Product data sheet Characteristics

LC1D1150046MD

TeSys D contactor - 4P(4 NO) - AC-1 - <= 440 V 200 A - 220 V DC coil



Main

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Range of product	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 DC for power circuit <= 1000 V AC 25400 Hz for power circuit
[le] rated operational current	200 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit
Control circuit type	DC standard
Control circuit voltage	220 V DC
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Overvoltage category	III
[lth] conventional free air thermal current	200 A at <= 60 °C for power circuit
Irms rated making capacity	1260 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	250 A <= 40 °C 10 min power circuit 550 A <= 40 °C 1 min power circuit 950 A <= 40 °C 10 s power circuit 1100 A <= 40 °C 1 s power circuit
Associated fuse rating	250 A gG at <= 690 V coordination type 1 for power circuit 200 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	0.6 mOhm at 50 Hz - Ith 200 A for power circuit
[Ui] rated insulation voltage	600 V for power circuit certifications CSA 600 V for power circuit certifications UL 1000 V for power circuit conforming to IEC 60947-4-1
Power dissipation per pole	24 W AC-1
Safety cover	Without
Mounting support	Plate Rail
Standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 CSA C22.2 n°14
Product certifications	BV CCC CSA DNV GL GOST RINA UL LROS

Connections - terminals	Control circuit: lugs-ring terminals - external diameter: 8 mm Power circuit: lugs-ring terminals - external diameter: 25 mm Power circuit: bars 1 5 x 25 mm
Tightening torque	Control circuit: 1.2 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm screw: M3.5 Control circuit: 1.2 N.m - on lugs-ring terminals - with screwdriver Philips No 2 screw: M3.5 Power circuit: 12 N.m - on lugs-ring terminals hexagonal 13 mm screw: M8 Power circuit: 12 N.m - on bars hexagonal 13 mm screw: M8
Operating time	2035 ms closing 4075 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 (millions)	8 Mcycles
Operating rate	1200 cyc/h at <= 60 °C

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.751.2 Uc at 55 °C operational 0.150.4 Uc at 55 °C drop-out
Time constant	25 ms
Inrush power in W	270365 W at 20 °C
Hold-in power consumption in W	2.45.1 W at 20 °C

Environment

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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 Vibrations contactor closed 4 Gn, 5300 Hz Shocks contactor closed 15 Gn for 11 ms Shocks contactor open 6 Gn for 11 ms
Height	158 mm
Width	155 mm
Depth	115 mm
Product weight	2.86 kg

