

# LC1D188D7

IEC contactor, TeSys Deca, nonreversing,  
32A resistive, 4 pole, 2 NO and 2 NC, 42VAC  
50/60Hz coil, open style



## Main

|                                |                                                     |
|--------------------------------|-----------------------------------------------------|
| Range of Product               | TeSys Deca                                          |
| Product or Component Type      | Contacteur                                          |
| Device short name              | LC1D                                                |
| Contacteur application         | Resistive load                                      |
| Utilisation category           | AC-1<br>AC-3<br>AC-3e<br>AC-4                       |
| Poles description              | 4P                                                  |
| [Ue] rated operational voltage | Power circuit <= 690 V AC 25...400 Hz               |
| [Ie] rated operational current | 32 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit |
| [Uc] control circuit voltage   | 42 V AC 50/60 Hz                                    |

## Complementary

|                                             |                                                                                                                                                                                                                                                                                              |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compatibility code                          | LC1D                                                                                                                                                                                                                                                                                         |
| Pole contact composition                    | 2 NO + 2 NC                                                                                                                                                                                                                                                                                  |
| Contact compatibility                       | M6                                                                                                                                                                                                                                                                                           |
| Protective cover                            | With                                                                                                                                                                                                                                                                                         |
| [Ith] conventional free air thermal current | 10 A 140 °F (60 °C) signalling circuit<br>32 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>300 A 440 V power circuit IEC 60947                                                                                                                                                                |
| Rated breaking capacity                     | 300 A 440 V power circuit IEC 60947                                                                                                                                                                                                                                                          |
| [Icw] rated short-time withstand current    | 145 A 104 °F (40 °C) - 10 s power circuit<br>240 A 104 °F (40 °C) - 1 s power circuit<br>40 A 104 °F (40 °C) - 10 min power circuit<br>84 A 104 °F (40 °C) - 1 min power circuit<br>100 A - 1 s signalling circuit<br>120 A - 500 ms signalling circuit<br>140 A - 100 ms signalling circuit |
| Associated fuse rating                      | 10 A gG signalling circuit IEC 60947-5-1<br>50 A gG <= 690 V type 1 power circuit<br>35 A gG <= 690 V type 2 power circuit                                                                                                                                                                   |
| Average impedance                           | 2.5 mOhm - Ith 32 A 50 Hz power circuit                                                                                                                                                                                                                                                      |
| Power dissipation per pole                  | 2.5 W AC-1                                                                                                                                                                                                                                                                                   |
| [Ui] rated insulation voltage               | Power circuit 690 V IEC 60947-4-1<br>Power circuit 600 V CSA<br>Power circuit 600 V UL<br>Signalling circuit 690 V IEC 60947-1<br>Signalling circuit 600 V CSA<br>Signalling circuit 600 V UL                                                                                                |
| Overvoltage category                        | III                                                                                                                                                                                                                                                                                          |
| Pollution degree                            | 3                                                                                                                                                                                                                                                                                            |
| [Uimp] rated impulse withstand voltage      | 6 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                       | 15 Mcycles                                                                                                                                                                                                                                                                                   |

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electrical durability           | 1 Mcycles 32 A AC-1 ≤ 440 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Control circuit type            | AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Coil technology                 | Without built-in suppressor module                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Control circuit voltage limits  | 0.3...0.6 U <sub>c</sub> -40...140 °F (-40...60 °C) drop-out AC 50/60 Hz<br>0.8...1.1 U <sub>c</sub> -40...140 °F (-40...60 °C) operational AC 50 Hz<br>0.85...1.1 U <sub>c</sub> -40...140 °F (-40...60 °C) operational AC 60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Inrush power in VA              | 70 VA 60 Hz 0.75 68 °F (20 °C))<br>70 VA 50 Hz 0.75 68 °F (20 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Hold-in power consumption in VA | 7.5 VA 60 Hz 0.3 68 °F (20 °C))<br>7 VA 50 Hz 0.3 68 °F (20 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Heat dissipation                | 2...3 W 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Operating time                  | 12...22 ms closing<br>4...19 ms opening                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Maximum operating rate          | 3600 cyc/h 140 °F (60 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Connections - terminals         | Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end<br>Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end<br>Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible with cable end<br>Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) flexible with cable end<br>Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid without cable end<br>Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid without cable end<br>Power circuit screw clamp terminals 1 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) flexible without cable end<br>Power circuit screw clamp terminals 2 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) flexible without cable end<br>Power circuit screw clamp terminals 1 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) flexible with cable end<br>Power circuit screw clamp terminals 2 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) flexible with cable end<br>Power circuit screw clamp terminals 1 0.00...0.02 in <sup>2</sup> (2.5...16 mm <sup>2</sup> ) solid without cable end<br>Power circuit screw clamp terminals 2 0.00...0.02 in <sup>2</sup> (2.5...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>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2<br>Power circuit 15.93 lbf.in (1.8 N.m) screw clamps terminals flat Ø 6 mm<br>Power circuit 15.93 lbf.in (1.8 N.m) screw clamps terminals Philips No 2<br>Power circuit 15.93 lbf.in (1.8 N.m) screw clamp terminals pozidriv No 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 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                                             | EN 60947-4-1<br>EN 60947-5-1<br>IEC 60947-4-1<br>IEC 60947-5-1<br>UL 60947-4-1<br>UL 60947-5-1<br>CSA C22.2 No 60947-4-1<br>CSA C22.2 No 60947-5-1<br>GB/T 14048.4                 |
| Product Certifications                                | UL<br>CSA<br>CCC<br>EAC<br>UKCA<br>CB<br>EU-RO-MR by DNV-GL                                                                                                                        |
| 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 open 10 Gn for 11 ms)<br>Shocks contactor closed 15 Gn for 11 ms) |
| Height                                                | 3.58 in (91 mm)                                                                                                                                                                    |
| Width                                                 | 1.77 in (45 mm)                                                                                                                                                                    |
| Depth                                                 | 3.90 in (99 mm)                                                                                                                                                                    |
| Net Weight                                            | 0.94 lb(US) (0.425 kg)                                                                                                                                                             |

## Ordering and shipping details

|                   |                                    |
|-------------------|------------------------------------|
| Category          | 22354-CTR, TESYS D, OPEN, 9-38A AC |
| Discount Schedule | I12                                |
| GTIN              | 3389110291322                      |
| Returnability     | No                                 |
| Country of origin | ID                                 |

## Packing Units

|                              |                  |
|------------------------------|------------------|
| Unit Type of Package 1       | PCE              |
| Number of Units in Package 1 | 1                |
| 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)  |
| Package 1 Weight             | 16.44 oz (466 g) |

## 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  <a href="#">EU RoHS Declaration</a>                                                                                                                         |
| Toxic heavy metal free    | Yes                                                                                                                                                                                                                                                       |

|                            |                                                                                                                              |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------|
| 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 |
|----------|-----------|