

## LC1D80004N7

TeSys D contactor - 4P(4 NO) - AC-1 -  $\leq 440$  V  
125 A - 415 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                    | 4 NO                                                                                                                                                               |
| [Ue] rated operational voltage              | $\leq 690$ V AC for power circuit<br>$\leq 300$ V DC 25...400 Hz for power circuit                                                                                 |
| [Ie] rated operational current              | 125 A ( $\leq 60$ °C) at $\leq 440$ V AC AC-1 for power circuit                                                                                                    |
| Control circuit type                        | AC 50/60 Hz                                                                                                                                                        |
| Control circuit voltage                     | 415 V AC 50/60 Hz                                                                                                                                                  |
| [Uimp] rated impulse withstand voltage      | 8 kV conforming to IEC 60947                                                                                                                                       |
| Overvoltage category                        | III                                                                                                                                                                |
| [Ith] conventional free air thermal current | 125 A at $\leq 60$ °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 $\leq 40$ °C 10 min power circuit<br>640 A $\leq 40$ °C 10 s power circuit<br>990 A $\leq 40$ °C 1 s power circuit<br>320 A $\leq 40$ °C 1 min power circuit |
| Associated fuse rating                      | 160 A gG at $\leq 690$ V coordination type 2 for power circuit<br>200 A gG at $\leq 690$ 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 $\leq 440$ 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                                                                                                                      |

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|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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>0.3...0.6 U<sub>c</sub> at 55 °C drop-out 50/60 Hz</p> <p>0.8...1.1 U<sub>c</sub> at 55 °C operational 50 Hz</p> <p>0.85...1.1 U<sub>c</sub> at 55 °C operational 60 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                               | 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<br>Shocks contactor closed 10 Gn for 11 ms |
| Height                | 127 mm                                                                                                                                                                        |
| Width                 | 96 mm                                                                                                                                                                         |
| Depth                 | 125 mm                                                                                                                                                                        |
| Product weight        | 1.76 kg                                                                                                                                                                       |

### Offer Sustainability

|                                  |                                                                       |
|----------------------------------|-----------------------------------------------------------------------|
| Sustainable offer status         | Green Premium product                                                 |
| RoHS                             | Compliant - since 0701 - 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                                 |