

# Product data sheet

Specifications



## Reversing contactor, TeSys Deca, 3P(3 NO), AC-3, 0 to 440V, 65A, 48VDC coil

LC2D65AED

⚠ Discontinued on: Dec 1, 2021

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### Main

Range	TeSys TeSys Deca
Product Name	TeSys D TeSys Deca
Product Or Component Type	Reversing contactor
Device Short Name	LC2D
Contactor Application	Resistive load Motor control
Utilisation Category	AC-1 AC-3 AC-3e
Device Presentation	Preassembled with reversing power busbar
Poles Description	3P
Power Pole Contact Composition	3 NO
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25...400 Hz Power circuit: <= 300 V DC
[Ie] Rated Operational Current	80 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 65 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 65 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
Motor Power Kw	18.5 kW at 220...230 V AC 50 Hz 30 kW at 380...400 V AC 50 Hz 37 kW at 415...440 V AC 50 Hz 37 kW at 500 V AC 50 Hz 37 kW at 660...690 V AC 50 Hz
Motor Power Hp (UI / Csa)	40 hp at 460/480 V AC 60 Hz for 3 phases motors 5 hp at 115 V AC 60 Hz for 1 phase motors 10 hp at 230/240 V AC 60 Hz for 1 phase motors 20 hp at 200/208 V AC 60 Hz for 3 phases motors 20 hp at 230/240 V AC 60 Hz for 3 phases motors 50 hp at 575/600 V AC 60 Hz for 3 phases motors
Control Circuit Type	DC standard
[Uc] Control Circuit Voltage	48 V DC
Auxiliary Contact Composition	1 NO + 1 NC
[Uimp] Rated Impulse Withstand Voltage	6 kV conforming to IEC 60947
Overvoltage Category	III
[Ith] Conventional Free Air Thermal Current	10 A (at 60 °C) for signalling circuit 80 A (at 60 °C) for power circuit

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

<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>	520 A 40 °C - 10 s for power circuit 900 A 40 °C - 1 s for power circuit 110 A 40 °C - 10 min for power circuit 260 A 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>[Ui] Rated Insulation Voltage</b>	Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified
<b>Electrical Durability</b>	1.45 Mcycles 65 A AC-3 at Ue <= 440 V 1.4 Mcycles 80 A AC-1 at Ue <= 440 V 1.45 Mcycles 65 A AC-3e at Ue <= 440 V
<b>Power Dissipation Per Pole</b>	9.6 W AC-1 6.3 W AC-3 6.3 W AC-3e
<b>Front Cover</b>	With
<b>Interlocking Type</b>	Mechanical
<b>Mounting Support</b>	Rail Plate
<b>Standards</b>	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 IEC 60335-1
<b>Product Certifications</b>	UL CSA RINA GOST CCC DNV LROS (Lloyds register of shipping) GL BV UKCA
<b>Connections - Terminals</b>	Control circuit: screw clamp terminals 1 cable(s) 1...4 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm²solid Control circuit: screw clamp terminals 2 cable(s) 1...4 mm²solid Power circuit: EverLink BTR screw connectors 1 cable(s) 1...35 mm²flexible without cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 1...25 mm²flexible without cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 1...35 mm²flexible with cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 1...25 mm²flexible with cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 1...35 mm²solid Power circuit: EverLink BTR screw connectors 2 cable(s) 1...25 mm²solid

Tightening Torque	Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 8 N.m - on EverLink BTR screw connectors - cable 25...35 mm² hexagonal screw head 4 mm Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 1...25 mm² hexagonal screw head 4 mm
Operating Time	16...24 ms opening 42.5...57.5 ms closing
Safety Reliability Level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical Durability	10 Mcycles
Maximum Operating Rate	3600 cyc/h 60 °C

## Complementary

Coil Technology	Built-in bidirectional peak limiting diode suppressor
Control Circuit Voltage Limits	0.1...0.3 Uc (-40...70 °C):drop-out DC 0.75...1.25 Uc (-40...60 °C):operational DC 1...1.25 Uc (60...70 °C):operational DC
Time Constant	34 ms
Inrush Power In W	19 W (at 20 °C)
Hold-In Power Consumption In W	7.4 W at 20 °C
Auxiliary Contacts Type	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1
Signalling Circuit Frequency	25...400 Hz
Minimum Switching Current	5 mA for signalling circuit
Minimum Switching Voltage	17 V 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
Insulation Resistance	> 10 MOhm for signalling circuit

## Environment

Ip Degree Of Protection	IP20 front face conforming to IEC 60529
Climatic Withstand	conforming to IACS E10 conforming to IEC 60947-1 Annex Q category D
Protective Treatment	TH conforming to IEC 60068-2-30
Pollution Degree	3
Ambient Air Temperature For Operation	-40...60 °C 60...70 °C with derating
Ambient Air Temperature For Storage	-60...80 °C
Operating Altitude	0...3000 m
Fire Resistance	850 °C conforming to 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 open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms
Height	122 mm
Width	119 mm

Depth	120 mm
Net Weight	2.04 kg

### Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	14 cm
Package 1 Width	16.2 cm
Package 1 Length	19.8 cm
Package 1 Weight	2.1 kg

### Contractual warranty

Warranty	18 months
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency   RoHS/REACH

## Well-being performance

✓ Reach Free Of Svhc

✓ Mercury Free

✓ Rohs Exemption Information   [Yes](#)

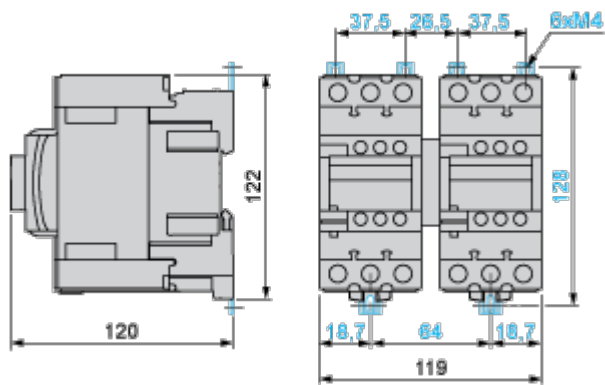
✓ Pvc Free

## Certifications & Standards

Reach Regulation	<a href="#">REACH Declaration</a>
Eu Rohs Directive	Compliant <a href="#">EU RoHS Declaration</a>
China Rohs Regulation	<a href="#">China RoHS declaration</a> Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	<a href="#">End of Life Information</a>
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 <a href="#">www.P65Warnings.ca.gov</a>

Dimensions Drawings

Dimensions



Connections and Schema

Wiring

