

## LC1F780FD

TeSys F contactor - 3P (3 NO) - AC-3 -  $\leq 440$  V  
780 A - coil 110 V DC



### 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	DC standard
Control circuit voltage	110 V DC
[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 UL LROS

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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	100...130 ms opening 70...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 0.2...0.4 Uc at 55 °C drop-out
Inrush power in W	2000 W at 20 °C
Hold-in power consumption in W	42 W at 20 °C
Heat dissipation	42 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	3389118094628
RoHS	Compliant - since 0843 - Schneider Electric declaration of conformity
Product environmental profile	3389118094628
Product end of life instructions	3389118094628