



Main

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|---|---|
| Range | TeSys |
| Product name | TeSys F |
| Product or component type | Contactors |
| Device short name | LC1F |
| Contactors application | Motor control Resistive load |
| Motor power kW | 132 kW at 380...400 V AC 50/60 Hz AC-3 140 kW at 415 V AC 50/60 Hz AC-3 140 kW at 440 V AC 50/60 Hz AC-3 160 kW at 500 V AC 50/60 Hz AC-3 160 kW at 660...690 V AC 50/60 Hz AC-3 147 kW at 1000 V AC 50/60 Hz AC-3 75 kW at 220...230 V AC 50/60 Hz AC-3 51 kW at 400 V AC 50/60 Hz AC-4 |
| Control circuit type | AC 40...400 Hz |
| Control circuit voltage | 220 V AC 40...400 Hz |
| [Uimp] rated impulse withstand voltage | 8 kV |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 350 A at ≤ 40 °C |
| Irms rated making capacity | 2650 A AC conforming to IEC 60947-4-1 |
| Rated breaking capacity | 2120 A conforming to IEC 60947-4-1 |
| [Icw] rated short-time withstand current | 2200 A ≤ 40 °C 10 s 1230 A ≤ 40 °C 30 s 950 A ≤ 40 °C 1 min 620 A ≤ 40 °C 3 min 480 A ≤ 40 °C 10 min |
| Associated fuse rating | 315 A aM at ≤ 440 V 400 A gG at ≤ 440 V |
| Average impedance | 0.3 mOhm at 50 Hz - Ith 350 A |
| [Ui] rated insulation voltage | 1000 V conforming to IEC 60947-4-1 1500 V conforming to VDE 0110 group C |

Disclaimer: 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

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|----------------------------|---|
| Power dissipation per pole | 21 W AC-3 37 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 |
| Connections - terminals | Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm ² - cable stiffness: flexible - with cable end Power circuit : connector 1 cable(s) 240 mm ² 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 1 cable(s) 240 mm ² Power circuit : bar 2 x (32 x 4 mm) Power circuit : bolted connection |
| Tightening torque | Power circuit : 35 N.m Control circuit : 1.2 N.m |
| Operating time | 100...170 ms opening 40...65 ms closing |
| Mechanical durability | 10 Mcycles |
| Operating rate | 2400 cyc/h at ≤ 55 °C |

Complementary

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|---------------------------------|---|
| Utilisation category | AC-1 AC-3 AC-4 |
| Poles description | 3P |
| Pole contact composition | 3 NO |
| [Ue] rated operational voltage | ≤ 1000 V AC 50/60 Hz ≤ 460 V DC |
| [Ie] rated operational current | 350 A (≤ 40 °C) at ≤ 440 V AC AC-1 265 A (≤ 55 °C) at ≤ 440 V AC AC-3 |
| Control circuit voltage limits | 0.85...1.1 U _c at 55 °C operational 40...400 Hz 0.15...0.2 U _c at 55 °C drop-out 40...400 Hz |
| Inrush power in VA | 650 VA at 20 °C (cos φ 0.9) 40...400 Hz |
| Hold-in power consumption in VA | 10 VA at 20 °C (cos φ 0.9) 40...400 Hz |
| Heat dissipation | 8 W |

Environment

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|---|---|
| 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 | Vibrations contactor closed 5 Gn, 5...300 Hz |

Vibrations contactor open 2 Gn, 5...300 Hz
Shocks contactor closed 15 Gn for 11 ms
Shocks contactor open 6 Gn for 11 ms

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| Height | 203 mm |
| Width | 201.5 mm |
| Depth | 213 mm |
| Product weight | 7.44 kg |

Offer Sustainability

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

Contractual warranty

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