



## Main

|                                |   |
|--------------------------------|---|
| Range                          | TeSys<br>TeSys Deca   |
| Range of product               | TeSys D<br>TeSys Deca   |
| Product or component type      | Contacteur  |
| Device short name              | LC1D  |
| Contacteur application         | Resistive load<br>Motor control   |
| Utilisation category           | AC-3<br>AC-1<br>AC-4<br>AC-3e   |
| Poles description              | 3P  |
| [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-3 for power circuit<br>50 A (at <60 °C) at <= 440 V AC AC-1 for power circuit<br>32 A (at <60 °C) at <= 440 V AC AC-3e for power circuit |

## Complementary

|   |   |
|---|---|
| Motor power kW                              | 7.5 kW at 220...230 V AC 50/60 Hz (AC-3)<br>15 kW at 380...400 V AC 50/60 Hz (AC-3)<br>15 kW at 415...440 V AC 50/60 Hz (AC-3)<br>18.5 kW at 500 V AC 50/60 Hz (AC-3)<br>18.5 kW at 660...690 V AC 50/60 Hz (AC-3)<br>7.5 kW at 400 V AC 50/60 Hz (AC-4)<br>7.5 kW at 220...230 V AC 50/60 Hz (AC-3e)<br>15 kW at 380...400 V AC 50/60 Hz (AC-3e)<br>15 kW at 415...440 V AC 50/60 Hz (AC-3e)<br>18.5 kW at 500 V AC 50/60 Hz (AC-3e)<br>18.5 kW at 660...690 V AC 50/60 Hz (AC-3e) |
| Motor power hp                              | 2 Hp at 115 V AC 50/60 Hz for 1 phase motors<br>5 Hp at 230/240 V AC 50/60 Hz for 1 phase motors<br>7.5 Hp at 200/208 V AC 50/60 Hz for 3 phases motors<br>10 Hp at 230/240 V AC 50/60 Hz for 3 phases motors<br>20 Hp at 460/480 V AC 50/60 Hz for 3 phases motors<br>30 hp at 575/600 V AC 50/60 Hz for 3 phases motors   |
| Pole contact composition                    | 3 NO  |
| Contact compatibility                       | M4  |
| Protective cover                            | With  |
| Auxiliary contacts type                     | 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  |
| Auxiliary contact composition               | 1 NO + 1 NC   |
| [Ui] rated insulation voltage               | Power circuit: 690 V conforming to IEC 60947-4-1<br>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   |
| [Uimp] rated impulse withstand voltage      | 6 kV conforming to IEC 60947  |
| Overvoltage category                        | III   |
| [Ith] conventional free air thermal current | 10 A (at 60 °C) for signalling circuit<br>50 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>550 A at 440 V for power circuit conforming to IEC 60947   |
| Rated breaking capacity        | 550 A at 440 V for power circuit conforming to IEC 60947   |
| Associated fuse rating         | 10 A gG for signalling circuit conforming to IEC 60947-5-1<br>63 A gG at ≤ 690 V coordination type 1 for power circuit<br>63 A gG at ≤ 690 V coordination type 2 for power circuit   |
| Time constant                  | 28 ms  |
| Control circuit type           | DC standard  |
| Coil technology                | Built-in bidirectional peak limiting diode suppressor  |
| Control circuit voltage limits | 0.1...0.25 U <sub>c</sub> (-40...70 °C):drop-out DC<br>0.7...1.25 U <sub>c</sub> (-40...60 °C):operational DC<br>1...1.25 U <sub>c</sub> (60...70 °C):operational DC   |
| Average impedance              | 2 mOhm - Ith 50 A 50 Hz for power circuit  |
| Power dissipation per pole     | 2 W AC-3<br>5 W AC-1<br>2 W AC-3e  |
| Minimum switching current      | 5 mA for signalling circuit  |
| Minimum switching voltage      | 17 V 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  |
| Maximum operating rate         | 3600 cyc/h 60 °C   |
| Inrush power in W              | 5.4 W (at 20 °C)   |
| Hold-in power consumption in W | 5.4 W at 20 °C   |
| Insulation resistance          | > 10 MOhm for signalling circuit   |
| Tightening torque              | 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>Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Power circuit: 2.5 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: 2.5 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 |
| Mounting support               | Rail<br>Plate  |
| Electrical durability          | 1.65 Mcycles 32 A AC-3 at U <sub>e</sub> ≤ 440 V<br>1.4 Mcycles 50 A AC-1 at U <sub>e</sub> ≤ 440 V<br>1.65 Mcycles 32 A AC-3e at U <sub>e</sub> ≤ 440 V   |
| Mechanical durability          | 30 Mcycles   |
| Safety reliability level       | 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   |
| Operating altitude             | 0...3000 m   |
| Compatibility code             | LC1D   |
| Product certifications         | DNV<br>GL<br>CCC<br>UL<br>GOST<br>BV<br>LROS (Lloyds register of shipping)<br>RINA<br>CSA<br>UKCA  |

## Environment

|                                     |  |
|-------------------------------------|--|
| Climatic withstand                  | Conforming to IACS E10<br>Conforming to IEC 60947-1 Annex Q category D |
| Ambient air temperature for storage | -60...80 °C  |
| Fire resistance                     | 850 °C conforming to IEC 60695-2-1                                     |
| Height                              | 85 mm  |
| Width                               | 45 mm  |
| Depth                               | 101 mm   |
| Net weight                          | 0.535 kg   |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Package 1 Length             | 11.2 cm  |
| Number of Units in Package 1 | 1        |
| Package 3 Width              | 60.0 cm  |
| Package 3 Weight             | 154.5 kg |
| Package 2 Width              | 30.0 cm  |
| Package 2 Height             | 15.0 cm  |
| Package 2 Weight             | 9.055 kg |
| Number of Units in Package 3 | 240      |
| Unit Type of Package 3       | P06      |
| Package 3 Height             | 75.0 cm  |
| Package 3 Length             | 80.0 cm  |
| Package 1 Width              | 9.2 cm   |
| Package 1 Height             | 5.0 cm   |
| Package 1 Weight             | 583.0 g  |
| Number of Units in Package 2 | 15       |
| Unit Type of Package 2       | S02      |
| Package 2 Length             | 40.0 cm  |

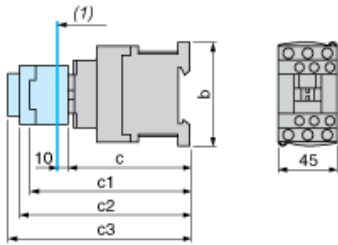
## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Compliant <a href="#">EU RoHS Declaration</a>   |
| Mercury free               | Yes   |
| RoHS exemption information | <a href="#">Yes</a>   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | <a href="#">End Of Life Information</a>   |
| PVC free                   | Yes   |
| 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> |

## Contractual warranty

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

Dimensions



(1) Minimum electrical clearance

| LC1   |                                   | D25...D38 | D183...D323 |
|---|-----------------------------------|-----------|-------------|
| b   |                                   | 85        | 99          |
| c   | without cover or add-on blocks    | 99        | 99          |
| with cover,<br>without add-<br>on blocks    | 101                               | 101       |             |
| c1  | with LAD N or C (2 or 4 contacts) | 132       | 132         |
| c2  | with LA6 DK10                     | 144       | 144         |
| c3  | with LAD T, R, S                  | 152       | 152         |
| with LAD<br>T, R, S and<br>sealing<br>cover | 156                               | 156       |             |

## Wiring

