Product datasheet

Specifications

To be discontinued

Contactor, TeSys Deca, 3P(3NO), AC-3/AC-3e, <=440V, 25A, 220V AC 50/60Hz coil, screw clamp terminals, bulk qty

LC1D25M7TQ

Discontinued on: 1 Nov 2020

Main

Range	TeSys TeSys Deca
Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	25 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 40 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 25 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	220 V AC 50/60 Hz

Complementary

Motor power kW	11 kW at 380...400 V AC 50/60 Hz (AC-3) 15 kW at 500 V AC 50/60 Hz (AC-3) 15 kW at 660...690 V AC 50/60 Hz (AC-3) 5.5 kW at 220...230 V AC 50/60 Hz (AC-3) 11 kW at 415...440 V AC 50/60 Hz (AC-3) 5.5 kW at 400 V AC 50/60 Hz (AC-4) 11 kW at 380...400 V AC 50/60 Hz (AC-3e) 15 kW at 500 V AC 50/60 Hz (AC-3e) 15 kW at 660...690 V AC 50/60 Hz (AC-3e) 5.5 kW at 220...230 V AC 50/60 Hz (AC-3e) 11 kW at 415...440 V AC 50/60 Hz (AC-3e)
Motor power hp	5 hp at 200/208 V AC 50/60 Hz for 3 phases motors conforming to CSA 5 hp at 200/208 V AC 50/60 Hz for 3 phases motors conforming to UL 3 hp at 230...240 V AC 50/60 Hz for 1 phase motors conforming to CSA 3 hp at 230...240 V AC 50/60 Hz for 1 phase motors conforming to UL 15 hp at 460/480 V AC 50/60 Hz for 3 phases motors conforming to CSA 15 hp at 460/480 V AC 50/60 Hz for 3 phases motors conforming to UL 2 hp at 115 V AC 50/60 Hz for 1 phase motors conforming to CSA 2 hp at 115 V AC 50/60 Hz for 1 phase motors conforming to UL 20 hp at 575/600 V AC 50/60 Hz for 3 phases motors conforming to CSA 20 hp at 575/600 V AC 50/60 Hz for 3 phases motors conforming to UL 7.5 hp at 230...240 V AC 50/60 Hz for 3 phases motors conforming to CSA 7.5 hp at 230...240 V AC 50/60 Hz for 3 phases motors conforming to UL
Compatibility code	LC1D
Pole contact composition	3 NO

Excluding VAT, FCA Jabal Ali & are subject to change – check with your local distributor.

Protective cover	With
[Ith] conventional free air thermal current	10 A (at 60 °C) for control circuit 40 A (at 60 °C) for power circuit
Irms rated making capacity	140 A AC for control circuit conforming to IEC 60947-5-1 450 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	450 kA 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 40 A at <= 690 V coordination type 2 for power circuit 63 A at <= 690 V coordination type 1 for power circuit
Average impedance	2 mOhm - Ith 40 A 50 Hz for power circuit
Power dissipation per pole	3.2 W AC-1 1.25 W AC-3 1.25 W AC-3e
[Ui] 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 60947-4-1 Power circuit: 690 V conforming to IEC 60947-4-1
Overvoltage category	III
[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
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 Uc (60 °C):drop-out AC 50/60 Hz 0.8...1.1 Uc (60 °C):operational AC 50 Hz 0.85...1.1 Uc (60 °C):operational AC 60 Hz
Inrush power in VA	70 VA cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	7 VA 50/60 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	2…3 W at 50/60 Hz for control circuit
Operating time	4...19 ms opening 12...22 ms closing
Maximum operating rate	3600 cyc/h at 60 °C
Connections - terminals	Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 1.5…10 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.5…10 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 2.5…10 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.5…10 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 1…10 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1.5…6 mm² - cable stiffness: flexible with cable end

Tightening torque	Control circuit: 1.7 N.m - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - with screwdriver Philips No 2 Power circuit: 2.5 N.m - with screwdriver flat Ø 6 mm Power circuit: 2.5 N.m - with screwdriver Philips No 2 Control circuit: 1.7 N.m - with screwdriver pozidriv No 2 Power circuit: 2.5 N.m - with screwdriver pozidriv No 2
Auxiliary contact composition	1 NO + 1 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	Plate Rail

Environment

Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 CSA C22.2 No 14 IEC 60335-1
Product certifications	UL DNV GL BV GOST LROS (Lloyds register of shipping) CCC RINA CSA UKCA
IP degree of protection	IP2X conforming to IEC 60529 IP2X conforming to VDE 0106
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	-5…60 °C -40…70 °C at Uc
Operating altitude	3000 m without derating
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor closed (15 Gn for 11 ms) Shocks contactor opened (8 Gn for 11 ms) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz)
Height	85 mm
Width	45 mm
Depth	92 mm
Net weight	3.7 kg
Quantity per set	Set of 10

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	15.000 cm

Package 1 Width	30.000 cm
Package 1 Length	40.000 cm
Package 1 Weight	388.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	9.572 kg

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

Total lifecycle Carbon footprint	**127 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**2 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.2 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**123 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.9 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
EU RoHS Directive	**Compliant**
REACh Regulation	**Free of Substances of Very High Concern above the threshold**
PVC free	**Yes**

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

Recyclability potential, in %	**66**
End of life manual availability	**End of Life Information**
Take-back	**Nej**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**

Offer Marketing Illustration

Product benefits / Features

Offer Marketing Illustration

Product benefits / Features

Offer Marketing Illustration

Product benefits / Features