Product data sheet

Specifications

Green Premium™

TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 630 A - coil 440 V AC

LC1F630R7

Discontinued on: 31/12/2023

To be discontinued

Main

Range	TeSys
Range Of Product	TeSys F
Product Or Component Type	Contactor
Device Short Name	LC1F
Contactor Application	Motor control Resistive load
Utilisation Category	AC-1 AC-3 AC-4
Poles Description	3P
[Ue] Rated Operational Voltage	<= 1000 V AC 50/60 Hz <= 460 V DC
[Uc] Control Circuit Voltage	440 V AC 40...400 Hz
[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

Complementary

[Uimp] Rated Impulse Withstand Voltage	8 kV
[Ith] Conventional Free Air Thermal Current	1000 A (at 40 °C) 1250 A
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
Associated Fuse Rating	1000 A gG at <= 440 V 630 A aM 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
Overvoltage Category	III
Power Pole Contact Composition	3 NO

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

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 660...690 V AC 50/60 Hz (AC-3) 450 kW at 1000 V AC 50/60 Hz (AC-3) 200 kW at 220...230 V AC 50/60 Hz (AC-3) 100 kW at 400 V AC 50/60 Hz (AC-4)
Control Circuit Voltage Limits	Operational: 0.85...1.1 Uc 40...400 Hz (at 55 °C) Drop-out: 0.25...0.5 Uc 40...400 Hz (at 55 °C)
Mechanical Durability	5 Mcycles
Inrush Power In Va	1650 VA, 40...400 Hz cos phi 0.9 (at 20 °C)
Hold-In Power Consumption In Va	22 VA, 40...400 Hz cos phi 0.9 (at 20 °C)
Maximum Operating Rate	1200 cyc/h 55 °C
Operating Time	40...80 ms closing 100...200 ms opening
Connections - Terminals	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 without 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 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1…4 mm²solid without cable end Control circuit: screw clamp terminals 2 cable(s) 1…4 mm²solid without cable end Power circuit: bar 2 cable(s) - busbar cross section: 60 x 5 mm Power circuit: bolted connection
Tightening Torque	Control circuit: 1.2 N.m Power circuit: 58 N.m
Mounting Support	Plate
Heat Dissipation	20 W
Standards	EN 60947-4-1 IEC 60947-4-1 IEC 60947-1 JIS C8201-4-1 EN 60947-1
Product Certifications	ABS BV LROS (Lloyds register of shipping) RMRoS CCC DNV UL RINA CB UKCA
Compatibility Code	LC1F
Control Circuit Type	AC at 40...400 Hz

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
Height	304 mm
Width	309 mm
Depth	255 mm

Operating Altitude	3000 m without derating
Net Weight	18.6 kg

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	29.0 cm
Package 1 Width	35.0 cm
Package 1 Length	36.0 cm
Package 1 Weight	18.4 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