Product data sheet
Characteristics

LC1D40AG7
contactor TeSys LC1-D - 3 poles - AC-3 440V 40 A - coil 120 V AC

Main

Range of product	TeSys D
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
Coil type	Standard
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	40 A ≤ 60 °C AC AC-3 power circuit 60 A ≤ 60 °C AC AC-1 power circuit
Motor power kW	11 kW 220...240 V AC 50/60 Hz 18,5 kW 380...400 V AC 50/60 Hz 22 kW 415 V AC 50/60 Hz 22 kW 440 V AC 50/60 Hz 22 kW 500 V AC 50/60 Hz 30 kW 660...690 V AC 50/60 Hz
Motor power hp	3 hp 115 V 1P AC 60 Hz UL 3 hp 115 V 1P AC 60 Hz CSA 5 hp 230/240 V 1P AC 60 Hz UL 5 hp 230/240 V 1P AC 60 Hz CSA 10 hp 230/240 V 3P AC 60 Hz CSA 10 hp 230/240 V 3P AC 60 Hz UL 10 hp 200/208 V 3P AC 60 Hz CSA 10 hp 200/208 V 3P AC 60 Hz UL 30 hp 575/600 V 3P AC 60 Hz CSA 30 hp 575/600 V 3P AC 60 Hz UL 30 hp 460/480 V 3P AC 60 Hz CSA 30 hp 460/480 V 3P AC 60 Hz UL
Control circuit voltage	120 V AC 50/60 Hz
Connections - terminals	EverLink BTR screw connectors power circuit 2 1...25 mm² flexible with EverLink BTR screw connectors power circuit 2 1...25 mm² flexible without EverLink BTR screw connectors power circuit 2 1...25 mm² solid without EverLink BTR screw connectors power circuit 1 1...35 mm² solid without EverLink BTR screw connectors power circuit 1 1...35 mm² flexible with EverLink BTR screw connectors power circuit 1 1...35 mm² flexible without Screw clamp terminal control circuit 1 1...4 mm² flexible without Screw clamp terminal control circuit 2 1...4 mm² flexible without Screw clamp terminal control circuit 1 1...4 mm² flexible with Screw clamp terminal control circuit 2 1...2,5 mm² flexible with Screw clamp terminal control circuit 1 1...4 mm² solid without Screw clamp terminal control circuit 2 1...4 mm² solid without

Complementary

Coil technology	Without built-in bidirectional peak limiting diode suppressor
Protective cover	With
Auxiliary contacts type	Mechanically linked IEC 60947-5-1 1 NO + 1 NC Mirror contact IEC 60947-4-1 1 NC
Auxiliary contact composition	1 NO + 1 NC
Control circuit voltage limits	0.3...0.6 Uc 60 °C drop-out 50/60 Hz 0.8...1.1 Uc 60 °C operational 50 Hz 0.85...1.1 Uc 60 °C operational 60 Hz
[Ui] rated insulation voltage	600 V UL power circuit 600 V CSA power circuit 600 V UL control circuit 600 V CSA control circuit 690 V IEC 60947-1 power circuit 690 V IEC 60947-1 control circuit
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Overvoltage category	III
Mounting support	Plate Rail
Flame retardance	V1 UL 94
Tightening torque	1,7 N.m control circuit screw clamp terminal flat Ø 6 mm 1,7 N.m control circuit screw clamp terminal Philips No 2 2 mm 5 N.m power circuit EverLink BTR screw connectors 1...25 mm² hexagonal 4 mm 8 N.m power circuit EverLink BTR screw connectors 35 mm² hexagonal 4 mm
[Ue] rated operational voltage	<= 690 V AC 25...400 Hz power circuit
[Ith] conventional free air thermal current	10 A ≤ 60 °C control circuit 60 A ≤ 60 °C power circuit
Irms rated making capacity	140 A AC control circuit IEC 60947-5-1 800 A 440 V power circuit IEC 60947
Rated breaking capacity	800 A 440 V power circuit IEC 60947
Permissible short-time rating	72 A ≤ 40 °C 10 min power circuit 100 A 1 s control circuit 120 A 500 ms control circuit 140 A 100 ms control circuit 165 A ≤ 40 °C 1 min power circuit 320 A ≤ 40 °C 10 s power circuit 720 A ≤ 40 °C 1 s power circuit
Associated fuse rating	10 A gG control circuit IEC 60947-5-1 80 A gG <= 690 V type 1 power circuit 80 A gG <= 690 V type 2 power circuit
Average impedance	1,5 mOhm 50 Hz 60 A power circuit
Power dissipation per pole	2,4 W AC-3 5,4 W AC-1
Inrush power in VA	140 VA 20 °C 0,75 60 Hz 160 VA 20 °C 0,75 50 Hz
Hold-in power consumption in VA	13 VA 20 °C 0,3 60 Hz 15 VA 20 °C 0,3 50 Hz
Operating time	4...19 ms opening 12...26 ms closing
Mechanical durability	6000000 cycles
Operating rate	3600 cyc/h ≤ 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	122 mm
Width	55 mm
Depth	120 mm
Product weight	1,4 kg

Environment

Standards	CSA C22-2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
Product certifications	BV CCC CSA DNV (Det Norske Veritas) GL GOST LROS (pending) RINA UL
IP degree of protection	IP2x VDE 0106 IP2x IEC 60529
Protective treatment	TH IEC 60068 3
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
Fire resistance	850 °C IEC 60695-2-1
Shock resistance	10 gn contactor opened 15 gn contactor closed
Vibration resistance	2 gn contactor opened 5...300 Hz 4 gn contactor closed 5...300 Hz
Heat dissipation	4...5 W 50/60 Hz control circuit
RoHS EUR conformity date	0820
RoHS EUR status	Compliant