

# LC1F780

contactor body without coil, TeSys F, 3P(3NO), AC-3, <=440V 780A, use with coil LX1/LX9 110...500V AC 40/400Hz, LX4 110...440V DC



## 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 at 1000 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) 425 kW at 440 V AC 50/60 Hz (AC-3) 450 kW at 500 V AC 50/60 Hz (AC-3) 220 kW at 220...240 V AC 50/60 Hz (AC-3) 475 kW at 660...690 V AC 50/60 Hz (AC-3) 110 kW at 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
Oversvoltage category	III
[Ith] conventional free air thermal current	1600 A (at 104 °F (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	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 at <= 440 V 1600 A gG at <= 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 with LX1/LX9 coil Drop-out: 0.2...0.4 Uc AC 40...400 Hz with LX1/LX9 coil Operational: 0.85...1.1 Uc DC with LX4 coil Drop-out: 0.2...0.4 Uc DC with LX4 coil
Heat dissipation	22 W

The information provided in this documentation contains general descriptions and/or technical characteristics 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[RETURN]LROS (Lloyds register of shipping) [RETURN]RINA[RETURN]DNV[RETURN]CCC[RETURN]BV[RETURN]CB[RETURN]ABS[RETURN]
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, 40...400 Hz cos phi 0.9 (at 68 °F (20 °C))with LX1/LX9 coil 42...52 VA (at 68 °F (20 °C))with LX4 coil
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 derating
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	3389110227239
Returnability	No
Country of origin	CZ

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	12.40 in (31.500 cm)
Package 1 Width	16.14 in (41.000 cm)
Package 1 Length	35.63 in (90.500 cm)
Package 1 Weight	90.39 lb(US) (41.000 kg)
Unit Type of Package 2	P12
Number of Units in Package 2	2
Package 2 Height	29.53 in (75.000 cm)
Package 2 Width	31.50 in (80.000 cm)
Package 2 Length	47.24 in (120.000 cm)
Package 2 Weight	220.46 lb(US) (100.000 kg)

## Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</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
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