Product data sheet
Characteristics

LC1D40M7
CONTACTOR 600VAC 40AMP IEC +OPTIONS



Main

Range of product	TeSys D
Range	TeSys
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-2 AC-3 AC-1 AC-4
Control circuit type	AC 50/60 Hz
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	40 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit 60 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit
Motor power kW	18.5 kW at 380...400 V AC 50 Hz AC-3 22 kW at 500 V AC 50 Hz AC-3 30 kW at 660...690 V AC 50 Hz AC-3 22 kW at 415 V AC 50 Hz AC-3 22 kW at 440 V AC 50 Hz AC-3 11 kW at 220...230 V AC 50 Hz AC-3 9 kW at 400 V AC 50 Hz AC-4 22 kW at 1000 V AC 50 Hz AC-3
Motor power hp	5 hp at 230/240 V AC 60 Hz 1 phase 10 hp at 200/208 V AC 60 Hz 3 phases 10 hp at 230/240 V AC 60 Hz 3 phases 3 hp at 115 V AC 60 Hz 1 phase 30 hp at 460/480 V AC 60 Hz 3 phases 30 hp at 575/600 V AC 60 Hz 3 phases
[Uc] control circuit voltage	220 V AC 50/60 Hz
Connections - terminals	Control circuit : screw clamp terminals 1 cable 1...2.5 mm² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 2 cable 1...2.5 mm² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable 1...4 mm² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable 1...4 mm² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable 1...4 mm² - cable stiffness: rigid Control circuit : screw clamp terminals 2 cable 1...4 mm² - cable stiffness: rigid

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

	Power circuit : screw terminals 1 cable 2.5...25 mm² - cable stiffness: rigid Power circuit : screw terminals 2 cable 2.5...16 mm² - cable stiffness: rigid Power circuit : screw terminals 1 cable 2.5...25 mm² - cable stiffness: flexible - without cable end Power circuit : screw terminals 2 cable 2.5...16 mm² - cable stiffness: flexible - without cable end Power circuit : screw terminals 1 cable 2.5...25 mm² - cable stiffness: flexible - with cable end Power circuit : screw terminals 2 cable 2.5...10 mm² - cable stiffness: flexible - with cable end

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 <= 60 °C drop-out 50/60 Hz 0.8...1.1 Uc at <= 60 °C operational 50 Hz 0.85...1.1 Uc at <= 60 °C operational 60 Hz
[Ui] rated insulation voltage	600 V for control circuit certifications CSA 600 V for control circuit certifications UL 600 V for power circuit certifications CSA 600 V for power circuit certifications UL 690 V for control circuit conforming to IEC 60947-1 690 V for power circuit conforming to IEC 60947-1
[Uimp] rated impulse withstand voltage	8 kV IEC 60947
Overvoltage category	III
Mounting support	Plate Rail
Flame retardance	V1 conforming to UL 94
Tightening torque	Control circuit : 1.2 N.m - on screw clamp terminal - with screwdriver Philips No 2 Control circuit : 1.2 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit : 5 N.m - on screw terminal - with screwdriver flat Ø 6 to Ø 8 mm
[Ue] rated operational voltage	<= 690 V AC 25...400 Hz for power circuit
[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
Power dissipation per pole	5.4 W AC-1 2.4 W AC-3
Inrush power in VA	140 VA at 20 °C (cos f 0.75) 160 VA at 20 °C (cos f 0.75)
Hold-in power consumption in VA	13 VA at 20 °C (cos f 0.3) 60 Hz 15 VA at 20 °C (cos f 0.3) 50 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 <= 60 °C
Minimum switching current	5 mA for control circuit
Minimum switching voltage	17 V 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
Insulation resistance	> 10 MOhm for control circuit
Terminals description ISO n°1	(21-22)NC (A1-A2)CO (13-14)NO
Height	127 mm
Width	75 mm

Depth	119 mm
Product weight	1.4 kg

Environment

Standards	CSA C22.2 No 14 UL 508 IEC 60947-4-1 EN 60947-4-1 EN 60947-5-1 IEC 60947-5-1
Product certifications	CCC LROS (Lloyds register of shipping) RINA GOST DNV UL GL BV CSA
IP degree of protection	IP2x conforming to IEC 60529 IP2x conforming to VDE 0106
Ambient air temperature for operation	-5...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C at Uc
Operating altitude	3000 m without derating
Fire resistance	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

LC1D40M7 is replaced by:



Contactors LC1D40AM7

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 40 A - 220 V AC 50/60 Hz coil

Qty 1

Reason for Substitution: End of Life | Substitution date: 22 August 2008