

LC1D18BD

IEC contactor, TeSys Deca, nonreversing, 18A, 10HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 24VDC coil, open



Main

| | |
|--------------------------------|---|
| Range of Product | TeSys Deca |
| Product or Component Type | Contacteur |
| Device short name | LC1D |
| Contacteur application | Motor control Resistive load |
| Utilisation category | AC-4 AC-1 AC-3 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 | 18 A 140 °F (60 °C) <= 440 V AC AC-3 power circuit 32 A 140 °F (60 °C) <= 440 V AC AC-1 power circuit 18 A 140 °F (60 °C) <= 440 V AC AC-3e power circuit |
| [Uc] control circuit voltage | 24 V DC |

Complementary

| | |
|---|---|
| Motor power kW | 4 KW 220...230 V AC 50/60 Hz AC-3) 7.5 KW 380...400 V AC 50/60 Hz AC-3) 9 KW 415...440 V AC 50/60 Hz AC-3) 10 KW 500 V AC 50/60 Hz AC-3) 10 KW 660...690 V AC 50/60 Hz AC-3) 4 KW 400 V AC 50/60 Hz AC-4) 4 KW 220...230 V AC 50/60 Hz AC-3e) 7.5 KW 380...400 V AC 50/60 Hz AC-3e) 9 KW 415...440 V AC 50/60 Hz AC-3e) 10 KW 500 V AC 50/60 Hz AC-3e) 10 kW 660...690 V AC 50/60 Hz AC-3e) |
| Maximum Horse Power Rating | 1 Hp 115 V at AC 50/60 Hz for 1 phase 3 Hp 230/240 V at AC 50/60 Hz for 1 phase 5 Hp 200/208 V at AC 50/60 Hz for 3 phase 5 Hp 230/240 V at AC 50/60 Hz for 3 phase 10 Hp 460/480 V at AC 50/60 Hz for 3 phase 15 hp 575/600 V at AC 50/60 Hz for 3 phase |
| Compatibility code | LC1D |
| Pole contact composition | 3 NO |
| Contact compatibility | M4 |
| Protective cover | With |
| [Ith] conventional free air thermal current | 10 A 140 °F (60 °C) signalling circuit 32 A 140 °F (60 °C) power circuit |
| Irms rated making capacity | 140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1 300 A 440 V power circuit IEC 60947 |
| Rated breaking capacity | 300 A 440 V power circuit IEC 60947 |

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| [Icw] rated short-time withstand current | 145 A 104 °F (40 °C) - 10 s power circuit 240 A 104 °F (40 °C) - 1 s power circuit 40 A 104 °F (40 °C) - 10 min power circuit 84 A 104 °F (40 °C) - 1 min power circuit 100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit 140 A - 100 ms signalling circuit |
| Associated fuse rating | 10 A gG signalling circuit IEC 60947-5-1 50 A gG ≤ 690 V type 1 power circuit 35 A gG ≤ 690 V type 2 power circuit |
| Average impedance | 2.5 mOhm - Ith 32 A 50 Hz power circuit |
| Power dissipation per pole | 2.5 W AC-1 0.8 W AC-3 0.8 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 | 1.65 Mcycles 18 A AC-3 ≤ 440 V 1 Mcycles 32 A AC-1 ≤ 440 V 1.65 Mcycles 18 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 | 53.55...72.45 ms closing 16...24 ms opening |
| Time constant | 28 ms |
| Maximum operating rate | 3600 cyc/h 140 °F (60 °C) |
| 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 without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) solid without cable end Power circuit screw clamp terminals 1 0.00...0.01 in ² (1.5...6 mm ²) flexible without cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1.5...6 mm ²) flexible without cable end Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...6 mm ²) flexible with cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) flexible with cable end Power circuit screw clamp terminals 1 0.00...0.01 in ² (1.5...6 mm ²) solid without cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1.5...6 mm ²) solid without cable end |
| Tightening torque | Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 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 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 |
| Auxiliary contact composition | 1 NO + 1 NC |

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|------------------------------|---|
| 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 signalling circuit |
| Minimum switching current | 5 mA signalling circuit |
| Insulation resistance | > 10 MOhm 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 | Plate Rail |

Environment

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| 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 | LROS (Lloyds register of shipping) DNV GL RINA BV CCC UL CSA GOST UKCA |
| 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 | 3.03 in (77 mm) |
| Width | 1.77 in (45 mm) |
| Depth | 3.74 in (95 mm) |
| Product Weight | 1.08 lb(US) (0.49 kg) |

Ordering and shipping details

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|-------------------|------------------------------------|
| Category | 22355-CTR, TESYS D, OPEN, 9-38A DC |
| Discount Schedule | I12 |
| GTIN | 3389110354775 |
| Returnability | Yes |
| Country of origin | ID |

Packing Units

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|------------------------------|----------------------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 1.97 in (5.000 cm) |
| Package 1 Width | 3.54 in (9.000 cm) |
| Package 1 Length | 4.33 in (11.000 cm) |
| Package 1 Weight | 18.43 oz (522.500 g) |
| Unit Type of Package 2 | S02 |

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|------------------------------|----------------------------|
| Number of Units in Package 2 | 15 |
| 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 | 17.79 lb(US) (8.068 kg) |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 240 |
| 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 | 302.21 lb(US) (137.080 kg) |

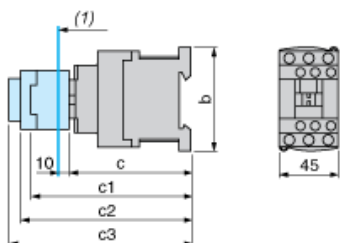
Offer Sustainability

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|----------------------------|---|
| 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 EU RoHS Declaration |
| 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

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| Warranty | 18 months |
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Dimensions



(1) Minimum electrical clearance

| LC1 | | D09...D18 | D093...D123 | D099...D129 |
|------------------------------------|-----------------------------------|-----------|-------------|-------------|
| b | | 77 | 99 | 80 |
| c | without cover or add-on blocks | 93 | 93 | 93 |
| with cover, without add-on blocks | 95 | 95 | 95 | |
| c1 | with LAD N or C (2 or 4 contacts) | 126 | 126 | 126 |
| c2 | with LA6 DK10 | 138 | 138 | 138 |
| c3 | with LAD T, R, S | 146 | 146 | 146 |
| with LAD T, R, S and sealing cover | 150 | 150 | 150 | |

Wiring

