

# TeSys D - star delta starter - 3 x 3P (3 NO) - 18 A - 42 V AC coil

LC3D18AD7

#### ! Discontinued

#### Main

| Main                                   |  |
|--|--|
| Range                                  | TeSys  |
| Product Name                           | TeSys D  |
| Product Or Component Type              | Star delta starter   |
| Device Short Name                      | LC3D   |
| Contactor Application                  | Motor control  |
| Utilisation Category                   | AC-3   |
| Device Presentation                    | Pre-wired  |
| Poles Description                      | 3 x 3P   |
| Power Pole Contact Composition         | 3 x 3 NO   |
| [Ue] Rated Operational Voltage         | Power circuit: <= 690 V AC 25400 Hz  |
| [le] Rated Operational Current         | 18 A (at <60 °C) at <= 440 V AC AC-3 for power circuit   |
| Motor Power Kw                         | 11 kW at 220/230 V AC 50/60 Hz<br>22 kW at 415 V AC 50/60 Hz<br>22 kW at 440 V AC 50/60 Hz<br>18.5 kW at 380/400 V AC 50/60 Hz   |
| Control Circuit Type                   | AC at 50/60 Hz   |
| [Uc] Control Circuit Voltage           | 42 V AC 50/60 Hz   |
| Auxiliary Contact Composition          | 1 NC for KM1 star contactor  |
| [Uimp] Rated Impulse Withstand Voltage | 6 kV conforming to IEC 60947   |
| Overvoltage Category                   | Ш  |
| [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 |
| Electrical Durability                  | 1.65 Mcycles 18 A AC-3 at Ue <= 440 V  |
| Safety Cover                           | Protective cover   |
| Interlocking Type                      | Mechanical   |
| Mounting Support                       | Plate  |
| Standards                              | CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 UL 508 IEC 60947-5-1 IEC 60947-4-1   |

| 5 1 10 15 15           |                                    |
|------------------------|------------------------------------|
| Product Certifications | CSA                                |
|                        | GOST                               |
|                        | BV                                 |
|                        | RINA                               |
|                        | LROS (Lloyds register of shipping) |
|                        | UL                                 |
|                        | GL                                 |
|                        | DNV                                |
|                        | CCC                                |

# Complementary

| Connections - Terminals  | Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible without cable end  |
|--|--|
|  | Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible without  |
|  | cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible with cable   |
|  | end Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with   |
|  | cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without   |
|  | cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without   |
|  | cable end Power circuit: screw clamp terminals 1 1.56 mm² - cable stiffness: flexible without  |
|  | cable end Power circuit: screw clamp terminals 2 1.56 mm² - cable stiffness: flexible without  |
|  | cable end Power circuit: screw clamp terminals 1 16 mm² - cable stiffness: flexible with cable   |
|  | end Power circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible with cable   |
|  | end Power circuit: screw clamp terminals 1 1.56 mm² - cable stiffness: solid without   |
|  | cable end  |
|  | Power circuit: screw clamp terminals 2 1.56 mm² - cable stiffness: solid without cable end   |
| Tightening Torque  | Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm   |
|  | Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm |
|  | Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2  |
| Maximum Operating Rate   | 30 cyc/h 60 °C   |
| Starting Time  | 30 s   |
| Coil Technology  | Without built-in suppressor module   |
| Control Circuit Voltage Limits   | Drop-out: 0.30.6 Uc at 50/60 Hz (at <60 °C) Operational: 0.81.1 Uc at 50 Hz (at <60 °C)  |
|  | Operational: 0.851.1 Uc at 60 Hz (at <60 °C)   |
| 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)  |
| The same of the sa | 7 VA 50 Hz cos phi 0.3 (at 20 °C)  |
| Heat Dissipation   | 23 W at 50/60 Hz   |
| Auxiliary Contacts Type  | Mechanically linked conforming to IEC 60947-5-1 3 x 1 NO + 1 NC<br>Mirror contact conforming to IEC 60947-4-1 3 x 1 NC   |
| Signalling Circuit Frequency   | 25400 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  |
| Width  | 144 mm   |
| Height   | 124 mm   |
| Depth  | 143 mm   |
| Net Weight   | 1.73 kg  |

## **Environment**

| Insulation Resistance                 | > 10 MOhm for signalling circuit  |
|---------------------------------------|---|
| Ip Degree Of Protection               | IP2X front face conforming to IEC 60529   |
| Protective Treatment                  | TH conforming to IEC 60068-2-30   |
| Pollution Degree                      | 3   |
| Ambient Air Temperature For Storage   | -6080 °C  |
| Ambient Air Temperature For Operation | -4070 °C at Uc  |
| Operating Altitude                    | 3000 m without derating   |
| 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 open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms |

# **Contractual warranty**

Warranty 18 months

## Sustainability

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## Well-being performance

| Reach Free Of Svhc         |   |
|----------------------------|---|
| Toxic Heavy Metal Free     |   |
| Mercury Free               |   |
| Rohs Exemption Information | Yes   |
| Pvc Free                   |   |
|                            |   |
| Eu Rohs Directive          | Compliant   |
|                            | EU RoHS Declaration   |
| China Rohs Regulation      | China RoHS declaration  |
|                            | Pro-active China RoHS declaration (out of China RoHS legal scope) |