

# Product datasheet

Specifications



## TeSys D contactor - 3P(3 NO) - AC-3 - $\leq 440$ V 9 A - 72 V DC coil

LC1D09SD

**Price: 1,075.96 ZAR**

### Main

|                                       |   |
|---------------------------------------|---|
| <b>Range Of Product</b>               | TeSys Deca  |
| <b>Product Or Component Type</b>      | Contactors  |
| <b>Device Short Name</b>              | LC1D  |
| <b>Contactors Application</b>         | Resistive load<br>Motor control   |
| <b>Utilisation Category</b>           | AC-3<br>AC-4<br>AC-1<br>AC-3e   |
| <b>Poles Description</b>              | 3P  |
| <b>[Ue] Rated Operational Voltage</b> | Power circuit: $\leq 690$ V AC 25...400 Hz<br>Power circuit: $\leq 300$ V DC  |
| <b>[Ie] Rated Operational Current</b> | 9 A (at $<60$ °C) at $\leq 440$ V AC AC-3 for power circuit<br>25 A (at $<60$ °C) at $\leq 440$ V AC AC-1 for power circuit<br>9 A (at $<60$ °C) at $\leq 440$ V AC AC-3e for power circuit |
| <b>[Uc] Control Circuit Voltage</b>   | 72 V DC   |

### Complementary

|  |   |
|--|---|
| <b>Motor Power Kw</b>                              | 2.2 kW at 220...230 V AC 50/60 Hz (AC-3)<br>4 kW at 380...400 V AC 50/60 Hz (AC-3)<br>4 kW at 415...440 V AC 50/60 Hz (AC-3)<br>5.5 kW at 500 V AC 50/60 Hz (AC-3)<br>5.5 kW at 660...690 V AC 50/60 Hz (AC-3)<br>2.2 kW at 400 V AC 50/60 Hz (AC-4)<br>2.2 kW at 220...230 V AC 50/60 Hz (AC-3e)<br>4 kW at 380...400 V AC 50/60 Hz (AC-3e)<br>4 kW at 415...440 V AC 50/60 Hz (AC-3e)<br>5.5 kW at 500 V AC 50/60 Hz (AC-3e)<br>5.5 kW at 660...690 V AC 50/60 Hz (AC-3e) |
| <b>Motor Power Hp</b>                              | 1 hp at 230/240 V AC 50/60 Hz for 1 phase motors<br>2 hp at 200/208 V AC 50/60 Hz for 3 phases motors<br>2 hp at 230/240 V AC 50/60 Hz for 3 phases motors<br>5 hp at 460/480 V AC 50/60 Hz for 3 phases motors<br>7.5 hp at 575/600 V AC 50/60 Hz for 3 phases motors<br>0.33 hp at 115 V AC 50/60 Hz for 1 phase motors   |
| <b>Compatibility Code</b>                          | LC1D  |
| <b>Pole Contact Composition</b>                    | 3 NO  |
| <b>Protective Cover</b>                            | With  |
| <b>[Ith] Conventional Free Air Thermal Current</b> | 25 A (at 60 °C) for power circuit<br>10 A (at 60 °C) for signalling circuit   |
| <b>Irms Rated Making Capacity</b>                  | 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  |
| <b>Rated Breaking Capacity</b>                     | 250 A at 440 V for power circuit conforming to IEC 60947  |

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

|   |  |
|---|--|
| <b>[Icw] Rated Short-Time Withstand Current</b> | 105 A 40 °C - 10 s for power circuit<br>210 A 40 °C - 1 s for power circuit<br>30 A 40 °C - 10 min for power circuit<br>61 A 40 °C - 1 min for power circuit<br>100 A - 1 s for signalling circuit<br>120 A - 500 ms for signalling circuit<br>140 A - 100 ms for signalling circuit |
| <b>Associated Fuse Rating</b>                   | 10 A gG for signalling circuit conforming to IEC 60947-5-1<br>25 A gG at <= 690 V coordination type 1 for power circuit<br>20 A gG at <= 690 V coordination type 2 for power circuit   |
| <b>Average Impedance</b>                        | 2.5 mOhm - Ith 25 A 50 Hz for power circuit  |
| <b>Power Dissipation Per Pole</b>               | 1.56 W AC-1<br>0.2 W AC-3<br>0.2 W AC-3e   |
| <b>[Ui] Rated Insulation Voltage</b>            | Power circuit: 690 V conforming to IEC 60947-4-1<br>Power circuit: 600 V CSA certified<br>Power circuit: 600 V UL certified<br>Signalling circuit: 690 V conforming to IEC 60947-1<br>Signalling circuit: 600 V CSA certified<br>Signalling circuit: 600 V UL certified              |
| <b>Overvoltage Category</b>                     | III  |
| <b>Pollution Degree</b>                         | 3  |
| <b>[Uimp] Rated Impulse Withstand Voltage</b>   | 6 kV conforming to IEC 60947   |
| <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>                    | 30 Mcycles   |
| <b>Electrical Durability</b>                    | 0.6 Mcycles 25 A AC-1 at Ue <= 440 V<br>2 Mcycles 9 A AC-3 at Ue <= 440 V<br>2 Mcycles 9 A AC-3e at Ue <= 440 V  |
| <b>Control Circuit Type</b>                     | DC standard  |
| <b>Coil Technology</b>                          | Built-in bidirectional peak limiting diode suppressor  |
| <b>Control Circuit Voltage Limits</b>           | 0.1...0.25 Uc (-40...70 °C):drop-out DC<br>0.7...1.25 Uc (-40...60 °C):operational DC<br>1...1.25 Uc (60...70 °C):operational DC   |
| <b>Inrush Power In W</b>                        | 5.4 W (at 20 °C)   |
| <b>Hold-In Power Consumption In W</b>           | 5.4 W at 20 °C   |
| <b>Operating Time</b>                           | 63 ±15 % ms closing<br>20 ±20 % ms opening   |
| <b>Time Constant</b>                            | 28 ms  |
| <b>Maximum Operating Rate</b>                   | 3600 cyc/h 60 °C   |

|                                |  |
|--------------------------------|--|
| <b>Connections - Terminals</b> | Power circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end   |
|                                | Power circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end   |
|                                | Power circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end      |
|                                | Power circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end    |
|                                | Power circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end      |
|                                | Power circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end      |
|                                | Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end |
|                                | Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end |
|                                | Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end    |
|                                | Control circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end  |
|                                | Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end    |
|                                | Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end    |

|                          |  |
|--------------------------|--|
| <b>Tightening Torque</b> | Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>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>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2<br>Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 |
|--------------------------|--|

|                                      |             |
|--------------------------------------|-------------|
| <b>Auxiliary Contact Composition</b> | 1 NO + 1 NC |
|--------------------------------------|-------------|

|                                |  |
|--------------------------------|--|
| <b>Auxiliary Contacts Type</b> | 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 |
|--------------------------------|--|

|                                     |             |
|-------------------------------------|-------------|
| <b>Signalling Circuit Frequency</b> | 25...400 Hz |
|-------------------------------------|-------------|

|                                  |                             |
|----------------------------------|-----------------------------|
| <b>Minimum Switching Voltage</b> | 17 V for signalling circuit |
|----------------------------------|-----------------------------|

|                                  |                             |
|----------------------------------|-----------------------------|
| <b>Minimum Switching Current</b> | 5 mA for signalling circuit |
|----------------------------------|-----------------------------|

|                              |                                  |
|------------------------------|----------------------------------|
| <b>Insulation Resistance</b> | > 10 MOhm for signalling circuit |
|------------------------------|----------------------------------|

|                         |   |
|-------------------------|---|
| <b>Non-Overlap Time</b> | 1.5 ms on de-energisation between NC and NO contact<br>1.5 ms on energisation between NC and NO contact |
|-------------------------|---|

|                         |               |
|-------------------------|---------------|
| <b>Mounting Support</b> | Rail<br>Plate |
|-------------------------|---------------|

## Environment

|                  |  |
|------------------|--|
| <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<br>IEC 60335-1 |
|------------------|--|

|                               |   |
|-------------------------------|---|
| <b>Product Certifications</b> | GL<br>BV<br>DNV<br>LROS (Lloyds register of shipping)<br>RINA<br>UL<br>CCC<br>CSA<br>GOST<br>UKCA<br>CB |
|-------------------------------|---|

|                                |   |
|--------------------------------|---|
| <b>IP Degree Of Protection</b> | IP20 front face conforming to IEC 60529 |
|--------------------------------|---|

|                             |                                 |
|-----------------------------|---------------------------------|
| <b>Protective Treatment</b> | TH conforming to IEC 60068-2-30 |
|-----------------------------|---------------------------------|

|  |  |
|--|--|
| <b>Climatic Withstand</b>                                    | conforming to IACS E10 exposure to damp heat<br>conforming to IEC 60947-1 Annex Q category D exposure to damp heat   |
| <b>Permissible Ambient Air Temperature Around The Device</b> | -40...60 °C<br>60...70 °C with derating  |
| <b>Operating Altitude</b>                                    | 0...3000 m   |
| <b>Fire Resistance</b>                                       | 850 °C conforming to IEC 60695-2-1   |
| <b>Flame Retardance</b>                                      | V1 conforming to UL 94   |
| <b>Mechanical Robustness</b>                                 | Vibrations contactor open (2 Gn, 5...300 Hz)<br>Vibrations contactor closed (4 Gn, 5...300 Hz)<br>Shocks contactor open (10 Gn for 11 ms)<br>Shocks contactor closed (15 Gn for 11 ms) |
| <b>Height</b>  | 77 mm  |
| <b>Width</b>   | 45 mm  |
| <b>Depth</b>   | 95 mm  |
| <b>Net Weight</b>  | 0.48 kg  |

## Packing Units

|                                     |          |
|-------------------------------------|----------|
| <b>Unit Type Of Package 1</b>       | PCE      |
| <b>Number Of Units In Package 1</b> | 1        |
| <b>Package 1 Height</b>             | 11.0 cm  |
| <b>Package 1 Width</b>              | 9.4 cm   |
| <b>Package 1 Length</b>             | 5.0 cm   |
| <b>Package 1 Weight</b>             | 492.0 g  |
| <b>Unit Type Of Package 2</b>       | S02      |
| <b>Number Of Units In Package 2</b> | 15       |
| <b>Package 2 Height</b>             | 15 cm    |
| <b>Package 2 Width</b>              | 30 cm    |
| <b>Package 2 Length</b>             | 40 cm    |
| <b>Package 2 Weight</b>             | 7.731 kg |

## Contractual warranty

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

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

## Well-being performance

Mercury Free

Rohs Exemption Information Yes

Pvc Free

## Certifications & Standards

Reach Regulation [REACH Declaration](#)

Eu Rohs Directive Compliant with Exemptions

China Rohs Regulation [China RoHS declaration](#)  
Product out of China RoHS scope. Substance declaration for your information

Environmental Disclosure [Product Environmental Profile](#)

Circularity Profile [End of Life Information](#)