

Product datasheet

Specifications



TeSys F contactor - 3P(3 NO)-AC-3
≤ 440V 1000 A with coil LX1/ LX9
- 110...500V AC 40/400Hz, LX4 -
110...440V DC

LC1F1000

Main

Range	TeSys
Product name	TeSys F
Product or component type	Contactor
Device short name	LC1F
Contactor application	Resistive load Motor control
Utilisation category	AC-3 AC-1
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	≤ 440 V AC 50/60 Hz
[Ie] rated operational current	1250 A (at <40 °C) at ≤ 440 V AC AC-1 1000 A (at <55 °C) at ≤ 440 V AC AC-3

Complementary

[Uc] control circuit voltage	110...500 V AC 40...400 Hz with LX1/LX9 coil 110...440 V DC with LX4 coil
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	1250 A (at 40 °C)
Irms rated making capacity	10 kA AC conforming to IEC 60947-4-1
Rated breaking capacity	8 kA conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	7500 A 40 °C - 30 s 5500 A 40 °C - 1 min 4200 A 40 °C - 3 min 3000 A 40 °C - 10 min 10000 A 40 °C - 10 s
Associated fuse rating	2000 A gG at ≤ 440 V
Average impedance	0.1 mOhm - Ith 1250 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	200 W AC-1
Control circuit voltage limits	Operational: 0.85...1.1 Uc AC 40...400 Hz with LX1/LX9 coil Drop-out: 0.3...0.5 Uc AC 40...400 Hz with LX1/LX9 coil

	Operational: 0.85...1.1 Uc DC with LX4 coil Drop-out: 0.2...0.35 Uc DC with LX4 coil
Heat dissipation	18 W
Operating time	40...75 ms closing for with LX1/LX9 coil 100...170 ms opening for with LX1/LX9 coil 50...60 ms closing for with LX4 coil 45...60 ms opening for with LX4 coil
Mounting support	Plate
Standards	EN 60947-4-1 IEC 60947-4-1 EN 60947-1 IEC 60947-1
Product certifications	CB CSA CCC UKCA
Connections - terminals	Power circuit: bar 4 cable(s) Power circuit: bar 3 cable(s) Control circuit: screw clamp terminals 1 cable(s) 1...4 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm²solid without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm² Control circuit: screw clamp terminals 2 cable(s) 1...4 mm²
Tightening torque	Power circuit: 58 N.m Control circuit: 1.2 N.m
Mechanical durability	0.5 Mcycles
Inrush power in VA	1600...2400 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 2000...2200 VA (at 20 °C)with LX4 coil
Hold-in power consumption in VA	29...37 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 8...10 VA (at 20 °C)with LX4 coil
Maximum operating rate	600 cyc/h 55 °C
Compatibility code	LC1F
Power range	315 kW at 220...230 V 3 phases 560 kW at 380...400 V 3 phases 630 kW at 415 V 3 phases 670 kW at 440 V 3 phases

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	-5...40 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...60 °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	332 mm
Width	438 mm
Depth	238.6 mm
Net weight	31 kg

Packing Units

Unit Type of Package 1	PCE
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Number of Units in Package 1	1
Package 1 Height	36.1 cm
Package 1 Width	48.3 cm
Package 1 Length	60.3 cm
Package 1 Weight	23 kg
Unit Type of Package 2	P06
Number of Units in Package 2	1
Package 2 Height	77 cm
Package 2 Width	80 cm
Package 2 Length	60 cm
Package 2 Weight	30 kg
Package 3 Height	77 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
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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Recommended replacement(s)