

## LC1F225G7

TeSys F contactor - 3P (3 NO) - AC-3 -  $\leq 440$  V  
225 A - coil 120 V AC



### Main

|   |   |
|---|---|
| Range                                       | TeSys   |
| Product name                                | TeSys F   |
| Product or component type                   | Contacteur  |
| Device short name                           | LC1F  |
| Contacteur application                      | Motor control<br>Resistive load   |
| Utilisation category                        | AC-1<br>AC-3  |
| Poles description                           | 3P  |
| Pole contact composition                    | 3 NO  |
| [Ue] rated operational voltage              | $\leq 1000$ V AC 50/60 Hz<br>$\leq 460$ V DC  |
| [Ie] rated operational current              | 315 A ( $\leq 40$ °C) at $\leq 440$ V AC AC-1<br>225 A ( $\leq 55$ °C) at $\leq 440$ V AC AC-3  |
| Motor power kW                              | 100 kW at 1000 V AC 50/60 Hz<br>110 kW at 380...400 V AC 50/60 Hz<br>110 kW at 415 V AC 50/60 Hz<br>110 kW at 440 V AC 50/60 Hz<br>129 kW at 500 V AC 50/60 Hz<br>63 kW at 220...230 V AC 50/60 Hz<br>129 kW at 660...690 V AC 50/60 Hz |
| Control circuit type                        | AC 40...400 Hz  |
| Control circuit voltage                     | 120 V AC 40...400 Hz  |
| [Uimp] rated impulse withstand voltage      | 8 kV  |
| Overvoltage category                        | III   |
| [Ith] conventional free air thermal current | 315 A at $\leq 40$ °C   |
| Irms rated making capacity                  | 2250 A AC conforming to IEC 60947-4-1   |
| Rated breaking capacity                     | 1800 kA conforming to IEC 60947-4-1   |
| [Icw] rated short-time withstand current    | 1800 A $\leq 40$ °C 10 s<br>1000 A $\leq 40$ °C 30 s<br>850 A $\leq 40$ °C 1 min<br>560 A $\leq 40$ °C 3 min<br>440 A $\leq 40$ °C 10 min   |
| Associated fuse rating                      | 315 A gG at $\leq 440$ V<br>250 A aM at $\leq 440$ V  |
| Average impedance                           | 0.32 mOhm at 50 Hz - Ith 315 A  |
| [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                  | 16 W AC-3<br>32 W AC-1  |
| Mounting support                            | Plate   |
| Standards                                   | EN 60947-1<br>EN 60947-4-1<br>IEC 60947-1<br>IEC 60947-4-1<br>JEM 1038  |
| Product certifications                      | BV<br>CCC<br>CSA<br>DNV<br>GL<br>RINA<br>RMRoS  |

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|                         | UL<br>LROS   |
|-------------------------|--|
| Connections - terminals | Control circuit : screw clamp terminals 2 cable(s)<br>1...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit : connector 1 cable(s) 185 mm <sup>2</sup><br>Control circuit : screw clamp terminals 1 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Control circuit : screw clamp terminals 2 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Control circuit : screw clamp terminals 1 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Control circuit : screw clamp terminals 1 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Control circuit : screw clamp terminals 2 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Power circuit : lugs-ring terminals 1 cable(s) 185 mm <sup>2</sup><br>Power circuit : bar 2 x ( 32 x 4 mm) |
| Tightening torque       | Power circuit : 35 N.m<br>Control circuit : 1.2 N.m  |
| Operating time          | 20...35 ms closing<br>7...15 ms opening  |
| 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 50/60 Hz<br>0.35...0.55 Uc at 55 °C drop-out 50/60 Hz |
| Inrush power in VA              | 805 VA at 20 °C (cos $\phi$ 0.3) 50 Hz<br>970 VA at 20 °C (cos $\phi$ 0.3) 60 Hz         |
| Hold-in power consumption in VA | 55 VA at 20 °C (cos $\phi$ 0.3) 50 Hz<br>66 VA at 20 °C (cos $\phi$ 0.3) 60 Hz           |
| Heat dissipation                | 18...24 W  |

## Environment

|   |   |
|---|---|
| IP degree of protection                               | IP20 front face with shrouds (ordered separately) conforming to IEC 60529<br>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                                 | Vibrations contactor open 2 Gn, 5...300 Hz<br>Shocks contactor closed 15 Gn for 11 ms<br>Vibrations contactor closed 5 Gn, 5...300 Hz<br>Shocks contactor open 7 Gn for 11 ms |
| Height  | 197 mm  |
| Width   | 168.5 mm  |
| Depth   | 181 mm  |
| Product weight  | 4.75 kg   |

## Offer Sustainability

|                                  |   |
|----------------------------------|---|
| Sustainable offer status         | Green Premium product   |
| RoHS                             | Compliant - since 0843 - Schneider Electric declaration of conformity |
| REACH                            | Reference not containing SVHC above the threshold                     |
| Product environmental profile    | Available   |
| Product end of life instructions | Available   |