# Product data sheet Characteristics

# LC2D25EHE

TeSys D reversing contactor - 3P - <= 440 V - 25 A AC-3 - 48...130 V AC/DC coil



#### Main

| Main  |   |  |
|---|---|--|
| Range of product                            | TeSys D   |  |
| Range                                       | TeSys   |  |
| Product name                                | TeSys D Green   |  |
| Product or component type                   | Reversing contactor   |  |
| Device short name                           | LC2D  |  |
| Contactor application                       | Motor control<br>Resistive load   |  |
| Utilisation category                        | AC-3<br>AC-1  |  |
| Device presentation                         | Preassembled with reversing power busbar  |  |
| Poles description                           | 3P  |  |
| Pole contact composition                    | 3 NO  |  |
| [Ue] rated operational voltage              | <= 690 V AC 25400 Hz for power circuit  |  |
| [le] rated operational current              | 25 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit 40 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit   |  |
| Motor power kW                              | 11 kW at 380400 V AC 50/60 Hz<br>15 kW at 500 V AC 50/60 Hz<br>15 kW at 660690 V AC 50/60 Hz<br>5.5 kW at 220230 V AC 50/60 Hz<br>11 kW at 415440 V AC 50/60 Hz |  |
| Control circuit type                        | AC 50/60 Hz AC/DC electronic<br>DC AC/DC electronic   |  |
| [Uc] control circuit voltage                | 48130 V DC<br>48130 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   |  |
| [lth] conventional free air thermal current | 40 A at <= 60 °C for power circuit 10 A at <= 60 °C for signalling circuit  |  |
| Irms rated making capacity                  | 450 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1  |  |

|  | 250 A DC for signalling circuit conforming to IEC 60947-5-1   |
|--|---|
| Rated breaking capacity                  | 450 A at 440 V for power circuit conforming to IEC 60947  |
| [Icw] rated short-time withstand current | 120 A <= 40 °C 1 min power circuit 240 A <= 40 °C 10 s power circuit 380 A <= 40 °C 1 s power circuit 50 A <= 40 °C 10 min power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit   |
| Associated fuse rating                   | 40 A gG at <= 690 V coordination type 2 for power circuit 63 A gG at <= 690 V coordination type 1 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1  |
| Average impedance                        | 2 mOhm at 50 Hz - Ith 40 A for power circuit  |
| [Ui] rated insulation voltage            | 690 V for power circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-1  |
| Electrical durability                    | 650000 cycles 25 A AC-1 <= 440 V >= 17221<br>2 Mcycles 9 A AC-3 <= 440 V >= 17221<br>23000 cycles AC-4 <= 440 V >= 17221  |
| Power dissipation per pole               | 3.2 W AC-1<br>1.25 W AC-3   |
| Protective cover                         | With  |
| Interlocking type                        | Mechanical  |
| Mounting support                         | Rail<br>Plate   |
| Standards                                | EN/IEC 60947-4-1<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1<br>EN/IEC 60947-5-1  |
| Product certifications                   | UL<br>CSA<br>CCC<br>EAC<br>KC   |
| Connections - terminals                  | Control circuit : screw clamp terminals 2 cable(s) 12.5 mm² - cable stiffness: flexible - with cable  |
|  | end Power circuit : screw clamp terminals 1 cable(s) 1.510 mm² - cable stiffness: solid - without cable end   |
|  | Control circuit : screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - without cable end   |
|  | Control circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: flexible - without cable end  Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - with cable end  Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: solid - without cable end  Control circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: solid - without cable end  Power circuit: screw clamp terminals 1 cable(s) 2.510 mm² - cable stiffness: flexible - without cable end  Power circuit: screw clamp terminals 2 cable(s) 2.510 mm² - cable stiffness: flexible - without cable end  Power circuit: screw clamp terminals 1 cable(s) 110 mm² - cable stiffness: flexible - with cable end |
|  | Power circuit: screw clamp terminals 2 cable(s) 1.56 mm² - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 2 cable(s) 2.510 mm² - cable stiffness: solid - without cable end  |
| Tightening torque                        | Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver Philips No 2   |
| Operating time                           | 4555 ms closing<br>2090 ms opening  |
| Safety reliability level                 | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1   |
| Mechanical durability                    | 15000000 cycles   |
| Operating rate                           | 3600 cyc/h at <= 60 °C  |

## Complementary

| Coil technology                | Built-in bidirectional peak limiting |
|--------------------------------|--------------------------------------|
| Control circuit voltage limits | <= 0.1 Uc drop-out at 60 °C          |

| Inrush power in VA              | 25 VA at 20 °C 50/60 Hz   |  |
|---------------------------------|---|--|
| Inrush power in W               | 24 W at 20 °C   |  |
| Hold-in power consumption in VA | 1.3 VA at 20 °C 50/60 Hz  |  |
| Hold-in power consumption in W  | 0.8 W at 20 °C  |  |
| Heat dissipation                | 0.8 W at 50/60 Hz   |  |
| Auxiliary contacts type         | Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1 Type mirror contact (1 NC) conforming to IEC 60947-4-1 |  |
| Signalling circuit frequency    | 25400 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) 1.5 ms on energisation (between NC and NO contact)                  |  |
| Insulation resistance           | > 10 MOhm for signalling circuit  |  |
|                                 |   |  |

#### Environment

| IP20 front face conforming to IEC 60529  |
|--|
| TH conforming to IEC 60068-2-30  |
| 3  |
| -2560 °C   |
| -6080 °C   |
| -4070 °C at Uc   |
| 3000 m without derating in temperature   |
| 850 °C conforming to IEC 60695-2-1   |
| V1 conforming to UL 94   |
| Vibrations contactor open 2 Gn, 5300 Hz Vibrations contactor closed 4 Gn, 5300 Hz Shocks contactor closed 15 Gn for 11 ms Shocks contactor open 8 Gn for 11 ms |
| 85 mm  |
| 90 mm  |
| 92 mm  |
| 0.913 kg   |
| Grey SE GREY 6<br>Green SE GREEN 2   |
|  |

### Offer Sustainability

| onor odotamasmity                |   |  |
|----------------------------------|---|--|
| Sustainable offer status         | Green Premium product   |  |
| RoHS (date code: YYWW)           | Compliant - since 1640 - Schneider Electric declaration of conformity |  |
|                                  | Schneider Electric declaration of conformity                          |  |
| REACh                            | Reference not containing SVHC above the threshold                     |  |
|                                  | Reference not containing SVHC above the threshold                     |  |
| Product environmental profile    | Available   |  |
|                                  | Product environmental   |  |
| Product end of life instructions | Available   |  |
|                                  | End of life manual  |  |
|                                  |   |  |