





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
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 50 Hz
Control circuit voltage	380 V AC 50 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 ² Power circuit : lugs-ring terminals 1 cable(s) 150 mm ² Control circuit : screw clamp terminals 2 cable(s) 1...4 mm ² - cable stiffness: solid - without 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...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 - with 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 - 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 Uc at 55 °C drop-out 50/60 Hz 0.85...1.1 Uc at 55 °C operational 50/60 Hz
Inrush power in VA	805 VA at 20 °C (cos ϕ 0.3) 50 Hz
Hold-in power consumption in VA	55 VA at 20 °C (cos ϕ 0.3) 50 Hz
Heat dissipation	18...24 W

Environment

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	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 - Schneider Electric declaration of conformity
Product environmental profile	Available Download Product Environmental
Product end of life instructions	Available Download End Of Life Manual