

# Bảng thông số sản phẩm

Thông số kỹ thuật



Contactor, TeSys Deca, 3P(3NO), AC-3/AC-3e,  $\leq 440\text{V}$ , 9A, 24V DC low consumption coil, screw clamp terminals

LC1D09BL

## Main

|                                |  |
|--------------------------------|--|
| Range of product               | TeSys Deca   |
| product or component type      | Contacteur   |
| Device short name              | LC1D   |
| contactor application          | Resistive load<br>Motor control  |
| Utilisation category           | AC-3<br>AC-1<br>AC-4<br>AC-3e  |
| poles description              | 3P   |
| [Ue] rated operational voltage | Power circuit: $\leq 690\text{ V AC } 25\dots 400\text{ Hz}$<br>Power circuit: $\leq 300\text{ V DC}$  |
| [Ie] rated operational current | 9 A (at $<60\text{ }^\circ\text{C}$ ) at $\leq 440\text{ V AC AC-3}$ for power circuit<br>25 A (at $<60\text{ }^\circ\text{C}$ ) at $\leq 440\text{ V AC AC-1}$ for power circuit<br>9 A (at $<60\text{ }^\circ\text{C}$ ) at $\leq 440\text{ V AC AC-3e}$ for power circuit |
| [Uc] control circuit voltage   | 24 V DC  |

## Complementary

|   |   |
|---|---|
| Motor power kW                              | 2.2 kW at 220...230 V AC 50/60 Hz (AC-3)<br>4 kW at 380...400 V AC 50/60 Hz (AC-3)<br>4 kW at 415...440 V AC 50/60 Hz (AC-3)<br>5.5 kW at 500 V AC 50/60 Hz (AC-3)<br>5.5 kW at 660...690 V AC 50/60 Hz (AC-3)<br>2.2 kW at 400 V AC 50/60 Hz (AC-4)<br>2.2 kW at 220...230 V AC 50/60 Hz (AC-3e)<br>4 kW at 380...400 V AC 50/60 Hz (AC-3e)<br>4 kW at 415...440 V AC 50/60 Hz (AC-3e)<br>5.5 kW at 500 V AC 50/60 Hz (AC-3e)<br>5.5 kW at 660...690 V AC 50/60 Hz (AC-3e) |
| Motor power hp                              | 1 hp at 230/240 V AC 50/60 Hz for 1 phase motors<br>2 hp at 200/208 V AC 50/60 Hz for 3 phases motors<br>2 hp at 230/240 V AC 50/60 Hz for 3 phases motors<br>5 hp at 460/480 V AC 50/60 Hz for 3 phases motors<br>7.5 hp at 575/600 V AC 50/60 Hz for 3 phases motors<br>0.33 hp at 115 V AC 50/60 Hz for 1 phase motors   |
| Compatibility code                          | LC1D  |
| Pole contact composition                    | 3 NO  |
| Protective cover                            | With  |
| [Ith] conventional free air thermal current | 25 A (at $60\text{ }^\circ\text{C}$ ) for power circuit<br>10 A (at $60\text{ }^\circ\text{C}$ ) for signalling 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  |

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| <b>[Icw] rated short-time withstand current</b> | 105 A 40 °C - 10 s for power circuit<br>210 A 40 °C - 1 s for power circuit<br>30 A 40 °C - 10 min for power circuit<br>61 A 40 °C - 1 min for power circuit<br>100 A - 1 s for signalling circuit<br>120 A - 500 ms for signalling circuit<br>140 A - 100 ms for signalling circuit |
| <b>Associated fuse rating</b>                   | 10 A gG for signalling circuit conforming to IEC 60947-5-1<br>25 A gG at <= 690 V coordination type 1 for power circuit<br>20 A gG at <= 690 V coordination type 2 for power circuit   |
| <b>Average impedance</b>                        | 2.5 mOhm - Ith 25 A 50 Hz for power circuit  |
| <b>Power dissipation per pole</b>               | 1.56 W AC-1<br>0.2 W AC-3<br>0.2 W AC-3e   |
| <b>[Ui] rated insulation voltage</b>            | Power circuit: 690 V conforming to IEC 60947-4-1<br>Power circuit: 600 V CSA certified<br>Power circuit: 600 V UL certified<br>Signalling circuit: 690 V conforming to IEC 60947-1<br>Signalling circuit: 600 V CSA certified<br>Signalling circuit: 600 V UL certified              |
| <b>Overvoltage category</b>                     | III  |
| <b>Pollution degree</b>                         | 3  |
| <b>[Uimp] rated impulse withstand voltage</b>   | 6 kV conforming to IEC 60947   |
| <b>Safety reliability level</b>                 | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1   |
| <b>Mechanical durability</b>                    | 30 Mcycles   |
| <b>Electrical durability</b>                    | 0.6 Mcycles 25 A AC-1 at Ue <= 440 V<br>2 Mcycles 9 A AC-3 at Ue <= 440 V<br>2 Mcycles 9 A AC-3e at Ue <= 440 V  |
| <b>Control circuit type</b>                     | DC low consumption   |
| <b>Coil technology</b>                          | Built-in bidirectional peak limiting diode suppressor  |
| <b>Control circuit voltage limits</b>           | 0.1...0.3 Uc (-40...70 °C):drop-out DC<br>0.8...1.25 Uc (-40...60 °C):operational DC<br>1...1.25 Uc (60...70 °C):operational DC  |
| <b>Inrush power in W</b>                        | 2.4 W (at 20 °C)   |
| <b>Hold-in power consumption in W</b>           | 2.4 W at 20 °C   |
| <b>Operating time</b>                           | 77 ±15 % ms closing<br>25 ±20 % ms opening   |
| <b>Time constant</b>                            | 40 ms  |
| <b>Maximum operating rate</b>                   | 3600 cyc/h 60 °C   |

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

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| <b>Tightening torque</b> | Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2<br>Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 |
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| <b>Auxiliary contact composition</b> | 1 NO + 1 NC |
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| <b>Auxiliary contacts type</b> | type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1<br>type mirror contact 1 NC conforming to IEC 60947-4-1 |
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| <b>Signalling circuit frequency</b> | 25...400 Hz |
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| <b>Minimum switching voltage</b> | 17 V for signalling circuit |
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| <b>Minimum switching current</b> | 5 mA for signalling circuit |
|----------------------------------|-----------------------------|

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

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

|                         |               |
|-------------------------|---------------|
| <b>mounting support</b> | Plate<br>Rail |
|-------------------------|---------------|

## Environment

|                  |  |
|------------------|--|
| <b>Standards</b> | CSA C22.2 No 14<br>EN 60947-4-1<br>EN 60947-5-1<br>IEC 60947-4-1<br>IEC 60947-5-1<br>UL 508<br>IEC 60335-1 |
|------------------|--|

|                               |   |
|-------------------------------|---|
| <b>Product certifications</b> | GL<br>BV<br>DNV<br>LROS (Lloyds register of shipping)<br>RINA<br>UL<br>CCC<br>CSA<br>GOST<br>UKCA<br>CB |
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| <b>IP degree of protection</b> | IP20 front face conforming to IEC 60529 |
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|                             |                                 |
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| <b>Protective treatment</b> | TH conforming to IEC 60068-2-30 |
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| <b>Climatic withstand</b>                                    | conforming to IACS E10 exposure to damp heat<br>conforming to IEC 60947-1 Annex Q category D exposure to damp heat   |
| <b>Permissible ambient air temperature around the device</b> | -40...60 °C<br>60...70 °C with derating  |
| <b>Operating altitude</b>                                    | 0...3000 m   |
| <b>Fire resistance</b>                                       | 850 °C conforming to IEC 60695-2-1   |
| <b>Flame retardance</b>                                      | V1 conforming to UL 94   |
| <b>Mechanical robustness</b>                                 | Vibrations contactor open (2 Gn, 5...300 Hz)<br>Vibrations contactor closed (4 Gn, 5...300 Hz)<br>Shocks contactor open (10 Gn for 11 ms)<br>Shocks contactor closed (15 Gn for 11 ms) |
| <b>Height</b>  | 77 mm  |
| <b>Width</b>   | 45 mm  |
| <b>Depth</b>   | 95 mm  |
| <b>net weight</b>  | 0.48 kg  |

## Packing Units

|                                     |            |
|-------------------------------------|------------|
| <b>Unit Type of Package 1</b>       | PCE        |
| <b>Number of Units in Package 1</b> | 1          |
| <b>Package 1 Height</b>             | 5.000 cm   |
| <b>Package 1 Width</b>              | 9.200 cm   |
| <b>Package 1 Length</b>             | 11.200 cm  |
| <b>Package 1 Weight</b>             | 528.000 g  |
| <b>Unit Type of Package 2</b>       | S02        |
| <b>Number of Units in Package 2</b> | 15         |
| <b>Package 2 Height</b>             | 15.000 cm  |
| <b>Package 2 Width</b>              | 30.000 cm  |
| <b>Package 2 Length</b>             | 40.000 cm  |
| <b>Package 2 Weight</b>             | 8.182 kg   |
| <b>Unit Type of Package 3</b>       | P06        |
| <b>Number of Units in Package 3</b> | 240        |
| <b>Package 3 Height</b>             | 75.000 cm  |
| <b>Package 3 Width</b>              | 60.000 cm  |
| <b>Package 3 Length</b>             | 80.000 cm  |
| <b>Package 3 Weight</b>             | 138.000 kg |

## Contractual warranty

|                 |           |
|-----------------|-----------|
| <b>Warranty</b> | 18 months |
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## Bền vững

Nhãn **Green Premium™** là cam kết của Schneider Electric trong việc cung cấp sản phẩm với hiệu suất môi trường tốt nhất. Green Premium cam kết tuân thủ các quy định mới nhất, minh bạch về tác động môi trường, cũng như các sản phẩm tuần hoàn và CO<sub>2</sub> thấp.

**Hướng dẫn đánh giá tính bền vững của sản phẩm** là tài liệu kỹ thuật phổ thông giúp làm rõ các tiêu chuẩn nhãn sinh thái toàn cầu và cách diễn giải việc khai báo môi trường.

[Tìm hiểu thêm về Green Premium >](#)

[Hướng dẫn đánh giá về sự bền vững của sản phẩm >](#)



Minh bạch [RoHS/REACH](#)

## Hiệu suất sức khỏe

Mercury Free

Rohs Exemption Information [Yes](#)

Pvc Free

## Chứng nhận & Tiêu chuẩn

Reach Regulation [REACH Declaration](#)

Eu Rohs Directive [Compliant with Exemptions](#)

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

Environmental Disclosure [Product Environmental Profile](#)

Circularity Profile [End of Life Information](#)

## Dimensions Drawings

### Dimensions



(1) Minimum electrical clearance

| LC1       |                                    | D09...D18 | D093...D123 | D099...D129 |
|-----------|------------------------------------|-----------|-------------|-------------|
| <b>b</b>  |                                    | 77        | 99          | 80          |
| <b>c</b>  | without cover or add-on blocks     | 93        | 93          | 93          |
|           | with cover, without add-on blocks  | 95        | 95          | 95          |
| <b>c1</b> | with LAD N or C (2 or 4 contacts)  | 126       | 126         | 126         |
| <b>c2</b> | with LA6 DK10                      | 138       | 138         | 138         |
| <b>c3</b> | with LAD T, R, S                   | 146       | 146         | 146         |
|           | with LAD T, R, S and sealing cover | 150       | 150         | 150         |

**Wiring**

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