

Product data sheet

Characteristics

LC1D40004E7

Contactor, TeSys Deca, 4P(4NO),AC-1 440V
60A,48V AC coil, screw clamp terminal



Main

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
[Ie] rated operational current	60 A (at <60 °C) AC AC-1 for power circuit
[Uc] control circuit voltage	48 V AC 50/60 Hz

Complementary

Compatibility code	LC1D
Pole contact composition	4 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 60 °C) for control circuit 60 A (at 60 °C) for power circuit
Irms rated making capacity	140 A AC for control circuit conforming to IEC 60947-5-1 800 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	800 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 80 A gG at ≤ 690 V coordination type 1 for power circuit 80 A gG at ≤ 690 V coordination type 2 for power circuit
Average impedance	1.5 mOhm - Ith 60 A 50 Hz for power circuit
Power dissipation per pole	5.4 W AC-1
[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 60947-1 Power circuit: 690 V conforming to IEC 60947-1
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	6000000 cycles
Control circuit type	AC at 50/60 Hz standard
Coil technology	Without built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.3...0.6 U _c (60 °C):drop-out AC 50/60 Hz 0.8...1.1 U _c (60 °C):operational AC 50 Hz 0.85...1.1 U _c (60 °C):operational AC 60 Hz

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Inrush power in VA	140 VA cos phi 0.75 (at 20 °C) 160 VA cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	13 VA 60 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	4...5 W at 50/60 Hz for control circuit
Operating time	12...26 ms closing 4...19 ms opening
Maximum operating rate	3600 cyc/h 60 °C
Connections - terminals	Control circuit: screw clamp terminal 1 1...4 mm ² - cable stiffness: solid without cable end Control circuit: screw clamp terminal 2 1...2.5 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminal 2 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminal 2 1...4 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminal 1 1...35 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminal 2 1...25 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminal 2 1...35 mm ² - cable stiffness: solid without cable end
Tightening torque	Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 8 mm
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
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	UL 508 IEC 60947-4-1 EN 60947-4-1 EN 60947-5-1 CSA C22.2 No 14 IEC 60947-5-1
Product certifications	UL[RETURN]CSA[RETURN]BV[RETURN]JL[RETURN]GOST[RETURN]DNV[RETURN]CCC[RE] (Lloyds register of shipping)[RETURN]UKCA
IP degree of protection	IP2X conforming to IEC 60529 IP2X conforming to VDE 0106
Protective treatment	TH (pollution degree 3) conforming to IEC 60068
Permissible ambient air temperature around the device	-5...60 °C -40...70 °C at U _c
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 open (8 Gn for 11 ms) Shocks contactor closed (10 Gn for 11 ms) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz)
Height	127 mm
Width	85 mm
Depth	125 mm
Net weight	1.44 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	15 cm
Package 1 Width	13.2 cm
Package 1 Length	10.6 cm
Package 1 Weight	1.473 kg
Unit Type of Package 2	S02
Number of Units in Package 2	5
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	7.82 kg
Unit Type of Package 3	P06
Number of Units in Package 3	80
Package 3 Height	77 cm
Package 3 Width	80 cm
Package 3 Length	60 cm
Package 3 Weight	133.62 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	No need of specific recycling operations
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Contractual warranty

Warranty	18 months
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