

## LC1D80008E7

TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 <= 440 V 125 A 48 V AC 50/60 Hz coil



### Main

|   |  |
|---|--|
| Range                                       | TeSys  |
| Product name                                | TeSys D  |
| Product or component type                   | Contacteur   |
| Device short name                           | LC1D   |
| Contacteur application                      | Resistive load   |
| Utilisation category                        | AC-1   |
| Poles description                           | 4P   |
| Pole contact composition                    | 2 NO + 2 NC  |
| [Ue] rated operational voltage              | <= 690 V AC for power circuit<br><= 300 V DC 25...400 Hz for power circuit   |
| [Ie] rated operational current              | 125 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit   |
| Control circuit type                        | AC 50/60 Hz  |
| [Uc] control circuit voltage                | 48 V AC 50/60 Hz   |
| [Uimp] rated impulse withstand voltage      | Conforming to IEC 60947  |
| Overvoltage category                        | III  |
| [Ith] conventional free air thermal current | 125 A at <= 60 °C for power circuit  |
| Irms rated making capacity                  | 1100 A at 440 V for power circuit conforming to IEC 60947  |
| Rated breaking capacity                     | 1100 A at 440 V for power circuit conforming to IEC 60947  |
| [Icw] rated short-time withstand current    | 135 A <= 40 °C 10 min power circuit<br>640 A <= 40 °C 10 s power circuit<br>990 A <= 40 °C 1 s power circuit<br>320 A <= 40 °C 1 min power circuit |
| Associated fuse rating                      | 160 A gG at <= 690 V coordination type 2 for power circuit<br>200 A gG at <= 690 V coordination type 1 for power circuit                           |
| Average impedance                           | 0.8 mOhm at 50 Hz - Ith 125 A for power circuit  |
| [Ui] rated insulation voltage               | 1000 V for power circuit conforming to IEC 60947-4-1<br>600 V for power circuit certifications CSA<br>600 V for power circuit certifications UL    |
| Electrical durability                       | 0.8 Mcycles 125 A AC-1 at Ue <= 440 V  |
| Power dissipation per pole                  | 12.5 W AC-1  |
| Protective cover                            | Without  |
| Mounting support                            | Plate<br>Rail  |
| Standards                                   | UL 508<br>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  |
| Product certifications                      | BV<br>CCC<br>CSA<br>DNV<br>GL<br>GOST<br>LROS (Lloyds register of shipping)  |

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                          |   |
|--------------------------|---|
| Connections - terminals  | <p>Control circuit : screw clamp terminals 2 cable(s)<br/>1...2.5 mm<sup>2</sup> - cable stiffness: flexible - with cable end</p> <p>Control circuit : screw clamp terminals 1 cable(s)<br/>1...4 mm<sup>2</sup> - cable stiffness: flexible - without cable end</p> <p>Control circuit : screw clamp terminals 2 cable(s)<br/>1...4 mm<sup>2</sup> - cable stiffness: flexible - without cable end</p> <p>Control circuit : screw clamp terminals 1 cable(s)<br/>1...4 mm<sup>2</sup> - cable stiffness: solid - without cable end</p> <p>Control circuit : screw clamp terminals 2 cable(s)<br/>1...4 mm<sup>2</sup> - cable stiffness: solid - without cable end</p> <p>Control circuit : screw clamp terminals 1 cable(s)<br/>1...2.5 mm<sup>2</sup> - cable stiffness: flexible - with cable end</p> <p>Power circuit : connector 1 cable(s) 4...50 mm<sup>2</sup> - cable stiffness: flexible - without cable end</p> <p>Power circuit : connector 2 cable(s) 4...25 mm<sup>2</sup> - cable stiffness: flexible - without cable end</p> <p>Power circuit : connector 1 cable(s) 4...50 mm<sup>2</sup> - cable stiffness: flexible - with cable end</p> <p>Power circuit : connector 2 cable(s) 4...16 mm<sup>2</sup> - cable stiffness: flexible - with cable end</p> <p>Power circuit : connector 1 cable(s) 4...50 mm<sup>2</sup> - cable stiffness: solid - without cable end</p> <p>Power circuit : connector 2 cable(s) 4...25 mm<sup>2</sup> - cable stiffness: solid - without cable end</p> |
| Tightening torque        | <p>Power circuit : 9 N.m - on connector - with screwdriver flat Ø 6 to Ø 8 mm</p> <p>Power circuit : 9 N.m - on connector hexagonal 4 mm</p> <p>Control circuit : 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm</p> <p>Control circuit : 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2</p>   |
| Operating time           | <p>20...35 ms closing</p> <p>6...20 ms opening</p>  |
| Safety reliability level | <p>B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1</p> <p>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1</p>   |
| Mechanical durability    | 4 Mcycles   |
| Operating rate           | 3600 cyc/h at ≤ 60 °C   |

## Complementary

|                                 |   |
|---------------------------------|---|
| Coil technology                 | Without built-in suppressor module  |
| Control circuit voltage limits  | <p>0.85...1.1 Uc operational at 55 °C, AC 60 Hz</p> <p>0.3...0.6 Uc drop-out at 55 °C, AC 50/60 Hz</p> <p>0.8...1.1 Uc operational at 55 °C, AC 50 Hz</p> |
| Inrush power in VA              | <p>245 VA at 20 °C (cos φ 0.75) 60 Hz</p> <p>245 VA at 20 °C (cos φ 0.75) 50 Hz</p>   |
| Hold-in power consumption in VA | <p>26 VA at 20 °C (cos φ 0.3) 60 Hz</p> <p>26 VA at 20 °C (cos φ 0.3) 50 Hz</p>   |
| Heat dissipation                | 6...10 W at 50/60 Hz  |

## 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                 | -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>Shocks contactor open 8 Gn for 11 ms<br>Vibrations contactor closed 3 Gn, 5...300 Hz<br>Shocks contactor closed 10 Gn for 11 ms |
| height                | 127 mm  |
| width                 | 96 mm   |
| depth                 | 140 mm  |
| product weight        | 1.84 kg   |

### Offer Sustainability

|                                  |   |
|----------------------------------|---|
| Sustainable offer status         | Green Premium product   |
| RoHS (date code: YYWW)           | Compliant - since 0707 - Schneider Electric declaration of conformity |
| REACH                            | Reference not containing SVHC above the threshold                     |
| Product environmental profile    | Available   |
| Product end of life instructions | Need no specific recycling operations                                 |