Product datasheet

Specifications

To be discontinued

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

LC1F500

Discontinued on: 31-Dec-2024

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	<= 1000 V AC 50/60 Hz <= 460 V DC
[Ie] rated operational current	700 A (at <40 °C) at <= 440 V AC AC-1 500 A (at <55 °C) at <= 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
[Ith] conventional free air thermal current	700 A (at 40 °C)
Irms rated making capacity	5000 A AC conforming to IEC 60947-4-1
Rated breaking capacity	4000 A conforming to IEC 60947-4-1
[Icw] 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 - Ith 700 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	88 W AC-1 45 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: 0.2...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	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 UKCA
Connections - terminals	Power circuit: lugs-ring terminals 2 cable(s) 240 mm² 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 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: 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
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: 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 Height	27.500 cm
Package 1 Width	30.000 cm
Package 1 Length	30.000 cm
Package 1 Weight	10.398 kg
Unit Type of Package 2	P06
Number of Units in Package 2	8
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	92.332 kg

Contractual warranty

Warranty	18 months

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

How this information helps you

Environmental footprint

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	**4052**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**No**
Packaging without single use plastic	**No**
EU RoHS Directive	**Compliant with Exemptions**
REACh Regulation	**REACh Declaration**
China RoHS Regulation	**China RoHS declaration**

Use Again

Repack and remanufacture

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**

Take-back	**No**