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Main

Range	TeSys TeSys Deca
Product name	TeSys D 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 <= 690 V AC 25...400 Hz Power circuit <= 300 V DC
[Ie] rated operational current	32 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 50 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 32 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
Motor power kW	7.5 kW at 220...230 V AC 50-60 Hz 15 kW at 380...400 V AC 50-60 Hz 15 kW at 415 V AC 50-60 Hz 15 kW at 440 V AC 50-60 Hz 18.5 kW at 500 V AC 50-60 Hz 18.5 kW at 660...690 V AC 50-60 Hz
Motor power HP (UL / CSA)	2 Hp at 115 V AC 60 Hz for 1 phase motors 5 Hp at 230/240 V AC 60 Hz for 1 phase motors 10 Hp at 200/208 V AC 60 Hz for 3 phase motors 10 Hp at 230/240 V AC 60 Hz for 3 phase motors 20 Hp at 460/480 V AC 60 Hz for 3 phase motors 30 hp at 575/600 V AC 60 Hz for 3 phase motors
Control circuit type	DC low consumption
[Uc] control circuit voltage	24 V DC
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for signalling circuit 50 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 60947-5-1 550 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	550 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	60 A 104 °F (40 °C) - 10 min for power circuit 138 A 104 °F (40 °C) - 1 min for power circuit 260 A 104 °F (40 °C) - 10 s for power circuit 430 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 63 A gG at <= 690 V coordination type 1 for power circuit 63 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2 mOhm - lth 50 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 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
Electrical durability	1.65 Mcycles 32 A AC-3 <= 440 V 1.4 Mcycles 50 A AC-1 <= 440 V 1.65 Mcycles 32 A AC-3e <= 440 V
Power dissipation per pole	2 W AC-3 5 W AC-1 2 W AC-3e
Front cover	With
Interlocking type	Mechanical
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 IEC 60335-1
Product Certifications	UL[RETURN]CSA[RETURN]RINA[RETURN]GOST[RETURN]CC (Lloyds register of shipping) [RETURN]GL[RETURN]BV[RETURN]UKCA
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 screw clamp terminals 1 0.00...0.02 in ² (2.5...10 mm ²)flexible without cable end Power circuit screw clamp terminals 2 0.00...0.02 in ² (2.5...10 mm ²)flexible without cable end Power circuit screw clamp terminals 1 0.00...0.02 in ² (1...10 mm ²)flexible with cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1.5...6 mm ²)flexible with cable end Power circuit screw clamp terminals 1 0.00...0.02 in ² (1.5...10 mm ²)solid Power circuit screw clamp terminals 2 0.00...0.02 in ² (2.5...10 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 22.13 lbf.in (2.5 N.m) screw clamp terminals flat Ø 6 mm Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals Philips No 2 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals pozidriv No 2
Operating time	65.45...88.55 ms closing 20...30 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	30 Mcycles
Maximum operating rate	3600 cyc/h 140 °F (60 °C)

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.3 Uc -40...158 °F (-40...70 °C) drop-out DC 0.8...1.25 Uc -40...140 °F (-40...60 °C) operational DC 1...1.25 Uc 140...158 °F (60...70 °C) operational DC
Time constant	40 ms
Inrush power in W	2.4 W 68 °F (20 °C)
Hold-in power consumption in W	2.4 W 68 °F (20 °C)
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 IEC 60947-1 Annex Q category D
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 open8 Gn for 11 ms
Height	3.35 in (85 mm)
Width	3.54 in (90 mm)
Depth	3.98 in (101 mm)
Net Weight	2.48 lb(US) (1.127 kg)

Ordering and shipping details

Category	22354-CTR,TESYS D,OPEN,9-38A AC
Discount Schedule	I12
GTIN	3389110544701
Returnability	No

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.33 in (11.000 cm)
Package 1 Width	4.53 in (11.500 cm)
Package 1 Length	5.31 in (13.500 cm)
Package 1 Weight	2.84 lb(US) (1.290 kg)

Unit Type of Package 2	S02
Number of Units in Package 2	5
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	14.78 lb(US) (6.705 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	80
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	31.50 in (80.000 cm)
Package 3 Length	23.62 in (60.000 cm)
Package 3 Weight	254.15 lb(US) (115.280 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
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
PVC free	Yes

Contractual warranty

Warranty	18 months
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Dimensions



LC2 or 2 x LC1	a	b	c ⁽¹⁾	e1	e2	G
D09 to D18 (AC)	90	77	86	4	1.5	80
D093 to D123 (AC)	90	99	86	–	–	80
D09 to D18 (DC)	90	77	95	4	1.5	80
D093 to D123 (DC)	90	99	95	–	–	80
D25 to D38 (AC)	90	85	92	9	5	80
D183 to D383 (AC)	90	99	92	–	–	80
D25 to D32 (DC)	90	85	101	9	5	80
D183 to D383 (DC)	90	99	101	–	–	80

e1 and e2: including cabling.

(1) With safety cover, without add-on block.

Wiring

