

# Product datasheet

Specifications



## Reversing Contactor, TeSys Deca, 3P(3NO), AC-3, <=440V 115A, 24V DC coil, screw clamp terminals

LC2D115BD

### 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-1<br>AC-3                                                                                                                                                                                                                                    |
| Device presentation                         | Preassembled with reversing power busbar                                                                                                                                                                                                        |
| Poles description                           | 3P                                                                                                                                                                                                                                              |
| power pole contact composition              | 3 NO                                                                                                                                                                                                                                            |
| [Ue] rated operational voltage              | Power circuit: <= 1000 V AC 25...400 Hz<br>Power circuit: <= 300 V DC                                                                                                                                                                           |
| [Ie] rated operational current              | 200 A (at <60 °C) at <= 440 V AC AC-1 for power circuit<br>115 A (at <60 °C) at <= 440 V AC AC-3 for power circuit                                                                                                                              |
| Motor power kW                              | 30 kW at 220...230 V AC 50...60 Hz<br>55 kW at 380...400 V AC 50...60 Hz<br>59 kW at 415 V AC 50...60 Hz<br>59 kW at 440 V AC 50...60 Hz<br>75 kW at 500 V AC 50...60 Hz<br>80 kW at 660...690 V AC 50...60 Hz<br>65 kW at 1000 V AC 50...60 Hz |
| Motor power hp                              | 30 hp at 200/208 V AC 60 Hz for 3 phases motors<br>40 hp at 230/240 V AC 60 Hz for 3 phases motors<br>75 hp at 460/480 V AC 60 Hz for 3 phases motors<br>100 hp at 575/600 V AC 60 Hz for 3 phases motors                                       |
| Control circuit type                        | DC standard                                                                                                                                                                                                                                     |
| [Uc] control circuit voltage                | 24 V DC                                                                                                                                                                                                                                         |
| Auxiliary contact composition               | 1 NO + 1 NC                                                                                                                                                                                                                                     |
| [Uimp] rated impulse withstand voltage      | 8 kV conforming to IEC 60947                                                                                                                                                                                                                    |
| Overvoltage category                        | III                                                                                                                                                                                                                                             |
| [Ith] conventional free air thermal current | 200 A (at 60 °C) for power circuit                                                                                                                                                                                                              |
| Irms rated making capacity                  | 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<br>1260 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                                                                                                                                                                                       |

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> | 250 A 40 °C - 10 min for power circuit<br>550 A 40 °C - 1 min for power circuit<br>950 A 40 °C - 10 s for power circuit<br>1100 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>                   | 10 A gG for signalling circuit conforming to IEC 60947-5-1<br>250 A gG at ≤ 690 V coordination type 1 for power circuit<br>200 A gG at ≤ 690 V coordination type 2 for power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Average impedance</b>                        | 0.6 mOhm - Ith 200 A 50 Hz for power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>[Ui] rated insulation voltage</b>            | 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<br>Power circuit: 1000 V conforming to IEC 60947-4-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Electrical durability</b>                    | 0.8 Mcycles 200 A AC-1 at Ue ≤ 440 V<br>0.95 Mcycles 115 A AC-3 at Ue ≤ 440 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Power dissipation per pole</b>               | 24 W AC-1<br>7.9 W AC-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Front cover</b>                              | With                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Interlocking type</b>                        | Electrical<br>Mechanical                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Mounting support</b>                         | Rail<br>Plate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <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>                   | BV<br>CCC<br>CSA<br>DNV<br>GL<br>RINA<br>UL<br>EAC<br>UKCA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Connections - terminals</b>                  | Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm²flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm²flexible without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm²flexible without cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm²flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm²solid without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm²solid without cable end<br>Power circuit: connector 1 cable(s) 10...120 mm²flexible without cable end<br>Power circuit: connector 2 cable(s) 10...50 mm²flexible without cable end<br>Power circuit: connector 1 cable(s) 10...120 mm²flexible with cable end<br>Power circuit: connector 2 cable(s) 10...50 mm²flexible with cable end<br>Power circuit: connector 1 cable(s) 10...120 mm²solid without cable end<br>Power circuit: connector 2 cable(s) 10...50 mm²solid without cable end |
| <b>Tightening torque</b>                        | Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>Power circuit: 12 N.m - on connector hexagonal screw head 4 mm<br>Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver pozidriv No 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Operating time</b>                           | 20...35 ms closing<br>40...75 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>                    | 8 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

|                        |                  |
|------------------------|------------------|
| Maximum operating rate | 1200 cyc/h 60 °C |
|------------------------|------------------|

## Complementary

|                                |                                                                                                                          |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Coil technology                | Without built-in suppressor module                                                                                       |
| Control circuit voltage limits | 0.15...0.4 Uc (55 °C):drop-out DC<br>0.75...1.2 Uc (55 °C):operational DC                                                |
| Time constant                  | 25 ms                                                                                                                    |
| Inrush power in W              | 270...365 W at 20 °C                                                                                                     |
| Hold-in power consumption in W | 2.4...5.1 W at 20 °C                                                                                                     |
| 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                                                                                                                                                            |
| 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 closed: 15 Gn for 11 ms<br>Shocks contactor open: 6 Gn for 11 ms |
| Height                                | 158 mm                                                                                                                                                                            |
| Width                                 | 266 mm                                                                                                                                                                            |
| Depth                                 | 148 mm                                                                                                                                                                            |
| Net weight                            | 6.35 kg                                                                                                                                                                           |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 23.0 cm |
| Package 1 Width              | 31.5 cm |
| Package 1 Length             | 37.0 cm |
| Package 1 Weight             | 6.5 kg  |

# Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



### Environmental footprint

|                                                        |                                               |
|--------------------------------------------------------|-----------------------------------------------|
| Total lifecycle Carbon footprint                       | 199 kg CO2 eq.                                |
| Environmental Disclosure                               | <a href="#">Product Environmental Profile</a> |
| Carbon footprint of the manufacturing phase [A1 to A3] | 56 kg CO2 eq.                                 |
| Carbon footprint of the distribution phase [A4]        | 2 kg CO2 eq.                                  |
| Carbon footprint of the installation phase [A5]        | 0.7 kg CO2 eq.                                |
| Carbon footprint of the use phase [B2, B3, B4, B6]     | 129 kg CO2 eq.                                |
| Carbon footprint of the end-of-life phase [C1 to C4]   | 11 kg CO2 eq.                                 |

## Use Better



### Materials and Substances

|                                        |                                                                                        |
|----------------------------------------|----------------------------------------------------------------------------------------|
| Packaging made with recycled cardboard | Yes                                                                                    |
| Packaging without single use plastic   | Yes                                                                                    |
| SCIP Number                            | A530c666-91dd-4119-8d61-f1c22a361ecb                                                   |
| EU RoHS Directive                      | <a href="#">Compliant By Exemption</a>                                                 |
| REACH Regulation                       | <a href="#">Reference contains Substances of Very High Concern above the threshold</a> |
| PVC free                               | Yes                                                                                    |

## Use Longer



### Lifetime extension

|        |    |
|--------|----|
| Repair | No |
|--------|----|

## Use Again

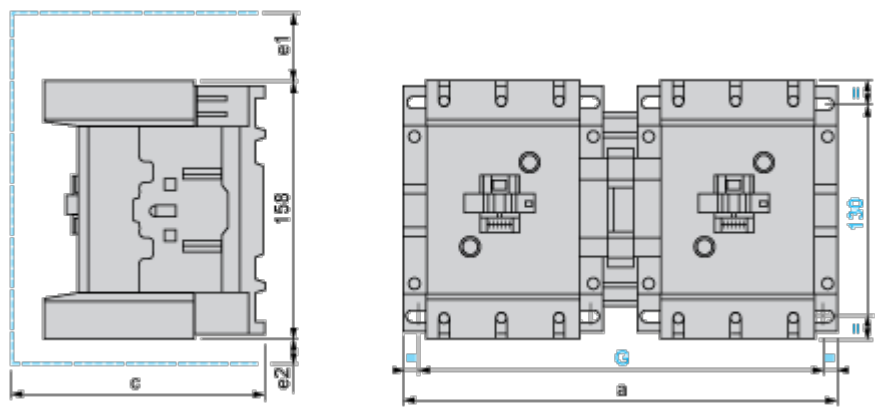


### Repack and remanufacture

|                                 |                                                                                                                                                                                                                 |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recyclability potential, in %   | 54                                                                                                                                                                                                              |
| End of life manual availability | <a href="#">End of Life Information</a>                                                                                                                                                                         |
| Take-back                       | No                                                                                                                                                                                                              |
| WEEE Label                      |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Dimensions Drawings

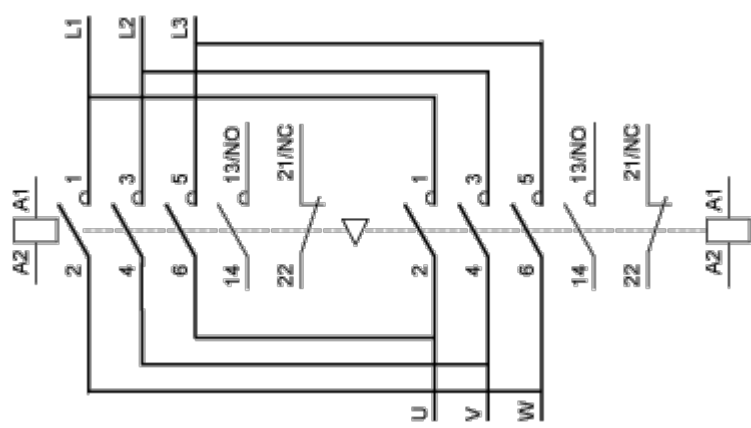
Dimensions



|                                  |     |     |    |    |         |
|----------------------------------|-----|-----|----|----|---------|
| LC2 or 2 x LC1                   | a   | c   | e1 | e2 | G       |
| D115 and D150                    | 266 | 148 | 56 | 18 | 242/256 |
| c, e1 and e2: including cabling. |     |     |    |    |         |

Connections and Schema

Wiring



Technical Illustration

Assembly's dimensions

---

