Product datasheet Characteristics

LC1D80004P7 TeSys D contactor - 4P(4 NO) - AC-1 - <= 440 V 125 A - 230 V AC 50/60 Hz coil



Main

2224		
Main		
Range of product	TeSys D	
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	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 °C) at <= 440 V AC AC-1 for power circuit	
Control circuit type	AC 50/60 Hz	
Control circuit voltage	230 V AC 50/60 Hz	
[Uimp] rated impulse withstand voltage	e Conforming to IEC 60947	
Overvoltage category	III	
[Ith] conventional free air thermal current	125 A at <= 60 °C for power circuit	
Irms rated making capacity	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	nt 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	ated 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		
Protective 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	GL CCC RINA GOST UL LROS BV CSA DNV		
Connections - terminals	Control circuit : screw clamp terminals 2 cable(s) 12.5 mm ² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 14 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 14 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 1 cable(s) 125 mm ² - cable stiffness: flexible - with cable end Control circuit : connector 1 cable(s) 450 mm ² - cable stiffness: flexible - without cable end Power circuit : connector 2 cable(s) 450 mm ² - cable stiffness: flexible - without cable end Power circuit : connector 1 cable(s) 450 mm ² - cable stiffness: flexible - with cable end Power circuit : connector 2 cable(s) 450 mm ² - cable stiffness: flexible - with cable end Power circuit : connector 1 cable(s) 450 mm ² - cable stiffness: flexible - with cable end Power circuit : connector 1 cable(s) 450 mm ² - cable stiffness: flexible - with cable end Power circuit : connector 2 cable(s) 450 mm ² - cable stiffness: flexible - with cable end Power circuit : connector 2 cable(s) 450 mm ² - cable stiffness: solid - without cable end Power circuit : connector 1 cable(s) 450 mm ² - cable stiffness: solid - without cable end Power circuit : connector 1 cable(s) 450 mm ² - cable stiffness: solid - without cable end Power circuit : connector 1 cable(s) 450 mm ² - cable stiffness: solid - without cable end Power circuit : connector 2 cable(s) 450 mm ² - cable stiffness: solid - without cable end Power circuit : connector 2 cable(s) 450 mm ² - cable stiffness: solid - without cable end Power circuit : connector 2 cable(s) 4		
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		
Mechanical durability	4 Mcycles		
Operating rate	3600 cyc/h at <= 60 °C		

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	IP2x 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 in temperature	
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	

Offer Sustainability

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		
	Reference not containing SVHC above the threshold		
Product environmental profile	Available		
	Product environmental		
Product end of life instructions	Need no specific recycling operations		

Contractual warranty

Contractual warranty			
Warranty period	18 months		