



### Principal

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|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gama de producto                            | TeSys D                                                                                                                                                                                                                                                      |
| Gama                                        | TeSys                                                                                                                                                                                                                                                        |
| Product name                                | TeSys D                                                                                                                                                                                                                                                      |
| Tipo de producto o componente               | Contactor                                                                                                                                                                                                                                                    |
| Device short name                           | LC1D                                                                                                                                                                                                                                                         |
| Contactor application                       | Motor control<br>Resistive load                                                                                                                                                                                                                              |
| Categoría de empleo                         | AC-4<br>AC-1<br>AC-3                                                                                                                                                                                                                                         |
| Poles description                           | 3P                                                                                                                                                                                                                                                           |
| Pole contact composition                    | 3 NO                                                                                                                                                                                                                                                         |
| [Ue] tensión de funcionamiento nominal      | <= 300 V CC para power circuit<br><= 690 V AC 25...400 Hz para power circuit                                                                                                                                                                                 |
| [Ie] intensidad de funcionamiento nominal   | 38 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit<br>50 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit                                                                                                                                               |
| Motor power kW                              | 18.5 kW at 500 V AC 50/60 Hz AC-3<br>18.5 kW at 660...690 V AC 50/60 Hz AC-3<br>7.5 kW at 400 V AC 50/60 Hz AC-4<br>18.5 kW at 380...400 V AC 50/60 Hz AC-3<br>18.5 kW at 415...440 V AC 50/60 Hz AC-3<br>9 kW at 220...230 V AC 50/60 Hz AC-3               |
| Motor power hp                              | 10 hp at 230/240 V AC 50/60 Hz for 3 phases motors<br>10 hp at 200/208 V AC 50/60 Hz for 3 phases motors<br>5 hp at 240 V AC 50/60 Hz for 1 phase motors<br>20 hp at 480 V AC 50/60 Hz for 3 phases motors<br>25 hp at 600 V AC 50/60 Hz for 3 phases motors |
| Control circuit type                        | AC 50/60 Hz                                                                                                                                                                                                                                                  |
| [Uc] control circuit voltage                | 220 V AC 50/60 Hz                                                                                                                                                                                                                                            |
| Auxiliary contact composition               | 1 NO + 1 NC                                                                                                                                                                                                                                                  |
| [Uimp] rated impulse withstand voltage      | Conforming to IEC 60947                                                                                                                                                                                                                                      |
| Overvoltage category                        | III                                                                                                                                                                                                                                                          |
| [Ith] conventional free air thermal current | 50 A at <= 60 °C for power circuit<br>10 A at <= 60 °C for signalling circuit                                                                                                                                                                                |
| Irms rated making capacity                  | 550 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                     | 550 A at 440 V for power circuit conforming to IEC 60947                                                                                                                                                                                                     |
| [Icw] rated short-time withstand current    | 150 A <= 40 °C 1 min power circuit<br>310 A <= 40 °C 10 s power circuit<br>430 A <= 40 °C 1 s power circuit<br>60 A <= 40 °C 10 min power circuit<br>100 A 1 s signalling circuit<br>120 A 500 ms signalling circuit<br>140 A 100 ms signalling circuit      |

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| Associated fuse rating        | 63 A gG at ≤ 690 V coordination type 1 for power circuit<br>63 A gG at ≤ 690 V coordination type 2 for power circuit<br>10 A gG for signalling circuit conforming to IEC 60947-5-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Average impedance             | 2 mOhm at 50 Hz - Ith 50 A for power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| [Ui] rated insulation voltage | 600 V for power circuit certifications CSA<br>600 V for power circuit certifications UL<br>690 V for power circuit conforming to IEC 60947-4-1<br>690 V for signalling circuit conforming to IEC 60947-1<br>600 V for signalling circuit certifications CSA<br>600 V for signalling circuit certifications UL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Durabilidad eléctrica         | 1.4 Mcycles 50 A AC-1 at Ue ≤ 440 V<br>1.4 Mcycles 38 A AC-3 at Ue ≤ 440 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Power dissipation per pole    | 3 W AC-3<br>5 W AC-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Protective cover              | With                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Mounting support              | Plate<br>Rail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Normas                        | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Certificaciones de producto   | DNV<br>LROS (Lloyds register of shipping)<br>GL<br>CCC<br>GOST<br>CSA<br>UL<br>RINA<br>BV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Conexiones - terminales       | Control circuit: screw clamp terminals 2 cable(s)<br>1...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit: screw clamp terminals 1 cable(s)<br>1.5...10 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Control circuit: screw clamp terminals 1 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Control circuit: screw clamp terminals 2 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Control circuit: screw clamp terminals 1 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Control circuit: screw clamp terminals 1 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Control circuit: screw clamp terminals 2 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Power circuit: screw clamp terminals 1 cable(s)<br>2.5...10 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Power circuit: screw clamp terminals 2 cable(s)<br>2.5...10 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Power circuit: screw clamp terminals 1 cable(s)<br>1...10 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit: screw clamp terminals 2 cable(s)<br>1.5...6 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit: screw clamp terminals 2 cable(s)<br>2.5...10 mm <sup>2</sup> - cable stiffness: solid - without cable end |
| Tightening torque             | 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>Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver Philips No 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Operating time                | 4...19 ms opening<br>12...22 ms closing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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| Safety reliability level | B10d = 1369863 Ciclos contactor with nominal load conforme a EN/ISO 13849-1<br>B10d = 20000000 Ciclos contactor with mechanical load conforme a EN/ISO 13849-1 |
| Mechanical durability    | 15 Mcycles                                                                                                                                                     |
| Operating rate           | 3600 cyc/h at <= 60 °C                                                                                                                                         |

## Complementos

|                                 |                                                                                                                                                                          |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Coil technology                 | Without built-in suppressor module                                                                                                                                       |
| Control circuit voltage limits  | 0.3...0.6 Uc drop-out at 60 °C, AC 50/60 Hz<br>0.8...1.1 Uc operational at 60 °C, AC 50 Hz<br>0.85...1.1 Uc operational at 60 °C, AC 60 Hz                               |
| Inrush power in VA              | 70 VA at 20 °C (cos $\phi$ 0.75) 60 Hz<br>70 VA at 20 °C (cos $\phi$ 0.75) 50 Hz                                                                                         |
| Hold-in power consumption in VA | 7.5 VA at 20 °C (cos $\phi$ 0.3) 60 Hz<br>7 VA at 20 °C (cos $\phi$ 0.3) 50 Hz                                                                                           |
| Heat dissipation                | 2...3 W at 50/60 Hz                                                                                                                                                      |
| Auxiliary contacts type         | Type mechanically linked (1 NO + 1 NC) conforme a IEC 60947-5-1<br>Type mirror contact (1 NC) conforme a 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                                                                                                                                         |
| Power range                     | 7...11 kW 200...240 V 3 phases<br>15...25 kW 380...440 V 3 phases<br>15...25 kW 480...500 V 3 phases<br>15...25 kW 525...690 V 3 phases<br>4...6 kW 100...120 V 3 phases |
| Motor starter type              | Direct on-line contactor                                                                                                                                                 |

## Ambiente

|                                                       |                                                                                                                                                                               |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IP degree of protection                               | IP20 front face conforming to IEC 60529                                                                                                                                       |
| Protective treatment                                  | TH conforming to IEC 60068-2-30                                                                                                                                               |
| Pollution degree                                      | 3                                                                                                                                                                             |
| Temperatura ambiente de trabajo                       | -5...60 °C                                                                                                                                                                    |
| Temperatura ambiente de almacenamiento                | -60...80 °C                                                                                                                                                                   |
| Permissible ambient air temperature around the device | -40...70 °C at Uc                                                                                                                                                             |
| Operating altitude                                    | 3000 m without derating in temperature                                                                                                                                        |
| 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 8 Gn for 11 ms |
| Altura                                                | 85 mm                                                                                                                                                                         |
| Anchura                                               | 45 mm                                                                                                                                                                         |
| Profundidad                                           | 92 mm                                                                                                                                                                         |
| Peso del producto                                     | 0.38 kg                                                                                                                                                                       |

## Oferta sustentable

|                                  |                                                                                                                                    |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status         | Green Premium product                                                                                                              |
| RoHS (date code: YYWW)           | Compliant - since 0627 - Schneider Electric declaration of conformity <a href="#">Schneider Electric declaration of conformity</a> |
| REACH                            | Reference not containing SVHC above the threshold                                                                                  |
| Product environmental profile    | Available <a href="#">Perfil Medioambiental</a>                                                                                    |
| Product end of life instructions | Available <a href="#">Manual De Gestión Residuos</a>                                                                               |

Garantia contractual

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