



Main

Range	TeSys
Product name	TeSys F
Product or component type	Contactor
Device short name	LC1F
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3 AC-4
Poles description	3P
Power 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
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-3 147 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-4 160 kW at 660...690 V AC 50/60 Hz AC-3
[Uc] control circuit voltage	48 V AC 40...400 Hz

Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	350 A at ≤ 40 °C
Rated breaking capacity	2120 A conforming to IEC 60947-4-1

[I _{cw}] 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 - I _{th} 350 A
[U _i] 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 37 W AC-1
Mounting support	Plate
Standards	EN 60947-1 EN 60947-4-1 IEC 60947-1 IEC 60947-4-1 JIS C8201-4-1
Product certifications	ABS BV CSA DNV LROS (Lloyds register of shipping) RINA RMRoS UL CB
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 : bolted connection Power circuit : bar 2 x (32 x 4 mm)
Tightening torque	Power circuit : 35 N.m Control circuit : 1.2 N.m
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
Operating time	100...170 ms opening 40...65 ms closing
Mechanical durability	10 Mcycles
Operating rate	2400 cyc/h at ≤ 55 °C

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

Vibrations resistance contactor closed 5 Gn, 5...300 Hz

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  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 Profile
Product end of life instructions	Available  End of Life Information

Contractual warranty

Warranty period	18 months
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