# Product data sheet Characteristics

# LC1D80008B7

TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 <= 440 V 125 A 24 V AC 50/60 Hz coil





(!) To be discontinued

#### Main

| Range                                       | TeSys  | - sbec                                     |  |
|---|--|--|--|
| Product name                                | TeSys D  | cts fo                                     |  |
| Product or component type                   | Contactor  | -pour                                      |  |
| Device short name                           | LC1D   | ese  |  |
| Contactor application                       | TeSys D Contactor  C1D Resistive load AC-1 4P  |  |  |
| Utilisation category                        | AC-1   | ability                                    |  |
| Poles description                           | 4P   | or reli                                    |  |
| Power pole contact composition              | 2 NO + 2 NC  | _ oility                                   |  |
| [Ue] rated operational voltage              | Power circuit: <= 300 V DC 25400 Hz Power circuit: <= 690 V AC   | not to be used for determining suitability |  |
| [le] rated operational current              | 125 A (at <60 °C) at <= 440 V AC AC-1 for power circuit  | ermin                                      |  |
| Control circuit type                        | AC at 50/60 Hz   | C at 50/60 Hz                              |  |
| [Uc] control circuit voltage                |  |  |  |
| [Uimp] rated impulse withstand voltage      | 3 kV conforming to IEC 60947   |  |  |
| Overvoltage category                        | ill a pr   |  |  |
| [Ith] conventional free air thermal current | 125 A (at 60 °C) for power circuit  1100 A at 440 V for power circuit conforming to IEC 60947  1100 A at 440 V for power circuit conforming to IEC 60947   |  |  |
| 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  |  |  |
| [lcw] rated short-time withstand current    | 640 A 40 °C - 10 s for power circuit  990 A 40 °C - 1 s for power circuit  135 A 40 °C - 10 min for power circuit  320 A 40 °C - 1 min for power circuit  200 A gG at <= 690 V coordination type 1 for power circuit |  |  |
| Associated fuse rating                      | 200 A gG at <= 690 V coordination type 1 for power circuit  160 A gG at <= 690 V coordination type 2 for power circuit   |  |  |
| Average impedance                           | 0.8 mOhm - Ith 125 A 50 Hz for power circuit   |  |  |
| [Ui] rated insulation voltage               | 0.8 mOhm - Ith 125 A 50 Hz for power circuit  Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Power circuit: 1000 V conforming to IEC 60947-4-1   |  |  |

| Electrical durability      | 0.8 Mcycles 125 A AC-1 at Ue <= 440 V  |  |
|----------------------------|--|--|
| Power dissipation per pole | 12.5 W AC-1  |  |
| Front cover                | Without  |  |
| Mounting support           | Rail<br>Plate  |  |
| 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     | GL RINA UL CSA CCC BV DNV LROS (Lloyds register of shipping) GOST  |  |
| Connections - terminals    | Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 12.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²solid without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²solid without cable end Power circuit: connector 1 cable(s) 450 mm²flexible without cable end Power circuit: connector 2 cable(s) 425 mm²flexible without cable end Power circuit: connector 1 cable(s) 450 mm²flexible with cable end Power circuit: connector 2 cable(s) 416 mm²flexible with cable end Power circuit: connector 1 cable(s) 450 mm²solid without cable end Power circuit: connector 2 cable(s) 450 mm²solid without cable end Power circuit: connector 2 cable(s) 450 mm²solid without cable end |  |
| Tightening torque          | Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 9 N.m - on connector - with screwdriver flat Ø 6 to Ø 8 mm Power circuit: 9 N.m - on connector hexagonal screw head 4 mm   |  |
| Operating time             | 2035 ms closing<br>620 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      | 4 Mcycles  |  |
| Maximum operating rate     | 3600 cyc/h 60 °C   |  |
|                            |  |  |

### Complementary

| Complementary                   |  |  |
|---------------------------------|--|--|
| Coil technology                 | Without built-in suppressor module   |  |
| Inrush power in VA              | 245 VA 60 Hz cos phi 0.75 (at 20 °C)<br>245 VA 50 Hz cos phi 0.75 (at 20 °C) |  |
| Hold-in power consumption in VA | 26 VA 60 Hz cos phi 0.3 (at 20 °C)<br>26 VA 50 Hz cos phi 0.3 (at 20 °C)     |  |
| Heat dissipation                | 610 W at 50/60 Hz  |  |
| Contact compatibility           | M1   |  |
| Compatibility code              | LC1D   |  |

## 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 storage | -6080 °C                                 |  |
| 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 |  |

| Shocks contactor open: 8 Gn for 11 ms      |
|--|
| Vibrations contactor closed: 3 Gn, 5300 Hz |
| Shocks contactor closed: 10 Gn for 11 ms   |

| Height     | 127 mm  |  |
|------------|---------|--|
| Width      | 96 mm   |  |
| Depth      | 140 mm  |  |
| Net weight | 1.84 kg |  |

## Packing Units

| Unit Type of Package 1       | PCE      |  |
|------------------------------|----------|--|
| Number of Units in Package 1 | 1        |  |
| Package 1 Weight             | 1.842 kg |  |
| Package 1 Height             | 15.5 cm  |  |
| Package 1 width              | 11 cm    |  |
| Package 1 Length             | 13.5 cm  |  |

## Offer Sustainability

| Sustainable offer status   | Green Premium product   |  |
|----------------------------|---|--|
| REACh free of SVHC         | Yes   |  |
| EU RoHS Directive          | Compliant EU RoHS Declaration   |  |
| Toxic heavy metal free     | Yes   |  |
| Mercury free               | Yes   |  |
| RoHS exemption information | Yes   |  |
| China RoHS Regulation      | China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)                                    |  |
| Environmental Disclosure   | Product Environmental Profile   |  |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |  |
| PVC free                   | Yes   |  |

## Contractual warranty

| Marranty   | 10 months    |  |
|------------|--------------|--|
| VValiality | 10 111011115 |  |
|            |              |  |