

Product datasheet

Specifications



Contactor, TeSys Deca,
4P(2NO+2NC), AC-1, $\leq 440\text{V}$,
40A, 48V AC 50/60Hz coil, screw
clamp terminal

LC1D258E7

Main

Range of product	TeSys Deca
product or component type	Contacteur
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: $\leq 690\text{ V AC } 25\dots 400\text{ Hz}$
[Ie] rated operational current	40 A (at $\leq 60\text{ }^\circ\text{C}$) at $\leq 440\text{ V AC AC-1}$ for power circuit
[Uc] control circuit voltage	48 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 $60\text{ }^\circ\text{C}$) for signalling circuit 40 A (at $60\text{ }^\circ\text{C}$) for power circuit
Rms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 450 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	450 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	240 A $40\text{ }^\circ\text{C}$ - 10 s for power circuit 380 A $40\text{ }^\circ\text{C}$ - 1 s for power circuit 50 A $40\text{ }^\circ\text{C}$ - 10 min for power circuit 120 A $40\text{ }^\circ\text{C}$ - 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 63 A gG at $\leq 690\text{ V}$ coordination type 1 for power circuit 40 A gG at $\leq 690\text{ V}$ coordination type 2 for power circuit
Average impedance	2 mOhm - Ith 40 A 50 Hz for power circuit
Power dissipation per pole	3.2 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	1.4 Mcycles 40 A AC-1 at $U_e \leq 440$ V
Control circuit type	AC at 50/60 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 U_c (-40...60 °C):drop-out AC 50/60 Hz 0.8...1.1 U_c (-40...60 °C):operational AC 50 Hz 0.85...1.1 U_c (-40...60 °C):operational AC 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: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...2.5 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 2.5...10 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.5...10 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 2.5...10 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.5...10 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 2.5...16 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.5...16 mm ² - cable stiffness: solid without cable end
Tightening torque	Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 1.8 N.m - on screw clamps terminals - with screwdriver flat Ø 6 mm Power circuit: 1.8 N.m - on screw clamps terminals - with screwdriver Philips No 2 Power circuit: 1.8 N.m - on screw clamp terminals - 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
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	Rail Plate

Environment

Standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 60947-4-1 UL 60947-5-1 CSA C22.2 No 60947-4-1 CSA C22.2 No 60947-5-1 GB/T 14048.4
Product certifications	UL CSA CCC EAC UKCA CB EU-RO-MR by DNV-GL
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	-40...60 °C 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 closed (15 Gn for 11 ms) Shocks contactor open (8 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
Package 1 Height	5.800 cm
Package 1 Width	9.500 cm
Package 1 Length	12.000 cm
Package 1 Weight	473.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	16
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm

Package 2 Length	40.000 cm
Package 2 Weight	8.047 kg
Unit Type of Package 3	P06
Number of Units in Package 3	256
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	136.752 kg

Contractual warranty

Warranty	18 months
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Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class 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

Well-being performance

Reach Free Of Svhc

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 [End of Life Information](#)