

LC1F630

TeSys F contactor - 3P(3 NO)-AC-3 \leq 440V 630 A 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	1000 A 104 °F (40 °C) \leq 440 V AC AC-1 630 A 131 °F (55 °C) \leq 440 V AC AC-3
Motor power kW	335 kW 380...400 V AC 50/60 Hz AC-3) 375 kW 415 V AC 50/60 Hz AC-3) 400 kW 440 V AC 50/60 Hz AC-3) 400 kW 500 V AC 50/60 Hz AC-3) 450 kW 1000 V AC 50/60 Hz AC-3) 200 kW 220...240 V AC 50/60 Hz AC-3) 450 kW 660...690 V AC 50/60 Hz AC-3) 100 kW 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	1000 A 104 °F (40 °C) 1250 A
I _{rms} rated making capacity	6300 A AC IEC 60947-4-1
Rated breaking capacity	5040 A IEC 60947-4-1
[I _{cw}] rated short-time withstand current	5050 A 104 °F (40 °C) - 10 s 4400 A 104 °F (40 °C) - 30 s 3400 A 104 °F (40 °C) - 1 min 2200 A 104 °F (40 °C) - 3 min 1600 A 104 °F (40 °C) - 10 min
Associated fuse rating	630 A aM ≤ 440 V 1000 A gG ≤ 440 V
Average impedance	0.12 mΩ - I _{th} 1000 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	120 W AC-1 48 W AC-3
Control circuit voltage limits	Operational 0.85...1.1 U _c AC 40...400 Hz Drop-out 0.25...0.5 U _c AC 40...400 Hz Operational 0.85...1.1 U _c DC Drop-out 0.2...0.35 U _c DC
Heat dissipation	20 W
Operating time	40...80 ms closing with LX1/LX9 coil 100...200 ms opening with LX1/LX9 coil 60...70 ms closing with LX4 coil 40...50 ms opening with LX4 coil
Mounting support	Plate
Standards	EN 60947-4-1 IEC 60947-4-1 IEC 60947-1 JIS C8201-4-1 EN 60947-1
Product certifications	ABS UL RINA DNV CSA CB LROS (Lloyds register of shipping) BV RMRoS
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 ² flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (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 0.00...0.00 in ² (1...2.5 mm ²)solid without cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)
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	1500...1730 VA, 40...400 Hz cos phi 0.9 (at 68 °F (20 °C))with LX1/LX9 coil 1420...1920 VA (at 68 °F (20 °C))with LX4 coil
Hold-in power consumption in VA	20...25 VA 6.5...12.5 VA
Maximum operating rate	1200 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	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
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	41.01 lb(US) (18.6 kg)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	37.72 lb(US) (17.11 kg)
Package 1 Height	13.39 in (34 cm)
Package 1 width	13.39 in (34 cm)
Package 1 Length	17.72 in (45 cm)
Unit Type of Package 2	P06
Number of Units in Package 2	4
Package 2 Weight	169.62 lb(US) (76.94 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	REACH Declaration
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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