Product datasheet

Specifications



Discontinued

TeSys F contactor-3P(3 NO)-AC-3 <= 440V 1100A with coil LX1/LX9 -48…1000V AC 40/400Hz, LX4 -48...440V DC, LXE -100...250V AC 50/60Hz or 100…380V DC

Local distributor code:

2220121 LC1F400

Discontinued on: 11 Jan 2023

EAN Code: 3389110122114

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 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	500 A (at <40 °C) at <= 440 V AC AC-1 400 A (at <55 °C) at <= 440 V AC AC-3
Motor power kW	185 kW at 1000 V AC 50/60 Hz (AC-3) 200 kW at 380...400 V AC 50/60 Hz (AC-3) 220 kW at 415 V AC 50/60 Hz (AC-3) 250 kW at 440 V AC 50/60 Hz (AC-3) 257 kW at 500 V AC 50/60 Hz (AC-3) 110 kW at 220...240 V AC 50/60 Hz (AC-3) 280 kW at 660...690 V AC 50/60 Hz (AC-3) 75 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 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	500 A (at 40 °C)
Irms rated making capacity	4000 A AC conforming to IEC 60947-4-1
Rated breaking capacity	3200 A conforming to IEC 60947-4-1

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

[Icw] rated short-time withstand current	3600 A 40 °C - 10 s 2400 A 40 °C - 30 s 1700 A 40 °C - 1 min 1200 A 40 °C - 3 min 1000 A 40 °C - 10 min
Associated fuse rating	400 A aM at <= 440 V 500 A gG at <= 440 V
Average impedance	0.26 mOhm - Ith 500 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	65 W AC-1 42 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 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	14 W 2.2…5.5 W
Operating time	40...75 ms closing for with LX1/LX9 coil 100...170 ms opening with LX1/LX9 coil 50...60 ms closing for with LX4 coil 45...60 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	JIS C8201-4-1 IEC 60947-4-1 IEC 60947-1 EN 60947-4-1 EN 60947-1
Product certifications	CB ABS DNV RMRoS LROS (Lloyds register of shipping) BV RINA UL CSA UKCA
Connections - terminals	Power circuit: bar 2 cable(s) - busbar cross section: 30 x 5 mm Power circuit: lugs-ring terminals 2 cable(s) 150 mm² 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 Control circuit: screw clamp terminals 1.0 cable(s) 0.2…2.5 mm²flexible without cable end Control circuit: screw clamp terminals 1.0 cable(s) 0.25…2.5 mm²flexible with cable end Control circuit: screw clamp terminals 1.0 cable(s) 0.2…2.5 mm²solid without cable end
Tightening torque	Power circuit: 35 N.m Control circuit: 1.2 N.m Control circuit: 0.6 N.m
Mechanical durability	10 Mcycles
Inrush power in VA	1000…1150 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 920…1140 VA (at 20 °C)with LX4 coil 360…470 VA, 50/60 Hz cos phi 0.5 (at 20 °C)with LXE coil 410…450 VA (at 20 °C)with LXE coil

Hold-in power consumption in VA	12…18 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 4…7.5 VA (at 20 °C)with LX4 coil 4.5…7.0 VA, 50/60 Hz cos phi 0.5 (at 20 °C)with LXE coil 2.5…4.0 VA (at 20 °C)with LXE 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: 1.5 Gn, 5...300 Hz Vibrations contactor closed: 5 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	206 mm
Width	213 mm
Depth	219 mm
Net weight	8 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	26.000 cm
Package 1 Width	24.500 cm
Package 1 Length	32.500 cm
Package 1 Weight	8.126 kg
Unit Type of Package 2	P06
Number of Units in Package 2	10
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	91.540 kg

Logistical informations

Country of origin	CZ

Contractual warranty

Warranty (in months)	18

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.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	**3 555 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**55 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**3 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**3 479 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**17 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**
SCIP Number	**975ba4d0-bc82-40e2-8faa-6f6819f63b0c**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**

Use Again

Repack and remanufacture

Recyclability potential, in %	**95**
End of life manual availability	**End of Life Information**
Take-back	**No**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**