



## Main

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|---|--|
| Range of product                            | TeSys D  |
| 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              | 60 A ( $\leq 60$ °C) at $\leq 440$ V AC-1 for power circuit<br>40 A ( $\leq 60$ °C) at $\leq 440$ V AC-3 for power circuit   |
| Motor power kW                              | 11 kW at 220...230 V AC 50/60 Hz<br>22 kW at 500 V AC 50/60 Hz<br>30 kW at 660...690 V AC 50/60 Hz<br>18.5 kW at 380...400 V AC 50/60 Hz<br>22 kW at 415...440 V AC 50/60 Hz           |
| Control circuit type                        | AC/DC 50/60 Hz AC/DC electronic  |
| [Uc] control circuit voltage                | 100...250 V DC<br>100...250 V AC 50/60 Hz  |
| 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 | 60 A at $\leq 60$ °C for power circuit<br>10 A at $\leq 60$ °C for signalling circuit  |
| Irms rated making capacity                  | 800 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 |

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

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|--|--|
| Rated breaking capacity                  | 800 A at 440 V for power circuit conforming to IEC 60947   |
| [Icw] rated short-time withstand current | 100 A 1 s signalling circuit<br>120 A 500 ms signalling circuit<br>140 A 100 ms signalling circuit<br>320 A ≤ 40 °C 10 s power circuit<br>720 A ≤ 40 °C 1 s power circuit<br>72 A ≤ 40 °C 10 min power circuit<br>165 A ≤ 40 °C 1 min power circuit  |
| Associated fuse rating                   | 80 A gG at ≤ 690 V coordination type 1 for power circuit<br>80 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                        | 1.5 mOhm at 50 Hz - Ith 60 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                    | 2 Mcycles 40 A AC-3 at Ue ≤ 440 V (date code ≥ 17221)<br>700000 cycles 60 A AC-1 at Ue ≤ 440 V (date code ≥ 17221)<br>50000 cycles AC-4 at Ue ≤ 440 V (date code ≥ 17221)  |
| Power dissipation per pole               | 5.4 W AC-1<br>2.4 W AC-3   |
| Protective cover                         | With   |
| Mounting support                         | Plate<br>Rail  |
| Standards                                | EN/IEC 60947-4-1<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1<br>EN/IEC 60947-5-1   |
| Product certifications                   | UL<br>CSA<br>CCC<br>EAC<br>KC  |
| Connections - terminals                  | Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit : EverLink BTR screw connectors 1 cable(s) 1...35 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Power circuit : EverLink BTR screw connectors 1 cable(s) 1...35 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit : EverLink BTR screw connectors 1 cable(s) 1...35 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Power circuit : EverLink BTR screw connectors 2 cable(s) 1...25 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Power circuit : EverLink BTR screw connectors 2 cable(s) 1...25 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit : EverLink BTR screw connectors 2 cable(s) 1...25 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Control circuit : screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Control circuit : screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Control circuit : screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Control circuit : screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Control circuit : screw clamp terminals 2 cable(s) 1...4 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 : 8 N.m - on EverLink BTR screw connectors - cable 25...35 mm <sup>2</sup> hexagonal 4 mm<br>Power circuit : 5 N.m - on EverLink BTR screw connectors - cable 1...25 mm <sup>2</sup> hexagonal 4 mm   |
| Operating time                           | 55...65 ms closing<br>20...120 ms opening (date code ≥ 17221)<br>20...80 ms opening (date code ≥ 18011)  |
| 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                    | 6 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           |

|                                 |  |
|---------------------------------|--|
|                                 | 0.85...1.1 Uc operational at 60 °C   |
| Inrush power in VA              | 18 VA at 20 °C 50/60 Hz  |
| Inrush power in W               | 14 W at 20 °C  |
| Hold-in power consumption in VA | 1.8 VA at 20 °C 50/60 Hz   |
| Hold-in power consumption in W  | 1.2 W at 20 °C   |
| Heat dissipation                | 1.2 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   |
| Compatibility code              | LC1D   |

## 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 open 10 Gn for 11 ms<br>Shocks contactor closed 15 Gn for 11 ms |
| Height  | 122 mm   |
| Width   | 55 mm  |
| Depth   | 120 mm   |
| Product weight  | 0.992 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 1625 - Schneider Electric declaration of conformity<br><a href="#">Schneider Electric declaration of conformity</a> |
| REACH                            | Reference not containing SVHC above the threshold<br><a href="#">Reference not containing SVHC above the threshold</a>                |
| Product environmental profile    | Available<br><a href="#">Product environmental</a>  |
| Product end of life instructions | Available<br><a href="#">End of life manual</a>   |