

# LC1F4004

TeSys F contactor-4P(4 NO)-AC-1  $\leq$  440V 500A with coil LX1/LX9 -48...1000V AC 40/400Hz, LX4 -48...440V DC, LXE -100...250V AC 50/60Hz or 100...380V DC



## Main

Range	TeSys
Product name	TeSys F
Product or component type	Contactors
Device short name	LC1F
Contactors application	Resistive load
Utilisation category	AC-1
Poles description	4P
Power pole contact composition	4 NO
[Ue] rated operational voltage	$\leq$ 1000 V AC 50/60 Hz $\leq$ 460 V DC
[Ie] rated operational current	500 A 104 °F (40 °C) $\leq$ 440 V AC AC-1

## Complementary

[Uc] control circuit voltage	48...1000 V AC 40...400 Hz with LX1/LX9 coil 48...440 V DC with LX4 coil 100...250 V AC 50/60 Hz with LXE coil 100...380 V DC with LXE coil
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	500 A (at 40 °C)
Irms rated making capacity	4000 A AC IEC 60947-4-1
Rated breaking capacity	3200 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	3600 A 40 °C - 10 s 2400 A 40 °C - 30 s 1700 A 40 °C - 1 min

Disclaimer: 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

	1200 A 40 °C - 3 min 1000 A 40 °C - 10 min
Associated fuse rating	400 A aM at ≤ 440 V 500 A gG at ≤ 440 V
Average impedance	0.26 mOhm - lth 500 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	65 W AC-1
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 0.2...0.35 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	14 W 2.2...5.5 W
Operating time	40...75 ms closing with LX1/LX9 coil 100...170 ms opening with LX1/LX9 coil 50...60 ms closing with LX4 coil 45...60 ms opening with LX4 coil 40...80 ms closing with LXE coil 6...54 ms opening with LXE coil
Mounting support	Plate
Standards	JIS C8201-4-1 IEC 60947-4-1 IEC 60947-1 EN 60947-4-1 EN 60947-1
Product certifications	CB ABS DNV RMRoS LROS (Lloyds register of shipping) BV RINA UL CSA
Connections - terminals	Power circuit: bar 2 cable(s) - busbar cross section: 30 x 5 mm Power circuit: lugs-ring terminals 2 cable(s) 150 mm <sup>2</sup> 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> ) Control circuit screw clamp terminals 1.0 0.00...0.00 in <sup>2</sup> (0.2...2.5 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 1.0 0.00...0.00 in <sup>2</sup> (0.25...2.5 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 1.0 0.00...0.00 in <sup>2</sup> (0.2...2.5 mm <sup>2</sup> )solid without cable end
Tightening torque	Power circuit: 35 N.m Control circuit: 1.2 N.m Control circuit 5.31 lbf.in (0.6 N.m)
Mechanical durability	10 Mcycles
Inrush power in VA	1000...1150 VA, 40...400 Hz cos phi 0.9 (at 68 °F (20 °C))with LX1/LX9 coil 920...1140 VA (at 68 °F (20 °C))with LX4 coil 360...470 VA, 50/60 Hz cos phi 0.5 (at 68 °F (20 °C))with LXE coil 410...450 VA (at 68 °F (20 °C))with LXE coil
Hold-in power consumption in VA	12...18 VA 4...7.5 VA 4.5...7.0 VA 2.5...4.0 VA
Maximum operating rate	2400 cyc/h 131 °F (55 °C)
Compatibility code	LC1F

## Environment

IP degree of protection	IP20 front face with shrouds conforming to IEC 60529
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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	-40...70 °C
Mechanical robustness	Vibrations contactor open: 1.5 Gn, 5...300 Hz Vibrations contactor closed: 5 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	8.11 in (206 mm)
Width	10.28 in (261 mm)
Depth	8.62 in (219 mm)
Net weight	17.64 lb(US) (8 kg)

### Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	21.41 lb(US) (9.712 kg)
Package 1 Height	10.08 in (25.6 cm)
Package 1 width	10.00 in (25.4 cm)
Package 1 Length	11.89 in (30.2 cm)
Unit Type of Package 2	S03
Number of Units in Package 2	1
Package 2 Weight	22.35 lb(US) (10.14 kg)
Package 2 Height	11.81 in (30 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Unit Type of Package 3	P06
Number of Units in Package 3	10
Package 3 Weight	235.01 lb(US) (106.6 kg)
Package 3 Height	31.50 in (80 cm)
Package 3 width	31.50 in (80 cm)
Package 3 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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