# Product data sheet
## Characteristics

# LC1F225X7
contactor, TeSys F, 3P(3NO), AC-3, <=440V 225A, coil 600V AC




## Main

| | |
|---|---|
| Range | TeSys |
| Range of Product | TeSys F |
| Product or Component Type | Contactor |
| Device short name | LC1F |
| Contactor application | Motor control<br>Resistive load |
| Utilisation category | AC-1<br>AC-4<br>AC-3 |
| Poles description | 3P |
| [Ue] rated operational voltage | <= 460 V DC<br><= 690 V AC 50/60 Hz |
| [Uc] control circuit voltage | 600 V AC 40...400 Hz |
| [Ie] rated operational current | 315 A (at <104 °F (40 °C)) at <= 440 V AC-1<br>225 A (at <131 °F (55 °C)) at <= 440 V AC-3 |

## Complementary

| | |
|---|---|
| [Uimp] rated impulse withstand voltage | 8 kV |
| [Ith] conventional free air thermal current | 315 A (at 104 °F (40 °C)) |
| Rated breaking capacity | 1800 A conforming to IEC 60947-4-1 |
| [Icw] rated short-time withstand current | 1800 A 104 °F (40 °C) - 10 s<br>1000 A 104 °F (40 °C) - 30 s<br>850 A 104 °F (40 °C) - 1 min<br>560 A 104 °F (40 °C) - 3 min<br>440 A 104 °F (40 °C) - 10 min |
| Associated fuse rating | 315 A gG at <= 440 V<br>250 A aM at <= 440 V |
| Average impedance | 0.32 mOhm - Ith 315 A 50 Hz |
| [Ui] rated insulation voltage | 1000 V IEC 60947-4-1<br>1500 V VDE 0110 group C |
| Power dissipation per pole | 32 W AC-1<br>16 W AC-3 |
| Overvoltage category | III |
| Power pole contact composition | 3 NO |
| Motor power kW | 110 KW at 380...400 V AC 50/60 Hz (AC-3)<br>110 KW at 415 V AC 50/60 Hz (AC-3)<br>110 KW at 440 V AC 50/60 Hz (AC-3)<br>129 KW at 500 V AC 50/60 Hz (AC-3)<br>129 KW at 660...690 V AC 50/60 Hz (AC-3)<br>63 KW at 220...230 V AC 50/60 Hz (AC-3)<br>40 kW at 400 V AC 50/60 Hz (AC-4) |
| Control circuit voltage limits | Operational 0.85...1.1 Uc 40...400 Hz 131 °F (55 °C))<br>Drop-out 0.2...0.55 Uc 40...400 Hz 131 °F (55 °C)) |
| Mechanical durability | 10 Mcycles |
| Inrush power in VA | 950…1180 VA, 40...400 Hz 0.9 68.0000000000 °F (20 °C)) |
| Hold-in power consumption in VA | 8.9…10.9 VA, 40...400 Hz 0.9 68.0000000000 °F (20 °C)) |
| Maximum operating rate | 1200 cyc/h 131 °F (55 °C) |
| Operating time | 35 ms closing at Uc)<br>130 ms opening at Uc) |

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|---|---|
| Connections - terminals | Control circuit screw clamp terminals 1 0.002…0.006 in² (1…4 mm²)flexible without cable end<br>Control circuit screw clamp terminals 2 0.002…0.006 in² (1…4 mm²)flexible without cable end<br>Control circuit screw clamp terminals 1 0.002…0.006 in² (1…4 mm²)flexible with cable end<br>Control circuit screw clamp terminals 2 0.002…0.004 in² (1…2.5 mm²)flexible with cable end<br>Control circuit screw clamp terminals 1 0.002…0.006 in² (1…4 mm²)solid without cable end<br>Control circuit screw clamp terminals 2 0.002…0.006 in² (1…4 mm²)solid without cable end<br>Power circuit bar 2 32 x 4 mm<br>Power circuit lugs-ring terminals 1 0.3 in² (185 mm²)<br>Power circuit connector 1 0.3 in² (185 mm²)<br>Power circuit bolted connection |
| Tightening torque | Control circuit 10.6 lbf.in (1.2 N.m)<br>Power circuit 309.8 lbf.in (35 N.m) |
| Mounting Support | Plate |
| Heat dissipation | 8…9.8 W |
| Motor power range | 55…100 KW 200…240 V 3 phase<br>110…220 KW 480…500 V 3 phase<br>110…220 kW 380…440 V 3 phase |
| Motor starter type | Direct on-line contactor |
| Contactor coil voltage | 600 V AC standard |
| Standards | IEC 60947-1<br>JIS C8201-4-1<br>EN 60947-1<br>IEC 60947-4-1<br>EN 60947-4-1 |
| Product Certifications | RINA[RETURN]BV[RETURN]CSA[RETURN]UL[RETURN]LROS (Lloyds register of shipping)[RETURN]DNV[RETURN]RMRoS[RETURN]ABS[RETURN]CB |
| Compatibility code | LC1F |
| Control circuit type | AC 40...400 Hz |

## Environment

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|---|---|
| IP degree of protection | IP20 front face with shrouds IEC 60529<br>IP20 front face with shrouds VDE 0106 |
| Protective treatment | TH |
| Ambient Air Temperature for Operation | 23…131 °F (-5…55 °C) |
| Ambient Air Temperature for Storage | -76…176 °F (-60…80 °C) |
| Permissible ambient air temperature around the device | -40…158 °F (-40…70 °C) |
| Height | 7.8 in (197 mm) |
| Width | 6.6 in (168.5 mm) |
| Depth | 7.1 in (181 mm) |
| Operating altitude | 9842.52 ft (3000 m) without derating |
| Net Weight | 10.47 lb(US) (4.75 kg) |

## Ordering and shipping details

| | |
|---|---|
| Category | US10I1222336 |
| Discount Schedule | 0I12 |
| GTIN | 3606481734204 |
| Returnability | No |
| Country of origin | CZ |

## Packing Units

| | |
|---|---|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 8.300 in (21.082 cm) |
| Package 1 Width | 8.900 in (22.606 cm) |
| Package 1 Length | 9.50 in (24.13 cm) |
| Package 1 Weight | 11.601 lb(US) (5.262 kg) |

## Offer Sustainability

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