

# LC1D1156F7

IEC contactor, TeSys Deca, nonreversing,  
115A, 75HP at 480VAC, 3 phase, 3 pole, 3 NO,  
110VAC 50/60Hz coil, open style



## Main

|                                |                                                                                                                                                                       |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                          | TeSys                                                                                                                                                                 |
| Range of Product               | TeSys Deca                                                                                                                                                            |
| Product or Component Type      | Contactor                                                                                                                                                             |
| Device short name              | LC1D                                                                                                                                                                  |
| Contactor application          | Motor control<br>Resistive load                                                                                                                                       |
| Utilisation category           | AC-3<br>AC-1<br>AC-4<br>AC-3e                                                                                                                                         |
| Poles description              | 3P                                                                                                                                                                    |
| [Ue] rated operational voltage | Power circuit <= 1000 V AC 25...400 Hz<br>Power circuit <= 300 V DC                                                                                                   |
| [Ie] rated operational current | 200 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit<br>115 A 140 °F (60 °C)) <= 440 V AC AC-3 power circuit<br>115 A 140 °F (60 °C)) <= 440 V AC AC-3e power circuit |
| [Uc] control circuit voltage   | 110 V AC 50/60 Hz                                                                                                                                                     |

## Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Motor power kW                              | 30 KW 220...230 V AC 50/60 Hz AC-3)<br>55 KW 380...400 V AC 50/60 Hz AC-3)<br>59 KW 415...440 V AC 50/60 Hz AC-3)<br>75 KW 500 V AC 50/60 Hz AC-3)<br>80 KW 660...690 V AC 50/60 Hz AC-3)<br>65 KW 1000 V AC 50/60 Hz AC-3)<br>18.5 KW 400 V AC 50/60 Hz AC-4)<br>30 KW 220...230 V AC 50/60 Hz AC-3e)<br>55 KW 380...400 V AC 50/60 Hz AC-3e)<br>59 KW 415...440 V AC 50/60 Hz AC-3e)<br>75 KW 500 V AC 50/60 Hz AC-3e)<br>80 KW 660...690 V AC 50/60 Hz AC-3e)<br>65 kW 1000 V AC 50/60 Hz AC-3e) |
| Maximum Horse Power Rating                  | 30 Hp 200/208 V at AC 50/60 Hz for 3 phase<br>40 Hp 230/240 V at AC 50/60 Hz for 3 phase<br>75 Hp 460/480 V at AC 50/60 Hz for 3 phase<br>100 hp 575/600 V at AC 50/60 Hz for 3 phase                                                                                                                                                                                                                                                                                                               |
| Compatibility code                          | LC1D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Pole contact composition                    | 3 NO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Contact compatibility                       | M13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Protective cover                            | With                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| [Ith] conventional free air thermal current | 200 A 140 °F (60 °C) power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Irms rated making capacity                  | 1260 A 440 V power circuit IEC 60947<br>140 A AC signalling circuit IEC 60947-5-1<br>250 A DC signalling circuit IEC 60947-5-1                                                                                                                                                                                                                                                                                                                                                                      |
| Rated breaking capacity                     | 1100 A 440 V power circuit IEC 60947                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Icw] rated short-time withstand current | 250 A 104 °F (40 °C) - 10 min power circuit<br>550 A 104 °F (40 °C) - 1 min power circuit<br>950 A 104 °F (40 °C) - 10 s power circuit<br>1100 A 104 °F (40 °C) - 1 s power circuit<br>100 A - 1 s signalling circuit<br>120 A - 500 ms signalling circuit<br>140 A - 100 ms signalling circuit                                                                                                                 |
| Associated fuse rating                   | 250 A gG <= 690 V type 1 power circuit<br>200 A gG <= 690 V type 2 power circuit<br>10 A gG signalling circuit                                                                                                                                                                                                                                                                                                  |
| Average impedance                        | 0.6 mOhm - lth 200 A 50 Hz power circuit                                                                                                                                                                                                                                                                                                                                                                        |
| Power dissipation per pole               | 24 W AC-1<br>7.9 W AC-3<br>7.9 W AC-3e                                                                                                                                                                                                                                                                                                                                                                          |
| [Ui] rated insulation voltage            | Power circuit 600 V CSA<br>Power circuit 600 V UL<br>Power circuit 1000 V IEC 60947-4-1<br>Signalling circuit 690 V IEC 60947-1<br>Signalling circuit 600 V CSA<br>Signalling circuit 600 V UL                                                                                                                                                                                                                  |
| Overvoltage category                     | III                                                                                                                                                                                                                                                                                                                                                                                                             |
| Pollution degree                         | 3                                                                                                                                                                                                                                                                                                                                                                                                               |
| [Uimp] rated impulse withstand voltage   | 8 kV IEC 60947                                                                                                                                                                                                                                                                                                                                                                                                  |
| Safety reliability level                 | B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1                                                                                                                                                                                                                                                                        |
| Mechanical durability                    | 8 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                       |
| Electrical durability                    | 0.8 Mcycles 200 A AC-1 <= 440 V<br>0.95 Mcycles 115 A AC-3 <= 440 V<br>0.95 Mcycles 115 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<br>0.8...1.15 Uc -40...131 °F (-40...55 °C) operational AC 50/60 Hz<br>1...1.15 Uc 131...158 °F (55...70 °C) operational AC 50/60 Hz                                                                                                                                                                                                               |
| Inrush power in VA                       | 280...350 VA 60 Hz 0.8 68 °F (20 °C))<br>280...350 VA 50 Hz 0.8 68 °F (20 °C))                                                                                                                                                                                                                                                                                                                                  |
| Hold-in power consumption in VA          | 2...18 VA 60 Hz 0.3 68 °F (20 °C))<br>2...18 VA 50 Hz 0.3 68 °F (20 °C))                                                                                                                                                                                                                                                                                                                                        |
| Heat dissipation                         | 3...8 W 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                |
| Operating time                           | 6...20 ms opening<br>20...50 ms closing                                                                                                                                                                                                                                                                                                                                                                         |
| Maximum operating rate                   | 2400 cyc/h 140 °F (60 °C)                                                                                                                                                                                                                                                                                                                                                                                       |
| Connections - terminals                  | Control circuit lugs-ring terminals 0.31 in (8 mm)<br>Power circuit lugs-ring terminals 0.98 in (25 mm)<br>Power circuit bars 1 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<br>Control circuit 10.62 lbf.in (1.2 N.m) lugs-ring terminals Philips No 2 M3.5<br>Power circuit 106.21 lbf.in (12 N.m) lugs-ring terminals hexagonal 0.51 in (13 mm) M8<br>Power circuit 106.21 lbf.in (12 N.m) bars hexagonal 0.51 in (13 mm) M8<br>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<br>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<br>1.5 ms on energisation between NC and NO contact                                                                                                                                                                                                                                                                                                         |
| Mounting Support                         | Plate<br>Rail                                                                                                                                                                                                                                                                                                                                                                                                   |

## Environment

|                                                       |                                                                                                                                                                                   |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                                             | 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                                                                                       |
| Product Certifications                                | CCC<br>RINA<br>GOST<br>BV<br>UL<br>DNV<br>LROS (Lloyds register of shipping)<br>CSA<br>GL<br>UKCA<br>CE                                                                           |
| IP degree of protection                               | IP20 front face IEC 60529                                                                                                                                                         |
| Protective treatment                                  | THIEC 60068-2-30                                                                                                                                                                  |
| Climatic withstand                                    | IACS E10 exposure to damp heat<br>IEC 60947-1 Annex Q category D exposure to damp heat                                                                                            |
| Permissible ambient air temperature around the device | -40...140 °F (-40...60 °C)<br>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)<br>Vibrations contactor closed 4 Gn, 5...300 Hz)<br>Shocks contactor closed 15 Gn for 11 ms)<br>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)                                                                                                                                                              |

## Ordering and shipping details

|                   |                                         |
|-------------------|-----------------------------------------|
| Category          | 22359-CTR, TESYS D, OPEN, 80-150A AC&DC |
| Discount Schedule | I12                                     |
| GTIN              | 3389110380798                           |
| Returnability     | Yes                                     |
| Country of origin | CZ                                      |

## Packing Units

|                              |                           |
|------------------------------|---------------------------|
| Unit Type of Package 1       | PCE                       |
| Number of Units in Package 1 | 1                         |
| Package 1 Height             | 7.68 in (19.500 cm)       |
| Package 1 Width              | 6.89 in (17.500 cm)       |
| Package 1 Length             | 8.27 in (21.000 cm)       |
| Package 1 Weight             | 4.89 lb(US) (2.217 kg)    |
| Unit Type of Package 2       | P06                       |
| Number of Units in Package 2 | 27                        |
| Package 2 Height             | 29.53 in (75.000 cm)      |
| Package 2 Width              | 23.62 in (60.000 cm)      |
| Package 2 Length             | 31.50 in (80.000 cm)      |
| Package 2 Weight             | 160.63 lb(US) (72.859 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>                                                                                                                                                                                                                         |
| EU RoHS Directive          | Compliant <a href="#">EU RoHS Declaration</a>                                                                                                                                                                                                             |
| Mercury free               | Yes                                                                                                                                                                                                                                                       |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>                                                                                                                                                                                                                    |
| RoHS exemption information | <a href="#">Yes</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 |
|----------|-----------|