

LC1D1506E7

Contacteur, TeSys Deca, 3P(3NO), AC-3/AC-3e, <=440V, 150A, 48V AC 50/60Hz coil, lugs/bars terminals



Main

Range	TeSys
Range of Product	TeSys Deca
Product or Component Type	Contacteur
Device short name	LC1D
Contacteur application	Motor control Resistive load
Utilisation category	AC-1 AC-4 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 1000 V AC 25...400 Hz Power circuit <= 300 V DC
[Ie] rated operational current	200 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 150 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 150 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	48 V AC 50/60 Hz

Complementary

Motor power kW	40 kW at 220...230 V AC 50/60 Hz (AC-3) 75 kW at 380...400 V AC 50/60 Hz (AC-3) 80 kW at 415...440 V AC 50/60 Hz (AC-3) 90 kW at 500 V AC 50/60 Hz (AC-3) 100 kW at 660...690 V AC 50/60 Hz (AC-3) 75 kW at 1000 V AC 50/60 Hz (AC-3) 22 kW at 400 V AC 50/60 Hz (AC-4) 40 kW at 220...230 V AC 50/60 Hz (AC-3e) 75 kW at 380...400 V AC 50/60 Hz (AC-3e) 80 kW at 415...440 V AC 50/60 Hz (AC-3e) 90 kW at 500 V AC 50/60 Hz (AC-3e) 100 kW at 660...690 V AC 50/60 Hz (AC-3e) 75 kW at 1000 V AC 50/60 Hz (AC-3e)
Maximum Horse Power Rating	40 Hp at 200/208 V AC 50/60 Hz for 3 phase motors 50 Hp at 230/240 V AC 50/60 Hz for 3 phase motors 100 Hp at 460/480 V AC 50/60 Hz for 3 phase motors 125 hp at 575/600 V AC 50/60 Hz for 3 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO
Contact compatibility	M13
Protective cover	With
[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

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[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 ≤ 690 V coordination type 1 for power circuit 250 A gG at ≤ 690 V coordination type 2 for power circuit
Average impedance	0.6 mOhm - Ith 200 A 50 Hz for power circuit
Power dissipation per pole	24 W AC-1 13.5 W AC-3 13.5 W AC-3e
[Ui] rated insulation voltage	Power circuit 600 V CSA Power circuit 600 V UL Power circuit 1000 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	8 kV IEC 60947
Safety reliability level	B10d = 684932 cycles contactor with nominal load EN/ISO 13849-1 B10d = 10000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	8 Mcycles
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
Control circuit type	AC 50/60 Hz
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.3...0.5 Uc -40...158 °F (-40...70 °C) drop-out AC 50/60 Hz 0.8...1.15 Uc -40...131 °F (-40...55 °C) operational AC 50/60 Hz 1...1.15 Uc 131...158 °F (55...70 °C) operational AC 50/60 Hz
Inrush power in VA	280...350 VA 60 Hz cos phi 0.9 (at 68 °F (20 °C)) 280...350 VA 50 Hz cos phi 0.9 (at 68 °F (20 °C))
Hold-in power consumption in VA	2...18 VA 60 Hz cos phi 0.9 (at 68 °F (20 °C)) 2...18 VA 50 Hz cos phi 0.9 (at 68 °F (20 °C))
Heat dissipation	3...4.5 W at 50/60 Hz
Operating time	20...35 ms closing 40...75 ms opening
Maximum operating rate	1200 cyc/h 140 °F (60 °C)
Connections - terminals	Control circuit: lugs-ring terminals - external diameter: 0.31 in (8 mm) Power circuit: lugs-ring terminals - external diameter: 0.98 in (25 mm) Power circuit: bars 1 - busbar cross section: 5 x 25 mm
Tightening torque	Control circuit 10.62 lbf.in (1.2 N.m) lugs-ring terminals flat Ø 6 mm M3.5 Control circuit 10.62 lbf.in (1.2 N.m) lugs-ring terminals Philips No 2 M3.5 Power circuit 106.21 lbf.in (12 N.m) lugs-ring terminals hexagonal 0.51 in (13 mm) M8 Power circuit 106.21 lbf.in (12 N.m) bars hexagonal 0.51 in (13 mm) M8 Control circuit 10.62 lbf.in (1.2 N.m) lugs-ring terminals pozidriv No 2 M3.5
Auxiliary contact composition	1 NO + 1 NC
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 voltage	17 V for signalling circuit
Minimum switching current	5 mA for signalling circuit
Insulation resistance	> 10 MOhm 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
Mounting Support	Rail Plate

Environment

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	CCC[RETURN]DNV[RETURN]GL[RETURN]RINA[RETURN]LROS (Lloyds register of shipping) [RETURN]CSA[RETURN]UL[RETURN]GOST[RETURN]BV[RETURN]UKCA[RETURN]CE
IP degree of protection	IP20 front face IEC 60529
Protective treatment	THIEC 60068-2-30
Climatic withstand	IACS E10 exposure to damp heat
Permissible ambient air temperature around the device	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
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 open 2 Gn, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz) Shocks contactor closed 15 Gn for 11 ms) Shocks contactor open 6 Gn for 11 ms)
Height	6.22 in (158 mm)
Width	4.72 in (120 mm)
Depth	5.35 in (136 mm)
Net Weight	5.51 lb(US) (2.5 kg)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.61 in (16.8 cm)
Package 1 Width	8.19 in (20.8 cm)
Package 1 Length	7.28 in (18.5 cm)
Package 1 Weight	4.70 lb(US) (2.13 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
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes