

# LC1D1506LE7

IEC contactor, TeSys D, nonreversing, 150A,  
100HP at 480VAC, 3 phase, 3 pole, 3 NO,  
208VAC 50/60Hz coil, open style





## Main

|                                             |                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                       | TeSys                                                                                                                                                                                                                                                                                            |
| Product name                                | TeSys D                                                                                                                                                                                                                                                                                          |
| Product or Component Type                   | Contactor                                                                                                                                                                                                                                                                                        |
| Device short name                           | LC1D                                                                                                                                                                                                                                                                                             |
| Contactor application                       | Resistive load<br>Motor control                                                                                                                                                                                                                                                                  |
| Utilisation category                        | AC-3<br>AC-1                                                                                                                                                                                                                                                                                     |
| Poles description                           | 3P                                                                                                                                                                                                                                                                                               |
| Power pole contact composition              | 3 NO                                                                                                                                                                                                                                                                                             |
| [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>150 A 140 °F (60 °C) ≤ 440 V AC AC-3 power circuit                                                                                                                                                                                         |
| Motor power kW                              | 40 KW 220...230 V AC 50/60 Hz<br>75 KW 380...400 V AC 50/60 Hz<br>80 KW 415...440 V AC 50/60 Hz<br>90 KW 500 V AC 50/60 Hz<br>100 KW 660...690 V AC 50/60 Hz<br>75 kW 1000 V AC 50/60 Hz                                                                                                         |
| Motor power HP (UL / CSA)                   | 40 Hp 200/208 V at AC 50/60 Hz for 3 phase<br>50 Hp 230/240 V at AC 50/60 Hz for 3 phase<br>100 Hp 460/480 V at AC 50/60 Hz for 3 phase<br>125 hp 575/600 V at AC 50/60 Hz for 3 phase                                                                                                           |
| Control circuit type                        | AC 50/60 Hz                                                                                                                                                                                                                                                                                      |
| [Uc] control circuit voltage                | 208 V AC 50/60 Hz                                                                                                                                                                                                                                                                                |
| Auxiliary contact composition               | 1 NO + 1 NC                                                                                                                                                                                                                                                                                      |
| [Uimp] rated impulse withstand voltage      | 8 kV IEC 60947                                                                                                                                                                                                                                                                                   |
| Overvoltage category                        | III                                                                                                                                                                                                                                                                                              |
| [Ith] conventional free air thermal current | 200 A 140 °F (60 °C) power circuit                                                                                                                                                                                                                                                               |
| Irms rated making capacity                  | 140 A AC signalling circuit IEC 60947-5-1<br>250 A DC signalling circuit IEC 60947-5-1<br>1660 A 440 V power circuit IEC 60947                                                                                                                                                                   |
| Rated breaking capacity                     | 1400 A 440 V power circuit IEC 60947                                                                                                                                                                                                                                                             |
| [Icw] rated short-time withstand current    | 250 A 104 °F (40 °C) - 10 min power circuit<br>580 A 104 °F (40 °C) - 1 min power circuit<br>1200 A 104 °F (40 °C) - 10 s power circuit<br>1400 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                      | 10 A gG signalling circuit IEC 60947-5-1<br>315 A gG ≤ 690 V type 1 power circuit<br>250 A gG ≤ 690 V type 2 power circuit                                                                                                                                                                       |
| Average impedance                           | 0.6 mOhm - Ith 200 A 50 Hz power circuit                                                                                                                                                                                                                                                         |
| [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                                                                                                   |
| Electrical durability                       | 0.85 Mcycles 150 A AC-3 ≤ 440 V<br>1 Mcycles 200 A AC-1 ≤ 440 V                                                                                                                                                                                                                                  |
| Power dissipation per pole                  | 24 W AC-1<br>13.5 W AC-3                                                                                                                                                                                                                                                                         |
| Front cover                                 | With                                                                                                                                                                                                                                                                                             |

|                          |                                                                                                                                                                                                                                                                                                                                |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mounting Support         | Rail Plate                                                                                                                                                                                                                                                                                                                     |
| 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   | RINA<br>DNV<br>UL<br>CCC<br>GL<br>CSA<br>LROS (Lloyds register of shipping)<br>GOST<br>BV<br>UKCA                                                                                                                                                                                                                              |
| 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 |
| Operating time           | 20...35 ms closing<br>40...75 ms opening                                                                                                                                                                                                                                                                                       |
| 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                                                                                                                                                                                                                                                                                                                      |
| Maximum operating rate   | 1200 cyc/h 140 °F (60 °C)                                                                                                                                                                                                                                                                                                      |

## Complementary

|                                 |                                                                                                                                                                                                   |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 0.9 68 °F (20 °C))<br>280...350 VA 50 Hz 0.9 68 °F (20 °C))                                                                                                                    |
| Hold-in power consumption in VA | 2...18 VA 60 Hz 0.9 68 °F (20 °C))<br>2...18 VA 50 Hz 0.9 68 °F (20 °C))                                                                                                                          |
| Heat dissipation                | 3...4.5 W 50/60 Hz                                                                                                                                                                                |
| 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 current       | 5 mA signalling circuit                                                                                                                                                                           |
| Minimum switching voltage       | 17 V 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                                                                                           |
| Insulation resistance           | > 10 MOhm signalling circuit                                                                                                                                                                      |

## Environment

|                                       |                                                                       |
|---------------------------------------|-----------------------------------------------------------------------|
| IP degree of protection               | IP20 front face IEC 60529                                             |
| Protective treatment                  | TH IEC 60068-2-30                                                     |
| Pollution degree                      | 3                                                                     |
| 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                                        |

|                       |                                                                                                                                                                           |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flame retardance      | V1 conforming to UL 94                                                                                                                                                    |
| Mechanical robustness | Vibrations contactor open2 Gn, 5...300 Hz<br>Vibrations contactor closed4 Gn, 5...300 Hz<br>Shocks contactor closed15 Gn for 11 ms<br>Shocks contactor open6 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                  | 3389110726756                             |
| Nbr. of units in pkg. | 1                                         |
| Package weight(Lbs)   | 4.70 lb(US) (2.13 kg)                     |
| Returnability         | No                                        |
| Country of origin     | CZ                                        |

### Packing Units

|                        |                   |
|------------------------|-------------------|
| Unit Type of Package 1 | PCE               |
| Package 1 Height       | 6.61 in (16.8 cm) |
| Package 1 width        | 8.19 in (20.8 cm) |
| Package 1 Length       | 7.28 in (18.5 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>                                                                                                                                                                                                                         |
| EU RoHS Directive          | Compliant <a href="#">EU RoHS Declaration</a>                                                                                                                                                                                                             |
| 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 |
|----------|-----------|