

LC1F500

TeSys F contactor - 3P(3 NO)-AC-3 \leq 440V
1100A with coil LX1/ LX9 - 48...1000V AC
40/400Hz, LX4 - 48...440V DC



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-4 AC-1 AC-3
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	700 A (at <40 °C) at \leq 440 V AC AC-1 500 A (at <55 °C) at \leq 440 V AC AC-3
Motor power kW	250 kW at 380...400 V AC 50/60 Hz (AC-3) 280 kW at 415 V AC 50/60 Hz (AC-3) 295 kW at 440 V AC 50/60 Hz (AC-3) 335 kW at 1000 V AC 50/60 Hz (AC-3) 355 kW at 500 V AC 50/60 Hz (AC-3) 147 kW at 220...240 V AC 50/60 Hz (AC-3) 335 kW at 660...690 V AC 50/60 Hz (AC-3) 80 kW at 400 V AC 50/60 Hz (AC-4)

Complementary

[Uc] control circuit voltage	48...1000 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

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

[I _{th}] conventional free air thermal current	700 A (at 40 °C)
I _{rms} rated making capacity	5000 A AC conforming to IEC 60947-4-1
Rated breaking capacity	4000 A conforming to IEC 60947-4-1
[I _{cw}] rated short-time withstand current	4200 A 40 °C - 10 s 3200 A 40 °C - 30 s 2400 A 40 °C - 1 min 1500 A 40 °C - 3 min 1200 A 40 °C - 10 min
Associated fuse rating	500 A aM at ≤ 440 V 800 A gG at ≤ 440 V
Average impedance	0.18 mOhm - I _{th} 700 A 50 Hz
[U _i] rated insulation voltage	1000 V conforming to IEC 60947-4-1 1500 V conforming to VDE 0110 group C
Power dissipation per pole	88 W AC-1 45 W AC-3
Control circuit voltage limits	Operational: 0.85...1.1 U _c AC 40...400 Hz with LX1/LX9 coil Drop-out: 0.3...0.5 U _c AC 40...400 Hz with LX1/LX9 coil Operational: 0.85...1.1 U _c DC with LX4 coil Drop-out: 0.2...0.35 U _c 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	JIS C8201-4-1 EN 60947-1 IEC 60947-1 EN 60947-4-1 IEC 60947-4-1
Product certifications	CSA LROS (Lloyds register of shipping) DNV BV ABS CB RMRoS RINA UL
Connections - terminals	Power circuit: lugs-ring terminals 2 cable(s) 240 mm ² Power circuit: bar 2 cable(s) - busbar cross section: 40 x 5 mm Power circuit: bolted connection Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm ² flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm ² solid without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² Control circuit: screw clamp terminals 2 cable(s) 1...4 mm ²
Tightening torque	Power circuit: 35 N.m Control circuit: 1.2 N.m
Mechanical durability	10 Mcycles
Inrush power in VA	1050...1150 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 990...1220 VA (at 20 °C)with LX4 coil
Hold-in power consumption in VA	16...20 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 4.54...8 VA (at 20 °C)with LX4 coil
Maximum operating rate	2400 cyc/h 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	-5...55 °C

Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C
Mechanical robustness	Vibrations contactor open: 2 Gn, 5...300 Hz Vibrations contactor closed: 4 Gn, 5...300 Hz Shocks contactor open: 9 Gn for 1/2 sine wave (11 ms) Shocks contactor closed: 15 Gn for 1/2 sine wave (11 ms)
Height	238 mm
Width	233 mm
Depth	232 mm
Net weight	9.75 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	10.568 kg
Package 1 Height	27.5 cm
Package 1 width	30 cm
Package 1 Length	30 cm
Unit Type of Package 2	CAR
Number of Units in Package 2	1
Package 2 Weight	10.006 kg
Package 2 Height	27.5 cm
Package 2 width	30 cm
Package 2 Length	30 cm
Unit Type of Package 3	P06
Number of Units in Package 3	8
Package 3 Weight	92.332 kg
Package 3 Height	80 cm
Package 3 width	80 cm
Package 3 Length	60 cm

Offer Sustainability

Sustainable offer status	Green Premium product
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
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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