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Main

Range	TeSys
Product name	TeSys Deca
Product or Component Type	Reversing contactor
Device short name	LC2D
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-3 AC-3e
Device presentation	Preassembled with reversing power busbar
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit \leq 1000 V AC 25...400 Hz Power circuit \leq 300 V DC
[Ie] rated operational current	200 A (at <140 °F (60 °C)) at \leq 440 V AC AC-1 for power circuit 150 A (at <140 °F (60 °C)) at \leq 440 V AC AC-3 for power circuit 150 A (at <140 °F (60 °C)) at \leq 440 V AC AC-3e for power circuit
Motor power kW	40 kW at 220...230 V AC 50 Hz 75 kW at 380...400 V AC 50 Hz 80 kW at 415...440 V AC 50 Hz 90 kW at 500 V AC 50 Hz 100 kW at 660...690 V AC 50 Hz 75 kW at 1000 V AC 50 Hz
Motor power HP (UL / CSA)	40 Hp at 200/208 V AC 60 Hz for 3 phase motors 50 Hp at 230/240 V AC 60 Hz for 3 phase motors 100 Hp at 460/480 V AC 60 Hz for 3 phase motors 125 hp at 575/600 V AC 60 Hz for 3 phase motors
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	380 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	8 kV IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	200 A (at 140 °F (60 °C)) for 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 1660 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1400 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	250 A 104 °F (40 °C) - 10 min for power circuit 580 A 104 °F (40 °C) - 1 min for power circuit 1200 A 104 °F (40 °C) - 10 s for power circuit 1400 A 104 °F (40 °C) - 1 s for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 315 A gG at \leq 690 V coordination type 1 for power circuit 250 A gG at \leq 690 V coordination type 2 for power circuit
Average impedance	0.6 mOhm - Ith 200 A 50 Hz for power circuit

[Ui] rated insulation voltage	Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL Power circuit 1000 V IEC 60947-4-1
Electrical durability	0.85 Mcycles 150 A AC-3 <= 440 V 1 Mcycles 200 A AC-1 <= 440 V 0.85 Mcycles 150 A AC-3e <= 440 V
Power dissipation per pole	24 W AC-1 13.5 W AC-3 13.5 W AC-3e
Front cover	With
Interlocking type	Mechanical Electrical
Mounting Support	Rail Plate
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	BV[RETURN]CCC[RETURN]CSA[RETURN]DNV[RETURN]GL[RE
Connections - terminals	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... 0.00 in ² (1...2.5 mm ²)flexible without cable end Control circuit screw clamp terminals 2 0.00... 0.00 in ² (1...2.5 mm ²)flexible without cable end Control circuit screw clamp terminals 1 0.00... 0.00 in ² (1...2.5 mm ²)flexible with cable end Control circuit screw clamp terminals 1 0.00... 0.00 in ² (1...2.5 mm ²)solid without cable end Control circuit screw clamp terminals 2 0.00... 0.00 in ² (1...2.5 mm ²)solid without cable end Power circuit connector 1 0.02...0.19 in ² (10... 120 mm ²)flexible without cable end Power circuit connector 2 0.02...0.08 in ² (10... 50 mm ²)flexible without cable end Power circuit connector 1 0.02...0.19 in ² (10... 120 mm ²)flexible with cable end Power circuit connector 2 0.02...0.08 in ² (10... 50 mm ²)flexible with cable end Power circuit connector 1 0.02...0.19 in ² (10... 120 mm ²)solid without cable end Power circuit connector 2 0.02...0.08 in ² (10... 50 mm ²)solid without cable end
Tightening torque	Control circuit 10.62 lbf.in (1.2 N.m) screw clamp terminals flat Ø 6 mm Control circuit 10.62 lbf.in (1.2 N.m) screw clamp terminals Philips No 2 Power circuit 106.21 lbf.in (12 N.m) connector hexagonal 0.16 in (4 mm) Control circuit 10.62 lbf.in (1.2 N.m) screw clamp terminals pozidriv No 2
Operating time	20...35 ms closing 40...75 ms opening
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	8000000 cycles
Maximum operating rate	1200 cyc/h 140 °F (60 °C)

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.3...0.5 U _c 131 °F (55 °C) drop-out AC 50/60 Hz 0.8...1.15 U _c 131 °F (55 °C) operational AC 50/60 Hz
Inrush power in VA	280...350 VA 60 Hz 0.9 68 °F (20 °C)) 280...350 VA 50 Hz 0.9 68 °F (20 °C))
Hold-in power consumption in VA	2...18 VA 68 °F (20 °C)) 0.9 60 Hz 2...18 VA 68 °F (20 °C)) 0.9 50 Hz
Heat dissipation	3...4.5 W 50/60 Hz
Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC 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

Environment

IP degree of protection	IP20 front face IEC 60529
Climatic withstand	IACS E10
Protective treatment	TH IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
Ambient Air Temperature for Storage	-76...176 °F (-60...80 °C)
Operating altitude	0...9842.52 ft (0...3000 m)
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Vibrations contactor open2 Gn, 5...300 Hz Vibrations contactor closed4 Gn, 5...300 Hz Shocks contactor closed15 Gn for 11 ms Shocks contactor open6 Gn for 11 ms
Height	6.22 in (158 mm)
Width	10.47 in (266 mm)
Depth	5.83 in (148 mm)
Net Weight	14.11 lb(US) (6.4 kg)

Ordering and shipping details

Category	22359-CTR, TESYS D, OPEN, 80-150A AC&DC
Discount Schedule	I12
GTIN	3389110509663
Returnability	No
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.06 in (23.0 cm)
Package 1 Width	12.40 in (31.5 cm)
Package 1 Length	14.57 in (37.0 cm)
Package 1 Weight	14.33 lb(US) (6.5 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
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.
PVC free	Yes

Contractual warranty

Warranty	18 months
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