

# TeSys Deca contactor - 3P(3 NO) - AC-3 - <= 440 V 32 A - 125 V DC coil

LC1D323GD

#### (!) Discontinued

#### Main

| Range                          | TeSys  |
|--------------------------------|--|
| Range Of Product               | TeSys D  |
| Product Or Component Type      | Contactor  |
| Device Short Name              | LC1D   |
| Contactor Application          | Motor control<br>Resistive load  |
| Utilisation Category           | AC-1<br>AC-3   |
| Poles Description              | 3P   |
| [Ue] Rated Operational Voltage | Power circuit: <= 690 V AC 25400 Hz<br>Power circuit: <= 300 V DC  |
| [le] Rated Operational Current | 25 A (at <60 °C) at <= 440 V AC AC-1 for power circuit<br>32 A (at <60 °C) at <= 440 V AC AC-3 for power circuit |
| [Uc] Control Circuit Voltage   | 125 V DC   |

### Complementary

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|--|---|--|
| Motor Power Kw                                 | 7.5 kW at 220230 V AC 50/60 Hz<br>15 kW at 380400 V AC 50/60 Hz<br>15 kW at 415440 V AC 50/60 Hz<br>18.5 kW at 500 V AC 50/60 Hz<br>18.5 kW at 660690 V AC 50/60 Hz   |  |
| Motor Power Hp                                 | 2 hp at 115 V AC 50/60 Hz for 1 phase motors<br>5 hp at 230/240 V AC 50/60 Hz for 1 phase motors<br>7.5 hp at 200/208 V AC 50/60 Hz for 3 phases motors<br>10 hp at 230/240 V AC 50/60 Hz for 3 phases motors<br>20 hp at 460/480 V AC 50/60 Hz for 3 phases motors<br>30 hp at 575/600 V AC 50/60 Hz for 3 phases motors |  |
| Compatibility Code                             | LC1D  |  |
| Pole Contact Composition                       | 3 NO  |  |
| Contact Compatibility                          | M4  |  |
| Protective Cover                               | With  |  |
| [Ith] Conventional Free Air<br>Thermal Current | 10 A (at 60 °C) for signalling circuit<br>50 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>550 A at 440 V for power circuit conforming to IEC 60947  |  |
| Rated Breaking Capacity                        | 550 A at 440 V for power circuit conforming to IEC 60947  |  |

| [Icw] Rated Short-Time Withstand<br>Current | 260 A 40 °C - 10 s for power circuit 430 A 40 °C - 1 s for power circuit 60 A 40 °C - 10 min for power circuit 138 A 40 °C - 1 min for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit   |
|---|---|
| Associated Fuse Rating                      | 10 A gG for signalling circuit conforming to IEC 60947-5-1 63 A gG at <= 690 V coordination type 1 for power circuit 63 A gG at <= 690 V coordination type 2 for power circuit  |
| Average Impedance                           | 2 mOhm - Ith 50 A 50 Hz for power circuit   |
| Power Dissipation Per Pole                  | 2 W AC-3<br>5 W AC-1  |
| [Ui] Rated Insulation Voltage               | Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified 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 to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1   |
| Mechanical Durability                       | 30 Mcycles  |
| Electrical Durability                       | 1.65 Mcycles 32 A AC-3 at Ue <= 440 V<br>1.4 Mcycles 50 A AC-1 at Ue <= 440 V   |
| Control Circuit Type                        | DC standard   |
| Coil Technology                             | Built-in bidirectional peak limiting diode suppressor   |
| Control Circuit Voltage Limits              | 0.10.25 Uc (-4070 °C):drop-out DC<br>0.71.25 Uc (-4060 °C):operational DC<br>11.25 Uc (6070 °C):operational DC  |
| Inrush Power In W                           | 5.4 W (at 20 °C)  |
| Hold-In Power Consumption In W              | 5.4 W at 20 °C  |
| Operating Time                              | 53.5572.45 ms closing<br>1624 ms opening  |
| Time Constant                               | 28 ms   |
| Maximum Operating Rate                      | 3600 cyc/h 60 °C  |
| Connections - Terminals                     | Control circuit: spring terminals 1 2.5 mm² - cable stiffness: flexible without cable end Control circuit: spring terminals 2 2.5 mm² - cable stiffness: flexible without cable end Power circuit: spring terminals 1 4 mm² - cable stiffness: flexible without cable end Power circuit: spring terminals 2 4 mm² - cable stiffness: flexible without cable end |
| Auxiliary Contact Composition               | 1 NO + 1 NC   |
| Auxiliary Contacts Type                     | type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1   |
| Signalling Circuit Frequency                | 25400 Hz  |
| Minimum Switching Voltage                   | 17 V for signalling circuit   |
| Minimum Switching Current                   | 5 mA for signalling circuit   |
| Insulation Resistance                       | > 10 MOhm for signalling circuit  |
|   |   |

| Mounting Support   | Plate<br>Rail  |
|--|--|
| 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  |
| Product Certifications                                   | GOST CSA LROS (Lloyds register of shipping) CCC BV GL DNV RINA UL  |
| 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 conforming to IEC 60947-1 Annex Q category D exposure to damp heat  |
| Permissible Ambient Air<br>Temperature Around The Device | -6080 °C storage<br>-4060 °C operation<br>6070 °C with derating  |
| Operating Altitude                                       | 03000 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, 5300 Hz) Vibrations contactor closed (4 Gn, 5300 Hz) Shocks contactor closed (15 Gn for 11 ms) Shocks contactor open (8 Gn for 11 ms) |
| Height   | 99 mm  |
| Width  | 45 mm  |
| Depth  | 101 mm   |
| Net Weight   | 0.535 kg   |
| Packing Units  |  |
| Unit Type Of Package 1                                   | PCE  |
| Number Of Units In Package 1                             | 1  |

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

## **Contractual warranty**

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