



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	500 A (≤ 40 °C) at ≤ 440 V AC AC-1 400 A (≤ 55 °C) at ≤ 440 V AC AC-3
Motor power kW	75 kW at 400 V AC 50/60 Hz AC-4 200 kW at 380...400 V AC 50/60 Hz AC-3 220 kW at 415 V AC 50/60 Hz AC-3 250 kW at 440 V AC 50/60 Hz AC-3 257 kW at 500 V AC 50/60 Hz AC-3 185 kW at 1000 V AC 50/60 Hz AC-3 110 kW at 220...230 V AC 50/60 Hz AC-3 280 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	500 A at ≤ 40 °C
Rated breaking capacity	3200 A conforming to IEC 60947-4-1

[I _{cw}] rated short-time withstand current	3600 A ≤ 40 °C 10 s 2400 A ≤ 40 °C 30 s 1700 A ≤ 40 °C 1 min 1200 A ≤ 40 °C 3 min 1000 A ≤ 40 °C 10 min
Associated fuse rating	400 A aM at ≤ 440 V 500 A gG at ≤ 440 V
Average impedance	0.26 mOhm at 50 Hz - I _{th} 500 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	42 W AC-3 65 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 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 2 cable(s) 150 mm ² Power circuit : bolted connection Power circuit : bar 2 x (30 x 5 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 0.3...0.5 U _c at 55 °C drop-out 40...400 Hz
Inrush power in VA	1075 VA at 20 °C (cos φ 0.9) 40...400 Hz
Hold-in power consumption in VA	15 VA at 20 °C (cos φ 0.9) 40...400 Hz
Heat dissipation	14 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	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 Vibrations resistance contactor open 1.5 Gn, 5...300 Hz

Height	206 mm
Width	213 mm
Depth	219 mm
Product weight	9.1 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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