

LC1D123BD

IEC contactor, TeSys Deca, nonreversing,
12A, 7.5HP at 480VAC, 3 phase, 3 pole, 3 NO,
24VDC coil, open style



Main

Range of Product	TeSys Deca
Product or Component Type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-4 AC-1 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit ≤ 690 V AC 25...400 Hz Power circuit ≤ 300 V DC
[Ie] rated operational current	16 A (at <140 °F (60 °C)) at ≤ 440 V AC AC-1 for power circuit 12 A (at <140 °F (60 °C)) at ≤ 440 V AC AC-3 for power circuit 12 A (at <140 °F (60 °C)) at ≤ 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	24 V DC

Complementary

Motor power kW	3 kW at 220...230 V AC 50/60 Hz (AC-3) 5.5 kW at 380...400 V AC 50/60 Hz (AC-3) 5.5 kW at 415 V AC 50/60 Hz (AC-3) 5.5 kW at 440 V AC 50/60 Hz (AC-3) 7.5 kW at 500 V AC 50/60 Hz (AC-3) 7.5 kW at 660...690 V AC 50/60 Hz (AC-3) 3 kW at 220...230 V AC 50/60 Hz (AC-3e) 5.5 kW at 380...400 V AC 50/60 Hz (AC-3e) 5.5 kW at 415 V AC 50/60 Hz (AC-3e) 5.5 kW at 440 V AC 50/60 Hz (AC-3e) 7.5 kW at 500 V AC 50/60 Hz (AC-3e) 7.5 kW at 660...690 V AC 50/60 Hz (AC-3e) 3.7 kW at 400 V AC 50/60 Hz (AC-4)
Maximum Horse Power Rating	0.5 Hp at 115 V AC 50/60 Hz for 1 phase motors 2 Hp at 230/240 V AC 50/60 Hz for 1 phase motors 3 Hp at 200/208 V AC 50/60 Hz for 3 phase motors 3 Hp at 230/240 V AC 50/60 Hz for 3 phase motors 7.5 Hp at 460/480 V AC 50/60 Hz for 3 phase motors 10 hp at 575/600 V AC 50/60 Hz for 3 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for signalling circuit 16 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	250 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	250 A at 440 V for power circuit conforming to IEC 60947

[Icw] rated short-time withstand current	105 A 104 °F (40 °C) - 10 s for power circuit 210 A 104 °F (40 °C) - 1 s for power circuit 30 A 104 °F (40 °C) - 10 min for power circuit 61 A 104 °F (40 °C) - 1 min 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 40 A gG at ≤ 690 V coordination type 1 for power circuit 25 A gG at ≤ 690 V coordination type 2 for power circuit
Average impedance	2.5 mOhm - Ith 16 A 50 Hz for power circuit
Power dissipation per pole	0.36 W AC-3 1.56 W AC-1 0.36 W AC-3e
[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
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
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
Electrical durability	2 Mcycles 12 A AC-3 ≤ 440 V 0.8 Mcycles 25 A AC-1 ≤ 440 V 2 Mcycles 12 A AC-3e ≤ 440 V
Control circuit type	DC standard
Coil technology	With integral suppression device
Control circuit voltage limits	0.1...0.25 Uc -40...158 °F (-40...70 °C) drop-out DC 0.7...1.25 Uc -40...140 °F (-40...60 °C) operational DC 1...1.25 Uc 140...158 °F (60...70 °C) operational DC
Inrush power in W	5.4 W 68 °F (20 °C))
Hold-in power consumption in W	5.4 W 68 °F (20 °C)
Operating time	63 ±15 % ms closing 20 ±20 % ms opening
Time constant	28 ms
Maximum operating rate	3600 cyc/h 140 °F (60 °C)
Maximum operating rate	3600 cyc/h at 60 °C
Connections - terminals	Power circuit: spring terminals 1 0.004 in² (2.5 mm²) - cable stiffness: flexible without cable end Power circuit: spring terminals 2 0.004 in² (2.5 mm²) - cable stiffness: flexible without cable end Control circuit: spring terminals 1 0.004 in² (2.5 mm²) - cable stiffness: flexible without cable end Control circuit: spring terminals 2 0.004 in² (2.5 mm²) - cable stiffness: flexible without cable end
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 60947-4-1 IEC 60335-1:Clause 30.2 IEC 60335-2-40:Annex JJ UL 60335-2-40:Annex JJ CSA C22.2 No 60947-4-1
Product Certifications	UL[RETURN]CCC[RETURN]CSA[RETURN]Marine[RETURN]UKCA[RETURN]EAC[RETURN]
IP degree of protection	IP20 front face IEC 60529
Protective treatment	THIEC 60068-2-30
Climatic withstand	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D 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 open 10 Gn for 11 ms) Shocks contactor closed 15 Gn for 11 ms)
Height	3.9 in (99 mm)
Width	1.8 in (45 mm)
Depth	3.7 in (95 mm)
Product Weight	1.069 lb(US) (0.485 kg)

Ordering and shipping details

Category	US10I1222355
Discount Schedule	0I12
GTIN	3389110806427
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.047 in (5.200 cm)
Package 1 Width	4.134 in (10.500 cm)
Package 1 Length	4.803 in (12.200 cm)
Package 1 Weight	19.612 oz (556.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	19.231 lb(US) (8.723 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
Sustainable packaging	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

Contractual warranty

Warranty	18 months
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