

# LC1F800

TeSys F contactor - 3P(3 NO)-AC-3  $\leq$  440V 800 A with coil LX1/ LX9 - 110...400V AC 40/400Hz, LX4 - 110...400V DC, LXE - 100...250V AC 50/60Hz



## Main

Range	TeSys
Product name	TeSys F
Product or component type	Contactor
Device short name	LC1F
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-1 AC-4
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	$\leq$ 1000 V AC 50/60 Hz $\leq$ 460 V DC
[Ie] rated operational current	1000 A 104 °F (40 °C) $\leq$ 440 V AC AC-1 800 A 131 °F (55 °C) $\leq$ 440 V AC AC-3
Motor power kW	450 kW 1000 V AC 50/60 Hz AC-3) 450 kW 500 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) 450 kW 380...400 V AC 50/60 Hz AC-3) 450 kW 415 V AC 50/60 Hz AC-3) 450 kW 440 V AC 50/60 Hz AC-3) 250 kW 220...240 V AC 50/60 Hz AC-3)

## Complementary

[Uc] control circuit voltage	110...400 V AC 40...400 Hz with LX1/LX9 coil 110...400 V DC with LX4 coil 100...250 V AC 50/60 Hz with LXE coil
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	100...380 V DC with LXE coil
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	1000 A 104 °F (40 °C)
Irms rated making capacity	8000 A AC IEC 60947-4-1
Rated breaking capacity	6400 A IEC 60947-4-1
[Icw] rated short-time withstand current	2600 A 104 °F (40 °C) - 3 min 5500 A 104 °F (40 °C) - 10 s 4600 A 104 °F (40 °C) - 30 s 3600 A 104 °F (40 °C) - 1 min 1700 A 104 °F (40 °C) - 10 min
Associated fuse rating	1000 A gG <= 440 V 800 A aM <= 440 V
Average impedance	0.12 mOhm - Ith 1000 A 50 Hz
[Ui] rated insulation voltage	1000 V conforming to IEC 60947-4-1 1500 V conforming to VDE 0110 group C
Power dissipation per pole	120 W AC-1 77 W AC-3
Control circuit voltage limits	Operational 0.85...1.1 Uc AC 40...400 Hz Drop-out 0.3...0.5 Uc AC 40...400 Hz Operational 0.85...1.1 Uc DC Drop-out 0.3...0.5 Uc DC Operational 85...275 V AC 50/60 Hz Drop-out 0...60 V AC 50/60 Hz Operational 85...418 V DC Drop-out 0...45 V DC
Heat dissipation	25 W 2.2...5.5 W
Operating time	60...80 ms closing with LX1/LX9 coil 160...180 ms opening with LX1/LX9 coil 60...80 ms closing with LX4 coil 40...50 ms opening with LX4 coil 40...80 ms closing with LXE coil 6...54 ms opening with LXE coil
Mounting support	Plate
Standards	IEC 60947-1 JIS C8201-4-1 EN 60947-1 IEC 60947-4-1 EN 60947-4-1
Product certifications	CB CSA LROS (Lloyds register of shipping) ABS CCC UL
Connections - terminals	Power circuit bar 2 60 x 5 mm Power circuit bolted connection Control circuit: screw clamp terminals 1 cable(s) 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 cable(s) 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: 1.2 N.m
Mechanical durability	5 Mcycles
Inrush power in VA	1700 VA, 40...400 Hz cos phi 0.9 (at 68 °F (20 °C))with LX1/LX9 coil 1900 VA (at 68 °F (20 °C))with LX4 coil 460...730 VA, 50/60 Hz cos phi 0.5 (at 68 °F (20 °C))with LXE coil 500...680 VA cos phi 0.5 (at 68 °F (20 °C))with LXE coil
Hold-in power consumption in VA	12 VA 12 VA 7...10 VA 4.0...5.5 VA

Maximum operating rate	600 cyc/h 131 °F (55 °C)
Compatibility code	LC1F

## Environment

IP degree of protection	IP20 front face with shrouds conforming to IEC 60529 IP20 front face with shrouds 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	23...131 °F (-5...55 °C)
Operating altitude	3000 m without derating
Mechanical robustness	Vibrations contactor open: 2 Gn, 5...300 Hz Vibrations contactor closed: 4 Gn, 5...300 Hz Shocks contactor open 6 Gn for 1/2 sine wave (11 ms) Shocks contactor closed 15 Gn for 1/2 sine wave (11 ms)
Height	11.97 in (304 mm)
Width	12.17 in (309 mm)
Depth	10.04 in (255 mm)
Net weight	41.34 lb(US) (18.75 kg)

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	37.91 lb(US) (17.195 kg)
Package 1 Height	13.19 in (33.5 cm)
Package 1 width	13.19 in (33.5 cm)
Package 1 Length	17.52 in (44.5 cm)
Unit Type of Package 2	P06
Number of Units in Package 2	4
Package 2 Weight	170.37 lb(US) (77.28 kg)
Package 2 Height	31.50 in (80 cm)
Package 2 width	31.50 in (80 cm)
Package 2 Length	23.62 in (60 cm)

## 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> Product out of China RoHS scope. Substance declaration for your information
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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