# Product datasheet Characteristics

# LC1F4004

TeSys F contactor-4P(4 NO)-AC-1 <= 440V 500A with coil LX1/LX9 -48...1000V AC 40/400Hz, LX4 -48...440V DC, LXE -100...250V AC 50/60Hz or 100...380V DC



Price\*: 1,325.53 GBP



#### Main

| Main                           |                                       | 0        |
|--------------------------------|---------------------------------------|----------|
| Range                          | TeSys                                 |          |
| Product name                   | TeSys F                               |          |
| Product or component type      | Contactor                             |          |
| Device short name              | LC1F                                  |          |
| Contactor application          | Resistive load                        |          |
| Utilisation category           | AC-1                                  |          |
| Poles description              | 4P                                    |          |
| Power pole contact composition | 4 NO                                  | <u>a</u> |
| [Ue] rated operational voltage | <= 1000 V AC 50/60 Hz<br><= 460 V DC  |          |
| [le] rated operational current | 500 A (at <40 °C) at <= 440 V AC AC-1 |          |

#### Complementary

| Complementary                               |   | \$                                    |
|---|---|---------------------------------------|
| [Uc] control circuit voltage                | 481000 V AC 40400 Hz with LX1/LX9 coil<br>48440 V DC with LX4 coil<br>100250 V AC 50/60 Hz with LXE coil<br>100380 V DC with LXE coil | i i i i i i i i i i i i i i i i i i i |
| [Uimp] rated impulse withstand voltage      | 8 kV  |                                       |
| Overvoltage category                        | III   | <u></u>                               |
| [lth] conventional free air thermal current | 500 A (at 40 °C)  | ati<br>Goo is                         |
| Irms rated making capacity                  | 4000 A AC conforming to IEC 60947-4-1   |                                       |
| Rated breaking capacity                     | 3200 A conforming to IEC 60947-4-1  |                                       |
| [lcw] rated short-time withstand current    | 3600 A 40 °C - 10 s<br>2400 A 40 °C - 30 s<br>1700 A 40 °C - 1 min<br>1200 A 40 °C - 3 min  | Disclaimer. This                      |

|                                 | 1000 A 40 °C - 10 min   |  |
|---------------------------------|---|--|
| Associated fuse rating          | 400 A aM at <= 440 V<br>500 A gG at <= 440 V  |  |
| Average impedance               | 0.26 mOhm - Ith 500 A 50 Hz   |  |
| [Ui] rated insulation voltage   | 1000 V conforming to IEC 60947-4-1<br>1500 V conforming to VDE 0110 group C   |  |
| Power dissipation per pole      | 65 W AC-1   |  |
| Control circuit voltage limits  | Operational: 0.851.1 Uc AC 40400 Hz with LX1/LX9 coil Drop-out: 0.30.5 Uc AC 40400 Hz with LX1/LX9 coil Operational: 0.851.1 Uc DC with LX4 coil Drop-out: 0.20.35 Uc DC with LX4 coil Operational: 85275 V AC 50/60 Hz with LXE coil Drop-out: 060 V AC 50/60 Hz with LXE coil Operational: 85418 V DC with LXE coil Drop-out: 045 V DC with LXE coil  |  |
| Heat dissipation                | 14 W<br>2.25.5 W  |  |
| Operating time                  | 4075 ms closing for with LX1/LX9 coil 100170 ms opening for with LX1/LX9 coil 5060 ms closing for with LX4 coil 4560 ms opening for with LX4 coil 4080 ms closing for with LXE coil 654 ms opening for with LXE coil  |  |
| Mounting support                | Plate   |  |
| Standards                       | JIS C8201-4-1<br>IEC 60947-4-1<br>IEC 60947-1<br>EN 60947-4-1<br>EN 60947-1   |  |
| Product certifications          | CB ABS DNV RMRoS LROS (Lloyds register of shipping) BV RINA UL CSA  |  |
| Connections - terminals         | Power circuit: bar 2 cable(s) - busbar cross section: 30 x 5 mm  Power circuit: lugs-ring terminals 2 cable(s) 150 mm²  Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end  Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end  Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end  Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²solid without cable end  Control circuit: screw clamp terminals 1 cable(s) 14 mm²  Control circuit: screw clamp terminals 2 cable(s) 14 mm²  Control circuit: screw clamp terminals 2 cable(s) 14 mm²  Control circuit: screw clamp terminals 1.0 cable(s) 0.22.5 mm²flexible without cable end  Control circuit: screw clamp terminals 1.0 cable(s) 0.252.5 mm²flexible with cable end  Control circuit: screw clamp terminals 1.0 cable(s) 0.22.5 mm²flexible without cable end |  |
| Tightening torque               | Power circuit: 35 N.m<br>Control circuit: 1.2 N.m<br>Control circuit: 0.6 N.m   |  |
| Mechanical durability           | 10 Mcycles  |  |
| Inrush power in VA              | 10001150 VA, 40400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 9201140 VA (at 20 °C)with LX4 coil 360470 VA, 50/60 Hz cos phi 0.5 (at 20 °C)with LXE coil 410450 VA (at 20 °C)with LXE coil  |  |
| Hold-in power consumption in VA | 1218 VA, 40400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 47.5 VA (at 20 °C)with LX4 coil 4.57.0 VA, 50/60 Hz cos phi 0.5 (at 20 °C)with LXE coil 2.54.0 VA (at 20 °C)with LXE coil   |  |
| 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                 | -555 °C  |
| Ambient air temperature for storage                   | -6080 °C   |
| Permissible ambient air temperature around the device | -4070 °C   |
| Mechanical robustness                                 | Vibrations contactor open: 1.5 Gn, 5300 Hz Vibrations contactor closed: 5 Gn, 5300 Hz Shocks contactor open: 6 Gn for 1/2 sine wave (11 ms) Shocks contactor closed: 15 Gn for 1/2 sine wave (11 ms) |
| Height  | 206 mm   |
| Width   | 261 mm   |
| Depth   | 219 mm   |
| Product weight  | 8 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 Product out of China RoHS scope. Substance declaration for your information                          |  |
| 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 |
|----------|-----------|