

Product data sheet

Specifications



TeSys Deca contactor 3P 80A AC-3 <= 440V - aux 1NO+1NC - coil 277V AC 60Hz

LC1D80W6

! Discontinued

Main

Range	TeSys
Range of Product	TeSys Deca
Product or Component Type	Contactors
Device short name	LC1D
Contactors application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 1000 V AC 25...400 Hz
[Ie] rated operational current	125 A (at <140 °F (60 °C)) at <= 1000 V AC AC-1 for power circuit 80 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit
[Uc] control circuit voltage	277 V AC 60 Hz

Complementary

Motor power kW	37 kW at 380...400 V AC 50 Hz 55 kW at 500 V AC 50 Hz 45 kW at 660...690 V AC 50 Hz 22 kW at 220...230 V AC 50 Hz 45 kW at 415 V AC 50 Hz 45 kW at 440 V AC 50 Hz
Maximum Horse Power Rating	7.5 hp at 115 V AC 60 Hz for 1 phase motors 15 hp at 230/240 V AC 60 Hz for 1 phase motors 25 hp at 200/208 V AC 60 Hz for 3 phase motors 30 hp at 230/240 V AC 60 Hz for 3 phase motors 60 hp at 460/480 V AC 60 Hz for 3 phase motors 60 hp at 575/600 V AC 60 Hz for 3 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for control circuit 125 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	140 A AC for control circuit conforming to IEC 60947-5-1 1100 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1100 kA 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.

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

[Icw] rated short-time withstand current	990 A 104 °F (40 °C) - 1 s for power circuit 640 A 104 °F (40 °C) - 10 s for power circuit 320 A 104 °F (40 °C) - 1 s for power circuit 135 A 104 °F (40 °C) - 10 s for power circuit 100 A - 1 s for control circuit 120 A - 500 s for control circuit 140 A - 100 s for control circuit
Associated fuse rating	10 A gG for control circuit conforming to IEC 60947-5-1 160 A gG at <= 690 V coordination type 2 for power circuit 200 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	0.8 Ohm - Ith 125 A 50 Hz for power circuit
Power dissipation per pole	5.1 W AC-3 12.5 W AC-1
[Ui] rated insulation voltage	Control circuit 600 V CSA Control circuit 600 V UL Power circuit 600 V CSA Power circuit 600 V UL Control circuit 690 V IEC 60947-1 Power circuit 1000 V IEC 60947-1
Overvoltage category	III
[Uimp] rated impulse withstand voltage	8 kV IEC 60947
Mechanical durability	4000000 cycles
Control circuit type	AC 60 Hz
Coil technology	Without built-in
Control circuit voltage limits	0.3...0.6 Uc (-40...158 °F (-40...70 °C)):drop-out AC 60 Hz 0.85...1.1 Uc (-40...131 °F (-40...55 °C)):operational AC 60 Hz 1...1.1 Uc (131...158 °F (55...70 °C)):operational AC 60 Hz
Inrush power in VA	245 VA cos phi 0.75 (at 68 °F (20 °C)) 200 VA cos phi 0.75 (at 68 °F (20 °C)) 220 VA cos phi 0.75 (at 68 °F (20 °C))
Hold-in power consumption in VA	26 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C)) 26 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) 20 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C)) 22 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C))
Heat dissipation	6...10 W at 50/60 Hz for control circuit
Operating time	20...35 ms closing 6...20 ms opening
Connections - terminals	Control circuit: screw clamp terminals 1 0.002...0.006 in² (1...4 mm²) - cable stiffness: rigid 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: 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 0.006...0.08 in² (4...50 mm²) - cable stiffness: rigid Power circuit: screw clamp terminals 2 0.006...0.04 in² (4...25 mm²) - cable stiffness: rigid Power circuit: screw clamp terminals 1 0.006...0.08 in² (4...50 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 0.006...0.04 in² (4...25 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 0.006...0.08 in² (4...50 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 0.006...0.02 in² (4...16 mm²) - cable stiffness: flexible with cable end

Tightening torque	Control circuit 10.6 lbf.in (1.2 N.m) screw clamp terminal flat Ø 6 mm Control circuit 10.6 lbf.in (1.2 N.m) screw clamp terminal Philips No 2 Power circuit 106.2 lbf.in (12 N.m) screw terminal flat Ø 6 to Ø 8 mm Power circuit 106.2 lbf.in (12 N.m) screw terminal hex (Allen key) 0.2 in (4 mm) Control circuit 10.6 lbf.in (1.2 N.m) screw clamp terminal pozidriv No 2
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
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 de-energisation between NC and NO contacts 1.5 ms on energisation between NC and NO contacts
Mounting Support	Plate Rail

Environment

Standards	IEC 60947-5-1 UL 508 CSA C22.2 No 14 EN 60947-4-1 IEC 60947-4-1 EN 60947-5-1
Product Certifications	GL LROS (Lloyds register of shipping) BV GOST CSA RINA DNV UL CCC
IP degree of protection	IP2X IEC 60529 IP2X VDE 0106
Protective treatment	TH 3)IEC 60068-2-30
Climatic withstand	IACS E10 exposure to damp heat
Permissible ambient air temperature around the device	-76...176 °F (-60...80 °C) storage -40...140 °F (-40...60 °C) operation 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
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor opened 8 gn) Shocks contactor closed 10 Gn) Vibrations contactor opened 2 Gn, 5...300 Hz) Vibrations contactor closed 3 Gn, 5...300 Hz)
Height	5 in (127 mm)
Width	3.8 in (96 mm)
Depth	7.1 in (181 mm)
Net Weight	5.71 lb(US) (2.59 kg)
Quantity per Set	Set of 1

Ordering and shipping details

Category	22359-CTR,TESYS D,OPEN,80-150A AC&DC
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Discount Schedule	I12
GTIN	3389110443165
Returnability	No
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	3.8 in (9.6 cm)
Package 1 Width	5.3 in (13.4 cm)
Package 1 Length	5.5 in (14 cm)
Package weight(Lbs)	3.5 lb(US) (1.6 kg)

Contractual warranty

Warranty (in months)	18
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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	16 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Carbon footprint of the manufacturing phase [A1 to A3]	11 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.3 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]	4 kg CO2 eq.

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant
REACH Regulation	REACH Declaration

Use Longer



Lifetime extension

Repair	No
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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.