

# LC1DT40FD

IEC contactor, TeSys D, nonreversing, 40A  
resistive, 4 pole, 4 NO, 110VDC coil, open style

Product availability : Non-Stock - Not normally stocked in distribution facility



Price\* : 245.70 USD



## Main

|                                             |                                                                                                                                                                                                                                                          |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                       | TeSys                                                                                                                                                                                                                                                    |
| Product name                                | TeSys D                                                                                                                                                                                                                                                  |
| Product or component type                   | Contactor                                                                                                                                                                                                                                                |
| Device short name                           | LC1D                                                                                                                                                                                                                                                     |
| Contactor application                       | Resistive load                                                                                                                                                                                                                                           |
| Utilisation category                        | AC-1                                                                                                                                                                                                                                                     |
| Poles description                           | 4P                                                                                                                                                                                                                                                       |
| Power pole contact composition              | 4 NO                                                                                                                                                                                                                                                     |
| [Ue] rated operational voltage              | Power circuit <= 690 V AC 25...400 Hz<br>Power circuit <= 300 V DC                                                                                                                                                                                       |
| [Ie] rated operational current              | 40 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit                                                                                                                                                                                                      |
| Control circuit type                        | DC standard                                                                                                                                                                                                                                              |
| [Uc] control circuit voltage                | 110 V DC                                                                                                                                                                                                                                                 |
| Auxiliary contact composition               | 1 NO + 1 NC                                                                                                                                                                                                                                              |
| [Uimp] rated impulse withstand voltage      | 6 kV IEC 60947                                                                                                                                                                                                                                           |
| Overvoltage category                        | III                                                                                                                                                                                                                                                      |
| [Ith] conventional free air thermal current | 10 A 140 °F (60 °C) signalling circuit<br>40 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>450 A 440 V power circuit IEC 60947                                                                                                                            |
| Rated breaking capacity                     | 450 A 440 V power circuit IEC 60947                                                                                                                                                                                                                      |
| [Icw] rated short-time withstand current    | 50 A 104 °F (40 °C) - 10 min power circuit<br>120 A 104 °F (40 °C) - 1 min power circuit<br>240 A 104 °F (40 °C) - 10 s power circuit<br>380 A 104 °F (40 °C) - 1 s power circuit<br>100 A - 1 s signalling circuit<br>120 A - 500 ms signalling circuit |

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

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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|                               | 140 A - 100 ms signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Associated fuse rating        | 10 A gG signalling circuit IEC 60947-5-1<br>63 A gG ≤ 690 V type 1 power circuit<br>40 A gG ≤ 690 V type 2 power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Average impedance             | 2 mOhm - lth 40 A 50 Hz power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| [Ui] rated insulation voltage | 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<br>Power circuit 690 V IEC 60947-4-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Electrical durability         | 1.4 Mcycles 40 A AC-1 ≤ 440 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Power dissipation per pole    | 3.2 W AC-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Front cover                   | With                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Mounting support              | Plate<br>Rail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 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        | DNV<br>UL<br>CCC<br>CSA<br>LROS (Lloyds register of shipping)<br>RINA<br>BV<br>GL<br>GOST                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Connections - terminals       | 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> )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 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 connector 1 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> )flexible without cable end<br>Power circuit connector 2 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> )flexible without cable end<br>Power circuit connector 1 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> )flexible with cable end<br>Power circuit connector 2 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> )flexible with cable end<br>Power circuit connector 1 0.00...0.02 in <sup>2</sup> (2.5...16 mm <sup>2</sup> )solid without cable end<br>Power circuit connector 2 0.00...0.02 in <sup>2</sup> (2.5...16 mm <sup>2</sup> )solid without cable end |
| Tightening torque             | 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<br>Power circuit 15.05 lbf.in (1.7 N.m) connector flat Ø 6 mm<br>Power circuit 15.05 lbf.in (1.7 N.m) connector Philips No 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Operating time                | 16...24 ms opening<br>53.55...72.45 ms closing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 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         | 30 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Maximum operating rate        | 3600 cyc/h 140 °F (60 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## Complementary

|                                |                                                                                                                                                                         |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Coil technology                | Built-in bidirectional peak limiting diode suppressor                                                                                                                   |
| Control circuit voltage limits | 0.1...0.25 Uc -40...158 °F (-40...70 °C) drop-out DC<br>0.7...1.25 Uc -40...140 °F (-40...60 °C) operational DC<br>1...1.25 Uc 140...158 °F (60...70 °C) operational DC |
| Time constant                  | 28 ms                                                                                                                                                                   |
| Inrush power in W              | 5.4 W 68 °F (20 °C))                                                                                                                                                    |
| Hold-in power consumption in W | 5.4 W 68 °F (20 °C)                                                                                                                                                     |
| 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 open8 Gn for 11 ms |
| Height                                | 3.58 in (91 mm)                                                                                                                                                           |
| Width                                 | 1.77 in (45 mm)                                                                                                                                                           |
| Depth                                 | 4.21 in (107 mm)                                                                                                                                                          |
| Net Weight                            | 0.94 lb(US) (0.425 kg)                                                                                                                                                    |

## Ordering and shipping details

|                       |                                      |
|-----------------------|--------------------------------------|
| Category              | 22355 - CTR, TESYS D, OPEN, 9-38A DC |
| Discount Schedule     | I12                                  |
| GTIN                  | 03389110247879                       |
| Nbr. of units in pkg. | 1                                    |
| Package weight(Lbs)   | 22.75 oz (645 g)                     |
| Returnability         | No                                   |
| Country of origin     | ID                                   |

## Packing Units

|                        |                  |
|------------------------|------------------|
| Unit Type of Package 1 | PCE              |
| Package 1 Height       | 2.17 in (5.5 cm) |
| Package 1 width        | 3.74 in (9.5 cm) |
| Package 1 Length       | 4.72 in (12 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> |
| RECh Regulation            | <a href="#">RECh Declaration</a>                                                                                                                                                                                                                          |
| RECh 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 |
|----------|-----------|