





## Main

Range of product	TeSys F
Product or component type	Contactors
Device short name	LC1F
Contactors application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	<= 460 V DC <= 1000 V AC 50/60 Hz
[Ie] rated operational current	185 A (<= 55 °C) at <= 440 V AC AC-3 275 A (<= 40 °C) at <= 440 V AC AC-1
Motor power kW	55 kW at 220...230 V AC 50/60 Hz 100 kW at 1000 V AC 50/60 Hz 110 kW at 660...690 V AC 50/60 Hz 110 kW at 500 V AC 50/60 Hz 100 kW at 440 V AC 50/60 Hz 100 kW at 415 V AC 50/60 Hz 90 kW at 380...400 V AC 50/60 Hz
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	275 A at <= 40 °C
Irms rated making capacity	1850 A AC conforming to IEC 60947-4-1
Rated breaking capacity	1480 kA conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	400 A <= 40 °C 10 min 500 A <= 40 °C 3 min 740 A <= 40 °C 1 min 920 A <= 40 °C 30 s 1500 A <= 40 °C 10 s
Associated fuse rating	315 A gG at <= 440 V 200 A aM at <= 440 V
Average impedance	0.33 mOhm at 50 Hz - Ith 275 A
[Ui] rated insulation voltage	1500 V conforming to VDE 0110 group C 1000 V conforming to IEC 60947-4-1
Power dissipation per pole	25 W AC-1 12 W AC-3
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	Power circuit: bar 2 x ( 25 x 3 mm) Power circuit: connector 1 cable(s) 150 mm <sup>2</sup> Power circuit: lugs-ring terminals 1 cable(s) 150 mm <sup>2</sup> Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end
Tightening torque	Power circuit: 18 N.m Control circuit: 1.2 N.m
Operating time	7...15 ms opening 20...35 ms closing
Mechanical durability	10 Mcycles
Operating rate	2400 cyc/h at <= 55 °C

### Complementary

Control circuit voltage limits	0.35...0.55 U <sub>c</sub> at 55 °C drop-out 50/60 Hz 0.85...1.1 U <sub>c</sub> at 55 °C operational 50/60 Hz
Inrush power in VA	805 VA at 20 °C (cos φ 0.3) 50 Hz 970 VA at 20 °C (cos φ 0.3) 60 Hz
Hold-in power consumption in VA	66 VA at 20 °C (cos φ 0.3) 60 Hz 55 VA at 20 °C (cos φ 0.3) 50 Hz
Heat dissipation	18...24 W

### Environment

IP degree of protection	IP2x front face with shrouds (ordered separately) conforming to VDE 0106 IP2x front face with shrouds (ordered separately) conforming to IEC 60529
Protective treatment	TH
Ambient air temperature for operation	-5...55 °C
Ambient air temperature for storage	-60...80 °C
Operating altitude	3000 m without derating in temperature
Mechanical robustness	Shocks contactor open 7 Gn for 11 ms Vibrations contactor closed 5 Gn, 5...300 Hz Shocks contactor closed 15 Gn for 11 ms Vibrations contactor open 2 Gn, 5...300 Hz
Height	174 mm
Width	168.5 mm
Depth	181 mm
Product weight	4.65 kg

### Offer Sustainability

Sustainable offer status	Green Premium product
RoHS	Compliant - since 0843 - <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available <a href="#">Download Product Environmental</a>
Product end of life instructions	Available <a href="#">Download End Of Life Manual</a>

### Contractual warranty

Period	18 months
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