementary

<b>Motor power kW</b>	11 kW at 400 V AC 50/60 Hz (AC-4) 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) 37 kW at 500 V AC 50/60 Hz (AC-3) 37 kW at 660...690 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) 37 kW at 500 V AC 50/60 Hz (AC-3e) 37 kW at 660...690 V AC 50/60 Hz (AC-3e)
<b>Maximum Horse Power Rating</b>	40 hp at 460/480 V AC 50/60 Hz for 3 phase motors 5 hp at 115 V AC 50/60 Hz for 1 phase motors 10 hp at 230/240 V AC 50/60 Hz for 1 phase motors 20 hp at 200/208 V AC 50/60 Hz for 3 phase motors 20 hp at 230/240 V AC 50/60 Hz for 3 phase motors 50 hp at 575/600 V AC 50/60 Hz for 3 phase motors
<b>Compatibility code</b>	LC1D
<b>Pole contact composition</b>	3 NO
<b>Protective cover</b>	With
<b>[Ith] conventional free air thermal current</b>	10 A (at 140 °F (60 °C)) for signalling circuit 80 A (at 140 °F (60 °C)) for power circuit

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

<b>Irms rated making capacity</b>	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 1000 A at 440 V for power circuit conforming to IEC 60947
<b>Rated breaking capacity</b>	1000 A at 440 V for power circuit conforming to IEC 60947
<b>[Icw] rated short-time withstand current</b>	640 A 104 °F (40 °C) - 10 s for power circuit 900 A 104 °F (40 °C) - 1 s for power circuit 110 A 104 °F (40 °C) - 10 min for power circuit 260 A 104 °F (40 °C) - 1 min for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit
<b>Associated fuse rating</b>	10 A gG for signalling circuit conforming to IEC 60947-5-1 125 A gG at ≤ 690 V coordination type 1 for power circuit 125 A gG at ≤ 690 V coordination type 2 for power circuit
<b>Average impedance</b>	1.5 mOhm - Ith 80 A 50 Hz for power circuit
<b>Power dissipation per pole</b>	9.6 W AC-1 6.3 W AC-3 6.3 W AC-3e
<b>[Ui] rated insulation voltage</b>	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
<b>Overvoltage category</b>	III
<b>Pollution degree</b>	3
<b>[Uimp] rated impulse withstand voltage</b>	6 kV IEC 60947
<b>Safety reliability level</b>	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
<b>Mechanical durability</b>	6 Mcycles
<b>Electrical durability</b>	1.4 Mcycles 80 A AC-1 ≤ 440 V 1.45 Mcycles 65 A AC-3 ≤ 440 V 1.45 Mcycles 65 A AC-3e ≤ 440 V
<b>Control circuit type</b>	AC 50/60 Hz standard
<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	0.3...0.6 Uc (-40...158 °F (-40...70 °C)):drop-out AC 50/60 Hz 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
<b>Inrush power in VA</b>	140 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C)) 160 VA 50 Hz cos phi 0.75 (at 68 °F (20 °C))
<b>Hold-in power consumption in VA</b>	13 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) 15 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))
<b>Heat dissipation</b>	4...5 W at 50/60 Hz
<b>Operating time</b>	4...19 ms opening 12...26 ms closing
<b>Maximum operating rate</b>	3600 cyc/h at 60 °C

<b>Connections - terminals</b>	<p>Control circuit: screw clamp terminals 2 0.002...0.004 in<sup>2</sup> (1...2.5 mm<sup>2</sup>) - cable stiffness: flexible with cable end</p> <p>Control circuit: screw clamp terminals 1 0.002...0.006 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: flexible without cable end</p> <p>Control circuit: screw clamp terminals 2 0.002...0.006 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: flexible without cable end</p> <p>Control circuit: screw clamp terminals 1 0.002...0.006 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: flexible with cable end</p> <p>Control circuit: screw clamp terminals 1 0.002...0.006 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: solid without cable end</p> <p>Control circuit: screw clamp terminals 2 0.002...0.006 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: solid without cable end</p> <p>Power circuit: screw clamp terminals 1 0.002...0.05 in<sup>2</sup> (1...35 mm<sup>2</sup>) - cable stiffness: flexible without cable end</p> <p>Power circuit: screw clamp terminals 2 0.002...0.04 in<sup>2</sup> (1...25 mm<sup>2</sup>) - cable stiffness: flexible without cable end</p> <p>Power circuit: screw clamp terminals 1 0.002...0.05 in<sup>2</sup> (1...35 mm<sup>2</sup>) - cable stiffness: flexible with cable end</p> <p>Power circuit: screw clamp terminals 2 0.002...0.04 in<sup>2</sup> (1...25 mm<sup>2</sup>) - cable stiffness: flexible with cable end</p> <p>Power circuit: screw clamp terminals 1 0.002...0.05 in<sup>2</sup> (1...35 mm<sup>2</sup>) - cable stiffness: solid without cable end</p> <p>Power circuit: screw clamp terminals 2 0.002...0.04 in<sup>2</sup> (1...25 mm<sup>2</sup>) - cable stiffness: solid without cable end</p>
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<b>Tightening torque</b>	<p>Control circuit 15.05 lbf.in (1.7 N.m) EverLink BTR screw connectors flat Ø 6 mm</p> <p>Control circuit 15.05 lbf.in (1.7 N.m) EverLink BTR screw connectors Philips No 2</p> <p>Power circuit 70.8 lbf.in (8 N.m) EverLink BTR screw connectors 0.04...0.05 in<sup>2</sup> (25...35 mm<sup>2</sup>) hexagonal 0.2 in (4 mm)</p> <p>Power circuit 44.3 lbf.in (5 N.m) EverLink BTR screw connectors 0.002...0.04 in<sup>2</sup> (1...25 mm<sup>2</sup>) hexagonal 0.2 in (4 mm)</p> <p>Control circuit 15.05 lbf.in (1.7 N.m) EverLink BTR screw connectors pozidriv No 2</p> <p>Power circuit 22.1 lbf.in (2.5 N.m) EverLink BTR screw connectors pozidriv No 2</p>
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<b>Auxiliary contact composition</b>	1 NO + 1 NC
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<b>Auxiliary contacts type</b>	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
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<b>Signalling circuit frequency</b>	25...400 Hz
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<b>Minimum switching voltage</b>	17 V for signalling circuit
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<b>Minimum switching current</b>	5 mA for signalling circuit
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<b>Insulation resistance</b>	> 10 MOhm for signalling circuit
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<b>Non-overlap time</b>	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
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<b>Mounting Support</b>	Rail Plate
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## Environment

<b>Standards</b>	<p>EN 60947-4-1</p> <p>EN 60947-5-1</p> <p>IEC 60947-4-1</p> <p>IEC 60947-5-1</p> <p>CSA C22.2 No 14</p> <p>UL 60947-4-1</p> <p>IEC 60335-2-40:Annex JJ</p> <p>UL 60335-2-40:Annex JJ</p> <p>IEC 60335-1:Clause 30.2</p>
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<b>Product Certifications</b>	<p>CCC</p> <p>UL</p> <p>CB Scheme</p> <p>CSA</p> <p>CE</p> <p>UKCA</p> <p>Marine</p> <p>EAC</p>
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<b>IP degree of protection</b>	IP20 front face IEC 60529
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<b>Protective treatment</b>	THIEC 60068-2-30
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<b>Climatic withstand</b>	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat
<b>Permissible ambient air temperature around the device</b>	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
<b>Operating altitude</b>	0...9842.52 ft (0...3000 m)
<b>Fire resistance</b>	1562 °F (850 °C) IEC 60695-2-1
<b>Flame retardance</b>	V1 conforming to UL 94
<b>Mechanical robustness</b>	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 10 Gn for 11 ms)
<b>Height</b>	4.8 in (122 mm)
<b>Width</b>	2.2 in (55 mm)
<b>Depth</b>	4.7 in (120 mm)
<b>Net Weight</b>	1.90 lb(US) (0.86 kg)

## Ordering and shipping details

<b>Category</b>	US10I1222357
<b>Discount Schedule</b>	0112
<b>GTIN</b>	3389119409025
<b>Returnability</b>	Yes
<b>Country of origin</b>	ID

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	2.362 in (6.000 cm)
<b>Package 1 Width</b>	5.315 in (13.500 cm)
<b>Package 1 Length</b>	5.906 in (15.000 cm)
<b>Package weight(Lbs)</b>	32.628 oz (925.000 g)
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	10
<b>Package 2 Height</b>	5.906 in (15.000 cm)
<b>Package 2 Width</b>	11.811 in (30.000 cm)
<b>Package 2 Length</b>	15.748 in (40.000 cm)
<b>Package 2 Weight</b>	21.455 lb(US) (9.732 kg)
<b>Unit Type of Package 3</b>	S02
<b>Number of Units in Package 3</b>	10
<b>Package 3 Height</b>	5.906 in (15.000 cm)
<b>Package 3 Width</b>	11.811 in (30.000 cm)
<b>Package 3 Length</b>	15.748 in (40.000 cm)
<b>Package 3 Weight</b>	21.286 lb(US) (9.655 kg)

## Contractual warranty

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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)	84
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## Use Better

### Materials and Substances

Packaging made with recycled cardboard	Yes
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Packaging without single use plastic	Yes
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<a href="#">EU RoHS Directive</a>	Compliant
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REACH Regulation	<a href="#">REACH Declaration</a>
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California proposition 65	<b>WARNING: This product can expose you to chemicals including: Antimony oxide &amp; Antimony trioxide, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a></b>
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PVC free	Yes
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## Use Again

### Repack and remanufacture

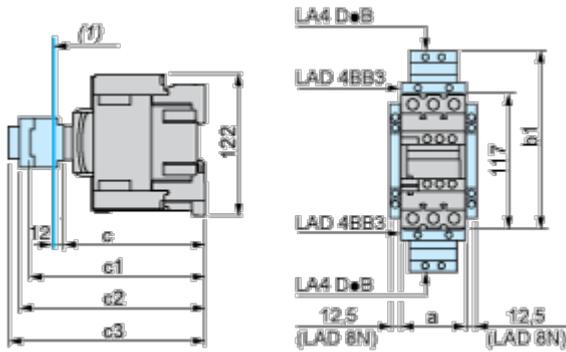
Circularity Profile	<a href="#">End of Life Information</a>
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Take-back	No
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WEEE Label	 <b>The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.</b>
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Dimensions Drawings

Dimensions



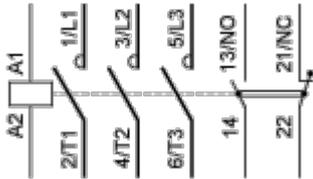
(1) Minimum electrical clearance

LC1		D40A...D65A
a		55
b1	with LA4 D•2	–
	with LA4 DB3 or LAD 4BB3	136
	with LA4 DF, DT	157
	with LA4 DM, DW, DL	166
c	without cover or add-on blocks	118
	with cover, without add-on blocks	120
c1	with LAD N (1 contact)	–
	with LAD N or C (2 or 4 contacts)	150
c2	with LA6 DK10, LAD 6DK	163
c3	with LAD T, R, S	171
	with LAD T, R, S and sealing cover	175

Connections and Schema

Wiring

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Technical Illustration

Assembly's dimensions

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