Product data sheet Characteristics

LC1D188G7

TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 - <= 440 V 32 A - 120 V AC coil





IVIAIII		
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	2 NO + 2 NC	
[Ue] rated operational voltage	<= 300 V DC for power circuit <= 690 V AC 25400 Hz for power circuit	
[le] rated operational current	32 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit	
Control circuit type	AC 50/60 Hz	
[Uc] control circuit voltage	120 V AC 50/60 Hz	
Auxiliary contact composition	1 NO + 1 NC	
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947	
Overvoltage category	III	
[lth] conventional free air thermal current	32 A at <= 60 °C for power circuit 10 A at <= 60 °C for signalling circuit	
Irms rated making capacity	300 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1	
Rated breaking capacity	300 A at 440 V for power circuit conforming to IEC 60947	
[lcw] rated short-time withstand current	145 A <= 40 °C 10 s power circuit 240 A <= 40 °C 1 s power circuit 40 A <= 40 °C 10 min power circuit 84 A <= 40 °C 1 min power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit	
Associated fuse rating	35 A gG at <= 690 V coordination type 2 for power circuit 50 A gG at <= 690 V coordination type 1 for power circuit	

	10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	2.5 mOhm at 50 Hz - Ith 32 A for power circuit
[Ui] rated insulation voltage	600 V for power circuit certifications CSA 600 V for power circuit certifications UL 690 V for power circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-1 600 V for signalling circuit certifications CSA 600 V for signalling circuit certifications UL
Electrical durability	1 Mcycles 32 A AC-1 at Ue <= 440 V
Power dissipation per pole	2.5 W AC-1
Safety cover	With
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	UL GOST CSA DNV CCC RINA GL LROS (Lloyds register of shipping) BV
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 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: flexible - with 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 Power circuit: connector 1 cable(s) 2.510 mm² - cable stiffness: flexible - without cable end Power circuit: connector 2 cable(s) 2.510 mm² - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 2.510 mm² - cable stiffness: flexible - with cable end Power circuit: connector 2 cable(s) 2.510 mm² - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 2.510 mm² - cable stiffness: solid - without cable end Power circuit: connector 2 cable(s) 2.516 mm² - cable stiffness: solid - without cable end Power circuit: connector 2 cable(s) 2.516 mm² - cable stiffness: solid - without cable end
Tightening torque	Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 1.7 N.m - on connector - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on connector - with screwdriver Philips No 2
Operating time	419 ms opening 1222 ms closing
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	15 Mcycles
Operating rate	3600 cyc/h at <= 60 °C

Complementary

Coil technology	Without built-in suppressor module	
Control circuit voltage limits	0.30.6 Uc drop-out at 60 °C, AC 50/60 Hz 0.81.1 Uc operational at 60 °C, AC 50 Hz 0.851.1 Uc operational at 60 °C, AC 60 Hz	
Inrush power in VA	70 VA at 20 °C (cos φ 0.75) 60 Hz 70 VA at 20 °C (cos φ 0.75) 50 Hz	
Hold-in power consumption in VA	7.5 VA at 20 °C (cos φ 0.3) 60 Hz 7 VA at 20 °C (cos φ 0.3) 50 Hz	
Heat dissipation	23 W at 50/60 Hz	
Auxiliary contacts type	Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1 Type mirror contact (1 NC) conforming to IEC 60947-4-1	

Signalling circuit frequency	25400 Hz
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Non-overlap time	1.5 ms on energisation between NC and NO contact 1.5 ms on de-energisation between NC and NO contact
Insulation resistance	> 10 MOhm for signalling circuit

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 Vibrations contactor closed 4 Gn, 5300 Hz Shocks contactor open 10 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms
Height	105 mm
Width	45 mm
Depth	99 mm
Product weight	0.425 kg

Offer Sustainability

Sustainable offer status	Green Premium product	
RoHS (date code: YYWW)	Compliant - since 0702 - 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 Profile	
Product end of life instructions	Available End of Life Information	

Contractual warranty

Warranty period	18 months	