

# Product data sheet

Specifications



IEC contactor, TeSys Deca, nonreversing, 32A, 20HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 24VAC 50/60Hz coil, open

LC1D32B7

Product availability : Stock - Normally stocked in distribution facility

Price\* : 206.40 USD

## Main

|                                |   |
|--------------------------------|---|
| Range of Product               | TeSys Deca  |
| Product or Component Type      | Contactor   |
| Device short name              | LC1D  |
| Contactor application          | Resistive load<br>Motor control   |
| Utilisation category           | AC-3<br>AC-4<br>AC-1<br>AC-3e   |
| Poles description              | 3P  |
| [Ue] rated operational voltage | Power circuit <= 690 V AC 25...400 Hz<br>Power circuit <= 300 V DC  |
| [Ie] rated operational current | 32 A 140 °F (60 °C) <= 440 V AC AC-3 power circuit<br>50 A 140 °F (60 °C) <= 440 V AC AC-1 power circuit<br>32 A 140 °F (60 °C) <= 440 V AC AC-3e power circuit |
| [Uc] control circuit voltage   | 24 V AC 50/60 Hz  |

## Complementary

|                            |   |
|----------------------------|---|
| Motor power kW             | 7.5 kW 220...230 V AC 50/60 Hz AC-3)<br>15 kW 380...400 V AC 50/60 Hz AC-3)<br>15 kW 415...440 V AC 50/60 Hz AC-3)<br>18.5 kW 500 V AC 50/60 Hz AC-3)<br>18.5 kW 660...690 V AC 50/60 Hz AC-3)<br>7.5 kW 400 V AC 50/60 Hz AC-4)<br>7.5 kW 220...230 V AC 50/60 Hz AC-3e)<br>15 kW 380...400 V AC 50/60 Hz AC-3e)<br>15 kW 415...440 V AC 50/60 Hz AC-3e)<br>18.5 kW 500 V AC 50/60 Hz AC-3e)<br>18.5 kW 660...690 V AC 50/60 Hz AC-3e) |
| Maximum Horse Power Rating | 2 hp 115 V at AC 50/60 Hz for 1 phase<br>5 hp 230/240 V at AC 50/60 Hz for 1 phase<br>7.5 hp 200/208 V at AC 50/60 Hz for 3 phase<br>10 hp 230/240 V at AC 50/60 Hz for 3 phase<br>20 hp 460/480 V at AC 50/60 Hz for 3 phase<br>30 hp 575/600 V at AC 50/60 Hz for 3 phase   |
| Compatibility code         | LC1D  |
| Pole contact composition   | 3 NO  |
| Contact compatibility      | M2  |

\* Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

|  |   |
|--|---|
| <b>Protective cover</b>                            | With  |
| <b>[Ith] conventional free air thermal current</b> | 10 A 140 °F (60 °C) signalling circuit<br>50 A 140 °F (60 °C) power circuit   |
| <b>Irms rated making capacity</b>                  | 140 A AC signalling circuit IEC 60947-5-1<br>250 A DC signalling circuit IEC 60947-5-1<br>550 A 440 V power circuit IEC 60947   |
| <b>Rated breaking capacity</b>                     | 550 A 440 V power circuit IEC 60947   |
| <b>[Icw] rated short-time withstand current</b>    | 260 A 104 °F (40 °C) - 10 s power circuit<br>430 A 104 °F (40 °C) - 1 s power circuit<br>60 A 104 °F (40 °C) - 10 min power circuit<br>138 A 104 °F (40 °C) - 1 min power circuit<br>100 A - 1 s signalling circuit<br>120 A - 500 ms signalling circuit<br>140 A - 100 ms signalling circuit   |
| <b>Associated fuse rating</b>                      | 10 A gG signalling circuit IEC 60947-5-1<br>63 A gG ≤ 690 V type 1 power circuit<br>63 A gG ≤ 690 V type 2 power circuit  |
| <b>Average impedance</b>                           | 2 mOhm - Ith 50 A 50 Hz power circuit   |
| <b>Power dissipation per pole</b>                  | 2 W AC-3<br>5 W AC-1<br>2 W AC-3e   |
| <b>[Ui] rated insulation voltage</b>               | Power circuit 690 V IEC 60947-4-1<br>Power circuit 600 V CSA<br>Power circuit 600 V UL<br>Signalling circuit 690 V IEC 60947-1<br>Signalling circuit 600 V CSA<br>Signalling circuit 600 V UL   |
| <b>Overvoltage category</b>                        | III   |
| <b>Pollution degree</b>                            | 3   |
| <b>[Uimp] rated impulse withstand voltage</b>      | 6 kV IEC 60947  |
| <b>Safety reliability level</b>                    | B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1  |
| <b>Mechanical durability</b>                       | 15 Mcycles  |
| <b>Electrical durability</b>                       | 1.65 Mcycles 32 A AC-3 ≤ 440 V<br>1.4 Mcycles 50 A AC-1 ≤ 440 V<br>1.65 Mcycles 25 A AC-3e ≤ 440 V  |
| <b>Control circuit type</b>                        | AC 50/60 Hz standard  |
| <b>Coil technology</b>                             | Without built-in suppressor module  |
| <b>Control circuit voltage limits</b>              | 0.3...0.6 U <sub>c</sub> -40...158 °F (-40...70 °C) drop-out AC 50/60 Hz<br>0.8...1.1 U <sub>c</sub> -40...140 °F (-40...60 °C) operational AC 50 Hz<br>0.85...1.1 U <sub>c</sub> -40...140 °F (-40...60 °C) operational AC 60 Hz<br>1...1.1 U <sub>c</sub> 140...158 °F (60...70 °C) operational AC 50/60 Hz   |
| <b>Inrush power in VA</b>                          | 70 VA 60 Hz 0.75 68 °F (20 °C))<br>70 VA 50 Hz 0.75 68 °F (20 °C))  |
| <b>Hold-in power consumption in VA</b>             | 7.5 VA 60 Hz 0.3 68 °F (20 °C))<br>7 VA 50 Hz 0.3 68 °F (20 °C))  |
| <b>Heat dissipation</b>                            | 2...3 W 50/60 Hz  |
| <b>Operating time</b>                              | 12...22 ms closing<br>4...19 ms opening   |
| <b>Maximum operating rate</b>                      | 3600 cyc/h 140 °F (60 °C)   |
| <b>Connections - terminals</b>                     | Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end<br>Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end<br>Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible with cable end<br>Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) flexible with cable end<br>Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid without cable end<br>Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid without cable end<br>Power circuit screw clamp terminals 1 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) flexible without cable end<br>Power circuit screw clamp terminals 2 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) flexible without cable end<br>Power circuit screw clamp terminals 1 0.00...0.02 in <sup>2</sup> (1...10 mm <sup>2</sup> ) flexible with cable end<br>Power circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1.5...6 mm <sup>2</sup> ) flexible with cable end<br>Power circuit screw clamp terminals 1 0.00...0.02 in <sup>2</sup> (1.5...10 mm <sup>2</sup> ) solid without cable end<br>Power circuit screw clamp terminals 2 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) solid without cable end |
| <b>Tightening torque</b>                           | Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm<br>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

|                                      |   |
|--------------------------------------|---|
| <b>Auxiliary contact composition</b> | 1 NO + 1 NC   |
| <b>Auxiliary contacts type</b>       | Mechanically linked 1 NO + 1 NC IEC 60947-5-1<br>Mirror contact 1 NC IEC 60947-4-1                      |
| <b>Signalling circuit frequency</b>  | 25...400 Hz   |
| <b>Minimum switching voltage</b>     | 17 V signalling circuit   |
| <b>Minimum switching current</b>     | 5 mA signalling circuit   |
| <b>Insulation resistance</b>         | > 10 MOhm signalling circuit  |
| <b>Non-overlap time</b>              | 1.5 ms on de-energisation between NC and NO contact<br>1.5 ms on energisation between NC and NO contact |
| <b>Mounting Support</b>              | Rail<br>Plate   |

## Environment

|  |   |
|--|---|
| <b>Standards</b>   | CSA C22.2 No 14<br>EN 60947-4-1<br>EN 60947-5-1<br>IEC 60947-4-1<br>IEC 60947-5-1<br>UL 508<br>IEC 60335-1  |
| <b>Product Certifications</b>                                | UL<br>DNV<br>CCC<br>CSA<br>LROS (Lloyds register of shipping)<br>GOST<br>RINA<br>BV<br>GL<br>UKCA   |
| <b>IP degree of protection</b>                               | IP20 front face IEC 60529   |
| <b>Protective treatment</b>                                  | THIEC 60068-2-30  |
| <b>Climatic withstand</b>                                    | IACS E10 exposure to damp heat<br>IEC 60947-1 Annex Q category D exposure to damp heat  |
| <b>Permissible ambient air temperature around the device</b> | -40...140 °F (-40...60 °C)<br>140...158 °F (60...70 °C) with derating   |
| <b>Operating altitude</b>                                    | 0...9842.52 ft (0...3000 m)   |
| <b>Fire resistance</b>                                       | 1562 °F (850 °C) IEC 60695-2-1  |
| <b>Flame retardance</b>                                      | V1 conforming to UL 94  |
| <b>Mechanical robustness</b>                                 | Vibrations contactor open 2 Gn, 5...300 Hz)<br>Vibrations contactor closed 4 Gn, 5...300 Hz)<br>Shocks contactor closed 15 Gn for 11 ms)<br>Shocks contactor open 8 Gn for 11 ms) |
| <b>Height</b>  | 3.35 in (85 mm)   |
| <b>Width</b>   | 1.77 in (45 mm)   |
| <b>Depth</b>   | 3.62 in (92 mm)   |
| <b>Net Weight</b>  | 0.83 lb(US) (0.375 kg)  |

## Ordering and shipping details

|                          |                                    |
|--------------------------|------------------------------------|
| <b>Category</b>          | 22354-CTR, TESYS D, OPEN, 9-38A AC |
| <b>Discount Schedule</b> | I12                                |
| <b>GTIN</b>              | 3389110350135                      |
| <b>Returnability</b>     | Yes                                |
| <b>Country of origin</b> | ID                                 |

## Packing Units

|                              |                          |
|------------------------------|--------------------------|
| Unit Type of Package 1       | PCE                      |
| Number of Units in Package 1 | 1                        |
| Package 1 Height             | 1.97 in (5 cm)           |
| Package 1 Width              | 3.62 in (9.2 cm)         |
| Package 1 Length             | 4.41 in (11.2 cm)        |
| Package 1 Weight             | 14.71 oz (417 g)         |
| Unit Type of Package 2       | S02                      |
| Number of Units in Package 2 | 20                       |
| Package 2 Height             | 5.91 in (15 cm)          |
| Package 2 Width              | 11.81 in (30 cm)         |
| Package 2 Length             | 15.75 in (40 cm)         |
| Package 2 Weight             | 19.11 lb(US) (8.669 kg)  |
| Unit Type of Package 3       | P06                      |
| Number of Units in Package 3 | 320                      |
| Package 3 Height             | 29.53 in (75 cm)         |
| Package 3 Width              | 23.62 in (60 cm)         |
| Package 3 Length             | 31.50 in (80 cm)         |
| Package 3 Weight             | 320.77 lb(US) (145.5 kg) |

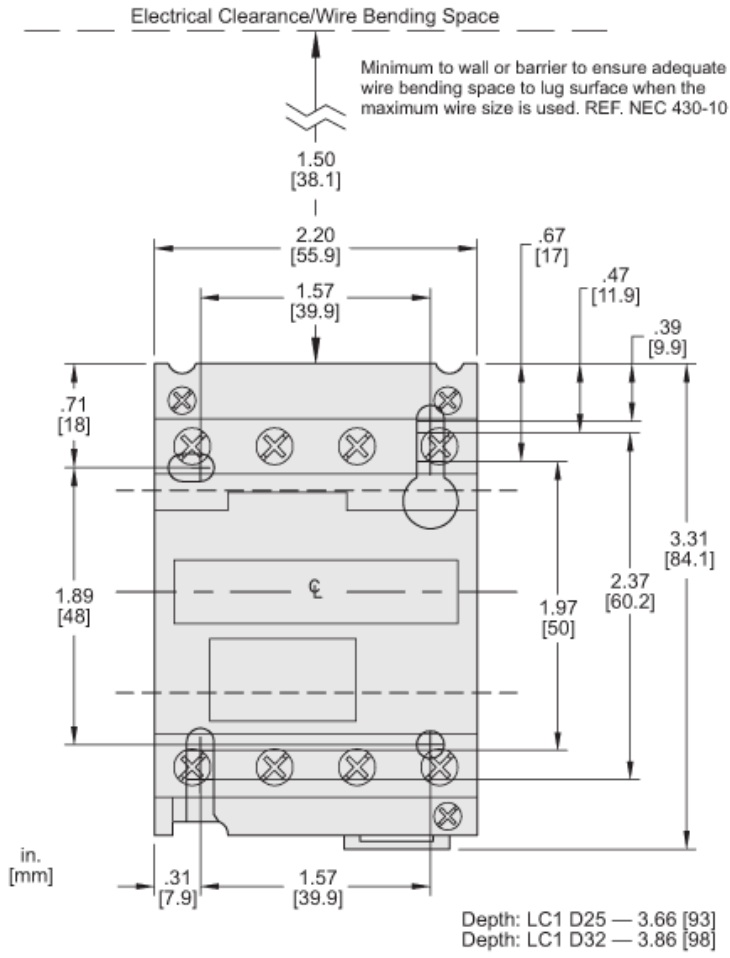
## Offer Sustainability

|                            |   |
|----------------------------|---|
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| REACH free of SVHC         | Yes   |
| EU RoHS Directive          | Compliant<br><a href="#">EU RoHS Declaration</a>  |
| Toxic heavy metal free     | Yes   |
| Mercury free               | Yes   |
| RoHS exemption information | <a href="#">Yes</a>   |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a><br>Pro-active China RoHS declaration (out of China RoHS legal scope)   |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | <a href="#">End of Life Information</a>   |
| 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 |
|----------|-----------|

**Approximate Dimensions**



**Recommended replacement(s)**