



Main

| | |
|--------------------------------|--|
| Range | TeSys |
| Product name | TeSys F |
| Product or component type | Contactor |
| Device short name | LC1F |
| Contactor application | Resistive load Motor control |
| Utilisation category | AC-3 AC-4 AC-1 |
| Poles description | 3P |
| Pole contact composition | 3 NO |
| [Ue] rated operational voltage | \leq 460 V DC \leq 690 V AC 50/60 Hz |
| [Ie] rated operational current | 315 A (at \leq 40 °C) at \leq 440 V AC-1 225 A (at \leq 55 °C) at \leq 440 V AC-3 |
| Motor power kW | 110 kW at 380...400 V AC 50/60 Hz (AC-3) 110 kW at 415 V AC 50/60 Hz (AC-3) 110 kW at 440 V AC 50/60 Hz (AC-3) 129 kW at 500 V AC 50/60 Hz (AC-3) 129 kW at 660...690 V AC 50/60 Hz (AC-3) 63 kW at 220...230 V AC 50/60 Hz (AC-3) 40 kW at 400 V AC 50/60 Hz (AC-4) |
| [Uc] control circuit voltage | 208 V AC 40...400 Hz |

Complementary




| | |
|---|--|
| [Uimp] rated impulse withstand voltage | 8 kV |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 315 A (at 40 °C) |
| Rated breaking capacity | 1800 A conforming to IEC 60947-4-1 |
| [Icw] rated short-time withstand current | 1800 A 40 °C - 10 s 1000 A 40 °C - 30 s 850 A 40 °C - 1 min 560 A 40 °C - 3 min 440 A 40 °C - 10 min |
| Associated fuse rating | 315 A gG at \leq 440 V 250 A aM at \leq 440 V |
| Average impedance | 0.32 MOhm - Ith 315 A 50 Hz |
| [Ui] rated insulation voltage | 1000 V conforming to IEC 60947-4-1 1500 V conforming to VDE 0110 group C |
| Power dissipation per pole | 32 W AC-1 16 W AC-3 |

| | |
|---------------------------------|---|
| Mounting support | Plate |
| Standards | EN 60947-1 IEC 60947-1 EN 60947-4-1 IEC 60947-4-1 JIS C8201-4-1 |
| Product certifications | CCC CB ABS BV RINA UL RMRoS DNV LROS (Lloyds register of shipping) |
| Connections - terminals | Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm ² flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm ² flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² solid without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm ² solid without cable end Power circuit: bar 2 cable(s) - busbar cross section: 32 x 4 mm Power circuit: lugs-ring terminals 1 cable(s) 185 mm ² Power circuit: connector 1 cable(s) 185 mm ² Power circuit: bolted connection |
| Tightening torque | Control circuit: 1.2 N.m Power circuit: 35 N.m |
| Control circuit voltage limits | Operational: 0.85...1.1 U _c 50/60 Hz (at 55 °C) Drop-out: 0.35...0.55 U _c 50/60 Hz (at 55 °C) |
| Inrush power in VA | 970 VA 60 Hz cos phi 0.3 (at 20 °C) 805 VA 50 Hz cos phi 0.3 (at 20 °C) |
| Hold-in power consumption in VA | 55 VA 50 Hz cos phi 0.3 (at 20 °C) 66 VA 60 Hz cos phi 0.3 (at 20 °C) |
| Heat dissipation | 18...24 W |
| Operating time | 35 ms closing (at U _c) 130 ms opening (at U _c) |
| Mechanical durability | 10 Mcycles |
| Maximum operating rate | 2400 Cyc/H 55 °C |
| Compatibility code | LC1F |

Environment

| | |
|---|---|
| IP degree of protection | IP20 front face with shrouds conforming to IEC 60529 IP20 front face with shrouds 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 |
| Height | 197 Mm |
| Width | 168.5 Mm |
| Depth | 181 Mm |
| Net weight | 4.75 Kg |

Offer Sustainability

| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation |  REACH Declaration |
| EU RoHS Directive | Compliant  EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information |  Yes |
| China RoHS Regulation |  China RoHS Declaration |

| | |
|--------------------------|---|
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End Of Life Information |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Contractual warranty

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

| | |
|-----------------------|----------------------------------|
| Product Life Status : | End of commerc. announced |
|-----------------------|----------------------------------|