

# Product data sheet

Specifications



## Reversing contactor, TeSys Deca, 3P(3NO), AC-3, <=440V, 9A, 120V AC 50/60Hz coil

LC2D0995G7

❗ Discontinued

### Main

|                                             |                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                       | TeSys                                                                                                                                                                                                                                                                                                  |
| Product Name                                | TeSys Deca                                                                                                                                                                                                                                                                                             |
| Product Or Component Type                   | Reversing contactor                                                                                                                                                                                                                                                                                    |
| Device Short Name                           | LC2D                                                                                                                                                                                                                                                                                                   |
| Contactor Application                       | Resistive load<br>Motor control                                                                                                                                                                                                                                                                        |
| Utilisation Category                        | AC-3<br>AC-1                                                                                                                                                                                                                                                                                           |
| Device Presentation                         | Preassembled with reversing power busbar                                                                                                                                                                                                                                                               |
| Poles Description                           | 3P                                                                                                                                                                                                                                                                                                     |
| Power Pole Contact Composition              | 3 NO                                                                                                                                                                                                                                                                                                   |
| [Ue] Rated Operational Voltage              | Power circuit: <= 690 V AC 25...400 Hz<br>Power circuit: <= 300 V DC                                                                                                                                                                                                                                   |
| [Ie] Rated Operational Current              | 9 A (at <60 °C) at <= 440 V AC AC-3 for power circuit<br>25 A (at <60 °C) at <= 440 V AC AC-1 for power circuit                                                                                                                                                                                        |
| Motor Power Kw                              | 2.2 kW at 220...230 V AC 50 Hz<br>4 kW at 380...400 V AC 50 Hz<br>4 kW at 415...440 V AC 50 Hz<br>5.5 kW at 500 V AC 50 Hz<br>5.5 kW at 660...690 V AC 50 Hz                                                                                                                                           |
| Motor Power Hp (UI / Csa)                   | 0.5 hp at 115 V AC 60 Hz for 1 phase motors<br>1 hp at 230/240 V AC 60 Hz for 1 phase motors<br>2 hp at 200/208 V AC 60 Hz for 3 phases motors<br>2 hp at 230/240 V AC 60 Hz for 3 phases motors<br>5 hp at 460/480 V AC 60 Hz for 3 phases motors<br>7.5 hp at 575/600 V AC 60 Hz for 3 phases motors |
| Control Circuit Type                        | AC at 50/60 Hz                                                                                                                                                                                                                                                                                         |
| [Uc] Control Circuit Voltage                | 120 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                                                                                                                                                                                                                                                                                                    |
| [Ith] Conventional Free Air Thermal Current | 10 A (at 60 °C) for signalling circuit<br>25 A (at 60 °C) for power circuit                                                                                                                                                                                                                            |
| Irms Rated Making Capacity                  | 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                                                                                                                 |
| Rated Breaking Capacity                     | 250 A at 440 V for power circuit conforming to IEC 60947                                                                                                                                                                                                                                               |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                                                 |                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>[Icw] Rated Short-Time Withstand Current</b> | 30 A 40 °C - 10 min for power circuit<br>61 A 40 °C - 1 min for power circuit<br>105 A 40 °C - 10 s for power circuit<br>210 A 40 °C - 1 s 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>                   | 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<br>10 A gG for signalling circuit conforming to IEC 60947-5-1                                                                                                 |
| <b>Average Impedance</b>                        | 2.5 mOhm - lth 25 A 50 Hz for power circuit                                                                                                                                                                                                                                          |
| <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>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                                                                                                                                                                                                            |
| <b>Power Dissipation Per Pole</b>               | 0.2 W AC-3<br>1.56 W AC-1                                                                                                                                                                                                                                                            |
| <b>Front Cover</b>                              | Without                                                                                                                                                                                                                                                                              |
| <b>Interlocking Type</b>                        | Mechanical                                                                                                                                                                                                                                                                           |
| <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>                   | GL<br>LROS (Lloyds register of shipping)<br>RINA<br>BV<br>CSA<br>UL<br>GOST<br>DNV<br>CCC                                                                                                                                                                                            |
| <b>Connections - Terminals</b>                  | Power circuit: Faston terminals 2 cable(s)<br>Control circuit: Faston terminals 1 cable(s)                                                                                                                                                                                           |
| <b>Operating Time</b>                           | 12...22 ms closing<br>4...19 ms opening                                                                                                                                                                                                                                              |
| <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>                    | 15 Mcycles                                                                                                                                                                                                                                                                           |
| <b>Maximum Operating Rate</b>                   | 3600 cyc/h 60 °C                                                                                                                                                                                                                                                                     |

## Complementary

|                                        |                                                                                                                                                                                                           |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Coil Technology</b>                 | Without built-in suppressor module                                                                                                                                                                        |
| <b>Control Circuit Voltage Limits</b>  | 0.3...0.6 Uc (-40...70 °C):drop-out AC 50/60 Hz<br>0.8...1.1 Uc (-40...60 °C):operational AC 50 Hz<br>0.85...1.1 Uc (-40...60 °C):operational AC 60 Hz<br>1...1.1 Uc (60...70 °C):operational AC 50/60 Hz |
| <b>Inrush Power In Va</b>              | 70 VA 60 Hz cos phi 0.75 (at 20 °C)<br>70 VA 50 Hz cos phi 0.75 (at 20 °C)                                                                                                                                |
| <b>Hold-In Power Consumption In Va</b> | 7.5 VA 60 Hz cos phi 0.3 (at 20 °C)<br>7 VA 50 Hz cos phi 0.3 (at 20 °C)                                                                                                                                  |

|                              |                                                                                                                          |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Heat Dissipation             | 2...3 W at 50/60 Hz                                                                                                      |
| Auxiliary Contacts Type      | 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 |
| Signalling Circuit Frequency | 25...400 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<br>1.5 ms on energisation between NC and NO contact                  |
| Insulation Resistance        | > 10 MOhm for signalling circuit                                                                                         |

## Environment

|                                       |                                                                                                                                                                                    |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ip Degree Of Protection               | IP20 front face conforming to IEC 60529                                                                                                                                            |
| Climatic Withstand                    | conforming to IACS E10<br>conforming to IEC 60947-1 Annex Q category D                                                                                                             |
| Protective Treatment                  | TH conforming to IEC 60068-2-30                                                                                                                                                    |
| Pollution Degree                      | 3                                                                                                                                                                                  |
| Ambient Air Temperature For Operation | -40...60 °C<br>60...70 °C with derating                                                                                                                                            |
| Ambient Air Temperature For Storage   | -60...80 °C                                                                                                                                                                        |
| Operating Altitude                    | 0...3000 m                                                                                                                                                                         |
| Fire Resistance                       | 850 °C conforming to IEC 60695-2-1                                                                                                                                                 |
| Flame Retardance                      | V1 conforming to UL 94                                                                                                                                                             |
| Mechanical Robustness                 | 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 |
| Height                                | 77 mm                                                                                                                                                                              |
| Width                                 | 90 mm                                                                                                                                                                              |
| Depth                                 | 84 mm                                                                                                                                                                              |
| Net Weight                            | 0.687 kg                                                                                                                                                                           |

## Packing Units

|                              |     |
|------------------------------|-----|
| Unit Type Of Package 1       | PCE |
| Number Of Units In Package 1 | 1   |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|