



### Main

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	120 V AC 40...400 Hz
Overvoltage category	III
[Ith] conventional free air thermal current	350 A at $\leq 40$ °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 $\leq 40$ °C 10 s 1230 A $\leq 40$ °C 30 s 950 A $\leq 40$ °C 1 min 620 A $\leq 40$ °C 3 min 480 A $\leq 40$ °C 10 min
Associated fuse rating	315 A aM at $\leq 440$ V 400 A gG at $\leq 440$ 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
Power dissipation per pole	21 W AC-3

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

## 37 W AC-1

Mounting support	Plate
Standards	IEC 60947-4-1 IEC 60947-1 EN 60947-4-1 JEM 1038 EN 60947-1
Product certifications	BV RINA GL CCC LROS DNV UL RMRoS CSA
Connections - terminals	Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end Power circuit : connector 1 cable(s) 240 mm <sup>2</sup> Control circuit : screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - without 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 - with 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...4 mm <sup>2</sup> - cable stiffness: solid - without cable end Power circuit : lugs-ring terminals 1 cable(s) 240 mm <sup>2</sup> 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

Utilisation category	AC-1 AC-4 AC-3
Poles description	3P
Pole contact composition	3 NO
[U <sub>e</sub> ] rated operational voltage	≤ 1000 V AC 50/60 Hz ≤ 460 V DC
[I <sub>e</sub> ] 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 <sub>c</sub> at 55 °C operational 40...400 Hz 0.15...0.2 U <sub>c</sub> 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

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

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

### Offer Sustainability

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

### Contractual warranty

Warranty period	18 months
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