



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 AC-4
Poles description	3P
Pole contact composition	3 NO
System Voltage	<= 1000 V AC 50/60 Hz <= 460 V DC
[Ie] rated operational current	1600 A (<= 104 °F (40 °C)) at <= 440 V AC AC-1 780 A (<= 131 °F (55 °C)) at <= 440 V AC AC-3
Motor power kW	220 kW at 220...230 V AC 50/60 Hz AC-3 400 kW at 380...400 V AC 50/60 Hz AC-3 425 kW at 415 V AC 50/60 Hz AC-3 450 kW at 1000 V AC 50/60 Hz AC-3 425 kW at 440 V AC 50/60 Hz AC-3 450 kW at 500 V AC 50/60 Hz AC-3 110 kW at 400 V AC 50/60 Hz AC-4 475 kW at 660...690 V AC 50/60 Hz AC-3
[Uc] control circuit voltage	110 V AC 40...400 Hz

Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	1600 A at <= 104 °F (40 °C)
Rated breaking capacity	6240 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	6250 A <= 104 °F (40 °C) 10 s 5600 A <= 104 °F (40 °C) 30 s 4600 A <= 104 °F (40 °C) 1 min 3000 A <= 104 °F (40 °C) 3 min 2200 A <= 104 °F (40 °C) 10 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	1000 V conforming to IEC 60947-4-1 1500 V conforming to VDE 0110 group C
Power dissipation per pole	250 W AC-1 60 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 CSA DNV LROS (Lloyds register of shipping) RINA RMRoS UL

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Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 0...0 in ² (1...2.5 mm ²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Power circuit : bolted connection Power circuit : bar 2 x (100 x 5 mm)
Tightening torque	Control circuit: 10.62 lbf.in (1.2 N.m) Power circuit: 513.27 lbf.in (58 N.m)
Control circuit voltage limits	0.85...1.1 Uc at 131 °F (55 °C) operational 40...400 Hz 0.2...0.4 Uc at 131 °F (55 °C) drop-out 40...400 Hz
Inrush power in VA	2100 VA at 68 °F (20 °C) (cos φ 0.9) 40...400 Hz
Hold-in power consumption in VA	50 VA at 68 °F (20 °C) (cos φ 0.9) 40...400 Hz
Heat dissipation	44 W
Operating time	130...230 ms opening 40...80 ms closing
Mechanical durability	5 Mcycles
Operating rate	600 cyc/h at ≤ 131 °F (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	23...131 °F (-5...55 °C)
ambient air temperature for storage	-76...176 °F (-60...80 °C)
permissible ambient air temperature around the device	-40...158 °F (-40...70 °C)
operating altitude	9842.52 ft (3000 m) without derating
mechanical robustness	Shocks resistance contactor closed 15 Gn for 11 ms Vibrations resistance contactor open 2.5 Gn, 5...300 Hz Vibrations resistance contactor closed 5.5 Gn, 5...300 Hz Shocks resistance contactor open 5 Gn for 11 ms
height	17.09 in (434 mm)
width	27.64 in (702 mm)
depth	10.04 in (255 mm)
product weight	87.08 lb(US) (39.5 kg)

Offer Sustainability

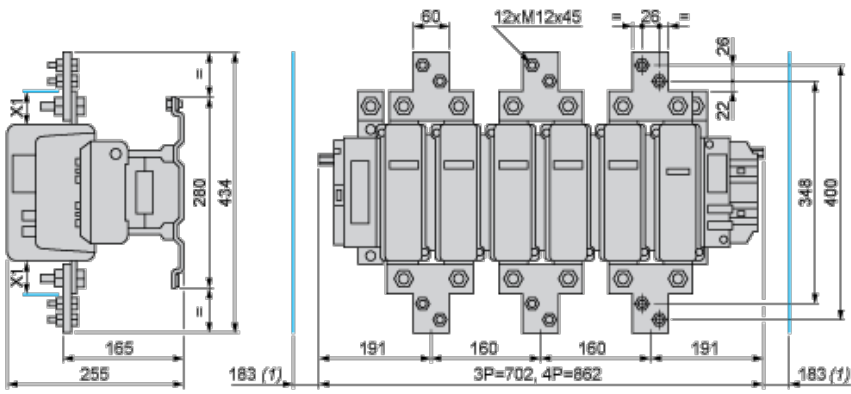
Green Premium product	Green Premium product
Compliant - since 0843 - Schneider Electric declaration of conformity	Compliant - since 0843 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Available	Available

Contractual warranty

Warranty period	18 months
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Dimensions and Drawings

LC1 F780

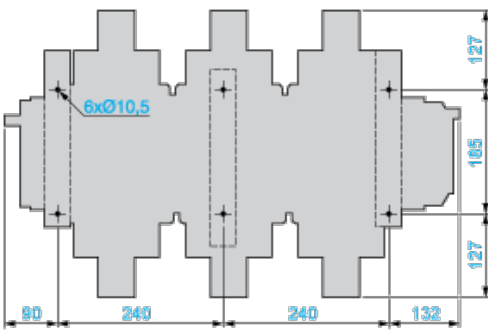


(1) Minimum distance required for coil removal.

NOTE: X1 (mm) = Minimum electrical clearance according to operating voltage and breaking capacity.

Voltage	200...500 V	690...1000 V
X1 (mm)	30	35

Fixing centers of LC1 F780



Connections and Schema

