Product datasheet

Specifications



Discontinued

TeSys F contactor - 3P(3 NO)-AC-3 <= 440V 185A with coil LX9 - 24...600V AC 40/400Hz, LX4 - 24...460V DC, LXE - 100...250V AC 50/60Hz or 100…380V DC

Local distributor code:

2220105 LC1F185

Discontinued on: 11 Jan 2023

EAN Code: 3389110122381

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-4 AC-1
Poles description	3P
power pole contact composition	3 NO
[Ue] rated operational voltage	<= 690 V AC 50/60 Hz <= 460 V DC
[Ie] rated operational current	275 A (at <40 °C) at <= 440 V AC-1 185 A (at <55 °C) at <= 440 V AC-3
Motor power kW	100 kW at 415 V AC 50/60 Hz (AC-3) 100 kW at 440 V AC 50/60 Hz (AC-3) 110 kW at 500 V AC 50/60 Hz (AC-3) 90 kW at 380...400 V AC 50/60 Hz (AC-3) 55 kW at 220...240 V AC 50/60 Hz (AC-3) 110 kW at 660...690 V AC 50/60 Hz (AC-3) 33 kW at 400 V AC 50/60 Hz (AC-4)

Complementary

[Uc] control circuit voltage	24...575 V AC 40...400 Hz with LX9 coil 24...460 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	275 A (at 40 °C)
Irms rated making capacity	1850 A conforming to IEC 60947-4-1
Rated breaking capacity	1480 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	1500 A 40 °C - 10 s 920 A 40 °C - 30 s 740 A 40 °C - 1 min 500 A 40 °C - 3 min 400 A 40 °C - 10 min
Associated fuse rating	200 A aM at <= 440 V 315 A gG at <= 440 V
Average impedance	0.33 mOhm - Ith 275 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	25 W AC-1 12 W AC-3
Control circuit voltage limits	Operational: 0.85...1.1 Uc AC 40...400 Hz with LX9 coil Drop-out: 0.2...0.55 Uc AC 40...400 Hz with LX9 coil Operational: 0.85...1.1 Uc DC with LX4 coil Drop-out: 0.15...0.2 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	8…9.8 W 2.2…2.5 W
Operating time	35 ms closing for with LX9 coil 130 ms opening for with LX9 coil 30...40 ms closing for with LX4 coil 30...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 60947-4-1 EN 60947-1 JIS C8201-4-1 EN 60947-4-1 IEC 60947-1
Product certifications	ABS LROS (Lloyds register of shipping) RINA CSA CB UL BV RMRoS DNV UKCA
Connections - terminals	Power circuit: bar 2 cable(s) - busbar cross section: 25 x 3 mm Power circuit: lugs-ring terminals 1 cable(s) 150 mm² Power circuit: connector 1 cable(s) 150 mm² 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 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: 18 N.m Control circuit: 1.2 N.m Control circuit: 0.6 N.m
Mechanical durability	10 Mcycles

Inrush power in VA	950…1180 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX9 coil 737…902 VA (at 20 °C)with LX4 coil 280…310 VA, 50/60 Hz cos phi 0.5 (at 20 °C)with LXE coil 270…320 VA (at 20 °C)with LXE coil
Hold-in power consumption in VA	8.9…10.9 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX9 coil 4.13…5.07 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
Compatibility code	LC1F

Environment

IP degree of protection	IP2X front face with shrouds conforming to IEC 60529 IP2X 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: 5 Gn, 5...300 Hz Shocks contactor open: 7 Gn for 1/2 sine wave (11 ms) Shocks contactor closed: 15 Gn for 1/2 sine wave (11 ms)
Height	174 mm
Width	168.5 mm
Depth	181 mm
Net weight	5.45 kg
Colour	-

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	24.000 cm
Package 1 Width	27.000 cm
Package 1 Length	25.000 cm
Package 1 Weight	4.379 kg
Unit Type of Package 2	P06
Number of Units in Package 2	12
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	61.048 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	**795 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**108 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**1 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0.5 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**675 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**10 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	**B2d4179a-eb65-40a3-a1ef-d9a33060486f**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
PVC free	**Yes**

Use Again

Repack and remanufacture

Recyclability potential, in %	**91**
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**