



### Main

|                                |                                                                                                                                                                          |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product               | TeSys Deca                                                                                                                                                               |
| Product or component type      | Contacteur                                                                                                                                                               |
| Device short name              | LC1D                                                                                                                                                                     |
| Contacteur application         | Motor control<br>Resistive load                                                                                                                                          |
| Utilisation category           | AC-3<br>AC-1<br>AC-4<br>AC-3e                                                                                                                                            |
| Poles description              | 3P                                                                                                                                                                       |
| [Ue] rated operational voltage | Power circuit: ≤ 690 V AC 25...400 Hz<br>Power circuit: ≤ 300 V DC                                                                                                       |
| [Ie] rated operational current | 18 A (at <60 °C) at ≤ 440 V AC AC-3 for power circuit<br>32 A (at <60 °C) at ≤ 440 V AC AC-1 for power circuit<br>18 A (at <60 °C) at ≤ 440 V AC AC-3e for power circuit |
| [Uc] control circuit voltage   | 240 V AC 50/60 Hz                                                                                                                                                        |

### Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Motor power kW                              | 4 kW at 220...230 V AC 50/60 Hz (AC-3)<br>7.5 kW at 380...400 V AC 50/60 Hz (AC-3)<br>9 kW at 415...440 V AC 50/60 Hz (AC-3)<br>10 kW at 500 V AC 50/60 Hz (AC-3)<br>10 kW at 660...690 V AC 50/60 Hz (AC-3)<br>4 kW at 400 V AC 50/60 Hz (AC-4)<br>4 kW at 220...230 V AC 50/60 Hz (AC-3e)<br>7.5 kW at 380...400 V AC 50/60 Hz (AC-3e)<br>9 kW at 415...440 V AC 50/60 Hz (AC-3e)<br>10 kW at 500 V AC 50/60 Hz (AC-3e)<br>10 kW at 660...690 V AC 50/60 Hz (AC-3e) |
| Motor power hp                              | 1 Hp at 115 V AC 50/60 Hz for 1 phase motors<br>3 Hp at 230/240 V AC 50/60 Hz for 1 phase motors<br>5 Hp at 200/208 V AC 50/60 Hz for 3 phases motors<br>5 Hp at 230/240 V AC 50/60 Hz for 3 phases motors<br>10 Hp at 460/480 V AC 50/60 Hz for 3 phases motors<br>15 Hp at 575/600 V AC 50/60 Hz for 3 phases motors                                                                                                                                                |
| Compatibility code                          | LC1D                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Pole contact composition                    | 3 NO                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Contact compatibility                       | M2                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Protective cover                            | With                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| [Ith] conventional free air thermal current | 10 A (at 60 °C) for signalling circuit<br>32 A (at 60 °C) for power circuit                                                                                                                                                                                                                                                                                                                                                                                           |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                                          |                                                                                                                                                                                                                                                                                      |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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>300 A at 440 V for power circuit conforming to IEC 60947                                                                                               |
| Rated breaking capacity                  | 300 A at 440 V for power circuit conforming to IEC 60947                                                                                                                                                                                                                             |
| [Icw] rated short-time withstand current | 145 A 40 °C - 10 s for power circuit<br>240 A 40 °C - 1 s for power circuit<br>40 A 40 °C - 10 min for power circuit<br>84 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 |
| Associated fuse rating                   | 10 A gG for signalling circuit conforming to IEC 60947-5-1<br>50 A gG at <= 690 V coordination type 1 for power circuit<br>35 A gG at <= 690 V coordination type 2 for power circuit                                                                                                 |
| Average impedance                        | 2.5 MOhm - Ith 32 A 50 Hz for power circuit                                                                                                                                                                                                                                          |
| Power dissipation per pole               | 2.5 W AC-1<br>0.8 W AC-3<br>0.8 W AC-3e                                                                                                                                                                                                                                              |
| [Ui] rated insulation voltage            | 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              |
| Overvoltage category                     | III                                                                                                                                                                                                                                                                                  |
| Pollution degree                         | 3                                                                                                                                                                                                                                                                                    |
| [Uimp] rated impulse withstand voltage   | 6 KV conforming to IEC 60947                                                                                                                                                                                                                                                         |
| Safety reliability level                 | B10d = 1369863 cycles contactor with nominal load conforming-<br>to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming-<br>to EN/ISO 13849-1                                                                                                         |
| Mechanical durability                    | 15 Mcycles                                                                                                                                                                                                                                                                           |
| Electrical durability                    | 1.65 Mcycles 18 A AC-3 at Ue <= 440 V<br>1 Mcycles 32 A AC-1 at Ue <= 440 V<br>1.65 Mcycles 18 A AC-3e at Ue <= 440 V                                                                                                                                                                |
| Control circuit type                     | AC at 50/60 Hz                                                                                                                                                                                                                                                                       |
| Coil technology                          | Without built-in suppressor module                                                                                                                                                                                                                                                   |
| Control circuit voltage limits           | 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                                                                            |
| Inrush power in VA                       | 70 VA 60 Hz cos phi 0.75 (at 20 °C)<br>70 VA 50 Hz cos phi 0.75 (at 20 °C)                                                                                                                                                                                                           |
| Hold-in power consumption in VA          | 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                                                                                                                                                                                                                                                                  |
| Operating time                           | 12...22 ms closing<br>4...19 ms opening                                                                                                                                                                                                                                              |
| Maximum operating rate                   | 3600 Cyc/H 60 °C                                                                                                                                                                                                                                                                     |

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connections - terminals       | Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end<br>Power circuit: screw clamp terminals 1 1.5...6 mm <sup>2</sup> - cable stiffness: flexible without cable end<br>Power circuit: screw clamp terminals 2 1.5...6 mm <sup>2</sup> - cable stiffness: flexible without cable end<br>Power circuit: screw clamp terminals 1 1...6 mm <sup>2</sup> - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 1 1.5...6 mm <sup>2</sup> - cable stiffness: solid without cable end<br>Power circuit: screw clamp terminals 2 1.5...6 mm <sup>2</sup> - cable stiffness: solid without cable end |
| Tightening torque             | 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-<br>pozidriv No 2<br>Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver-<br>pozidriv No 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Auxiliary contact composition | 1 NO + 1 NC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 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 voltage     | 17 V for signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Minimum switching current     | 5 MA for signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Insulation resistance         | > 10 MOhm 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Mounting support              | Rail<br>Plate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## Environment

|                                                       |                                                                                                                                                                                        |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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<br>IEC 60335-1                                                                             |
| Product certifications                                | UL[RETURN]DNV[RETURN]RINA[RETURN]GOST[RETURN]LROS (Lloyds register of shipping)[RETURN]CCC[RETURN]CSA[RETURN]GL[RETURN]BV[RETURN]UKCA                                                  |
| IP degree of protection                               | IP20 front face conforming to IEC 60529                                                                                                                                                |
| Protective treatment                                  | TH conforming to IEC 60068-2-30                                                                                                                                                        |
| Climatic withstand                                    | Conforming to IACS E10 exposure to damp heat<br>conforming to IEC 60947-1 Annex Q category D exposure to damp heat                                                                     |
| Permissible ambient air temperature around the device | -40...60 °C<br>60...70 °C with derating                                                                                                                                                |
| 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                                                 | 45 Mm                                                                                                                                                                                  |

|            |         |
|------------|---------|
| Depth      | 86 Mm   |
| Net weight | 0.33 Kg |

### Packing Units

|                              |            |
|------------------------------|------------|
| Unit Type of Package 1       | PCE        |
| Number of Units in Package 1 | 1          |
| Package 1 Height             | 5.500 Cm   |
| Package 1 Width              | 9.300 Cm   |
| Package 1 Length             | 11.500 Cm  |
| Package 1 Weight             | 356.000 G  |
| Unit Type of Package 2       | S02        |
| Number of Units in Package 2 | 20         |
| Package 2 Height             | 15.000 Cm  |
| Package 2 Width              | 30.000 Cm  |
| Package 2 Length             | 40.000 Cm  |
| Package 2 Weight             | 7.398 Kg   |
| Unit Type of Package 3       | P06        |
| Number of Units in Package 3 | 320        |
| Package 3 Height             | 75.000 Cm  |
| Package 3 Width              | 60.000 Cm  |
| Package 3 Length             | 80.000 Cm  |
| Package 3 Weight             | 126.460 Kg |

### Offer Sustainability

|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                       |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                           |
| REACH free of SVHC         | Yes                                                                                                                         |
| EU RoHS Directive          | Compliant <a href="#">EU RoHS Declaration</a>                                                                               |
| Toxic heavy metal free     | Yes                                                                                                                         |
| Mercury free               | Yes                                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>                                                                                      |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                         |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                               |
| Circularity Profile        | <a href="#">End Of Life Information</a>                                                                                     |
| 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

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

Product Life Status : **Commercialised**