

Product data sheet

Characteristics

LC1D40G7

Contactor, TeSys Deca, 3P(3NO), AC-3/AC-3e/
 ≤ 440 V 40 A, 120 V AC 50/60 Hz coil, screw
 clamp terminals



EAN Code: 3389110948561



Main

Range	TeSys
Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-3 AC-4 AC-1 AC-2
Poles description	3P
[Ue] rated operational voltage	Power circuit: ≤ 690 V AC 25...400 Hz
[Ie] rated operational current	60 A (at ≤ 60 °C) at ≤ 440 V AC AC-1 for power circuit 40 A (at ≤ 60 °C) at ≤ 440 V AC AC-3 for power circuit
[Uc] control circuit voltage	120 V AC 50/60 Hz

Complementary

Motor power kW	18.5 kW at 380...400 V AC 50/60 Hz (AC-3) 22 kW at 1000 V AC 50/60 Hz (AC-3) 22 kW at 415 V AC 50/60 Hz (AC-3) 22 kW at 440 V AC 50/60 Hz (AC-3) 22 kW at 500 V AC 50/60 Hz (AC-3) 30 kW at 660...690 V AC 50/60 Hz (AC-3) 11 kW at 220...230 V AC 50/60 Hz (AC-3) 9 kW at 400 V AC 50/60 Hz (AC-4)
Motor power hp	10 Hp at 200/208 V AC 60 Hz for 3 phases motors conforming to CSA 10 Hp at 200/208 V AC 60 Hz for 3 phases motors conforming to UL 10 Hp at 230/240 V AC 60 Hz for 3 phases motors conforming to CSA 10 Hp at 230/240 V AC 60 Hz for 3 phases motors conforming to UL 3 Hp at 115 V AC 60 Hz for 1 phase motors conforming to CSA 3 Hp at 115 V AC 60 Hz for 1 phase motors conforming to UL 30 Hp at 460/480 V AC 60 Hz for 3 phases motors conforming to CSA 30 Hp at 460/480 V AC 60 Hz for 3 phases motors conforming to UL 30 Hp at 575/600 V AC 60 Hz for 3 phases motors conforming to CSA 30 Hp at 575/600 V AC 60 Hz for 3 phases motors conforming to UL 5 Hp at 230/240 V AC 60 Hz for 1 phase motors conforming to CSA 5 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to UL
Compatibility code	LC1D
Pole contact composition	3 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 2.4 W AC-3
[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
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	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 50 Hz cos phi 0.3 (at 20 °C) 15 VA 60 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 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminal 2 1...4 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminal 1 1...2.5 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminal 2 1...2.5 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminal 1 1...4 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminal 2 1...4 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminal 1 2.5...35 mm² - cable stiffness: solid with cable end Power circuit: screw clamp terminal 2 2.5...35 mm² - cable stiffness: solid with cable end Power circuit: screw clamp terminal 1 2.5...35 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminal 2 2.5...25 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminal 1 2.5...35 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminal 2 2.5...35 mm² - cable stiffness: flexible with 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 contact composition	1 NO + 1 NC
Auxiliary contacts type	Type mirror contact 1 NC conforming to IEC 60947-4-1 Type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1
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	Rail Plate

Environment

Standards	UL 508 IEC 60947-4-1 CSA C22.2 No 14 EN 60947-4-1 IEC 60947-5-1 EN 60947-5-1
Product certifications	UL[RETURN]GL[RETURN]RINA[RETURN]LROS (Lloyds register of shipping)[RETURN]CSA[RETURN]BV[RETURN]CCC[RETURN]GOST[RETURN]DNV
IP degree of protection	IP2X conforming to IEC 60529 IP2X conforming to VDE 0106
Climatic withstand	Conforming to IACS E10 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 opened (10 Gn for 11 ms) Shocks contactor closed (15 Gn for 11 ms) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz)
Height	127 mm
Width	75 mm
Depth	119 mm
Net weight	1.4 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.300 cm
Package 1 Width	13.500 cm
Package 1 Length	14.000 cm
Package 1 Weight	1.445 kg
Unit Type of Package 2	S02
Number of Units in Package 2	5
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	7.514 kg
Unit Type of Package 3	P06
Number of Units in Package 3	80
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	128.724 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
PVC free	Yes
Contractual warranty	
Warranty	18 months