Product data sheet
Characteristics

LC2D40AD7
TeSys D reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 40 A - 42 V AC coil

Product availability: Non-Stock - Not normally stocked in distribution facility

Price*: 565.00 USD

Main

Commercial Status	Commercialised
Range	TeSys
Product name	TeSys D
Product or component type	Reversing contactor
Device short name	LC2D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Device presentation	Preassembled with reversing power busbar
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	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 22 kW at 415...440 V AC 50/60 Hz 11 kW at 220...230 V AC 50/60 Hz 18.5 kW at 380...400 V AC 50/60 Hz
Motor power hp	30 hp at 460/480 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 575/600 V AC 50/60 Hz 3 phases motors 10 hp at 230/240 V AC 50/60 Hz 3 phases motors 5 hp at 230/240 V AC 50/60 Hz 1 phase motors
Control circuit type	AC 50/60 Hz
Control circuit voltage	42 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	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 250 A DC signalling circuit conforming to IEC 60947-5-1 140 A AC 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	720 A <= 104 °F (40 °C) 1 s power circuit 320 A <= 104 °F (40 °C) 10 s power circuit 165 A <= 104 °F (40 °C) 1 min power circuit 72 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	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	At 50 Hz - Ith 60 A for power circuit
[Ui] rated insulation voltage	600 V signalling circuit certifications UL 600 V signalling circuit certifications CSA 690 V signalling circuit conforming to IEC 60947-1 600 V power circuit certifications UL 600 V power circuit certifications CSA 690 V power circuit conforming to IEC 60947-4-1
Electrical durability	1.4 Mcycles 60 A AC-1 at Ue <= 440 V 1.5 Mcycles 40 A AC-3 at Ue <= 440 V
Power dissipation per pole	5.4 W AC-1 2.4 W AC-3
Protective cover	With
Interlocking type	Mechanical
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	CCC CSA GOST UL
Connections - terminals	Power circuit: EverLink BTR screw connectors 2 cable(s) 0...0.04 in² (1...25 mm²) - cable stiffness: solid - without cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 0...0.05 in² (1...35 mm²) - cable stiffness: solid - without cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 0...0.04 in² (1...25 mm²) - cable stiffness: flexible - with cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 0...0.05 in² (1...35 mm²) - cable stiffness: flexible - with cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 0...0.04 in² (1...25 mm²) - cable stiffness: flexible - without cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 0...0.05 in² (1...35 mm²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0 in² (1...2.5 mm²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: flexible - without cable end
Tightening torque	Power circuit: 70.8 lbf.in (8 N.m) - on EverLink BTR screw connectors - cable 0.04...0.05 in² (25...35 mm²) hexagonal 0.16 in (4 mm) Power circuit: 44.25 lbf.in (5 N.m) - on EverLink BTR screw connectors - cable <= 0.04 in² (25 mm²) hexagonal 0.16 in (4 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	12...26 ms closing 4...19 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	6 Mcycles
Operating rate	3600 cyc/h at <= 140 °F (60 °C)

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.85...1.1 Uc at 140 °F (60 °C) operational 60 Hz 0.8...1.1 Uc at 140 °F (60 °C) operational 50 Hz 0.3...0.6 Uc at 140 °F (60 °C) drop-out 50/60 Hz
Inrush power in VA	160 VA at 68 °F (20 °C) (cos ϕ 0.75) 50 Hz 140 VA at 68 °F (20 °C) (cos ϕ 0.75) 60 Hz
Hold-in power consumption in VA	15 VA at 68 °F (20 °C) (cos ϕ 0.3) 50 Hz 13 VA at 68 °F (20 °C) (cos ϕ 0.3) 60 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
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 closed 4 Gn, 5...300 Hz Vibrations contactor open 2 Gn, 5...300 Hz
Height	4.8 in (122 mm)
Width	4.69 in (119 mm)
Depth	4.72 in (120 mm)
Product weight	4.12 lb(US) (1.87 kg)

Ordering and shipping details

Category	22346 - CTR,D-LINE,OPEN,REVERSING-NEW
Discount Schedule	I12
Nbr. of units in pkg.	1
Product availability	Non-Stock - Not normally stocked in distribution facility
Returnability	N
Country of origin	FR

Contractual warranty

Warranty period	18 months