





Main

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	780 A (<= 55 °C) at <= 440 V AC AC-3 1600 A (<= 40 °C) at <= 440 V AC AC-1
Motor power kW	220 kW at 220...230 V AC 50/60 Hz 475 kW at 660...690 V AC 50/60 Hz 450 kW at 500 V AC 50/60 Hz 425 kW at 440 V AC 50/60 Hz 425 kW at 415 V AC 50/60 Hz 400 kW at 380...400 V AC 50/60 Hz 450 kW at 1000 V AC 50/60 Hz
Control circuit type	AC 40...400 Hz
Control circuit voltage	220 V AC 40...400 Hz
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	1600 A at <= 40 °C
Irms rated making capacity	7800 A AC conforming to IEC 60947-4-1
Rated breaking capacity	6240 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	2200 A <= 40 °C 10 min 4600 A <= 40 °C 1 min 5600 A <= 40 °C 30 s 6250 A <= 40 °C 10 s 3000 A <= 40 °C 3 min
Associated fuse rating	800 A aM at <= 440 V 1600 A gG at <= 440 V
Average impedance	0.1 mOhm at 50 Hz - Ith 1600 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	60 W AC-3 250 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 : bar 2 x (100 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 : 58 N.m Control circuit : 1.2 N.m
Operating time	130...230 ms opening 40...80 ms closing
Mechanical durability	5 Mcycles
Operating rate	600 cyc/h at ≤ 55 °C

Complementary

Control circuit voltage limits	0.2...0.4 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	2100 VA at 20 °C (cos φ 0.9) 40...400 Hz
Hold-in power consumption in VA	50 VA at 20 °C (cos φ 0.9) 40...400 Hz
Heat dissipation	44 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	Shocks contactor open 5 Gn for 11 ms Vibrations contactor closed 5.5 Gn, 5...300 Hz Vibrations contactor open 2.5 Gn, 5...300 Hz Shocks contactor closed 15 Gn for 11 ms
Height	434 mm
Width	702 mm
Depth	255 mm
Product weight	39.5 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 Download Product Environmental
Product end of life instructions	Available