

# LC1D32KUE

TeSys D contactor - 3P - ≤ 440 V - 32 A AC-3 -  
100...250 V AC/DC coil



## Main

|                                             |                                                                                                                                                                                                                                                     |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                       | TeSys                                                                                                                                                                                                                                               |
| Product name                                | TeSys D Green                                                                                                                                                                                                                                       |
| Product or component type                   | Contactor                                                                                                                                                                                                                                           |
| Device short name                           | LC1D                                                                                                                                                                                                                                                |
| Contactor application                       | Motor control<br>Resistive load                                                                                                                                                                                                                     |
| Utilisation category                        | AC-1<br>AC-3                                                                                                                                                                                                                                        |
| Poles description                           | 3P                                                                                                                                                                                                                                                  |
| Pole contact composition                    | 3 NO                                                                                                                                                                                                                                                |
| [Ue] rated operational voltage              | ≤ 690 V AC 25...400 Hz for power circuit                                                                                                                                                                                                            |
| [Ie] rated operational current              | 32 A (≤ 60 °C) at ≤ 440 V AC AC-3 for power circuit<br>50 A (≤ 60 °C) at ≤ 440 V AC AC-1 for power circuit                                                                                                                                          |
| Motor power kW                              | 15 kW at 380...400 V AC 50/60 Hz<br>7.5 kW at 220...230 V AC 50/60 Hz<br>18.5 kW at 500 V AC 50/60 Hz<br>18.5 kW at 660...690 V AC 50/60 Hz<br>15 kW at 415...440 V AC 50/60 Hz                                                                     |
| [Uc] control circuit voltage                | 100...250 V AC 50/60 Hz<br>100...250 V DC                                                                                                                                                                                                           |
| Coil type                                   | AC/DC electronic                                                                                                                                                                                                                                    |
| Auxiliary contact composition               | 1 NO + 1 NC                                                                                                                                                                                                                                         |
| [Uimp] rated impulse withstand voltage      | 6 kV conforming to IEC 60947                                                                                                                                                                                                                        |
| Overvoltage category                        | III                                                                                                                                                                                                                                                 |
| [Ith] conventional free air thermal current | 50 A at ≤ 60 °C for power circuit<br>10 A at ≤ 60 °C for signalling circuit                                                                                                                                                                         |
| Irms rated making capacity                  | 550 A at 440 V for power circuit conforming to IEC 60947<br>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                                                              |
| Rated breaking capacity                     | 550 A at 440 V for power circuit conforming to IEC 60947                                                                                                                                                                                            |
| [Icw] rated short-time withstand current    | 138 A ≤ 40 °C 1 min power circuit<br>260 A ≤ 40 °C 10 s power circuit<br>430 A ≤ 40 °C 1 s power circuit<br>60 A ≤ 40 °C 10 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                      | 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<br>10 A gG for signalling circuit conforming to IEC 60947-5-1                                                                  |
| Average impedance                           | 2 mOhm at 50 Hz - Ith 50 A for power circuit                                                                                                                                                                                                        |
| [Ui] rated insulation voltage               | 690 V for power circuit conforming to IEC 60947-4-1<br>690 V for signalling circuit conforming to IEC 60947-1                                                                                                                                       |
| Electrical durability                       | 23000 cycles AC-4 at Ue ≤ 440 V (date code ≥=                                                                                                                                                                                                       |

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|                            | 17221)<br>650000 cycles 50 A AC-1 at Ue ≤ 440 V (date code ≥ 17221)<br>2 Mcycles 32 A AC-3 at Ue ≤ 440 V (date code ≥ 17221)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Power dissipation per pole | 2 W AC-3<br>5 W AC-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Protective cover           | With                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Mounting support           | Plate<br>Rail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Standards                  | EN/IEC 60947-5-1<br>EN/IEC 60947-4-1<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Product certifications     | UL<br>CSA<br>CCC<br>EAC<br>KC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Connections - terminals    | Control circuit : screw clamp terminals 2 cable(s)<br>1...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit : screw clamp terminals 1 cable(s)<br>1.5...10 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Control circuit : screw clamp terminals 1 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Control circuit : screw clamp terminals 2 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Control circuit : screw clamp terminals 1 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Control circuit : screw clamp terminals 1 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Control circuit : screw clamp terminals 2 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Power circuit : screw clamp terminals 1 cable(s)<br>2.5...10 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Power circuit : screw clamp terminals 2 cable(s)<br>2.5...10 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Power circuit : screw clamp terminals 1 cable(s)<br>1...10 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit : screw clamp terminals 2 cable(s)<br>1.5...6 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit : screw clamp terminals 2 cable(s)<br>2.5...10 mm <sup>2</sup> - cable stiffness: solid - without cable end |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Operating time             | 45...55 ms closing<br>20...90 ms opening (date code ≥ 17221)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Mechanical durability      | 15 Mcycles (date code ≥ 17221)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Operating rate             | ≤ 3600 cyc/h at ≤ 60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## Complementary

Coil technology

Built-in bidirectional peak limiting

|                                 |                                                                                                                              |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Control circuit voltage limits  | <= 0.1 Uc drop-out at 60 °C<br>0.85...1.1 Uc operational at 60 °C                                                            |
| Inrush power in VA              | 25 VA at 20 °C 50/60 Hz                                                                                                      |
| Inrush power in W               | 18 W at 20 °C                                                                                                                |
| Hold-in power consumption in VA | 1.6 VA at 20 °C 50/60 Hz                                                                                                     |
| Hold-in power consumption in W  | 1.1 W at 20 °C                                                                                                               |
| Heat dissipation                | 1.1 W at 50/60 Hz                                                                                                            |
| 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 |
| Signalling circuit frequency    | 25...400 Hz                                                                                                                  |
| 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)                  |
| Insulation resistance           | > 10 MOhm for signalling circuit                                                                                             |

## Environment

|                                                       |                                                                                                                                                                               |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IP degree of protection                               | IP20 front face conforming to IEC 60529                                                                                                                                       |
| protective treatment                                  | TH conforming to IEC 60068-2-30                                                                                                                                               |
| pollution degree                                      | 3                                                                                                                                                                             |
| ambient air temperature for operation                 | -25...60 °C                                                                                                                                                                   |
| ambient air temperature for storage                   | -60...80 °C                                                                                                                                                                   |
| permissible ambient air temperature around the device | -40...70 °C at Uc                                                                                                                                                             |
| operating altitude                                    | 3000 m without derating in temperature                                                                                                                                        |
| 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                                                | 85 mm                                                                                                                                                                         |
| width                                                 | 45 mm                                                                                                                                                                         |
| depth                                                 | 92 mm                                                                                                                                                                         |
| product weight                                        | 0.438 kg                                                                                                                                                                      |
| colour                                                | Grey SE GREY 6<br>Green SE GREEN 2                                                                                                                                            |

## Offer Sustainability

|                                  |                                                                       |
|----------------------------------|-----------------------------------------------------------------------|
| Sustainable offer status         | Green Premium product                                                 |
| RoHS (date code: YYWW)           | Compliant - since 1640 - Schneider Electric declaration of conformity |
| REACH                            | Reference contains SVHC above the threshold                           |
| Product environmental profile    | Available                                                             |
| Product end of life instructions | Available                                                             |