

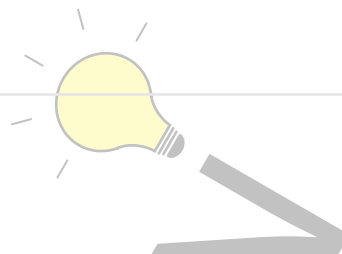
# Product data sheet

Specifications



TeSys Deca contactor , 4P(2 NO + 2 NC) , AC-1  $\leq$  440V, 60 A 220V AC 50/60 Hz coil

LC1D40008M7



## Main

|   |   |
|---|---|
| Range                                       | TeSys   |
| Product name                                | TeSys D<br>TeSys Deca   |
| Product or component type                   | Contacteur  |
| Device short name                           | LC1D  |
| Contacteur application                      | Resistive load  |
| Utilisation category                        | AC-1  |
| Poles description                           | 4P  |
| Power pole contact composition              | 2 NO + 2 NC   |
| [Ue] rated operational voltage              | Power circuit: $\leq$ 690 V AC 25...400 Hz<br>Power circuit: $\leq$ 300 V DC  |
| [Ie] rated operational current              | 60 A (at $<60$ °C) at $\leq$ 440 V AC AC-1 for power circuit  |
| Control circuit type                        | AC at 50/60 Hz  |
| [Uc] control circuit voltage                | 220 V AC 50/60 Hz   |
| [Uimp] rated impulse withstand voltage      | 6 kV conforming to IEC 60947  |
| Overvoltage category                        | III   |
| [Ith] conventional free air thermal current | 60 A (at $60$ °C) for power circuit   |
| Irms rated making capacity                  | 800 A at 440 V for power circuit conforming to IEC 60947  |
| Rated breaking capacity                     | 800 A at 440 V for power circuit conforming to IEC 60947  |
| [Icw] rated short-time withstand current    | 320 A $40$ °C - 10 s for power circuit<br>720 A $40$ °C - 1 s for power circuit<br>72 A $40$ °C - 10 min for power circuit<br>165 A $40$ °C - 1 min for power circuit |
| Associated fuse rating                      | 80 A gG at $\leq$ 690 V coordination type 1 for power circuit<br>80 A gG at $\leq$ 690 V coordination type 2 for power circuit  |
| Average impedance                           | 1.5 mOhm - Ith 60 A 50 Hz for power circuit   |
| [Ui] rated insulation voltage               | Power circuit: 600 V CSA certified<br>Power circuit: 600 V UL certified<br>Power circuit: 690 V conforming to IEC 60947-4-1   |
| Electrical durability                       | 1.4 Mcycles 60 A AC-1 at Ue $\leq$ 440 V  |
| Power dissipation per pole                  | 5.4 W AC-1  |
| Front cover                                 | Without   |

|  |  |
|--|--|
| <b>Mounting support</b>                      | Plate<br>Rail  |
| <b>Standards</b>                             | 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  |
| <b>Product certifications</b>                | RINA<br>GL<br>UL<br>GOST<br>BV<br>LROS (Lloyds register of shipping)<br>DNV<br>CCC<br>CSA  |
| <b>Connections - terminals</b>               | Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible without cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> solid without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> solid without cable end<br>Power circuit: screw clamp terminals 1 cable(s) 1...35 mm <sup>2</sup> flexible without cable end<br>Power circuit: screw clamp terminals 2 cable(s) 1...25 mm <sup>2</sup> flexible without cable end<br>Power circuit: screw clamp terminals 1 cable(s) 1...35 mm <sup>2</sup> flexible with cable end<br>Power circuit: screw clamp terminals 2 cable(s) 1...25 mm <sup>2</sup> flexible with cable end<br>Power circuit: screw clamp terminals 1 cable(s) 1...35 mm <sup>2</sup> solid without cable end<br>Power circuit: screw clamp terminals 2 cable(s) 1...25 mm <sup>2</sup> solid without cable end |
| <b>Tightening torque</b>                     | Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>Power circuit: 8 N.m - on screw clamp terminals - cable 25...35 mm <sup>2</sup> hexagonal screw head 4 mm<br>Power circuit: 5 N.m - on screw clamp terminals - cable 1...25 mm <sup>2</sup> hexagonal screw head 4 mm<br>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2   |
| <b>Operating time</b>                        | 4...19 ms opening<br>12...26 ms closing  |
| <b>Safety reliability level</b>              | 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   |
| <b>Mechanical durability</b>                 | 6 Mcycles  |
| <b>Maximum operating rate</b>                | 3600 cyc/h 60 °C   |
| <b>Complementary</b>                         |  |
| <b>Coil technology</b>                       | Without built-in suppressor module   |
| <b>Control circuit voltage limits</b>        | 0.3...0.6 U <sub>c</sub> (-40...70 °C):drop-out AC 50/60 Hz<br>0.8...1.1 U <sub>c</sub> (-40...60 °C):operational AC 50 Hz<br>0.85...1.1 U <sub>c</sub> (-40...60 °C):operational AC 60 Hz<br>1...1.1 U <sub>c</sub> (60...70 °C):operational AC 50/60 Hz  |
| <b>Inrush power in VA</b>                    | 140 VA 60 Hz cos phi 0.75 (at 20 °C)<br>160 VA 50 Hz cos phi 0.75 (at 20 °C)   |
| <b>Hold-in power consumption in VA</b>       | 13 VA 60 Hz cos phi 0.3 (at 20 °C)<br>15 VA 50 Hz cos phi 0.3 (at 20 °C)   |
| <b>Heat dissipation</b>                      | 4...5 W at 50/60 Hz  |
| <b>Environment</b>                           |  |
| <b>IP degree of protection</b>               | IP20 front face conforming to IEC 60529  |
| <b>Climatic withstand</b>                    | conforming to IACS E10   |
| <b>Protective treatment</b>                  | TH conforming to IEC 60068-2-30  |
| <b>Pollution degree</b>                      | 3  |
| <b>Ambient air temperature for operation</b> | -40...60 °C<br>60...70 °C with derating  |
| <b>Ambient air temperature for storage</b>   | -60...80 °C  |
| <b>Operating altitude</b>                    | 0...3000 m   |
| <b>Fire resistance</b>                       | 850 °C conforming to IEC 60695-2-1   |

|                              |  |
|------------------------------|--|
| <b>Mechanical robustness</b> | Vibrations contactor open: 2 Gn, 5...300 Hz<br>Vibrations contactor closed: 4 Gn, 5...300 Hz<br>Shocks contactor closed: 15 Gn for 11 ms<br>Shocks contactor open: 10 Gn for 11 ms |
| <b>Height</b>                | 127 mm   |
| <b>Width</b>                 | 85 mm  |
| <b>Depth</b>                 | 125 mm   |
| <b>Net weight</b>            | 1.44 kg  |

## Packing Units

|                                     |          |
|-------------------------------------|----------|
| <b>Unit Type of Package 1</b>       | PCE      |
| <b>Number of Units in Package 1</b> | 1        |
| <b>Package 1 Weight</b>             | 1.47 kg  |
| <b>Package 1 Height</b>             | 11.2 cm  |
| <b>Package 1 width</b>              | 13.5 cm  |
| <b>Package 1 Length</b>             | 15.2 cm  |
| <b>Unit Type of Package 2</b>       | S02      |
| <b>Number of Units in Package 2</b> | 5        |
| <b>Package 2 Weight</b>             | 7.605 kg |
| <b>Package 2 Height</b>             | 15 cm    |
| <b>Package 2 width</b>              | 30 cm    |
| <b>Package 2 Length</b>             | 40 cm    |
| <b>Package 3 Height</b>             | 73.5 cm  |

## Offer Sustainability

|                                   |   |
|-----------------------------------|---|
| <b>Sustainable offer status</b>   | Green Premium product   |
| <b>REACH Regulation</b>           | <a href="#">REACH Declaration</a>   |
| <b>REACH free of SVHC</b>         | Yes   |
| <b>EU RoHS Directive</b>          | Compliant<br><a href="#">EU RoHS Declaration</a>  |
| <b>Toxic heavy metal free</b>     | Yes   |
| <b>Mercury free</b>               | Yes   |
| <b>RoHS exemption information</b> | Yes   |
| <b>China RoHS Regulation</b>      | <a href="#">China RoHS declaration</a><br>Pro-active China RoHS declaration (out of China RoHS legal scope)   |
| <b>Environmental Disclosure</b>   | <a href="#">Product Environmental Profile</a>   |
| <b>Circularity Profile</b>        | <a href="#">End of Life Information</a>   |
| <b>WEEE</b>                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins   |
| <b>California proposition 65</b>  | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

## Contractual warranty

|                 |           |
|-----------------|-----------|
| <b>Warranty</b> | 18 months |
|-----------------|-----------|