LC1D128M7

TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 - <= 440 V 25 A - 220 V AC coil





Main

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
Pole contact composition	2 NO + 2 NC
[Ue] rated operational voltage	<= 690 V AC 25400 Hz for power circuit <= 300 V DC for power circuit
[le] rated operational current	25 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	220 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	25 A at <= 60 °C for power circuit 10 A at <= 60 °C for signalling circuit
Irms rated making capacity	250 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	250 A at 440 V for power circuit conforming to IEC 60947
[lcw] rated short-time withstand current	105 A <= 40 °C 10 s power circuit 210 A <= 40 °C 1 s power circuit 30 A <= 40 °C 10 min power circuit 61 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	25 A gG at <= 690 V coordination type 2 for power circuit 40 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 25 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	0.8 Mcycles 25 A AC-1 at Ue <= 440 V
Power dissipation per pole	1.56 W AC-1
Protective cover	With
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)
	12.5 mm ² - cable stiffness: flexible - with cable
	end
	Power circuit: screw clamp terminals 1 cable(s)
	14 mm ² - cable stiffness: flexible - with cable en
	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 mm² - cable stiffness: flexible - without cable
	end
	Control circuit : screw clamp terminals 1 cable(s)
	14 mm ² - cable stiffness: flexible - with cable en
	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
	Power circuit : screw clamp terminals 1 cable(s)
	14 mm ² - cable stiffness: flexible - without cable
	end
	Power circuit: screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: flexible - without cable
	end
	Power circuit : screw clamp terminals 2 cable(s)
	12.5 mm ² - cable stiffness: flexible - with cable
	end
	Power circuit: screw clamp terminals 1 cable(s)
	14 mm ² - cable stiffness: solid - without cable
	end
	Power circuit : screw clamp terminals 2 cable(s)
	14 mm ² - cable stiffness: solid - without cable
	end
Tightening torque	end Power circuit: 1.7 N.m - on screw clamp terminal
Tightening torque	end Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm
Tightening torque	end Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminal
Tightening torque	end Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2
Tightening torque	end Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp
Tightening torque	end Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm
Tightening torque	end Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp
	end Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 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
Tightening torque Operating time	end Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 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
	end Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 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 2 419 ms opening 1222 ms closing B10d = 1369863 cycles contactor with nominal
Operating time	end Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 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 2 419 ms opening 1222 ms closing B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1
Operating time	end Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 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 flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 419 ms opening 1222 ms closing B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with
Operating time Safety reliability level	end Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 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 flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 419 ms opening 1222 ms closing B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1
Operating time	end Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 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 flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 419 ms opening 1222 ms closing B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with

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 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 Vibrations contactor closed 4 Gn, 5300 Hz Shocks contactor open 10 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms
height	85 mm
width	45 mm
depth	92 mm
product weight	0.365 kg

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0702 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

