## Product data sheet Characteristics

# LC1D65008U6

TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 - <= 440 V 80 A - 240 V AC 60 Hz coil





#### Main

| Iviairi                                     |                                                                                                                                                |  |  |  |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Range                                       | TeSys                                                                                                                                          |  |  |  |
| Product name                                | TeSys D                                                                                                                                        |  |  |  |
| Product or component type                   | Contactor                                                                                                                                      |  |  |  |
| Device short name                           | LC1D                                                                                                                                           |  |  |  |
| Contactor application                       | Resistive load                                                                                                                                 |  |  |  |
| Utilisation category                        | AC-1                                                                                                                                           |  |  |  |
| Poles description                           | 4P                                                                                                                                             |  |  |  |
| Power pole contact composition              | 2 NO + 2 NC                                                                                                                                    |  |  |  |
| [Ue] rated operational voltage              | <= 300 V DC for power circuit<br><= 690 V AC 25400 Hz for power circuit                                                                        |  |  |  |
| [le] rated operational current              | 80 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit                                                                                          |  |  |  |
| Control circuit type                        | AC 60 Hz                                                                                                                                       |  |  |  |
| [Uc] control circuit voltage                | 240 V AC 60 Hz                                                                                                                                 |  |  |  |
| [Uimp] rated impulse withstand voltage      | Conforming to IEC 60947                                                                                                                        |  |  |  |
| Overvoltage category                        | III                                                                                                                                            |  |  |  |
| [lth] conventional free air thermal current | 80 A at <= 60 °C for power circuit                                                                                                             |  |  |  |
| Irms rated making capacity                  | 1000 A at 440 V for power circuit conforming to IEC 60947                                                                                      |  |  |  |
| Rated breaking capacity                     | 1000 A at 440 V for power circuit conforming to IEC 60947                                                                                      |  |  |  |
| [lcw] rated short-time withstand current    | 520 A <= 40 °C 10 s power circuit 900 A <= 40 °C 1 s power circuit 110 A <= 40 °C 10 min power circuit 260 A <= 40 °C 1 min power circuit      |  |  |  |
| Associated fuse rating                      | 125 A gG at <= 690 V coordination type 1 for power circuit 125 A gG at <= 690 V coordination type 2 for power circuit                          |  |  |  |
| Average impedance                           | 1.5 mOhm at 50 Hz - Ith 80 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 |  |  |  |
| Electrical durability                       | 1.4 Mcycles 80 A AC-1 at Ue <= 440 V                                                                                                           |  |  |  |
|                                             |                                                                                                                                                |  |  |  |

| Power dissipation per pole | 9.6 W AC-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Safety cover               | Without                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |
| Mounting support           | Plate<br>Rail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |
| Standards                  | 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<br>UL 508                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |
| Product certifications     | BV CCC CSA DNV GL GOST LROS (Lloyds register of shipping) RINA UL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
| Connections - terminals    | Control circuit: screw clamp terminals 2 cable(s) 12.5 mm² - cable stiffness: flexible - with 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) 135 mm² - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 2 cable(s) 125 mm² - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 1 cable(s) 135 mm² - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 1 cable(s) 125 mm² - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 1 cable(s) 125 mm² - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 1 cable(s) 125 mm² - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 2 cable(s) 125 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: 8 N.m - on screw clamp terminals - cable 2535 mm² hexagonal 4 mm Power circuit: 5 N.m - on screw clamp terminals - cable 125 mm² hexagonal 4 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |
| Operating time             | 1226 ms closing<br>419 ms opening                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
| Cofety 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
| Safety reliability level   | B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |
| Mechanical durability      | B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1  6 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |

#### Complementary

| Coil technology                 | Without built-in suppressor module                                                 |  |
|---------------------------------|------------------------------------------------------------------------------------|--|
| Control circuit voltage limits  | 0.851.1 Uc operational at 60 °C, AC 60 Hz<br>0.30.6 Uc drop-out at 60 °C, AC 60 Hz |  |
| Inrush power in VA              | 140 VA at 20 °C (cos φ 0.75) 60 Hz                                                 |  |
| Hold-in power consumption in VA | 13 VA at 20 °C (cos φ 0.3) 60 Hz                                                   |  |
| Heat dissipation                | 45 W at 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                 | -560 °C                                 |  |  |
| Ambient air temperature for storage                   | -6080 °C                                |  |  |
| Permissible ambient air temperature around the device | -4070 °C at Uc                          |  |  |

| Operating altitude    | 3000 m without derating                                                                                                                                                  |  |  |  |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Fire resistance       | 850 °C conforming to IEC 60695-2-1                                                                                                                                       |  |  |  |
| Flame retardance      | V1 conforming to UL 94                                                                                                                                                   |  |  |  |
| Mechanical robustness | Vibrations contactor open 2 Gn, 5300 Hz<br>Vibrations contactor closed 4 Gn, 5300 Hz<br>Shocks contactor open 10 Gn for 11 ms<br>Shocks contactor closed 15 Gn for 11 ms |  |  |  |
| Height                | 127 mm                                                                                                                                                                   |  |  |  |
| Width                 | 85 mm                                                                                                                                                                    |  |  |  |
| Depth                 | 125 mm                                                                                                                                                                   |  |  |  |
| Product weight        | 1.45 kg                                                                                                                                                                  |  |  |  |

### Offer Sustainability

| Sustainable offer status         | Green Premium product                                                 |  |  |
|----------------------------------|-----------------------------------------------------------------------|--|--|
| RoHS (date code: YYWW)           | Compliant - since 0707 - 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 Profile                                         |  |  |
| Product end of life instructions | Available                                                             |  |  |
|                                  | End of Life Information                                               |  |  |

#### Contractual warranty

| •               |           |  |
|-----------------|-----------|--|
| Warranty period | 18 months |  |