

## LC1D80008J5

TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 - <= 440 V 125 A - 12 V AC 50 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 Hz   |
| Control circuit voltage                     | 12 V AC 50 Hz  |
| [Uimp] rated impulse withstand voltage      | 8 kV 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                                   | EN 60947-4-1<br>EN 60947-5-1<br>IEC 60947-4-1<br>IEC 60947-5-1<br>UL 508<br>CSA C22.2 No 14  |
| Product certifications                      | BV<br>CCC<br>CSA<br>DNV<br>GL<br>GOST<br>RINA<br>UL<br>LROS  |

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|                          |  |
|--------------------------|--|
| 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>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: 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>Control circuit : screw clamp terminals 1 cable(s)<br>1...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit : connector 1 cable(s) 4...50 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Power circuit : connector 2 cable(s) 4...25 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Power circuit : connector 1 cable(s) 4...50 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit : connector 2 cable(s) 4...16 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit : connector 1 cable(s) 4...50 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Power circuit : connector 2 cable(s) 4...25 mm <sup>2</sup> - cable stiffness: solid - without cable end |
| Tightening torque        | Power circuit : 9 N.m - on connector - with screwdriver flat Ø 6 to Ø 8 mm<br>Power circuit : 9 N.m - on connector hexagonal 4 mm<br>Control circuit : 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Control circuit : 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2   |
| Operating time           | 20...35 ms closing<br>6...20 ms opening  |
| 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    | 10 Mcycles   |
| Operating rate           | 3600 cyc/h at ≤ 60 °C  |

## Complementary

|                                 |  |
|---------------------------------|--|
| Coil technology                 | Without built-in suppressor module   |
| Control circuit voltage limits  | 0.3...0.6 U <sub>c</sub> at 55 °C drop-out 50 Hz<br>0.85...1.1 U <sub>c</sub> at 55 °C operational 50 Hz |
| Inrush power in VA              | 200 VA at 20 °C (cos φ 0.75) 50 Hz   |
| Hold-in power consumption in VA | 20 VA at 20 °C (cos φ 0.3) 50 Hz   |
| Heat dissipation                | 6...10 W at 50 Hz  |

## 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                 | -5...60 °C   |
| Ambient air temperature for storage                   | -60...80 °C  |
| Permissible ambient air temperature around the device | -40...70 °C at U <sub>c</sub>  |
| 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 |

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         | 3389110075168   |
| RoHS                             | Compliant - since 0707 - Schneider Electric declaration of conformity |
| Product environmental profile    | 3389110075168   |
| Product end of life instructions | 3389110075168   |