Product datasheet

Specifications

Green Premium™

TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 150 A - coil 115 V AC

LC1F150FE7

Discontinued on: 1 Nov 2020

Discontinued

Main

Range Of Product	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
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 16 Hz 2/3...200 Hz
[Uc] Control Circuit Voltage	115 V AC 40...400 Hz
[Ie] Rated Operational Current	250 A (at <40 °C) AC AC-1 for power circuit 150 A (at <55 °C) AC AC-3 for power circuit

Complementary

[Uimp] Rated Impulse Withstand Voltage	8 kV coil not connected to the power circuit
[Ith] Conventional Free Air Thermal Current	250 A (at 40 °C) for power circuit
Rated Breaking Capacity	1200 A at <= 690 V for power circuit conforming to IEC 60497-4-1
Associated Fuse Rating	200 A gG at <= 440 V for power circuit 160 A aM at <= 440 V for power circuit 250 A gG at <= 440 V for power circuit
Average Impedance	0.35 mOhm - Ith 250 A 50 Hz for power circuit
[Ui] Rated Insulation Voltage	Power circuit: 1000 V conforming to IEC 60947-1 Power circuit: 1500 V conforming to VDE 0110 group C
Power Dissipation Per Pole	22 W AC-1 8 W AC-3
Power Pole Contact Composition	3 NO
Auxiliary Contact Composition	1 NO
Motor Power Kw	100 kW at 660...690 V AC 50/60 Hz 40 kW at 220...230 V AC 50/60 Hz 75 kW at 380...400 V AC 50/60 Hz 80 kW at 415 V AC 50/60 Hz 80 kW at 440 V AC 50/60 Hz 90 kW at 500 V AC 50/60 Hz
Irms Rated Making Capacity	1500 A at <= 690 V AC for power circuit conforming to IEC 60497-4-1
Control Circuit Voltage Limits	Drop-out: 0.2...0.55 Uc 40...400 Hz (at 55 °C) Operational: 0.85...1.1 Uc 40...400 Hz (at 55 °C)

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

Coil Suppressor	Without built-in bidirectional peak limiting diode suppressor
Mechanical Durability	10000000 cycles
Inrush Power In Va	770 VA cos phi 0.9 (at 20 °C)
Hold-In Power Consumption In Va	8.1 VA, 40...400 Hz cos phi 0.9 (at 20 °C)
Maximum Operating Rate	2400 cyc/h 55 °C
Operating Time	23...35 ms on closing 5...15 ms on opening
Connections - Terminals	Control circuit: connector 1 1…4 mm² - cable stiffness: flexible with cable end Control circuit: connector 1 1…4 mm² - cable stiffness: solid without cable end Control circuit: connector 2 1…2.5 mm² - cable stiffness: flexible without cable end Control circuit: connector 2 1…4 mm² - cable stiffness: flexible with cable end Control circuit: connector 2 1…4 mm² - cable stiffness: solid without cable end Power circuit: bars 2 without cable end Power circuit: ring lugs 1 120 mm² Power circuit: connector 1 120 mm²
Tightening Torque	Control circuit: 1.2 N.m - on connector - cable 1…2.5 mm² Control circuit: 1.2 N.m - on connector - cable 1…4 mm² Power circuit: 18 N.m - on bars Power circuit: 18 N.m - on connector - cable 120 mm² Power circuit: 18 N.m - on ring lugs - cable 120 mm²
Mounting Support	Plate Rail
Standards	EN 60947-4-1 JIS C8201-4-1 IEC 60947-4-1 EN 60947-1 IEC 60947-1
Product Certifications	RINA RMRoS CCC LROS (Lloyds register of shipping) DNV CB ABS CSA
Compatibility Code	LC1F
Control Circuit Type	AC
Coil Type	Standard
Auxiliary Contacts Type	type integrated in coil 1 NO
Permissible Short-Time Rating	1200 A 40 °C 10 s for power circuit 350 A 40 °C 10 min for power circuit 450 A 40 °C 3 min for power circuit 600 A 40 °C 1 min for power circuit 700 A 40 °C 30 s for power circuit
Heat Dissipation	5.9…7.2 W at 40...400 Hz for control circuit

Environment

Ip Degree Of Protection	IP20 front face with cover conforming to IEC 60529 IP20 front face with cover conforming to VDE 0106
Protective Treatment	TH
Ambient Air Temperature For Operation	-40…80 °C
Ambient Air Temperature For Storage	-60…80 °C
Permissible Ambient Air Temperature Around The Device	60…70 °C at Uc
Shock Resistance	15 gn contactor closed 9 gn contactor opened

Vibration Resistance	2 gn 5…300 Hz contactor opened 6 gn 5…300 Hz contactor closed
Fire Resistance	850 °C conforming to IEC 60695-2-1
Height	163.5 mm
Width	170 mm
Depth	171 mm
Operating Altitude	3000 m without derating
Net Weight	3.43 kg

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1

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

Eu Rohs Directive	Compliant EU RoHS Declaration
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