Product data sheet

Specifications

Green Premium™

Contactor body, TeSys F, 3P(3NO), AC-3, <=440V 630 A without coil

LC1F630

Discontinued on: 31/12/2023

End-of-service on: 15/04/2024

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-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	1000 A (at <40 °C) at <= 440 V AC AC-1 630 A (at <55 °C) at <= 440 V AC AC-3
Motor Power Kw	335 kW at 380...400 V AC 50/60 Hz (AC-3) 375 kW at 415 V AC 50/60 Hz (AC-3) 400 kW at 440 V AC 50/60 Hz (AC-3) 400 kW at 500 V AC 50/60 Hz (AC-3) 450 kW at 1000 V AC 50/60 Hz (AC-3) 200 kW at 220...240 V AC 50/60 Hz (AC-3) 450 kW at 660...690 V AC 50/60 Hz (AC-3) 100 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	1000 A (at 40 °C) 1250 A
Irms Rated Making Capacity	6300 A AC conforming to IEC 60947-4-1
Rated Breaking Capacity	5040 A conforming to IEC 60947-4-1
[Icw] Rated Short-Time Withstand Current	5050 A 40 °C - 10 s 4400 A 40 °C - 30 s 3400 A 40 °C - 1 min 2200 A 40 °C - 3 min 1600 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	630 A aM at <= 440 V 1000 A gG 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 48 W AC-3
Control Circuit Voltage Limits	Operational: 0.85...1.1 Uc AC 40...400 Hz with LX1/LX9 coil Drop-out: 0.25...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	20 W
Operating Time	40...80 ms closing for with LX1/LX9 coil 100...200 ms opening for with LX1/LX9 coil 60...70 ms closing for with LX4 coil 40...50 ms opening for with LX4 coil
Mounting Support	Plate
Standards	EN 60947-4-1 IEC 60947-4-1 IEC 60947-1 JIS C8201-4-1 EN 60947-1
Product Certifications	ABS UL RINA DNV CSA CB LROS (Lloyds register of shipping) BV RMRoS 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	1500…1730 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 1420…1920 VA (at 20 °C)with LX4 coil
Hold-In Power Consumption In Va	20…25 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 6.5…12.5 VA (at 20 °C)with LX4 coil
Maximum Operating Rate	1200 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: 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	18.6 kg

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	34.000 cm
Package 1 Width	34.000 cm
Package 1 Length	45.000 cm
Package 1 Weight	17.110 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	76.940 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