

## LC1F780Q7

TeSys F contactor - 3P (3 NO) - AC-3 -  $\leq$  440 V  
780 A - coil 380 V AC



### 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
Pole contact composition	3 NO
[Ue] rated operational voltage	$\leq$ 1000 V AC 50/60 Hz $\leq$ 460 V DC
[Ie] rated operational current	1600 A ( $\leq$ 40 °C) at $\leq$ 440 V AC AC-1 780 A ( $\leq$ 55 °C) at $\leq$ 440 V AC AC-3
Motor power kW	220 kW at 220...230 V AC 50/60 Hz 400 kW at 380...400 V AC 50/60 Hz 425 kW at 415 V AC 50/60 Hz 425 kW at 440 V AC 50/60 Hz 450 kW at 1000 V AC 50/60 Hz 450 kW at 500 V AC 50/60 Hz 475 kW at 660...690 V AC 50/60 Hz
Control circuit type	AC 40...400 Hz
Control circuit voltage	380 V AC 40...400 Hz
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	1600 A at $\leq$ 40 °C
Irms rated making capacity	7800 A AC conforming to IEC 60947-4-1
Rated breaking capacity	6240 kA conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	6250 A $\leq$ 40 °C 10 s 5600 A $\leq$ 40 °C 30 s 4600 A $\leq$ 40 °C 1 min 3000 A $\leq$ 40 °C 3 min 2200 A $\leq$ 40 °C 10 min
Associated fuse rating	800 A aM at $\leq$ 440 V 1600 A gG at $\leq$ 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 JEM 1038
Product certifications	BV CCC CSA DNV GL RINA RMRoS

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	UL LROS
Connections - terminals	Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end Power circuit : bar 2 x ( 100 x 5 mm)
Tightening torque	Control circuit : 1.2 N.m Power circuit : 58 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	0.85...1.1 Uc at 55 °C operational 40...400 Hz 0.2...0.4 Uc at 55 °C drop-out 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 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 in temperature
Mechanical robustness	Shocks contactor closed 15 Gn for 11 ms Vibrations contactor open 2.5 Gn, 5...300 Hz Vibrations contactor closed 5.5 Gn, 5...300 Hz Shocks contactor open 5 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	Compliant - since 0843 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available