

LC1F400VD

TeSys F contactor - 3P (3 NO) - AC-3 - \leq 440 V
400 A - coil 400 V DC



Main

| | |
|---|--|
| Range | TeSys |
| Product name | TeSys F |
| Product or component type | Contacteur |
| Device short name | LC1F |
| Contacteur application | Motor control Resistive load |
| Utilisation category | AC-1 AC-3 |
| Poles description | 3P |
| Pole contact composition | 3 NO |
| [Ue] rated operational voltage | \leq 1000 V AC 50/60 Hz \leq 460 V DC |
| [Ie] rated operational current | 500 A (\leq 40 °C) at \leq 440 V AC AC-1 400 A (\leq 55 °C) at \leq 440 V AC AC-3 |
| Motor power kW | 110 kW at 220...230 V AC 50/60 Hz 185 kW at 1000 V AC 50/60 Hz 200 kW at 380...400 V AC 50/60 Hz 220 kW at 415 V AC 50/60 Hz 250 kW at 440 V AC 50/60 Hz 257 kW at 500 V AC 50/60 Hz 280 kW at 660...690 V AC 50/60 Hz |
| Control circuit type | DC standard |
| Control circuit voltage | 400 V DC |
| [Uimp] rated impulse withstand voltage | 8 kV |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 500 A at \leq 40 °C |
| Irms rated making capacity | 4000 A AC conforming to IEC 60947-4-1 |
| Rated breaking capacity | 3200 kA conforming to IEC 60947-4-1 |
| [Icw] rated short-time withstand current | 3600 A \leq 40 °C 10 s 2400 A \leq 40 °C 30 s 1700 A \leq 40 °C 1 min 1200 A \leq 40 °C 3 min 1000 A \leq 40 °C 10 min |
| Associated fuse rating | 400 A aM at \leq 440 V 500 A gG at \leq 440 V |
| Average impedance | 0.26 mOhm at 50 Hz - Ith 500 A |
| [Ui] rated insulation voltage | 1000 V conforming to IEC 60947-4-1 1500 V conforming to VDE 0110 group C |
| Power dissipation per pole | 42 W AC-3 65 W AC-1 |
| Mounting support | Plate |
| Standards | EN 60947-1 EN 60947-4-1 IEC 60947-1 IEC 60947-4-1 JEM 1038 |
| Product certifications | BV CCC CSA DNV GL RINA RMRoS UL LROS |

The information provided in this documentation contains general descriptions and/or technical characteristics 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.

| | |
|-------------------------|--|
| Connections - terminals | Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm ² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm ² - cable stiffness: solid - without cable end Power circuit : lugs-ring terminals 2 cable(s) 150 mm ² Power circuit : bar 2 x (30 x 5 mm) |
| Tightening torque | Power circuit : 35 N.m Control circuit : 1.2 N.m |
| Operating time | 45...60 ms opening 50...60 ms closing |
| Mechanical durability | 10 Mcycles |
| Operating rate | 2400 cyc/h at <= 55 °C |

Complementary

| | |
|--------------------------------|---|
| Control circuit voltage limits | 0.85...1.1 Uc at 55 °C operational 0.2...0.35 Uc at 55 °C drop-out |
| Inrush power in W | 1000 W at 20 °C |
| Hold-in power consumption in W | 6 W at 20 °C |
| Heat dissipation | 6 W |

Environment

| | |
|---|---|
| IP degree of protection | IP20 front face with shrouds (ordered separately) conforming to IEC 60529 IP20 front face with shrouds (ordered separately) conforming to VDE 0106 |
| Protective treatment | TH |
| Ambient air temperature for operation | -5...55 °C |
| Ambient air temperature for storage | -60...80 °C |
| Permissible ambient air temperature around the device | -40...70 °C |
| Operating altitude | 3000 m without derating in temperature |
| Mechanical robustness | Shocks contactor closed 15 Gn for 11 ms Shocks contactor open 6 Gn for 11 ms Vibrations contactor closed 5 Gn, 5...300 Hz Vibrations contactor open 1.5 Gn, 5...300 Hz |
| Height | 206 mm |
| Width | 213 mm |
| Depth | 219 mm |
| Product weight | 9.1 kg |

Offer Sustainability

| | |
|----------------------------------|---|
| Sustainable offer status | 3389118094970 |
| RoHS | Compliant - since 0843 - Schneider Electric declaration of conformity |
| Product environmental profile | 3389118094970 |
| Product end of life instructions | 3389118094970 |