Product data sheet Characteristics

LC1DT40M7

TeSys D contactor - 4P(4 NO) - AC-1 - <= 440 V 40 A - 220 V AC coil

Price*: 193.00 USD



Main	
Commercial Status	Commercialised
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
Pole contact composition	4 NO
[Ue] rated operational voltage	<= 300 V DC for power circuit <= 690 V AC 25400 Hz for power circuit
[le] rated operational current	40 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
Control circuit type	AC 50/60 Hz
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
[Ith] conventional free air thermal current	40 A at <= 140 °F (60 °C) for power circuit 10 A at <= 140 °F (60 °C) for signalling circuit
Irms rated making ca- pacity	450 A at 440 V for power circuit conforming to IEC 60947 250 A DC for signalling circuit conforming to IEC 60947-5-1 140 A AC for signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	450 A at 440 V for power circuit conforming to IEC 60947
[lcw] rated short-time withstand current	380 A <= 104 °F (40 °C) 1 s power circuit 240 A <= 104 °F (40 °C) 10 s power circuit 120 A <= 104 °F (40 °C) 1 min power circuit 50 A <= 104 °F (40 °C) 10 min power circuit 140 A 100 ms signalling circuit 120 A 500 ms signalling circuit 100 A 1 s signalling circuit
Associated fuse rating	40 A gG at <= 690 V coordination type 2 for power circuit 63 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 mOhm at 50 Hz - Ith 40 A for power circuit
[Ui] rated insulation voltage	600 V for signalling circuit certifications UL 600 V for signalling circuit certifications CSA 690 V for signalling circuit conforming to IEC 60947-1 600 V for power circuit certifications UL 600 V for power circuit certifications CSA 690 V for power circuit conforming to IEC 60947-4-1
Electrical durability	1.4 Mcycles 40 A AC-1 at Ue <= 440 V
Power dissipation per pole	3.2 W AC-1
Protective cover	With

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 No 14
Product certifications	BV CCC CSA DNV GL GOST RINA UL LROS
Connections - terminals	Power circuit: connector 2 cable(s) 00.02 in² (2.516 mm²) - cable stiffness: solid - without cable end Power circuit: connector 1 cable(s) 00.02 in² (2.516 mm²) - cable stiffness: solid - without cable end Power circuit: connector 2 cable(s) 00.02 in² (2.510 mm²) - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 00.02 in² (2.510 mm²) - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 00.02 in² (2.510 mm²) - cable stiffness: flexible - without cable end Power circuit: connector 2 cable(s) 00.02 in² (2.510 mm²) - cable stiffness: flexible - without cable end Power circuit: sornector 1 cable(s) 00.02 in² (2.510 mm²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 00.01 in² (14 mm²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 00.01 in² (12.5 mm²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 00.01 in² (14 mm²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable(s) 00.01 in² (14 mm²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 00.01 in² (14 mm²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 00.01 in² (14 mm²) - cable stiffness: flexible - without cable end
Tightening torque	Power circuit: 15.04 lbf.in (1.7 N.m) - on connector - with screwdriver Philips No 2 Power circuit: 15.04 lbf.in (1.7 N.m) - on connector - with screwdriver flat Ø 6 mm Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm
Operating time	1222 ms closing 419 ms opening
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1
Mechanical durability	15 Mcycles



Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.851.1 Uc at 140 °F (60 °C) operational 60 Hz 0.81.1 Uc at 140 °F (60 °C) operational 50 Hz 0.30.6 Uc at 140 °F (60 °C) drop-out 50/60 Hz
Inrush power in VA	70 VA at 20 °C (cos φ 0.75) 50 Hz 70 VA at 20 °C (cos φ 0.75) 60 Hz
Hold-in power consumption in VA	7 VA at 20 °C (cos φ 0.3) 50 Hz 7.5 VA at 20 °C (cos φ 0.3) 60 Hz
Heat dissipation	23 W at 50/60 Hz
Auxiliary contacts type	Type mirror contact (1 NC) conforming to IEC 60947-4-1 Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1
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	IP2x front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	23140 °F (-560 °C)
Ambient air temperature for storage	-76176 °F (-6080 °C)
Permissible ambient air temperature around the device	-40158 °F (-4070 °C) at Uc
Operating altitude	9842.52 ft (3000 m) without derating in temperature
Fire resistance	1562 °F (850 °C) conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor open 8 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms Vibrations contactor closed 4 Gn, 5300 Hz Vibrations contactor open 2 Gn, 5300 Hz
Height	3.58 in (91 mm)
Width	1.77 in (45 mm)
Depth	3.9 in (99 mm)
Product weight	0.94 lb(US) (0.425 kg)

Ordering and shipping details

Category	22345 - CTR,D-LINE,OPEN,NONREV-NEW
Discount Schedule	112
GTIN	00785901825982
Nbr. of units in pkg.	1
Package weight(Lbs)	0.96
Returnability	N
Country of origin	ID

