



### Main

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| Range of product                       | TeSys D  |
| Range                                  | TeSys  |
| Product name                           | TeSys D  |
| Product or component type              | Contactor  |
| Device short name                      | LC1D   |
| Contactor application                  | Motor control<br>Resistive load  |
| Utilisation category                   | AC-3<br>AC-1<br>AC-4   |
| Poles description                      | 3P   |
| Pole contact composition               | 3 NO   |
| [Ue] rated operational voltage         | $\leq 300$ V DC for power circuit<br>$\leq 690$ V AC 25...400 Hz for power circuit   |
| [Ie] rated operational current         | 40 A ( $\leq 60$ °C) at $\leq 440$ V AC AC-3 for power circuit<br>60 A ( $\leq 60$ °C) at $\leq 440$ V AC AC-1 for power circuit   |
| Motor power kW                         | 18.5 kW at 380...400 V AC 50/60 Hz AC-3<br>22 kW at 500 V AC 50/60 Hz AC-3<br>30 kW at 660...690 V AC 50/60 Hz AC-3<br>11 kW at 220...230 V AC 50/60 Hz AC-3<br>9 kW at 400 V AC 50/60 Hz AC-4<br>22 kW at 415...440 V AC 50/60 Hz AC-3  |
| Motor power hp                         | 5 hp at 230/240 V AC 50/60 Hz for 1 phase motors<br>10 hp at 230/240 V AC 50/60 Hz for 3 phases motors<br>30 hp at 575/600 V AC 50/60 Hz for 3 phases motors<br>3 hp at 115 V AC 50/60 Hz for 1 phase motors<br>10 hp at 200/208 V AC 50/60 Hz for 3 phases motors<br>30 hp at 460/480 V AC 50/60 Hz for 3 phases motors |
| Control circuit type                   | AC 50/60 Hz  |
| [Uc] control circuit voltage           | 120 V AC 50/60 Hz  |
| Auxiliary contact composition          | 1 NO + 1 NC  |
| [Uimp] rated impulse withstand voltage | Conforming to IEC 60947  |

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| Overvoltage category                        | III  |
| [Ith] conventional free air thermal current | 60 A at ≤ 60 °C for power circuit<br>10 A at ≤ 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   |
| 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               | 600 V for power circuit certifications CSA<br>600 V for power circuit certifications UL<br>690 V for power circuit conforming to IEC 60947-4-1<br>690 V for signalling circuit conforming to IEC 60947-1<br>600 V for signalling circuit certifications CSA<br>600 V for signalling circuit certifications UL  |
| Electrical durability                       | 1.5 Mcycles 40 A AC-3 at Ue ≤ 440 V<br>1.4 Mcycles 60 A AC-1 at Ue ≤ 440 V   |
| Power dissipation per pole                  | 5.4 W AC-1<br>2.4 W AC-3   |
| Protective cover                            | With   |
| Mounting support                            | Plate<br>Rail  |
| 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  |
| Product certifications                      | CCC<br>UL<br>GOST<br>CSA   |
| Connections - terminals                     | Control circuit : screw clamp terminals 2 cable(s) 1...2.5 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: 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<br>Power circuit : screw connection 2 cable(s) 1...25 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit : screw connection 2 cable(s) 1...25 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Power circuit : screw connection 2 cable(s) 1...25 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Power circuit : screw connection 1 cable(s) 1...35 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Power circuit : screw connection 1 cable(s) 1...35 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Power circuit : screw connection 1 cable(s) 1...35 mm <sup>2</sup> - cable stiffness: flexible - with 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                              | 12...26 ms closing<br>4...19 ms opening  |
| Safety reliability level                    | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 2000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1  |
| Mechanical durability                       | 6 Mcycles  |
| Operating rate                              | 3600 cyc/h at ≤ 60 °C  |

## Complementary

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| Coil technology                 | Without built-in suppressor module   |
| Control circuit voltage limits  | 0.3...0.6 Uc drop-out at 60 °C, AC 50/60 Hz<br>0.8...1.1 Uc operational at 60 °C, AC 50 Hz<br>0.85...1.1 Uc operational at 60 °C, AC 60 Hz |
| Inrush power in VA              | 140 VA at 20 °C (cos $\phi$ 0.75) 60 Hz<br>160 VA at 20 °C (cos $\phi$ 0.75) 50 Hz   |
| Hold-in power consumption in VA | 13 VA at 20 °C (cos $\phi$ 0.3) 60 Hz<br>15 VA at 20 °C (cos $\phi$ 0.3) 50 Hz   |
| Heat dissipation                | 4...5 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

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| 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                 | -5...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  | 0.85 kg  |

## Offer Sustainability

|                                  |   |
|----------------------------------|---|
| Sustainable offer status         | Green Premium product   |
| RoHS (date code: YYWW)           | Compliant - since 0001 - 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>   |

## Contractual warranty

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