

# LC1D50F7

IEC contactor, TeSys D, nonreversing, 50A, 40HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 110VAC 50/60Hz coil, open



## Main

|                                |   |
|--------------------------------|---|
| Range of Product               | TeSys D<br>TeSys Deca   |
| Range                          | TeSys   |
| Product or Component Type      | Contacteur  |
| Device short name              | LC1D  |
| Contacteur application         | Motor control<br>Resistive load   |
| Utilisation category           | AC-2<br>AC-1<br>AC-4<br>AC-3<br>AC-3e   |
| Control circuit type           | AC 50/60 Hz   |
| Poles description              | 3P  |
| Pole contact composition       | 3 NO  |
| [Ie] rated operational current | 50 A 140 °F (60 °C) <= 440 V AC AC-3 power circuit<br>80 A 140 °F (60 °C) <= 440 V AC AC-1 power circuit<br>50 A 140 °F (60 °C) <= 440 V AC AC-3e power circuit   |
| Motor power kW                 | 22 KW 380...400 V AC 50 Hz AC-3)<br>25 KW 415 V AC 50 Hz AC-3)<br>30 KW 440 V AC 50 Hz AC-3)<br>30 KW 500 V AC 50 Hz AC-3)<br>33 KW 660...690 V AC 50 Hz AC-3)<br>15 KW 220...230 V AC 50 Hz AC-3)<br>11 KW 400 V AC 50 Hz AC-4)<br>30 KW 1000 V AC 50 Hz AC-3)<br>22 KW 380...400 V AC 50 Hz AC-3e)<br>25 KW 415 V AC 50 Hz AC-3e)<br>30 KW 440 V AC 50 Hz AC-3e)<br>30 KW 500 V AC 50 Hz AC-3e)<br>33 KW 660...690 V AC 50 Hz AC-3e)<br>15 KW 220...230 V AC 50 Hz AC-3e)<br>30 kW 1000 V AC 50 Hz AC-3e) |

## Complementary

|                                |   |
|--------------------------------|---|
| Coil technology                | Without built-in bidirectional peak limiting diode suppressor   |
| Front cover                    | With  |
| Maximum Horse Power Rating     | 3 Hp 115 V at AC 60 Hz for 1 phase<br>7.5 Hp 230/240 V at AC 60 Hz for 1 phase<br>15 Hp 200/208 V at AC 60 Hz for 3 phase<br>15 Hp 230/240 V at AC 60 Hz for 3 phase<br>40 Hp 460/480 V at AC 60 Hz for 3 phase<br>40 hp 575/600 V at AC 60 Hz for 3 phase    |
| Auxiliary contacts type        | Mechanically linked 1 NO + 1 NC IEC 60947-5-1<br>Mirror contact 1 NC IEC 60947-4-1  |
| Auxiliary contact composition  | 1 NO + 1 NC   |
| [Uc] control circuit voltage   | 110 V AC 50/60 Hz   |
| Control circuit voltage limits | 0.3...0.6 Uc -40...158 °F (-40...70 °C) drop-out AC 50/60 Hz<br>0.8...1.1 Uc -40...140 °F (-40...60 °C) operational AC 50 Hz<br>0.85...1.1 Uc -40...140 °F (-40...60 °C) operational AC 60 Hz<br>1...1.1 Uc 140...158 °F (60...70 °C) operational AC 50/60 Hz |

|   |  |
|---|--|
| [Ui] rated insulation voltage               | Control circuit 600 V CSA<br>Control circuit 600 V UL<br>Power circuit 600 V CSA<br>Power circuit 600 V UL<br>Control circuit 690 V IEC 60947-1<br>Power circuit 690 V IEC 60947-1   |
| [Uimp] rated impulse withstand voltage      | 8 kV IEC 60947   |
| Overvoltage category                        | III  |
| Mounting Support                            | Plate<br>Rail  |
| Connections - terminals                     | Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )rigid<br>Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )rigid<br>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...0.00 in <sup>2</sup> (1...2.5 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>Power circuit screw terminals 1 0.00...0.04 in <sup>2</sup> (2.5...25 mm <sup>2</sup> )rigid<br>Power circuit screw terminals 2 0.00...0.02 in <sup>2</sup> (2.5...16 mm <sup>2</sup> )rigid<br>Power circuit screw terminals 1 0.00...0.04 in <sup>2</sup> (2.5...25 mm <sup>2</sup> )flexible without cable end<br>Power circuit screw terminals 2 0.00...0.02 in <sup>2</sup> (2.5...16 mm <sup>2</sup> )flexible without cable end<br>Power circuit screw terminals 1 0.00...0.04 in <sup>2</sup> (2.5...25 mm <sup>2</sup> )flexible with cable end<br>Power circuit screw terminals 2 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> )flexible with cable end |
| Tightening torque                           | Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal flat Ø 6 mm<br>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal Philips No 2<br>Power circuit 44.25 lbf.in (5 N.m) screw terminal flat Ø 6 to Ø 8 mm<br>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal pozidriv No 2   |
| [Ue] rated operational voltage              | Power circuit ≤ 690 V AC 25...400 Hz   |
| [Ith] conventional free air thermal current | 10 A 140 °F (60 °C) control circuit<br>80 A 140 °F (60 °C) power circuit   |
| Irms rated making capacity                  | 900 A 440 V power circuit IEC 60947<br>140 A AC control circuit IEC 60947-5-1  |
| Rated breaking capacity                     | 900 A 440 V power circuit IEC 60947  |
| Associated fuse rating                      | 10 A gG control circuit IEC 60947-5-1<br>100 A gG ≤ 690 V type 1 power circuit<br>100 A gG ≤ 690 V type 2 power circuit  |
| Power dissipation per pole                  | 3.7 W AC-3<br>9.6 W AC-1<br>3.7 W AC-3e  |
| Inrush power in VA                          | 140 VA 0.75 68 °F (20 °C))<br>160 VA 0.75 68 °F (20 °C))   |
| Hold-in power consumption in VA             | 13 VA 60 Hz 0.3 68 °F (20 °C))<br>15 VA 50 Hz 0.3 68 °F (20 °C))   |
| Operating time                              | 4...19 ms opening<br>12...26 ms closing  |
| Safety reliability level                    | B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1<br>B10d = 2000000 cycles contactor with mechanical load EN/ISO 13849-1  |
| Mechanical durability                       | 6000000 cycles   |
| Maximum operating rate                      | 3600 cyc/h 140 °F (60 °C)  |
| Minimum switching current                   | 5 mA control circuit   |
| Minimum switching voltage                   | 17 V control circuit   |
| Non-overlap time                            | 1.5 Ms on de-energisation between NC and NO contacts<br>1.5 ms on energisation between NC and NO contacts  |
| Insulation resistance                       | > 10 MOhm control circuit  |
| Height                                      | 5.00 in (127 mm)   |
| Width                                       | 2.95 in (75 mm)  |
| Depth                                       | 4.69 in (119 mm)   |
| Net Weight                                  | 3.09 lb(US) (1.4 kg)   |

## Environment

|                                       |   |
|---------------------------------------|---|
| Standards                             | UL 508<br>CSA C22.2 No 14<br>IEC 60947-4-1<br>IEC 60947-5-1<br>EN 60947-5-1<br>EN 60947-4-1       |
| Product Certifications                | UL<br>GL<br>LROS (Lloyds register of shipping)<br>RINA<br>CCC<br>BV<br>DNV<br>GOST<br>CSA<br>UKCA |
| IP degree of protection               | IP2x IEC 60529<br>IP2x VDE 0106   |
| Climatic withstand                    | IACS E10  |
| Ambient air temperature for operation | -40...140 °F (-40...60 °C)<br>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  |
| Shock resistance                      | 10 gn contactor opened<br>15 gn contactor closed  |
| Vibration resistance                  | 2 gn 5...300 Hz contactor opened<br>4 gn 5...300 Hz contactor closed                              |
| Heat dissipation                      | 4...5 W 50/60 Hz control circuit  |

## Ordering and shipping details

|                       |                                     |
|-----------------------|-------------------------------------|
| Category              | 22357-CTR, TESYS D, OPEN, 40-65A AC |
| Discount Schedule     | I12                                 |
| GTIN                  | 3389110421392                       |
| Nbr. of units in pkg. | 1                                   |
| Package weight(Lbs)   | 3.19 lb(US) (1.448 kg)              |
| Returnability         | Yes                                 |
| Country of origin     | CZ                                  |

## Packing Units

|                              |                         |
|------------------------------|-------------------------|
| Unit Type of Package 1       | PCE                     |
| Package 1 Height             | 3.74 in (9.5 cm)        |
| Package 1 width              | 5.20 in (13.2 cm)       |
| Package 1 Length             | 5.51 in (14 cm)         |
| Unit Type of Package 2       | S02                     |
| Number of Units in Package 2 | 5                       |
| Package 2 Weight             | 16.62 lb(US) (7.538 kg) |
| 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 3 Height             | 30.31 in (77 cm)        |

## 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 <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>  |
| 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 |
|----------|-----------|