Product data sheet
Characteristics

LC2D40E7
reversing contactor TeSys LC2-D - 3 poles - AC-3 - 440 V 40 A - coil 48 V AC

Main

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
Power pole contact composition	3 NO
System Voltage	<= 1000 V AC 25...400 Hz power circuit
[Ie] rated operational current	40 A (<= 131 °F (55 °C)) at <= 440 V AC AC-3 power circuit 60 A (<= 104 °F (40 °C)) at <= 440 V AC AC-1 power circuit
Motor power kW	22 kW at 500 V AC 50 Hz 18.5 kW at 380...400 V AC 50 Hz 22 kW at 415 V AC 50 Hz 22 kW at 440 V AC 50 Hz 30 kW at 660...690 V AC 50 Hz 11 kW at 220...230 V AC 50 Hz
Motor power HP (UL / CSA)	3 hp at 115 V AC 60 Hz 1 phase motors 10 hp at 200/208 V AC 60 Hz 3 phases motors 30 hp at 575...600 V AC 60 Hz for 3 phases motors 30 hp at 460...480 V AC 60 Hz for 3 phases motors 5 hp at 230...240 V AC 60 Hz for 1 phase motors 10 hp at 220...240 V AC 60 Hz for 3 phases motors
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	48 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	10 A at <= 140 °F (60 °C) signalling circuit
Irms rated making capacity	800 A at 440 V power circuit conforming to IEC 60947-4 140 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 500 V power circuit conforming to IEC 60947 800 A at 220/415/440 V power circuit conforming to IEC 60947 400 A at 690 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	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	1000 V power circuit conforming to IEC 60947-4-1 600 V power circuit certifications CSA 600 V power circuit certifications UL 690 V signalling circuit conforming to IEC 60947-1 600 V signalling circuit certifications CSA 600 V signalling circuit certifications UL
Electrical durability	1.4 Mcycles 60 A AC-1 <= 440 V 1.5 Mcycles 40 A AC-3 <= 440 V
Power dissipation per pole	5.4 W AC-1 2.4 W AC-3
Safety cover	With
Interlocking type	Mechanical
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 CSA CCC EAC GL BV DNV RINA
Connections - terminals	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 - without 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 - with 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...0.01 in² (1...4 mm²) - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 1 cable(s) 0...0.04 in² (2.5...25 mm²) - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 2 cable(s) 0...0.02 in² (2.5...16 mm²) - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 2 cable(s) 0...0.02 in² (2.5...10 mm²) - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 1 cable(s) 0...0.04 in² (2.5...25 mm²) - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 2 cable(s) 0...0.02 in² (2.5...16 mm²) - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 1 cable(s) 0...0.04 in² (2.5...25 mm²) - 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: 53.1 lbf.in (6 N.m) - on screw clamp terminals Power circuit: 53.1 lbf.in (6 N.m) - on screw clamp terminals - with screwdriver flat Ø 8 mm
Operating time	20...26 ms closing 8...12 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	16000000 cycles
Operating rate	<= 3600 cyc/h at <= 55 °C

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.85...1.1 Uc operational at 131 °F (55 °C), AC 60 Hz 0.3...0.6 Uc drop-out at 131 °F (55 °C), AC 60 Hz 0.3...0.6 Uc drop-out at 131 °F (55 °C), AC 50/60 Hz 0.8...1.1 Uc operational at 131 °F (55 °C), AC 50/60 Hz
Inrush power in VA	200 VA at 68 °F (20 °C) (cos ϕ 0.75) 50 Hz 220 VA at 68 °F (20 °C) (cos ϕ 0.75) 60 Hz
Heat dissipation	6...10 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 MOhm signalling circuit

Environment

IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	23...131 °F (-5...55 °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)
Operating altitude	9842.52 ft (3000 m) without derating
Fire resistance	1760 °F (960 °C) conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Vibrations contactor open 2 Gn, 5...300 Hz Shocks contactor open 8 Gn for 11 ms Vibrations contactor closed 3 Gn, 5...300 Hz Shocks contactor closed 10 Gn for 11 ms
Height	5 in (127 mm)
Width	6.5 in (165 mm)
Depth	5.59 in (142 mm)
Product weight	5.29 lb(US) (2.4 kg)

Ordering and shipping details

Category	22357 - CTR,TESYS D,OPEN,40-65A AC
Discount Schedule	I12
GTIN	00785901710516
Nbr. of units in pkg.	1
Package weight(Lbs)	7.2800000000000002
Returnability	N
Country of origin	CZ

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0847 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available
California proposition 65	WARNING: This product can expose you to chemicals including:
- - - - - - - Substance 1	Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer.
- - - - - - - More information	For more information go to www.p65warnings.ca.gov

Contractual warranty

Warranty period	18 months