



## 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                       | Resistive load   |
| Utilisation category                        | AC-1   |
| Poles description                           | 4P   |
| Pole contact composition                    | 4 NO   |
| System Voltage                              | <= 300 V DC power circuit<br><= 690 V AC 25...400 Hz power circuit   |
| [Ie] rated operational current              | 40 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 power circuit   |
| 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  |
| Overvoltage category                        | III  |
| [Ith] conventional free air thermal current | 40 A at <= 140 °F (60 °C) power circuit<br>10 A at <= 140 °F (60 °C) signalling circuit  |
| Irms rated making capacity                  | 450 A at 440 V power circuit conforming to IEC 60947<br>140 A AC signalling circuit conforming to IEC 60947-5-1<br>250 A DC signalling circuit conforming to IEC 60947-5-1   |
| Rated breaking capacity                     | 450 A at 440 V power circuit conforming to IEC 60947   |
| [Icw] rated short-time withstand current    | 120 A <= 104 °F (40 °C) 1 min power circuit<br>240 A <= 104 °F (40 °C) 10 s power circuit<br>380 A <= 104 °F (40 °C) 1 s power circuit<br>50 A <= 104 °F (40 °C) 10 min power circuit<br>100 A 1 s signalling circuit<br>120 A 500 ms signalling circuit |

140 A 100 ms signalling circuit

|                               |   |
|-------------------------------|---|
| Associated fuse rating        | 40 A gG at ≤ 690 V coordination type 2 power circuit<br>63 A gG at ≤ 690 V coordination type 1 power circuit<br>10 A gG signalling circuit conforming to IEC 60947-5-1  |
| Average impedance             | 2 mOhm at 50 Hz - lth 40 A power circuit  |
| [Ui] rated insulation voltage | 600 V power circuit certifications CSA<br>600 V power circuit certifications UL<br>690 V power circuit conforming to IEC 60947-4-1<br>690 V signalling circuit conforming to IEC 60947-1<br>600 V signalling circuit certifications CSA<br>600 V signalling circuit certifications UL   |
| Electrical durability         | 1.4 Mcycles 40 A AC-1 at Ue ≤ 440 V   |
| Power dissipation per pole    | 3.2 W AC-1  |
| Protective cover              | With  |
| Mounting support              | Rail<br>Plate   |
| 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>GL<br>BV<br>LROS (Lloyds register of shipping)<br>UL<br>GOST<br>CSA<br>RINA<br>DNV   |
| Connections - terminals       | Control circuit: screw clamp terminals 2 cable(s) 0...0 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end<br>Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid - without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid - without cable end<br>Power circuit: connector 1 cable(s) 0...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end<br>Power circuit: connector 2 cable(s) 0...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end<br>Power circuit: connector 1 cable(s) 0...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end<br>Power circuit: connector 2 cable(s) 0...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end<br>Power circuit: connector 1 cable(s) 0...0.02 in <sup>2</sup> (2.5...16 mm <sup>2</sup> ) - cable stiffness: solid - without cable end<br>Power circuit: connector 2 cable(s) 0...0.02 in <sup>2</sup> (2.5...16 mm <sup>2</sup> ) - cable stiffness: solid - without cable end |
| Tightening torque             | Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver Philips No 2<br>Power circuit: 15.04 lbf.in (1.7 N.m) - on connector - with screwdriver flat Ø 6 mm<br>Power circuit: 15.04 lbf.in (1.7 N.m) - on connector - with screwdriver Philips No 2  |
| Operating time                | 4...19 ms opening<br>12...22 ms closing   |
| 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  |
| Operating rate                | 3600 cyc/h at ≤ 140 °F (60 °C)  |

## Complementary

|                                 |   |
|---------------------------------|---|
| Coil technology                 | Without built-in suppressor module  |
| Control circuit voltage limits  | 0.3...0.6 Uc drop-out at 140 °F (60 °C), AC 50/60 Hz<br>0.8...1.1 Uc operational at 140 °F (60 °C), AC 50 Hz<br>0.85...1.1 Uc operational at 140 °F (60 °C), AC 60 Hz |
| Inrush power in VA              | 70 VA at 68 °F (20 °C) (cos $\phi$ 0.75) 60 Hz<br>70 VA at 68 °F (20 °C) (cos $\phi$ 0.75) 50 Hz  |
| Hold-in power consumption in VA | 7.5 VA at 68 °F (20 °C) (cos $\phi$ 0.3) 60 Hz<br>7 VA at 68 °F (20 °C) (cos $\phi$ 0.3) 50 Hz  |
| Heat dissipation                | 2...3 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 signalling circuit   |
| Minimum switching voltage       | 17 V 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 signalling circuit  |

## Environment

|   |   |
|---|---|
| IP degree of protection                               | IP2x front face conforming to IEC 60529   |
| Protective treatment                                  | TH conforming to IEC 60068-2-30   |
| Pollution degree                                      | 3   |
| Ambient air temperature for operation                 | 23...140 °F (-5...60 °C)  |
| Ambient air temperature for storage                   | -76...176 °F (-60...80 °C)  |
| Permissible ambient air temperature around the device | -40...158 °F (-40...70 °C) at Uc  |
| Operating altitude                                    | 9842.52 ft (3000 m) without derating in temperature   |
| Fire resistance                                       | 1562 °F (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  | 3.58 in (91 mm)   |
| Width   | 1.77 in (45 mm)   |
| Depth   | 3.9 in (99 mm)  |
| Product weight  | 0.94 lb(US) (0.425 kg)  |

## Ordering and shipping details

|                       |                                    |
|-----------------------|------------------------------------|
| Category              | 22345 - CTR,D-LINE,OPEN,NONREV-NEW |
| Discount Schedule     | I12                                |
| GTIN                  | 00785901503187                     |
| Nbr. of units in pkg. | 1                                  |
| Package weight(Lbs)   | 1.03                               |
| Returnability         | Y                                  |
| Country of origin     | ID                                 |

## Offer Sustainability

|                          |   |
|--------------------------|---|
| Sustainable offer status | Green Premium product   |
| RoHS (date code: YYWW)   | Compliant - since 0702 - Schneider Electric declaration of conformity<br><a href="#">Schneider Electric declaration of conformity</a> |
| REACH                    | Reference not containing SVHC above the threshold   |

Reference not containing SVHC above the threshold

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|----------------------------------|-----------|
| Product environmental profile    | Available |
| Product end of life instructions | Available |

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### Contractual warranty

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| Warranty period | 18 months |
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