Product data sheet

Specifications

TeSys Deca reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 50 A - 48 V AC coil

LC2D50A3E7

Discontinued on: Jul 12, 2021

Discontinued

Main

Range	TeSys
Product name	TeSys Deca
Product or Component Type	Reversing contactor
Device short name	LC2D
Contactor application	Resistive load Motor control
Utilisation category	AC-3 AC-1
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	50 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 80 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
Motor power kW	15 kW at 220...230 V AC 50 Hz 22 kW at 380...400 V AC 50 Hz 30 kW at 500 V AC 50 Hz 33 kW at 660...690 V AC 50 Hz 25 kW at 415 V AC 50 Hz 30 kW at 440 V AC 50 Hz
Maximum Horse Power Rating	3 hp at 115 V AC 60 Hz for 1 phase motors 7.5 hp at 230/240 V AC 60 Hz for 1 phase motors 15 hp at 200/208 V AC 60 Hz for 3 phase motors 15 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 40 hp at 575/600 V AC 60 Hz for 3 phase motors
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	48 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for signalling circuit 80 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 900 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	900 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	400 A 104 °F (40 °C) - 10 s for power circuit 810 A 104 °F (40 °C) - 1 s for power circuit 84 A 104 °F (40 °C) - 10 min for power circuit 208 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
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 100 A gG at <= 690 V coordination type 1 for power circuit 100 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	1.5 mOhm - Ith 80 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 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
Electrical durability	1.45 Mcycles 50 A AC-3 <= 440 V 1.1 Mcycles 80 A AC-1 <= 440 V
Power dissipation per pole	3.7 W AC-3 9.6 W AC-1
Front cover	With
Interlocking type	Mechanical
Mounting Support	Plate Rail
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
Product Certifications	GOST CSA UL CCC
Connections - terminals	Control circuit spring terminals 1 0.004 in² (2.5 mm²)flexible without cable end Control circuit spring terminals 2 0.004 in² (2.5 mm²)flexible without cable end Power circuit EverLink BTR screw connectors 1 0.002…0.05 in² (1…35 mm²)flexible without cable end Power circuit EverLink BTR screw connectors 2 0.002…0.04 in² (1…25 mm²)flexible without cable end Power circuit EverLink BTR screw connectors 1 0.002…0.05 in² (1…35 mm²)flexible with cable end Power circuit EverLink BTR screw connectors 2 0.002…0.04 in² (1…25 mm²)flexible with cable end Power circuit EverLink BTR screw connectors 1 0.002…0.05 in² (1…35 mm²)solid Power circuit EverLink BTR screw connectors 2 0.002…0.04 in² (1…25 mm²)solid
Tightening torque	Power circuit 70.8 lbf.in (8 N.m) EverLink BTR screw connectors 0.04…0.05 in² (25…35 mm²) hexagonal 0.2 in (4 mm) Power circuit 44.3 lbf.in (5 N.m) EverLink BTR screw connectors 0.004…0.04 in² (2.5…25 mm²) hexagonal 0.2 in (4 mm)
Operating time	4...19 ms opening 12...26 ms closing
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
Maximum operating rate	3600 cyc/h 140 °F (60 °C)

Complementary

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…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
Inrush power in VA	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))
Hold-in power consumption in VA	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))
Heat dissipation	4…5 W 50/60 Hz
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 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 IEC 60529
Climatic withstand	IACS E10 IEC 60947-1 Annex Q category D
Protective treatment	TH IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-40…140 °F (-40…60 °C) 140…158 °F (60…70 °C) with derating
Ambient Air Temperature for Storage	-76…176 °F (-60…80 °C)
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 open2 Gn, 5...300 Hz Vibrations contactor closed4 Gn, 5...300 Hz Shocks contactor open10 Gn for 11 ms Shocks contactor closed15 Gn for 11 ms
Height	4.8 in (122 mm)
Width	4.7 in (119 mm)
Depth	4.7 in (120 mm)
Net Weight	4.14 lb(US) (1.88 kg)

Ordering and shipping details

Category	22357-CTR,TESYS D,OPEN,40-65A AC
Discount Schedule	I12
GTIN	3389118339996
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	5.5 in (14 cm)
Package 1 Width	6.4 in (16.2 cm)
Package 1 Length	7.8 in (19.8 cm)
Package weight(Lbs)	4.6 lb(US) (2.1 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

Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

EU RoHS Directive	Compliant
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
PVC free	Yes

Use Longer

Lifetime extension

Repair	No

Use Again

Repack and remanufacture

Circularity Profile	End of Life Information
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.