Product data sheet

Specifications

Reversing contactor, TeSys Deca, 3 poles, AC-3, <=440V 65A, 415V AC 50/60Hz coil, screw clamp terminals

LC2D65N7

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-1 AC-3
Device presentation	Preassembled with reversing power busbar
Poles description	3P
power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit <= 1000 V AC 25...400 Hz
[Ie] rated operational current	65 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 80 A (at <104 °F (40 °C)) at <= 440 V AC AC-1 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 500 V AC 50 Hz 37 kW at 660...690 V AC 50 Hz 37 kW at 440 V AC 50 Hz 37 kW at 415 V AC 50 Hz
Motor power hp	5 hp at 115 V AC 60 Hz for 1 phase motors 20 hp at 200/208 V AC 60 Hz for 3 phases motors 50 hp at 575...600 V AC 60 Hz for 3 phases motors 50 hp at 460...480 V AC 60 Hz for 3 phases motors 20 hp at 220...240 V AC 60 Hz for 3 phases motors 10 hp at 230...240 V AC 60 Hz for 1 phase motors
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	415 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	8 kV IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for signalling 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 1000 A at 440 V for power circuit conforming to IEC 60947-4
Rated breaking capacity	1000 A at 220/415/440 V for power circuit conforming to IEC 60947 1000 A at 500 V conforming to IEC 60947 630 A at 690 V conforming to IEC 60947

[Icw] rated short-time withstand current	100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit 520 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
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	1 mOhm - Ith 80 A 50 Hz for power circuit
[Ui] rated insulation voltage	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 1000 V IEC 60947-4-1
Electrical durability	1.4 Mcycles 80 A AC-1 <= 440 V 1.5 Mcycles 65 A AC-3 <= 440 V
Power dissipation per pole	6.4 W AC-1 4.2 W AC-3
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	BV CCC CSA DNV GL RINA UL EAC
Connections - terminals	Control circuit screw clamp terminals 1 0.002…0.006 in² (1…4 mm²)flexible without cable end Control circuit screw clamp terminals 2 0.002…0.006 in² (1…4 mm²)flexible without cable end Control circuit screw clamp terminals 1 0.002…0.006 in² (1…4 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.002…0.004 in² (1…2.5 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.002…0.006 in² (1…4 mm²)solid without cable end Control circuit screw clamp terminals 2 0.002…0.006 in² (1…4 mm²)solid without cable end Power circuit screw clamp terminals 1 0.004…0.04 in² (2.5…25 mm²)flexible without cable end Power circuit screw clamp terminals 2 0.004…0.02 in² (2.5…16 mm²)flexible without cable end Power circuit screw clamp terminals 1 0.004…0.04 in² (2.5…25 mm²)flexible with cable end Power circuit screw clamp terminals 2 0.004…0.02 in² (2.5…10 mm²)flexible with cable end Power circuit screw clamp terminals 1 0.004…0.04 in² (2.5…25 mm²)solid without cable end Power circuit screw clamp terminals 2 0.004…0.02 in² (2.5…16 mm²)solid without cable end
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 44.3 lbf.in (5 N.m) screw clamp terminals flat Ø 8 mm Power circuit 44.3 lbf.in (5 N.m) screw clamp terminals
Operating time	20...26 ms closing 8...12 ms opening

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	16000000 cycles
Maximum operating rate	3600 cyc/h 131 °F (55 °C)

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
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…131 °F (-40…55 °C)):operational AC 50 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 50/60 Hz
Inrush power in VA	200 VA 50 Hz 0.75 68 °F (20 °C)) 220 VA 60 Hz 0.75 68 °F (20 °C))
Heat dissipation	6…10 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
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...3000 m
Fire resistance	1760 °F (960 °C) IEC 60695-2-1
Flame retardance	V1 UL 94
Mechanical robustness	Vibrations contactor open2 Gn, 5...300 Hz Shocks contactor closed10 Gn for 11 ms Shocks contactor open8 Gn for 11 ms Vibrations contactor closed3 Gn, 5...300 Hz
Height	5 in (127 mm)
Width	6.5 in (165 mm)
Depth	5.6 in (142 mm)
Net weight	5.3 lb(US) (2.4 kg)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

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 >

Use Longer

Lifetime extension

Repair	No