Product datasheet
Characteristics

LC1D80008G6

Main

Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
Pole contact composition	2 NO + 2 NC
System Voltage	<= 690 V AC power circuit <= 300 V DC 25...400 Hz power circuit
[Ie] rated operational current	125 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 power circuit
Control circuit type	AC 60 Hz
[Uc] control circuit voltage	120 V AC 60 Hz
[Uimp] rated impulse withstand voltage	Conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	125 A at <= 140 °F (60 °C) power circuit
Irms rated making capacity	1100 A at 440 V power circuit conforming to IEC 60947
Rated breaking capacity	1100 A at 440 V power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	135 A <= 104 °F (40 °C) 10 min power circuit 640 A <= 104 °F (40 °C) 10 s power circuit 990 A <= 104 °F (40 °C) 1 s power circuit 320 A <= 104 °F (40 °C) 1 min power circuit
Associated fuse rating	160 A gG at <= 690 V coordination type 2 power circuit 200 A gG at <= 690 V coordination type 1 power circuit
Average impedance	0.8 mOhm at 50 Hz - Ith 125 A power circuit
[Ui] rated insulation voltage	1000 V power circuit conforming to IEC 60947-4-1 600 V power circuit certifications CSA 600 V power circuit certifications UL
Electrical durability	0.8 Mcycles 125 A AC-1 at Ue <= 440 V
Power dissipation per pole	12.5 W AC-1
Protective cover	Without
Mounting support	Plate Rail
Standards	UL 508 CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1
Product certifications	BV CCC CSA DNV GL GOST LROS (Lloyds register of shipping) RINA UL

Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 0...0 in² (1...2.5 mm²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0 in² (1...2.5 mm²) - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 0.01...0.08 in² (4...50 mm²) - cable stiffness: flexible - without cable end Power circuit: connector 2 cable(s) 0.01...0.04 in² (4...25 mm²) - cable stiffness: flexible - without cable end Power circuit: connector 1 cable(s) 0.01...0.08 in² (4...50 mm²) - cable stiffness: flexible - with cable end Power circuit: connector 2 cable(s) 0.01...0.02 in² (4...16 mm²) - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 0.01...0.08 in² (4...50 mm²) - cable stiffness: solid - without cable end Power circuit: connector 2 cable(s) 0.01...0.04 in² (4...25 mm²) - cable stiffness: solid - without cable end
Tightening torque	Power circuit: 79.65 lbf.in (9 N.m) - on connector - with screwdriver flat Ø 6 to Ø 8 mm Power circuit: 79.65 lbf.in (9 N.m) - on connector hexagonal 0.16 in (4 mm) Control circuit: 10.62 lbf.in (1.2 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 10.62 lbf.in (1.2 N.m) - on screw clamp terminals - with screwdriver Philips No 2
Operating time	20...35 ms closing 6...20 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	10 Mcycles
Operating rate	3600 cyc/h at <= 140 °F (60 °C)

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.85...1.1 Uc operational at 131 °F (55 °C), AC 60 Hz 0.3...0.6 Uc drop-out at 131 °F (55 °C), AC 60 Hz
Inrush power in VA	220 VA at 68 °F (20 °C) (cos ϕ 0.75) 60 Hz
Hold-in power consumption in VA	22 VA at 68 °F (20 °C) (cos ϕ 0.3) 60 Hz
Heat dissipation	6...10 W at 60 Hz

Environment

IP degree of protection	IP20 front face conforming to IEC 60529
protective treatment	TH conforming to IEC 60068-2-30
pollution degree	3
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
flame retardance	V1 conforming to UL 94
mechanical robustness	Vibrations contactor open 2 Gn, 5...300 Hz Shocks contactor open 8 Gn for 11 ms Vibrations contactor closed 3 Gn, 5...300 Hz Shocks contactor closed 10 Gn for 11 ms
height	5 in (127 mm)
width	3.78 in (96 mm)
depth	5.51 in (140 mm)
product weight	4.06 lb(US) (1.84 kg)

Offer Sustainability

Green Premium product	Green Premium product
Compliant - since 0707 - Schneider Electric declaration of conformity	Compliant - since 0707 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Need no specific recycling operations	Need no specific recycling operations

Contractual warranty

Warranty period	18 months