

## LC1DT206B7

TeSys D contactor - 4P(4 NO) - AC-1 -  $\leq 440$  V 20 A - 24 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 25...400 Hz for power circuit<br>$\leq 300$ V DC for power circuit  |
| [Ie] rated operational current              | 20 A ( $\leq 60$ °C) at $\leq 440$ V AC AC-1 for power circuit  |
| Control circuit type                        | AC 50/60 Hz   |
| Control circuit voltage                     | 24 V AC 50/60 Hz  |
| Auxiliary contact composition               | 1 NO + 1 NC   |
| [Uimp] rated impulse withstand voltage      | 6 kV conforming to IEC 60947  |
| Overvoltage category                        | III   |
| [Ith] conventional free air thermal current | 20 A at $\leq 60$ °C for power circuit<br>10 A at $\leq 60$ °C for signalling circuit   |
| Irms rated making capacity                  | 250 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                     | 250 A at 440 V for power circuit conforming to IEC 60947  |
| [Icw] rated short-time withstand current    | 105 A $\leq 40$ °C 10 s power circuit<br>210 A $\leq 40$ °C 1 s power circuit<br>30 A $\leq 40$ °C 10 min power circuit<br>61 A $\leq 40$ °C 1 min power circuit<br>100 A 1 s signalling circuit<br>120 A 500 ms signalling circuit<br>140 A 100 ms signalling circuit  |
| Associated fuse rating                      | 20 A gG at $\leq 690$ V coordination type 2 for power circuit<br>25 A gG at $\leq 690$ V coordination type 1 for power circuit<br>10 A gG for signalling circuit conforming to IEC 60947-5-1  |
| Average impedance                           | 2.5 mOhm at 50 Hz - Ith 20 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 |
| Power dissipation per pole                  | 1.56 W AC-1   |
| Protective cover                            | With  |
| Mounting support                            | Plate<br>Rail   |
| Standards                                   | EN 60947-4-1<br>EN 60947-5-1<br>IEC 60947-4-1   |

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.

|                          |  |
|--------------------------|--|
|                          | 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  |
| Connections - terminals  | Control circuit : lugs-ring terminals - external diameter: 8 mm<br>Power circuit : lugs-ring terminals - external diameter: 8 mm   |
| Tightening torque        | Control circuit : 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm screw : M3.5<br>Control circuit : 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 screw : M3.5<br>Power circuit : 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 screw : M3.5<br>Power circuit : 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm screw : M3.5 |
| 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 ≤ 60 °C  |

## Complementary

|                                 |  |
|---------------------------------|--|
| Coil technology                 | Without built-in suppressor module   |
| Control circuit voltage limits  | 0.3...0.6 Uc at 60 °C drop-out 50/60 Hz<br>0.8...1.1 Uc at 60 °C operational 50 Hz<br>0.85...1.1 Uc at 60 °C operational 60 Hz |
| Inrush power in VA              | 70 VA at 20 °C (cos φ 0.75) 60 Hz<br>70 VA at 20 °C (cos φ 0.75) 50 Hz   |
| Hold-in power consumption in VA | 7.5 VA at 20 °C (cos φ 0.3) 60 Hz<br>7 VA at 20 °C (cos φ 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 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

|   |  |
|---|--|
| 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 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 |

Shocks contactor open 10 Gn for 11 ms  
Shocks contactor closed 15 Gn for 11 ms

|                |          |
|----------------|----------|
| Height         | 85 mm    |
| Width          | 45 mm    |
| Depth          | 92 mm    |
| Product weight | 0.365 kg |

### Offer Sustainability

|                                  |   |
|----------------------------------|---|
| Sustainable offer status         | Not Green Premium product   |
| RoHS                             | Compliant - since 0719 - Schneider Electric declaration of conformity |
| Product end of life instructions | Need no specific recycling operations                                 |