

# Product datasheet

Specifications



Contactor, TeSys Deca, 4P(4 NO),  
AC-1, <=440V, 32A, 220V AC  
50/60Hz coil, screw clamp terminal

LC1DT32M7

## Main

|                                |                                                                      |
|--------------------------------|----------------------------------------------------------------------|
| Range                          | TeSys<br>TeSys Deca                                                  |
| Range of product               | TeSys Deca                                                           |
| Product or component type      | Contactor                                                            |
| Device short name              | LC1D                                                                 |
| contactor 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<br>Power circuit: <= 300 V DC |
| [Ie] rated operational current | 32 A (at <60 °C) at <= 440 V AC AC-1 for power circuit               |
| [Uc] control circuit voltage   | 220 V AC 50/60 Hz                                                    |

## Complementary

|                                             |                                                                                                                                                                                                                                                                                      |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compatibility code                          | LC1D                                                                                                                                                                                                                                                                                 |
| Pole contact composition                    | 4 NO                                                                                                                                                                                                                                                                                 |
| Protective cover                            | With                                                                                                                                                                                                                                                                                 |
| [Ith] conventional free air thermal current | 10 A (at 60 °C) for signalling circuit<br>32 A (at 60 °C) for power circuit                                                                                                                                                                                                          |
| Irms rated making capacity                  | 140 A AC for signalling circuit conforming to IEC 60947-5-1<br>250 A DC for signalling circuit conforming to IEC 60947-5-1<br>300 A at 440 V for power circuit conforming to IEC 60947                                                                                               |
| Rated breaking capacity                     | 300 A at 440 V for power circuit conforming to IEC 60947                                                                                                                                                                                                                             |
| [Icw] rated short-time withstand current    | 40 A 40 °C - 10 min for power circuit<br>84 A 40 °C - 1 min for power circuit<br>145 A 40 °C - 10 s for power circuit<br>240 A 40 °C - 1 s for power circuit<br>100 A - 1 s for signalling circuit<br>120 A - 500 ms for signalling circuit<br>140 A - 100 ms for signalling circuit |
| Associated fuse rating                      | 10 A gG for signalling circuit conforming to IEC 60947-5-1<br>50 A gG at <= 690 V coordination type 1 for power circuit<br>35 A gG at <= 690 V coordination type 2 for power circuit                                                                                                 |
| Average impedance                           | 2.5 mOhm - Ith 32 A 50 Hz for power circuit                                                                                                                                                                                                                                          |
| Power dissipation per pole                  | 2.5 W AC-1                                                                                                                                                                                                                                                                           |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>[Ui] rated insulation voltage</b>          | Power circuit: 600 V CSA certified<br>Power circuit: 600 V UL certified<br>Signalling circuit: 690 V conforming to IEC 60947-1<br>Signalling circuit: 600 V CSA certified<br>Signalling circuit: 600 V UL certified<br>Power circuit: 690 V conforming to IEC 60947-4-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Overvoltage category</b>                   | III                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Pollution degree</b>                       | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>[Uimp] rated impulse withstand voltage</b> | 6 kV conforming to IEC 60947                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Safety reliability level</b>               | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Mechanical durability</b>                  | 15 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Electrical durability</b>                  | 1 Mcycles 32 A AC-1 at Ue ≤ 440 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Control circuit type</b>                   | AC at 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Coil technology</b>                        | Without built-in suppressor module                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Control circuit voltage limits</b>         | 0.3...0.6 Uc (-40...70 °C):drop-out AC 50/60 Hz<br>0.8...1.1 Uc (-40...60 °C):operational AC 50 Hz<br>0.85...1.1 Uc (-40...60 °C):operational AC 60 Hz<br>1...1.1 Uc (60...70 °C):operational AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Inrush power in VA</b>                     | 70 VA 60 Hz cos phi 0.75 (at 20 °C)<br>70 VA 50 Hz cos phi 0.75 (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Hold-in power consumption in VA</b>        | 7.5 VA 60 Hz cos phi 0.3 (at 20 °C)<br>7 VA 50 Hz cos phi 0.3 (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Heat dissipation</b>                       | 2...3 W at 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Operating time</b>                         | 4...19 ms opening<br>12...22 ms closing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Maximum operating rate</b>                 | 3600 cyc/h 60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Connections - terminals</b>                | Control circuit: screw clamp terminals 2 1...2.5 mm² - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 2 1...4 mm² - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 2 1...4 mm² - cable stiffness: solid without cable end<br>Power circuit: screw clamp terminals 1 2.5...10 mm² - cable stiffness: flexible without cable end<br>Power circuit: screw clamp terminals 2 2.5...10 mm² - cable stiffness: flexible without cable end<br>Power circuit: screw clamp terminals 1 2.5...10 mm² - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 2 2.5...10 mm² - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 1 2.5...16 mm² - cable stiffness: solid without cable end<br>Power circuit: screw clamp terminals 2 2.5...16 mm² - cable stiffness: solid without cable end |
| <b>Tightening torque</b>                      | Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2<br>Power circuit: 1.8 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Power circuit: 1.8 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>Power circuit: 1.8 N.m - on screw clamp terminals - with screwdriver pozidriv No 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Auxiliary contact composition</b>          | 1 NO + 1 NC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Auxiliary contacts type</b>                | type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1<br>type mirror contact 1 NC conforming to IEC 60947-4-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

|                              |                                                                                                         |
|------------------------------|---------------------------------------------------------------------------------------------------------|
| Signalling circuit frequency | 25...400 Hz                                                                                             |
| Minimum switching voltage    | 17 V for signalling circuit                                                                             |
| Minimum switching current    | 5 mA for signalling circuit                                                                             |
| Insulation resistance        | > 10 MOhm for signalling circuit                                                                        |
| Non-overlap time             | 1.5 ms on de-energisation between NC and NO contact<br>1.5 ms on energisation between NC and NO contact |
| Mounting support             | Plate<br>Rail                                                                                           |

## Environment

|                                                       |                                                                                                                                                                                       |
|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                                             | CSA C22.2 No 14<br>EN 60947-4-1<br>EN 60947-5-1<br>IEC 60947-4-1<br>IEC 60947-5-1<br>UL 508<br>IEC 60335-1                                                                            |
| Product certifications                                | DNV<br>GL<br>CCC<br>LROS (Lloyds register of shipping)<br>RINA<br>BV<br>GOST<br>UL<br>CSA<br>CB                                                                                       |
| IP degree of protection                               | IP20 front face conforming to IEC 60529                                                                                                                                               |
| Protective treatment                                  | TH conforming to IEC 60068-2-30                                                                                                                                                       |
| Climatic withstand                                    | conforming to IACS E10 exposure to damp heat<br>conforming to IEC 60947-1 Annex Q category D exposure to damp heat                                                                    |
| Permissible ambient air temperature around the device | -40...60 °C<br>60...70 °C with derating                                                                                                                                               |
| Operating altitude                                    | 0...3000 m                                                                                                                                                                            |
| Fire resistance                                       | 850 °C conforming to IEC 60695-2-1                                                                                                                                                    |
| Flame retardance                                      | V1 conforming to UL 94                                                                                                                                                                |
| Mechanical robustness                                 | Vibrations contactor open (2 Gn, 5...300 Hz)<br>Vibrations contactor closed (4 Gn, 5...300 Hz)<br>Shocks contactor closed (15 Gn for 11 ms)<br>Shocks contactor open (8 Gn for 11 ms) |
| Height                                                | 91 mm                                                                                                                                                                                 |
| Width                                                 | 45 mm                                                                                                                                                                                 |
| Depth                                                 | 99 mm                                                                                                                                                                                 |
| Net weight                                            | 0.425 kg                                                                                                                                                                              |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 5.800 cm  |
| Package 1 Width              | 9.800 cm  |
| Package 1 Length             | 12.000 cm |
| Package 1 Weight             | 466.000 g |

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 2       | S02       |
| Number of Units in Package 2 | 16        |
| Package 2 Height             | 15.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 7.997 kg  |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Sustainability



**Green Premium™ label** is Schneider Electric’s commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product’s sustainability >](#)



Transparency   RoHS/REACH

## Well-being performance

|                              |     |
|------------------------------|-----|
| ✓ Toxic Heavy Metal Free     |     |
| ✓ Mercury Free               |     |
| ✓ Rohs Exemption Information | Yes |
| ✓ Pvc Free                   |     |

## Certifications & Standards

|                          |                                                                                                                             |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Reach Regulation         | <a href="#">REACH Declaration</a>                                                                                           |
| Eu Rohs Directive        | Compliant<br><a href="#">EU RoHS Declaration</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>                                                                               |
| Weee                     | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| Circularity Profile      | <a href="#">End of Life Information</a>                                                                                     |