

# 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



### Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0001 - Schneider Electric declaration of conformity <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold <a href="#">Reference not containing SVHC above the threshold</a>
Product environmental profile	Available
Product end of life instructions	Available

### 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

### Contractual warranty

Warranty period	18 months
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### Main

Range	TeSys
Product name	TeSys D
Product or component type	Contacteur
Device short name	LC1D

Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Poles description	3P
Pole contact composition	3 NO
System Voltage	<= 690 V AC 25...400 Hz power circuit <= 300 V DC power circuit
[Ie] rated operational current	60 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 power circuit 40 A (<= 140 °F (60 °C)) at <= 440 V AC AC-3 power circuit
Motor power kW	30 kW at 660...690 V AC 50/60 Hz 22 kW at 500 V AC 50/60 Hz 11 kW at 220...230 V AC 50/60 Hz 22 kW at 415...440 V AC 50/60 Hz 18.5 kW at 380...400 V AC 50/60 Hz
Motor power hp	5 hp at 230/240 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 10 hp at 230/240 V AC 50/60 Hz 3 phases motors 3 hp at 115 V AC 50/60 Hz 1 phase motors 30 hp at 575/600 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
[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	250 A DC signalling circuit conforming to IEC 60947-5-1 140 A AC signalling circuit conforming to IEC 60947-5-1 800 A at 440 V power circuit conforming to IEC 60947
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 320 A <= 104 °F (40 °C) 10 s power circuit 720 A <= 104 °F (40 °C) 1 s power circuit 165 A <= 104 °F (40 °C) 1 min power circuit 140 A 100 ms signalling circuit 72 A <= 104 °F (40 °C) 10 min power circuit
Associated fuse rating	80 A gG at <= 690 V coordination type 2 power circuit 80 A gG at <= 690 V coordination type 1 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	690 V power circuit conforming to IEC 60947-4-1 600 V power circuit certifications CSA 600 V signalling circuit certifications UL 600 V power circuit certifications UL 690 V signalling circuit conforming to IEC 60947-1 600 V signalling circuit certifications CSA
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	2.4 W AC-3 5.4 W AC-1
Protective cover	With
Mounting support	Plate Rail
Standards	EN 60947-4-1 IEC 60947-5-1 UL 508 CSA C22.2 No 14 EN 60947-5-1 IEC 60947-4-1
Product certifications	CCC CSA GOST

Connections - terminals	Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid - without cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 0...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 0...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable(s) 0...0 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 0...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) - cable stiffness: solid - without cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 0...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 0...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) - cable stiffness: solid - without cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 0...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end
Tightening torque	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 <sup>2</sup> (25...35 mm <sup>2</sup> ) hexagonal 0.16 in (4 mm) Power circuit: 44.25 lbf.in (5 N.m) - on EverLink BTR screw connectors - cable ≤ 0.04 in <sup>2</sup> (25 mm <sup>2</sup> ) hexagonal 0.16 in (4 mm) Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm
Operating time	4...19 ms opening 12...26 ms closing
Safety reliability level	B10d = 2000000 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	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 U <sub>c</sub> drop-out at 140 °F (60 °C), AC 50/60 Hz 0.8...1.1 U <sub>c</sub> operational at 140 °F (60 °C), AC 50 Hz 0.85...1.1 U <sub>c</sub> 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 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	25...400 Hz
Minimum switching current	5 mA signalling circuit
Minimum switching voltage	17 V 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 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	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	Shocks contactor closed 15 Gn for 11 ms Shocks contactor open 10 Gn for 11 ms Vibrations contactor open 2 Gn, 5...300 Hz Vibrations contactor closed 4 Gn, 5...300 Hz
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)