Product datasheet

Specifications

Contactor body,TeSys F,3P(3NO), AC-3, <=440V 150A without coil

LC1F150

Discontinued on: 18 Jan 2023

End-of-service on: 31 Dec 2023

Discontinued

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-1 AC-4 AC-3
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	250 A (at <40 °C) at <= 440 V AC-1 150 A (at <55 °C) at <= 440 V AC-3
Motor Power Kw	75 kW at 380...400 V AC 50/60 Hz (AC-3) 80 kW at 415 V AC 50/60 Hz (AC-3) 80 kW at 440 V AC 50/60 Hz (AC-3) 90 kW at 500 V AC 50/60 Hz (AC-3) 40 kW at 220...240 V AC 50/60 Hz (AC-3) 100 kW at 660...690 V AC 50/60 Hz (AC-3) 22 kW at 400 V AC 50/60 Hz (AC-4)

Complementary

[Uc] Control Circuit Voltage	24...575 V AC 40...400 Hz with LX1/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	250 A (at 40 °C)
Irms Rated Making Capacity	1500 A conforming to IEC 60947-4-1
Rated Breaking Capacity	1200 A conforming to IEC 60947-4-1
[Icw] Rated Short-Time Withstand Current	1200 A 40 °C - 10 s 700 A 40 °C - 30 s 600 A 40 °C - 1 min 450 A 40 °C - 3 min 350 A 40 °C - 10 min

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

Associated Fuse Rating	160 A aM at <= 440 V 250 A gG at <= 440 V
Average Impedance	0.35 mOhm - Ith 250 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	22 W AC-1 8 W AC-3
Control Circuit Voltage Limits	Operational: 0.85...1.1 Uc AC 40...400 Hz with LX1/LX9 coil Drop-out: 0.2...0.55 Uc AC 40...400 Hz with LX1/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	5.9…7.2 W 2.2…2.5 W
Operating Time	35 ms closing for with LX1/LX9 coil 130 ms opening for with LX1/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 60947-4-1 IEC 60947-1 EN 60947-1 JIS C8201-4-1
Product Certifications	RINA CSA BV RMRoS LROS (Lloyds register of shipping) DNV ABS UL CB UKCA
Connections - Terminals	Power circuit: lugs-ring terminals 1 cable(s) 120 mm² - busbar cross section: 25 x 3 mm Power circuit: connector 1 cable(s) 120 mm² Power circuit: bar 2 cable(s) 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	690…855 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 543…665 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	6.6…8.1 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 3.94…4.83 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	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	-40…60 °C
Ambient Air Temperature For Storage	-60…80 °C
Permissible Ambient Air Temperature Around The Device	60…70 °C at Uc
Operating Altitude	3000 m without derating
Mechanical Robustness	Vibrations contactor open: 2 Gn, 5...300 Hz Vibrations contactor closed: 6 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	170 mm
Width	163.5 mm
Depth	171 mm
Net Weight	3.83 kg

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	22.000 cm
Package 1 Width	19.600 cm
Package 1 Length	24.000 cm
Package 1 Weight	3.588 kg
Unit Type Of Package 2	P06
Number Of Units In Package 2	18
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	74.000 kg

Contractual warranty

Warranty	18 months

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency

RoHS/REACh

Well-being performance

Mercury Free	
Rohs Exemption Information	Yes

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information