



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
Pole contact composition	3 NO
[Ue] rated operational voltage	≤ 690 V AC 50/60 Hz
[Ie] rated operational current	200 A (≤ 40 °C) at ≤ 440 V AC-1 115 A (≤ 55 °C) at ≤ 440 V AC-3
Motor power kW	55 kW at 380...400 V AC 50/60 Hz AC-3 59 kW at 415 V AC 50/60 Hz AC-3 59 kW at 440 V AC 50/60 Hz AC-3 75 kW at 500 V AC 50/60 Hz AC-3 80 kW at 660...690 V AC 50/60 Hz AC-3 30 kW at 220...230 V AC 50/60 Hz AC-3 18.5 kW at 400 V AC 50/60 Hz AC-4
[Uc] control circuit voltage	240 V AC 40...400 Hz

Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	200 A at ≤ 40 °C
Rated breaking capacity	920 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1100 A ≤ 40 °C 10 s 640 A ≤ 40 °C 30 s 520 A ≤ 40 °C 1 min 400 A ≤ 40 °C 3 min 320 A ≤ 40 °C 10 min
Associated fuse rating	125 A aM at ≤ 440 V 200 A gG at ≤ 440 V
Average impedance	0.37 mOhm at 50 Hz - Ith 200 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	15 W AC-1 5 W AC-3
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 CCC DNV LROS (Lloyds register of shipping) RINA RMRoS UL

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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) 95 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) 95 mm ² Power circuit : bolted connection Power circuit : bar 2 x (20 x 3 mm)
Tightening torque	Control circuit : 1.2 N.m Power circuit : 10 N.m
Control circuit voltage limits	0.85...1.1 Uc at 55 °C operational 50/60 Hz 0.35...0.55 Uc at 55 °C drop-out 50/60 Hz
Inrush power in VA	550 VA at 20 °C (cos ϕ 0.3) 50 Hz 660 VA at 20 °C (cos ϕ 0.3) 60 Hz
Hold-in power consumption in VA	45 VA at 20 °C (cos ϕ 0.3) 50 Hz 55 VA at 20 °C (cos ϕ 0.3) 60 Hz
Heat dissipation	12...16 W
Operating time	35 ms closing (at Uc) 130 ms opening (at Uc)
Mechanical durability	10 Mcycles
Operating rate	2400 cyc/h at $\leq$ 55 °C

Environment

IP degree of protection	IP2x front face with shrouds (ordered separately) conforming to IEC 60529 IP2x 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 Vibrations resistance contactor closed 6 Gn, 5...300 Hz Shocks resistance contactor open 9 Gn for 11 ms Shocks resistance contactor closed 15 Gn for 11 ms
height	162 mm
width	163.3 mm
depth	171 mm
product weight	3.43 kg

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	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