

Product datasheet

Specifications



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

LC1F800

⚠ To be discontinued

⚠ To be discontinued on: 31 December 2023

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	≤ 1000 V AC 50/60 Hz ≤ 460 V DC
[Ie] rated operational current	1000 A (at ≤40 °C) at ≤ 440 V AC AC-1 800 A (at ≤55 °C) at ≤ 440 V AC AC-3
Motor power kW	450 kW at 1000 V AC 50/60 Hz (AC-3) 450 kW at 500 V AC 50/60 Hz (AC-3) 475 kW at 660...690 V AC 50/60 Hz (AC-3) 110 kW at 400 V AC 50/60 Hz (AC-4) 450 kW at 380...400 V AC 50/60 Hz (AC-3) 450 kW at 415 V AC 50/60 Hz (AC-3) 450 kW at 440 V AC 50/60 Hz (AC-3) 250 kW at 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 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 (at 40 °C)
Irms rated making capacity	8000 A AC conforming to IEC 60947-4-1
Rated breaking capacity	6400 A conforming to IEC 60947-4-1

[Icw] rated short-time withstand current	2600 A 40 °C - 3 min 5500 A 40 °C - 10 s 4600 A 40 °C - 30 s 3600 A 40 °C - 1 min 1700 A 40 °C - 10 min
Associated fuse rating	1000 A gG at <= 440 V 800 A aM at <= 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 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: 0.3...0.5 Uc DC with LX4 coil Operational: 85...275 V AC 50/60 Hz with LXE coil Drop-out: 0...60 V AC 50/60 Hz with LXE coil Operational: 85...418 V DC with LXE coil Drop-out: 0...45 V DC with LXE coil
Heat dissipation	25 W 2.2...5.5 W
Operating time	60...80 ms closing for with LX1/LX9 coil 160...180 ms opening for with LX1/LX9 coil 60...80 ms closing for with LX4 coil 40...50 ms opening for with LX4 coil 40...80 ms closing for with LXE coil 6...54 ms opening for 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 UKCA
Connections - terminals	Power circuit: bar 2 cable(s) - busbar cross section: 60 x 5 mm Power circuit: bolted connection 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	5 Mcycles
Inrush power in VA	1700 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 1900 VA (at 20 °C)with LX4 coil 460...730 VA, 50/60 Hz cos phi 0.5 (at 20 °C)with LXE coil 500...680 VA cos phi 0.5 (at 20 °C)with LXE coil
Hold-in power consumption in VA	12 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 12 VA (at 20 °C)with LX4 coil 7...10 VA, 50/60 Hz cos phi 0.5 (at 20 °C)with LXE coil 4.0...5.5 VA cos phi 0.5 (at 20 °C)with LXE coil
Maximum operating rate	600 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	-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	304 mm
Width	309 mm
Depth	255 mm
Net weight	18.75 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	33.500 cm
Package 1 Width	33.500 cm
Package 1 Length	44.500 cm
Package 1 Weight	17.195 kg
Unit Type of Package 2	P06
Number of Units in Package 2	4
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	77.280 kg

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)