Product datasheet

Specifications

Contactor, TeSys Deca, 4P(2NO+2NC), AC-1, <= 440 V 32 A - 240 V AC coil, lugs-ring terminals

LC1D1886U7

Discontinued

Discontinued on: 10 Jun 2022

End-of-service on: 26 Nov 2024

Main

Range	TeSys
Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load
Utilisation category	AC-1 AC-3 AC-3e AC-4
Poles description	4P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz Power circuit: <= 300 V DC
[Ie] rated operational current	32 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	240 V AC 50/60 Hz

Complementary

Compatibility code	LC1D
Pole contact composition	2 NO + 2 NC
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 32 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 60947-5-1 300 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	300 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	145 A 40 °C - 10 s for power circuit 240 A 40 °C - 1 s for power circuit 40 A 40 °C - 10 min for power circuit 84 A 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 50 A gG at <= 690 V coordination type 1 for power circuit 35 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2.5 mOhm - Ith 32 A 50 Hz for power circuit

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

Power dissipation per pole	2.5 W AC-1
[Ui] rated insulation voltage	Power circuit: 690 V conforming to IEC 60947-4-1 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
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	6 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	15 Mcycles
Electrical durability	1 Mcycles 32 A AC-1 at Ue <= 440 V
Control circuit type	AC at 50/60 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 Uc (-40…70 °C):drop-out AC 50/60 Hz 0.8...1.1 Uc (-40…60 °C):operational AC 50 Hz 0.85...1.1 Uc (-40…60 °C):operational AC 60 Hz 1...1.1 Uc (60…70 °C):operational AC 50/60 Hz
Inrush power in VA	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	7.5 VA 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	2…3 W at 50/60 Hz
Operating time	12...22 ms closing 4...19 ms opening
Maximum operating rate	3600 cyc/h 60 °C
Connections - terminals	Control circuit: lugs-ring terminals - external diameter: 8 mm Power circuit: lugs-ring terminals - external diameter: 8 mm
Tightening torque	Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm M3.5 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M3.5 Power circuit: 1.8 N.m - on lugs-ring terminals - with screwdriver flat Ø 8 mm M3.5 Power circuit: 1.8 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M3.5
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
Signalling circuit frequency	25...400 Hz
Minimum switching voltage	17 V for signalling circuit
Minimum switching current	5 mA for signalling circuit
Insulation resistance	> 10 MOhm 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
Mounting support	Plate Rail

Environment

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	RINA CSA DNV GOST CCC BV GL LROS (Lloyds register of shipping) UL
IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Climatic withstand	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
Permissible ambient air temperature around the device	-60…80 °C storage -40…60 °C operation 60…70 °C with derating
Operating altitude	0...3000 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, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz) Shocks contactor open (10 Gn for 11 ms) Shocks contactor closed (15 Gn for 11 ms)
Height	91 mm
Width	45 mm
Depth	99 mm
Net weight	0.425 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 >

Environmental footprint

Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

EU RoHS Directive	Compliant
PVC free	Yes

Use Longer

Lifetime extension

Repair	No

Use Again

Repack and remanufacture

End of life manual availability	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