





Main

Commercial Status	Commercialised
Range	TeSys
Product name	TeSys F
Product or component type	Contacteur
Device short name	LC1F
Contacteur 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	400 A (<= 55 °C) at <= 440 V AC AC-3 500 A (<= 40 °C) at <= 440 V AC AC-1
Motor power kW	110 kW at 220...230 V AC 50/60 Hz 185 kW at 1000 V AC 50/60 Hz 280 kW at 660...690 V AC 50/60 Hz 257 kW at 500 V AC 50/60 Hz 250 kW at 440 V AC 50/60 Hz 220 kW at 415 V AC 50/60 Hz 200 kW at 380...400 V AC 50/60 Hz
Control circuit type	AC 40...400 Hz
Control circuit voltage	230 V AC 40...400 Hz
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	500 A at <= 40 °C
Irms rated making capacity	4000 A AC conforming to IEC 60947-4-1
Rated breaking capacity	3200 kA conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1000 A <= 40 °C 10 min 1200 A <= 40 °C 3 min 1700 A <= 40 °C 1 min 2400 A <= 40 °C 30 s 3600 A <= 40 °C 10 s
Associated fuse rating	500 A gG at <= 440 V 400 A aM at <= 440 V
Average impedance	0.26 mOhm at 50 Hz - Ith 500 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	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 JEM 1038
Product certifications	BV CCC CSA DNV GL RINA RMRoS UL LROS

Connections - terminals	Power circuit : lugs-ring terminals 2 cable(s) 150 mm ² Power circuit : bar 2 x (30 x 5 mm) 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 : 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

Control circuit voltage limits	0.3...0.5 Uc at 55 °C drop-out 40...400 Hz 0.85...1.1 Uc at 55 °C operational 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

Environment

IP degree of protection	IP20 front face with shrouds (ordered separately) conforming to VDE 0106 IP20 front face with shrouds (ordered separately) conforming to IEC 60529
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 open 1.5 Gn, 5...300 Hz Vibrations contactor closed 5 Gn, 5...300 Hz Shocks contactor open 6 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms
Height	206 mm
Width	213 mm
Depth	219 mm
Product weight	9.1 kg

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS	Compliant - since 0843 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available Download Product Environmental
Product end of life instructions	Available