

Product datasheet

Specifications



Contactor, TeSys Deca, 3P (3NO),
AC-3/AC-3e $\leq 440\text{V}$ 80 A, 440 V
AC 50/60 Hz coil, ring-lug terminals

LC1D806R7

⚠ Discontinued on: 1 Nov 2020

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Main

Range	TeSys
Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-3e AC-4 AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: $\leq 690\text{ V AC } 25\dots 400\text{ Hz}$
[Ie] rated operational current	125 A (at $\leq 60\text{ }^\circ\text{C}$) at $\leq 440\text{ V AC AC-1}$ for power circuit 80 A (at $\leq 60\text{ }^\circ\text{C}$) at $\leq 440\text{ V AC AC-3}$ for power circuit 80 A (at $\leq 60\text{ }^\circ\text{C}$) at $\leq 440\text{ V AC AC-3e}$ for power circuit
[Uc] control circuit voltage	440 V AC 50/60 Hz

Complementary

Motor power kW	22 kW at 220...230 V AC 50/60 Hz (AC-3) 37 kW at 380...400 V AC 50/60 Hz (AC-3) 45 kW at 415...440 V AC 50/60 Hz (AC-3) 55 kW at 500 V AC 50/60 Hz (AC-3) 45 kW at 660...690 V AC 50/60 Hz (AC-3) 15 kW at 400 V AC 50/60 Hz (AC-4) 22 kW at 220...230 V AC 50/60 Hz (AC-3e) 37 kW at 380...400 V AC 50/60 Hz (AC-3e) 45 kW at 415...440 V AC 50/60 Hz (AC-3e) 55 kW at 500 V AC 50/60 Hz (AC-3e) 45 kW at 660...690 V AC 50/60 Hz (AC-3e)
Motor power hp	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 phases motors 30 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
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at $60\text{ }^\circ\text{C}$) for control circuit 125 A (at $60\text{ }^\circ\text{C}$) 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 A at 440 V for power circuit conforming to IEC 60947
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
Power dissipation per pole	5.1 W AC-3 12.5 W AC-1
[U_i] rated insulation voltage	Control circuit: 600 V CSA certified Control circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Control circuit: 690 V conforming to IEC 60947-1 Power circuit: 1000 V conforming to IEC 60947-1
Overvoltage category	III
[U_{imp}] rated impulse withstand voltage	8 kV conforming to IEC 60947
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
Electrical durability	0.8 Mcycles 125 A AC-1 at U _e ≤ 440 V 1.5 Mcycles 80 A AC-3 at U _e ≤ 440 V
Control circuit type	AC at 50/60 Hz
Coil technology	Without built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.3...0.6 U _c (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 U _c (-40...55 °C):operational AC 50 Hz 0.85...1.1 U _c (-40...55 °C):operational AC 60 Hz 1...1.1 U _c (55...70 °C):operational AC 50/60 Hz
Inrush power in VA	245 VA cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	26 VA 50 Hz cos phi 0.3 (at 20 °C) 26 VA 60 Hz cos phi 0.3 (at 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: lugs - external diameter: 8 mm Power circuit: lugs - external diameter: 17 mm Power circuit: bars - busbar cross section: 3 x 16 mm
Tightening torque	Control circuit: 1.2 N.m - on lugs - with screwdriver Philips No 2 Control circuit: 1.2 N.m - on lugs - with screwdriver flat Ø 6 mm Power circuit: 12 N.m - with screwdriver flat Ø 8 mm Power circuit: 12 N.m hexagonal screw head 10 mm Control circuit: 1.2 N.m - on lugs - with screwdriver pozidriv No 2
Auxiliary contact composition	1 NO + 1 NC
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
Terminals description ISO n°1	(13-14)NO (A1-A2)CO (21-22)NC
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	Rail Plate

Environment

Standards	IEC 60947-4-1 EN 60947-5-1 CSA C22.2 No 14 UL 508 EN 60947-4-1 IEC 60947-5-1
Product certifications	DNV RINA CCC GL BV GOST LROS (Lloyds register of shipping) UL CSA
IP degree of protection	IP2X conforming to IEC 60529 IP2X conforming to VDE 0106
Climatic withstand	conforming to IACS E10 exposure to damp heat
Operating altitude	0...3000 m
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor opened (8 Gn for 11 ms) Shocks contactor closed (10 Gn for 11 ms) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (3 Gn, 5...300 Hz)
Height	127 mm
Width	85 mm
Depth	130 mm
Net weight	1.59 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11 cm
Package 1 Width	16 cm
Package 1 Length	16.3 cm
Package 1 Weight	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 >](#)

Use Better



Materials and Substances

PVC free

Yes

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

WEEE Label



The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins