Product data sheet

Specifications

contactor TeSys Deca - 3 poles - AC-3 440V 65 A - coil 200..208 V AC

LC1D65L7

Discontinued

Main

Range	TeSys
Range Of Product	TeSys D
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Motor control Resistive load
Utilisation Category	AC-4 AC-2 AC-1 AC-3
Poles Description	3P
[Ue] Rated Operational Voltage	Power circuit <= 690 V AC 25...400 Hz
[Ie] Rated Operational Current	80 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 65 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit
[Uc] Control Circuit Voltage	200 V AC 50/60 Hz

Complementary

Motor Power Kw	30 kW at 440 V AC 50/60 Hz (AC-3) 11 kW at 400 V AC 50/60 Hz (AC-4) 30 kW at 380...400 V AC 50/60 Hz (AC-3) 30 kW at 415 V AC 50/60 Hz (AC-3) 37 kW at 1000 V AC 50/60 Hz (AC-3) 37 kW at 500 V AC 50/60 Hz (AC-3) 37 kW at 660...690 V AC 50/60 Hz (AC-3) 18.5 kW at 220...230 V AC 50/60 Hz (AC-3)
Motor Power Hp	10 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to CSA 10 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to UL 20 hp at 200/208 V AC 60 Hz for 3 phases motors conforming to CSA 20 hp at 200/208 V AC 60 Hz for 3 phases motors conforming to UL 20 hp at 230/240 V AC 60 Hz for 3 phases motors conforming to CSA 20 hp at 230/240 V AC 60 Hz for 3 phases motors conforming to UL 5 hp at 115 V AC 60 Hz for 1 phase motors conforming to CSA 5 hp at 115 V AC 60 Hz for 1 phase motors conforming to UL 50 hp at 460/480 V AC 60 Hz for 3 phases motors conforming to CSA 50 hp at 460/480 V AC 60 Hz for 3 phases motors conforming to UL 50 hp at 575/600 V AC 60 Hz for 3 phases motors conforming to CSA 50 hp at 575/600 V AC 60 Hz for 3 phases motors conforming to UL
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Protective Cover	With
[Ith] Conventional Free Air Thermal Current	10 A (at 140 °F (60 °C)) for control circuit 80 A (at 140 °F (60 °C)) for power circuit

Irms Rated Making Capacity	140 A AC for control circuit conforming to IEC 60947-5-1 1000 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	1000 A at 440 V for power circuit conforming to IEC 60947
Associated Fuse Rating	10 A gG for control circuit conforming to IEC 60947-5-1 125 A gG at <= 690 V coordination type 1 for power circuit 125 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	1 mOhm - Ith 80 A 50 Hz for power circuit
Power Dissipation Per Pole	6.4 W AC-1
[Ui] Rated Insulation Voltage	Control circuit 600 V CSA Control circuit 600 V UL Power circuit 600 V CSA Power circuit 600 V UL Control circuit 690 V IEC 60947-1 Power circuit 690 V IEC 60947-1
Overvoltage Category	III
[Uimp] Rated Impulse Withstand Voltage	8 kV IEC 60947
Safety Reliability Level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical Durability	6000000 cycles
Control Circuit Type	AC 50/60 Hz
Coil Technology	Without built-in bidirectional peak limiting diode suppressor
Control Circuit Voltage Limits	0.3...0.6 Uc 140 °F (60 °C) drop-out AC 50/60 Hz 0.8...1.1 Uc 140 °F (60 °C) operational AC 50 Hz 0.85...1.1 Uc 140 °F (60 °C) operational AC 60 Hz
Inrush Power In Va	140 VA cos phi 0.75 (at 68 °F (20 °C)) 160 VA cos phi 0.75 (at 68 °F (20 °C))
Hold-In Power Consumption In Va	13 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C)) 15 VA 60 Hz cos phi 0.3 (at 68 °F (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 140 °F (60 °C)
Connections - Terminals	Control circuit: screw clamp terminal 1 0.00…0.01 in² (1…4 mm²) - cable stiffness: solid without cable end Control circuit: screw clamp terminal 2 0.00…0.01 in² (1…4 mm²) - cable stiffness: solid without cable end Control circuit: screw clamp terminal 1 0.00…0.00 in² (1…2.5 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminal 2 0.00…0.00 in² (1…2.5 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminal 1 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminal 2 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible with cable end Power circuit: connector 1 0.00…0.05 in² (2.5…35 mm²) - cable stiffness: solid with cable end Power circuit: connector 2 0.00…0.05 in² (2.5…35 mm²) - cable stiffness: solid with cable end Power circuit: connector 1 0.00…0.05 in² (2.5…35 mm²) - cable stiffness: flexible without cable end Power circuit: connector 2 0.00…0.04 in² (2.5…25 mm²) - cable stiffness: flexible without cable end Power circuit: connector 1 0.00…0.05 in² (2.5…35 mm²) - cable stiffness: flexible with cable end Power circuit: connector 2 0.00…0.05 in² (2.5…35 mm²) - cable stiffness: flexible with cable end
Tightening Torque	Control circuit 10.62 lbf.in (1.2 N.m) screw clamp terminal flat Ø 6 mm Control circuit 10.62 lbf.in (1.2 N.m) screw clamp terminal Philips No 2 Power circuit 44.25 lbf.in (5 N.m) screw clamp terminal flat Ø 6 mm Power circuit 44.25 lbf.in (5 N.m) screw clamp terminal flat Ø 8 mm

Auxiliary Contact Composition	1 NO + 1 NC
Auxiliary Contacts Type	Mirror contact 1 NC IEC 60947-4-1 Mechanically linked 1 NO + 1 NC IEC 60947-5-1
Terminals Description Iso N°1	(A1-A2)CO (13-14)NO (21-22)NC
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	IEC 60947-4-1 UL 508 EN 60947-4-1 EN 60947-5-1 CSA C22.2 No 14 IEC 60947-5-1
Product Certifications	CCC LROS (pending) GL UL BV CSA RINA DNV GOST
Ip Degree Of Protection	IP2X IEC 60529 IP2X VDE 0106
Climatic Withstand	IACS E10 exposure to damp heat
Permissible Ambient Air Temperature Around The Device	-76��176 ��F (-60…80 °C) storage -40…140 °F (-40…60 °C) operation 140…158 °F (60…70 °C) with derating
Operating Altitude	3000 m without derating
Fire Resistance	1562 °F (850 °C) IEC 60695-2-1
Flame Retardance	V1 UL 94
Mechanical Robustness	Shocks contactor opened 10 Gn) Shocks contactor closed 15 gn) Vibrations contactor opened 2 Gn, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz)
Height	5.00 in (127 mm)
Width	2.95 in (75 mm)
Depth	4.69 in (119 mm)
Net Weight	3.09 lb(US) (1.4 kg)

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1

Contractual warranty

Warranty	18 months