Product data sheet
Characteristics

LC1D40G7
CONTACTOR 600VAC 40AMP IEC +OPTIONS

Main

Range of product	TeSys D
Range	TeSys
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-2 AC-3 AC-4
Control circuit type	AC 50/60 Hz
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	40 A (<= 140 °F (60 °C)) at <= 440 V AC AC-3 power circuit 60 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 power circuit
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 3P motors conforming to CSA 10 hp at 200/208 V AC 60 Hz 3P motors conforming to UL 10 hp at 230/240 V AC 60 Hz 3P motors conforming to CSA 10 hp at 230/240 V AC 60 Hz 3P motors conforming to UL 3 hp at 115 V AC 60 Hz 1P motors conforming to CSA 3 hp at 115 V AC 60 Hz 1P motors conforming to UL 30 hp at 460/480 V AC 60 Hz 3P motors conforming to CSA 30 hp at 460/480 V AC 60 Hz 3P motors conforming to UL 30 hp at 575/600 V AC 60 Hz 3P motors conforming to CSA 30 hp at 575/600 V AC 60 Hz 3P motors conforming to UL 5 hp at 230/240 V AC 60 Hz 1P motors conforming to CSA 5 hp at 230/240 V AC 60 Hz 1P motors conforming to UL
[Uc] control circuit voltage	120 V AC 50/60 Hz

Connections - terminals	Control circuit: screw clamp terminal 1 cable 0...0.01 in² (1...4 mm²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminal 2 cable 0...0.01 in² (1...4 mm²) - cable stiffness: solid - without cable end Power circuit: screw clamp terminal 1 cable 0...0.05 in² (1...35 mm²) - cable stiffness: solid - without cable end Power circuit: screw clamp terminal 2 cable 0...0.04 in² (1...25 mm²) - cable stiffness: solid - without cable end Power circuit: screw clamp terminal 1 cable 0...0.05 in² (1...35 mm²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminal 1 cable 0...0.01 in² (1...4 mm²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminal 2 cable 0...0 in² (1...2.5 mm²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminal 2 cable 0...0.01 in² (1...4 mm²) - cable stiffness: flexible - with cable end Power circuit: screw clamp terminal 2 cable 0...0.04 in² (1...25 mm²) - cable stiffness: flexible - with cable end Power circuit: screw clamp terminal 2 cable 0...0.05 in² (1...35 mm²) - cable stiffness: flexible - without cable end Power circuit : screw terminals

Complementary

Coil technology	Without built-in bidirectional peak limiting diode suppressor
Protective cover	With
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
Auxiliary contact composition	1 NO + 1 NC
Control circuit voltage limits	0.3...0.6 Uc at 140 °F (60 °C) drop-out 50/60 Hz 0.8...1.1 Uc at 140 °F (60 °C) operational 50 Hz 0.85...1.1 Uc at 140 °F (60 °C) operational 60 Hz
[Ui] rated insulation voltage	600 V control circuit certifications CSA 600 V control circuit certifications UL 600 V power circuit certifications CSA 600 V power circuit certifications UL 690 V control circuit conforming to IEC 60947-1 690 V power circuit conforming to IEC 60947-1
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overvoltage category	III
Mounting support	Plate Rail
Flame retardance	V1 conforming to UL 94
Tightening torque	Power circuit: 44.25 lbf.in (5 N.m) - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 44.25 lbf.in (5 N.m) - on screw clamp terminal - with screwdriver flat Ø 8 mm Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminal - with screwdriver Philips No 2 Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminal - with screwdriver flat Ø 6 mm
System Voltage	<= 690 V AC 25...400 Hz power circuit
[Ith] conventional free air thermal current	10 A at <= 140 °F (60 °C) control circuit 60 A at <= 140 °F (60 °C) power circuit
Irms rated making capacity	140 A AC for control circuit conforming to IEC 60947-5-1 800 A at 440 V power circuit conforming to IEC 60947
Rated breaking capacity	800 A at 440 V power circuit conforming to IEC 60947
Associated fuse rating	10 A gG control circuit conforming to IEC 60947-5-1 80 A gG at <= 690 V coordination type 1 power circuit 80 A gG at <= 690 V coordination type 2 power circuit
Average impedance	At 50 Hz - Ith 60 A for power circuit
Power dissipation per pole	5.4 W AC-1 2.4 W AC-3
Inrush power in VA	140 VA at 68 °F (20 °C) (cos φ 0.75) 160 VA at 68 °F (20 °C) (cos φ 0.75)
Hold-in power consumption in VA	13 VA at 68 °F (20 °C) (cos φ 0.3) 50 Hz 15 VA at 68 °F (20 °C) (cos φ 0.3) 60 Hz
Operating time	12...26 ms closing 4...19 ms opening
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
Operating rate	3600 cyc/h at <= 140 °F (60 °C)
Minimum switching current	5 mA control circuit
Minimum switching voltage	17 V 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
Insulation resistance	> 10 MOhm control circuit
Height	5 in (127 mm)
Width	2.95 in (75 mm)
Depth	4.69 in (119 mm)
Product weight	3.09 lb(US) (1.4 kg)

Environment

Standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 CSA C22.2 No 14
Product certifications	BV CCC CSA DNV GL GOST LROS (Lloyds register of shipping) RINA UL
IP degree of protection	IP2x conforming to IEC 60529 IP2x conforming to VDE 0106
Ambient air temperature for operation	23...140 °F (-5...60 °C)
Ambient air temperature for storage	-76...176 °F (-60...80 °C)
Permissible ambient air temperature around the device	-40...158 °F (-40...70 °C) at Uc
Operating altitude	9842.52 ft (3000 m) without derating in temperature
Fire resistance	1562 °F (850 °C) conforming to IEC 60695-2-1
Shock resistance	10 gn contactor opened 15 gn contactor closed
Vibration resistance	2 gn 5...300 Hz contactor opened 4 gn 5...300 Hz contactor closed
Heat dissipation	4...5 W at 50/60 Hz for control circuit

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0001 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available Product Environmental Profile
Product end of life instructions	Available End of Life Information

Contractual warranty

Warranty period	18 months

LC1D40G7 is replaced by:

Contactors LC1D40AG7

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 40 A - 120 V AC 50/60 Hz coil

Qty 1

Reason for Substitution: End of life | Substitution date: 01 January 2017