Product data sheet

Specifications



Reversing Contactor, TeSys Deca, 3P(3NO), AC-3/AC-3e, <=440V 80A, 120V 60HzAC 50/60Hz coil, screw clamp terminals

LC2D80G7

Main

Mann	
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-1 AC-3 AC-3e
Device Presentation	AC-4 Preassembled with reversing power busbar
Poles Description	3P
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Power Pole Contact Composition	3 NO
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC
[le] Rated Operational Current	125 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 80 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 80 A (at <60 °C) at <= 440 V AC AC-3e for power circuit 55 A (at <60 °C) at <= 400 V AC AC-4 for power circuit
Motor Power Kw	22 kW at 220230 V AC 50 Hz 37 kW at 380400 V AC 50 Hz 45 kW at 415440 V AC 50 Hz 55 kW at 500 V AC 50 Hz 45 kW at 660690 V AC 50 Hz
Motor Power Hp (UI / Csa)	20 hp at 200/208 V AC 60 Hz for 3 phases motors 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 230/240 V AC 60 Hz for 3 phases motors 60 hp at 460/480 V AC 60 Hz for 3 phases motors 60 hp at 575/600 V AC 60 Hz for 3 phases motors
Control Circuit Type	AC at 50/60 Hz
[Uc] Control Circuit Voltage	120 V AC 50/60 Hz
Auxiliary Contact Composition	1 NO + 1 NC
[Uimp] Rated Impulse Withstand Voltage	8 kV conforming to IEC 60947
Overvoltage Category	III
[Ith] Conventional Free Air Thermal Current	10 A (at 60 °C) for signalling circuit 125 A (at 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 1100 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	1100 A at 440 V for power circuit conforming to IEC 60947

[Icw] Rated Short-Time Withstand Current	135 A 40 °C - 10 min for power circuit
	320 A 40 °C - 1 min for power circuit 640 A 40 °C - 10 s for power circuit
	990 A 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
	200 A gG at <= 690 V coordination type 1 for power circuit 160 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	0.8 mOhm - Ith 125 A 50 Hz for power circuit
[Ui] Rated Insulation Voltage	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 Power circuit: 1000 V conforming to IEC 60947-4-1
Electrical Durability	0.8 Mcycles 125 A AC-1 at Ue <= 440 V
	1.5 Mcycles 80 A AC-3 at Ue <= 440 V 1.5 Mcycles 80 A AC-3e at Ue <= 440 V
Power Dissipation Per Pole	12.5 W AC-1
	5.1 W AC-3 5.1 W AC-3e
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	UL
	CSA
	RINA GOST
	CCC
	DNV
	LROS (Lloyds register of shipping) GL
	BV
	UKCA
Connections - Terminals	Control circuit: screw clamp terminals 1 cable(s) 14 mm ² flexible without cable end
	Control circuit: screw clamp terminals 2 cable(s) 14 mm ² flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm ² flexible with cable end
	Control circuit: screw clamp terminals 1 cable(s) 14 mm ² solid
	Control circuit: screw clamp terminals 2 cable(s) 14 mm ² solid
	Control circuit: screw clamp terminals 1 cable(s) 12.5 mm ² flexible with cable end Power circuit: connector 1 cable(s) 450 mm ² flexible without cable end
	Power circuit: connector 2 cable(s) 425 mm²flexible without cable end
	Power circuit: connector 1 cable(s) 450 mm²flexible with cable end
	Power circuit: connector 2 cable(s) 416 mm²flexible with cable end Power circuit: connector 1 cable(s) 450 mm²solid
	Power circuit: connector 2 cable(s) 430 mm solid Power circuit: connector 2 cable(s) 425 mm ² solid
Tightening Torque	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2
	Power circuit: 12 N.m - on connector - with screwdriver flat Ø 6 to Ø 8 mm
	Power circuit: 12 N.m - on connector hexagonal screw head 4 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
Operating Time	2035 ms closing
	620 ms opening
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	4 Mcycles
Maximum Operating Rate	3600 cyc/h 60 °C

Complementary

Coil Technology	Without built-in suppressor module
Control Circuit Voltage Limits	0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz
	0.81.1 Uc (-4055 °C):operational AC 50 Hz
	0.851.1 Uc (-4055 °C):operational AC 60 Hz
	11.1 Uc (5570 °C):operational AC 50/60 Hz
Inrush Power In Va	245 VA 60 Hz cos phi 0.75 (at 20 °C)
	245 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-In Power Consumption In Va	26 VA 60 Hz cos phi 0.3 (at 20 °C)
	26 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat Dissipation	610 W at 50/60 Hz
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	25400 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
Protective Treatment	TH conforming to IEC 60068-2-30
Pollution Degree	3
Ambient Air Temperature For Operation	-4060 °C 6070 °C with derating
Ambient Air Temperature For Storage	-6080 °C
Operating Altitude	03000 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, 5300 Hz Shocks contactor open: 8 Gn for 11 ms Vibrations contactor closed: 3 Gn, 5300 Hz Shocks contactor closed: 10 Gn for 11 ms
Height	127 mm
Width	182 mm
Depth	158 mm
Net Weight	3.2 kg

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	18.5 cm

Package 1 Width	19.0 cm
Package 1 Length	26.0 cm
Package 1 Weight	3.788 kg

Contractual warranty

Warranty

18 months

Sustainability

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ 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

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Well-being performance

Reach Free Of Svhc
 Toxic Heavy Metal Free
 Mercury Free
 Rohs Exemption Information Yes
 Pvc Free

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	No need of specific recycling operations
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