

Product data sheet

Characteristics

LC1D40AB7

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V
40 A - 24 V AC 50/60 Hz coil

Product availability : Stock - Normally stocked in distribution facility



Price* : 218.00 USD



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 Motor control
Utilisation category	AC-3 AC-4 AC-1
Poles description	3P
Pole contact composition	3 NO
System Voltage	<= 300 V DC power circuit <= 690 V AC 25...400 Hz power circuit
[Ie] rated operational current	40 A (<= 140 °F (60 °C)) at <= 440 V AC AC-3 power circuit 60 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 power circuit
Motor power kW	18.5 kW at 380...400 V AC 50/60 Hz AC-3 22 kW at 500 V AC 50/60 Hz AC-3 30 kW at 660...690 V AC 50/60 Hz AC-3 11 kW at 220...230 V AC 50/60 Hz AC-3 9 kW at 400 V AC 50/60 Hz AC-4 22 kW at 415...440 V AC 50/60 Hz AC-3
Motor power hp	5 hp at 230/240 V AC 50/60 Hz 1 phase motors 10 hp at 230/240 V AC 50/60 Hz 3 phases motors 30 hp at 575/600 V AC 50/60 Hz 3 phases motors 3 hp at 115 V AC 50/60 Hz 1 phase motors 10 hp at 200/208 V AC 50/60 Hz 3 phases motors 30 hp at 460/480 V AC 50/60 Hz 3 phases motors
Control circuit type	AC 50/60 Hz
Control circuit voltage	24 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[Uimp] rated impulse withstand voltage	Conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	60 A at <= 140 °F (60 °C) power circuit 10 A at <= 140 °F (60 °C) signalling circuit
Irms rated making capacity	800 A at 440 V power circuit conforming to IEC 60947 140 A AC signalling circuit conforming to IEC 60947-5-1 250 A DC signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	800 A at 440 V power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit 320 A <= 104 °F (40 °C) 10 s power circuit 720 A <= 104 °F (40 °C) 1 s power circuit 72 A <= 104 °F (40 °C) 10 min power circuit 165 A <= 104 °F (40 °C) 1 min power circuit
Associated fuse rating	80 A gG at <= 690 V coordination type 1 power circuit 80 A gG at <= 690 V coordination type 2 power circuit 10 A gG signalling circuit conforming to IEC 60947-5-1
Average impedance	1.5 mOhm at 50 Hz - Ith 60 A power circuit
[Ui] rated insulation voltage	600 V power circuit certifications CSA 600 V power circuit certifications UL 690 V power circuit conforming to IEC 60947-4-1 690 V signalling circuit conforming to IEC 60947-1 600 V signalling circuit certifications CSA 600 V signalling circuit certifications UL
Electrical durability	1.5 Mcycles 40 A AC-3 at Ue <= 440 V 1.4 Mcycles 60 A AC-1 at Ue <= 440 V
Power dissipation per pole	5.4 W AC-1 2.4 W AC-3
Protective cover	With
Mounting support	Plate Rail
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 CCC
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 0...0 in ² (1...2.5 mm ²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Power circuit : screw connection 2 cable(s) 1...25 mm ² - cable stiffness: flexible - with cable end Power circuit : screw connection 2 cable(s) 1...25 mm ² - cable stiffness: solid - without cable end Power circuit : screw connection 2 cable(s) 1...25 mm ² - cable stiffness: flexible - without cable end Power circuit : screw connection 1 cable(s) 1...35 mm ² - cable stiffness: solid - without cable end Power circuit : screw connection 1 cable(s) 1...35 mm ² - cable stiffness: flexible - without cable end Power circuit : screw connection 1 cable(s) 1...35 mm ² - cable stiffness: flexible - with cable end
Tightening torque	Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - 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 Power circuit: 70.8 lbf.in (8 N.m) - on EverLink BTR screw connectors - cable 0.04...0.05 in ² (25...35 mm ²) hexagonal 0.16 in (4 mm) Power circuit : 5 N.m - on EverLink BTR screw connectors - cable 1...25 mm ² hexagonal 4 mm
Operating time	12...26 ms closing 4...19 ms opening
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1

Mechanical durability	6 Mcycles
Operating rate	3600 cyc/h at <= 140 °F (60 °C)

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 Uc drop-out at 140 °F (60 °C), AC 50/60 Hz 0.8...1.1 Uc operational at 140 °F (60 °C), AC 50 Hz 0.85...1.1 Uc operational at 140 °F (60 °C), AC 60 Hz
Inrush power in VA	140 VA at 68 °F (20 °C) (cos φ 0.75) 60 Hz 160 VA at 68 °F (20 °C) (cos φ 0.75) 50 Hz
Hold-in power consumption in VA	13 VA at 68 °F (20 °C) (cos φ 0.3) 60 Hz 15 VA at 68 °F (20 °C) (cos φ 0.3) 50 Hz
Heat dissipation	4...5 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	25...400 Hz
Minimum switching current	5 mA signalling circuit
Minimum switching voltage	17 V signalling circuit
Non-overlap time	1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact)
Insulation resistance	> 10 MΩ signalling circuit
Motor power range AC-3	7...11 kW 200...240 V 3 phases 15...25 kW 380...440 V 3 phases 15...25 kW 480...500 V 3 phases
Motor starter type	Direct on-line contactor
Contactor coil voltage	24 V AC

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	23...140 °F (-5...60 °C)
Ambient air temperature for storage	-76...176 °F (-60...80 °C)
Permissible ambient air temperature around the device	-40...158 °F (-40...70 °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	Vibrations contactor open 2 Gn, 5...300 Hz Vibrations contactor closed 4 Gn, 5...300 Hz Shocks contactor open 10 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms
Height	4.8 in (122 mm)
Width	2.17 in (55 mm)
Depth	4.72 in (120 mm)
Product weight	1.87 lb(US) (0.85 kg)

Ordering and shipping details

Category	22345 - CTR,D-LINE,OPEN,NONREV-NEW
Discount Schedule	I12
GTIN	00785901998907
Nbr. of units in pkg.	1
Package weight(Lbs)	2.1000000000000001
Returnability	Y

Country of origin	ID
-------------------	----

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0001 - 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 end of life instructions	Available

Contractual warranty

Warranty period	18 months
-----------------	-----------
