

# LC1F780

TeSys F contactor - 3P(3 NO)-AC-3 <= 440V  
780 A with coil LX1/ LX9 - 110...500V AC  
40/400Hz, LX4 - 110...440V DC



Product availability: Stock - Normally stocked in distribution facility



## Main

Range	TeSys
Product name	TeSys F
Product or component type	Contacteur
Device short name	LC1F
Contacteur application	Resistive load Motor control
Utilisation category	AC-4 AC-3 AC-1
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	<= 1000 V AC 50/60 Hz <= 460 V DC
[Ie] rated operational current	780 A 131 °F (55 °C) <= 440 V AC AC-3 1600 A 104 °F (40 °C) <= 440 V AC AC-1
Motor power kW	450 kW 1000 V AC 50/60 Hz AC-3) 400 kW 380...400 V AC 50/60 Hz AC-3) 425 kW 415 V AC 50/60 Hz AC-3) 425 kW 440 V AC 50/60 Hz AC-3) 450 kW 500 V AC 50/60 Hz AC-3) 220 kW 220...240 V AC 50/60 Hz AC-3) 475 kW 660...690 V AC 50/60 Hz AC-3) 110 kW 400 V AC 50/60 Hz AC-4)

## Complementary

[Uc] control circuit voltage	110...500 V AC 40...400 Hz with LX1/LX9 coil 48...440 V DC with LX4 coil
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	1600 A 104 °F (40 °C)
Irms rated making capacity	7800 A AC IEC 60947-4-1
Rated breaking capacity	6240 A IEC 60947-4-1
[Icw] rated short-time withstand current	3000 A 104 °F (40 °C) - 3 min 6250 A 104 °F (40 °C) - 10 s 5600 A 104 °F (40 °C) - 30 s 4600 A 104 °F (40 °C) - 1 min 2200 A 104 °F (40 °C) - 10 min
Associated fuse rating	800 A aM <= 440 V 1600 A gG <= 440 V
Average impedance	0.1 mOhm - Ith 1600 A 50 Hz
[Ui] rated insulation voltage	1000 V IEC 60947-4-1 1500 V VDE 0110 group C
Power dissipation per pole	60 W AC-3 250 W AC-1
Control circuit voltage limits	Operational 0.85...1.1 Uc AC 40...400 Hz Drop-out 0.2...0.4 Uc AC 40...400 Hz Operational 0.85...1.1 Uc DC Drop-out 0.2...0.4 Uc DC
Heat dissipation	22 W

The information provided in this documentation contains general descriptions and/or technical characteristics of the products of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Operating time	40...80 ms closing with LX1/LX9 coil 130...230 ms opening with LX1/LX9 coil 70...80 ms closing with LX4 coil 100...130 ms opening with LX4 coil
Mounting support	Plate
Standards	IEC 60947-1 IEC 60947-4-1 EN 60947-1 JIS C8201-4-1 EN 60947-4-1
Product certifications	UL LROS (Lloyds register of shipping) RINA DNV CCC BV CB ABS
Connections - terminals	Power circuit bar 2 100 x 5 mm Power circuit bolted connection Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )solid without cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )
Tightening torque	Power circuit 513.34 lbf.in (58 N.m) Control circuit 10.62 lbf.in (1.2 N.m)
Mechanical durability	5 Mcycles
Inrush power in VA	1900...2300 VA, 40...400 Hz cos phi 0.9 (at 68 °F (20 °C))with LX1/LX9 coil 1960...2420 VA (at 68 °F (20 °C))with LX4 coil
Hold-in power consumption in VA	44...55 VA 42...52 VA
Maximum operating rate	600 cyc/h 131 °F (55 °C)
Compatibility code	LC1F

## Environment

IP degree of protection	IP20 front face with shrouds IEC 60529 IP20 front face with shrouds 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
Mechanical robustness	Vibrations contactor open2.5 Gn, 5...300 Hz Vibrations contactor closed5.5 Gn, 5...300 Hz Shocks contactor open5 Gn for 1/2 sine wave (11 ms) Shocks contactor closed15 Gn for 1/2 sine wave (11 ms)
Height	17.09 in (434 mm)
Width	27.64 in (702 mm)
Depth	10.04 in (255 mm)
Net weight	105.82 lb(US) (48 kg)

## Ordering and shipping details

Category	22336 - CTR,F-LINE,AC,OPEN,NONREV
Discount Schedule	I12
GTIN	00785901132905
Package weight(Lbs)	42.91 kg (94.6 lb(US))
Returnability	Yes
Country of origin	CZ

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

## Contractual warranty

Warranty	18 months
----------	-----------