

LC2D50AKUE

TeSys D reversing contactor - 3P - ≤ 440 V -
50 A AC-3 - 100...250 V AC/DC coil





Main

Range	TeSys
Product name	TeSys D Green
Product or component type	Reversing contactor
Device short name	LC2D
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-3
Device presentation	Preassembled with reversing power busbar
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit 690 V AC 25...400 Hz
[Ie] rated operational current	50 A 140 °F (60 °C)) <= 440 V AC-3 power circuit 80 A 140 °F (60 °C)) <= 440 V AC-1 power circuit
Motor power kW	15 kW 220...230 V AC 50 Hz 22 kW 380...400 V AC 50 Hz 25 kW 415 V AC 50 Hz 30 kW 440 V AC 50 Hz 30 kW 500 V AC 50 Hz 33 kW 660...690 V AC 50 Hz
Motor power HP (UL / CSA)	3 Hp 115 V AC 60 Hz 1 phase 7.5 Hp 230/240 V AC 60 Hz 1 phase 15 Hp 200/208 V AC 60 Hz 3 phase 15 Hp 230/240 V AC 60 Hz 3 phase 40 Hp 460/480 V AC 60 Hz 3 phase 40 hp 575/600 V AC 60 Hz 3 phase
Control circuit type	AC 50/60 Hz AC/DC electronic DC AC/DC electronic
[Uc] control circuit voltage	100...250 V AC 50/60 Hz 100...250 V DC
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	10 A (at 60 °C) for signalling circuit 80 A 140 °F (60 °C) power circuit
Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 900 A 440 V power circuit IEC 60947
Rated breaking capacity	900 A 440 V power circuit IEC 60947
[Icw] rated short-time withstand current	100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit 400 A 104 °F (40 °C) - 10 s power circuit 810 A 104 °F (40 °C) - 1 s power circuit 84 A 104 °F (40 °C) - 10 min power circuit 208 A 104 °F (40 °C) - 1 min power circuit
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 100 A gG <= 690 V type 1 power circuit 100 A gG <= 690 V type 2 power circuit
Average impedance	1.5 mOhm - Ith 80 A 50 Hz power circuit
[Ui] rated insulation voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1
Electrical durability	1.8 Mcycles 42 A AC-3 <= 440 V 0.5 Mcycles 80 A AC-1 <= 440 V
Power dissipation per pole	3.7 W AC-3 9.6 W AC-1

Front cover	With
Interlocking type	Mechanical
Mounting support	Rail Plate
Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 CSA C22.2 No 60947-4-1
Product certifications	CCC CSA EAC UL KC DNV-GL LROS (Lloyds register of shipping)
Connections - terminals	Control circuit screw clamp terminals 1 0.00... 0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 2 0.00... 0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 1 0.00... 0.01 in ² (1...4 mm ²)flexible with cable end Control circuit screw clamp terminals 2 0.00... 0.00 in ² (1...2.5 mm ²)flexible with cable end Control circuit screw clamp terminals 1 0.00... 0.01 in ² (1...4 mm ²)solid Control circuit screw clamp terminals 2 0.00... 0.01 in ² (1...4 mm ²)solid Power circuit EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²)flexible without cable end Power circuit EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²)flexible without cable end Power circuit EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²)flexible with cable end Power circuit EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²)flexible with cable end Power circuit EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²)solid Power circuit EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²)solid
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 70.81 lbf.in (8 N.m) EverLink BTR screw connectors 0.04...0.05 in ² (25...35 mm ²) hexagonal 0.16 in (4 mm) Power circuit 44.25 lbf.in (5 N.m) EverLink BTR screw connectors 0.00...0.04 in ² (1...25 mm ²) hexagonal 0.16 in (4 mm)
Operating time	55...65 ms closing 20...120 ms opening >= 17221) 20...80 ms opening >= 18011)
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	6 Mcycles
Maximum operating rate	3600 cyc/h 60 °C

Complementary

Coil technology	Built-in bidirectional peak limiting
Control circuit voltage limits	<= 0.1 Uc -40...158 °F (-40...70 °C) drop-out AC/DC 0.85...1.1 Uc -40...140 °F (-40...60 °C) operational AC/DC 1...1.1 Uc 140...158 °F (60...70 °C) operational AC/DC
Inrush power in VA	18 VA 50/60 Hz 68 °F (20 °C))
Inrush power in W	14 W 68 °F (20 °C)
Hold-in power consumption in VA	1.8 VA 68 °F (20 °C)) 50/60 Hz
Hold-in power consumption in W	1.2 W 68 °F (20 °C)
Heat dissipation	1.2 W 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 for signalling circuit
Minimum switching voltage	17 V for 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 for signalling circuit
Compatibility code	LC2D

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	-40...60 °C 60...70 °C with derating
Ambient air temperature for storage	-76...176 °F (-60...80 °C)
Operating altitude	0...3000 m
Fire resistance	1562 °F (850 °C) 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	4.80 in (122 mm)
Maximum Width	4.69 in (119 mm)
Depth	4.72 in (120 mm)
Net Weight	4.77 lb(US) (2.164 kg)
Color	Gray SE GREY 6) Green SE GREEN 2)

Ordering and shipping details

Category	22356 - CTR, TESYS D, OPEN, 9-65A AC/DC GREEN
Discount Schedule	I12
GTIN	03606480988134
Nbr. of units in pkg.	1
Package weight(Lbs)	4.77 lb(US) (2.16 kg)
Returnability	No

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	5.51 in (14 cm)
Package 1 width	6.30 in (16 cm)
Package 1 Length	7.68 in (19.5 cm)
Unit Type of Package 2	S03
Number of Units in Package 2	4
Package 2 Weight	21.89 lb(US) (9.931 kg)
Package 2 Height	11.81 in (30 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Compliant  EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	 Yes

China RoHS Regulation	 China RoHS Declaration
Environmental Disclosure	 Product Environmental Profile
Circularity Profile	 End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Halogen content performance	Halogen free plastic parts & cables product
Contractual warranty	
Warranty	18 months