Product data sheet Characteristics

LC1D80004F7

TeSys D contactor - 4P(4 NO) - AC-1 - <= 440 V 125 A - 110 V AC 50/60 Hz coil





Main

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
Power pole contact composition	4 NO
[Ue] rated operational voltage	<= 690 V AC for power circuit <= 300 V DC 25400 Hz for power circuit
[le] rated operational current	125 A (<= 60 $^{\circ}\text{C})$ at <= 440 V AC AC-1 for power circuit
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	110 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	Conforming to IEC 60947
Overvoltage category	III
[lth] conventional free air thermal current	125 A at <= 60 °C for power circuit
Irms rated making ca- pacity	1100 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1100 A at 440 V for power circuit conforming to IEC 60947
[lcw] rated short-time withstand current	135 A <= 40 °C 10 min power circuit 640 A <= 40 °C 10 s power circuit 990 A <= 40 °C 1 s power circuit 320 A <= 40 °C 1 min power circuit
Associated fuse rating	160 A gG at <= 690 V coordination type 2 for power circuit 200 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	0.8 mOhm at 50 Hz - Ith 125 A for power circuit
[Ui] rated insulation voltage	1000 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit certifications CSA 600 V for 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
Safety cover	Without
Mounting support	Rail Plate
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	RINA BV GL CCC UL LROS (Lloyds register of shipping) DNV GOST CSA

Connections - terminals	Control circuit : screw clamp terminals 2 cable(s)
Connections - terminals	12.5 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - without cable end
	Control circuit : screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: flexible - without cable end
	Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 12.5 mm² - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 450 mm² - ca- ble stiffness: flexible - without cable end Power circuit: connector 2 cable(s) 425 mm² - ca- ble stiffness: flexible - without cable end Power circuit: connector 1 cable(s) 450 mm² - ca- ble stiffness: flexible - with cable end Power circuit: connector 2 cable(s) 416 mm² - ca- ble stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 450 mm² - ca- ble stiffness: solid - without cable end Power circuit: connector 2 cable(s) 425 mm² - ca- ble stiffness: solid - without cable end
Tightening torque	Power circuit: 9 N.m - on connector - with screwdriver flat Ø 6 to Ø 8 mm Power circuit: 9 N.m - on connector hexagonal 4 mm Control circuit: 1.2 N.m - on screw clamp terminals with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals with screwdriver Philips No 2
Operating time	2035 ms closing 620 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
	load conforming to EN/ISO 13649-1
Mechanical durability	4 Mcycles

Complementary

Coil technology	Without built-in suppressor module	
Control circuit voltage limits	0.851.1 Uc operational at 55 °C, AC 60 Hz 0.30.6 Uc drop-out at 55 °C, AC 50/60 Hz 0.81.1 Uc operational at 55 °C, AC 50 Hz	
Inrush power in VA	245 VA at 20 °C (cos φ 0.75) 60 Hz 245 VA at 20 °C (cos φ 0.75) 50 Hz	
Hold-in power consumption in VA	26 VA at 20 °C (cos φ 0.3) 60 Hz 26 VA at 20 °C (cos φ 0.3) 50 Hz	
Heat dissipation	610 W at 50/60 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	-560 °C
Ambient air temperature for storage	-6080 °C
Permissible ambient air temperature around the device	-4070 °C at Uc
Operating altitude	3000 m without derating
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Vibrations contactor open 2 Gn, 5300 Hz Shocks contactor open 8 Gn for 11 ms Vibrations contactor closed 3 Gn, 5300 Hz Shocks contactor closed 10 Gn for 11 ms

Height	127 mm	
Width	96 mm	
Depth	125 mm	
Product weight	1.76 kg	

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0701 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available Product Environmental Profile
Product end of life instructions	Need no specific recycling operations

Contractual warranty

Warranty period	18 months