

Product data sheet

Specifications



TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 500 A - coil 400 V DC

LC1F500VD

ⓘ 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-3 AC-4 AC-1
Poles Description	3P
[Ue] Rated Operational Voltage	<= 1000 V AC 50/60 Hz <= 460 V DC
[Uc] Control Circuit Voltage	400 V DC
[Ie] Rated Operational Current	700 A (at <40 °C) at <= 440 V AC AC-1 500 A (at <55 °C) at <= 440 V AC AC-3

Complementary

[Uimp] Rated Impulse Withstand Voltage	8 kV
[Ith] Conventional Free Air Thermal Current	700 A (at 40 °C)
Rated Breaking Capacity	4000 A conforming to IEC 60947-4-1
[Icw] Rated Short-Time Withstand Current	4200 A 40 °C - 10 s 3200 A 40 °C - 30 s 2400 A 40 °C - 1 min 1500 A 40 °C - 3 min 1200 A 40 °C - 10 min
Associated Fuse Rating	500 A aM at <= 440 V 800 A gG at <= 440 V
Average Impedance	0.18 mOhm - Ith 700 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	88 W AC-1 45 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	250 kW at 380...400 V AC 50/60 Hz (AC-3) 280 kW at 415 V AC 50/60 Hz (AC-3) 295 kW at 440 V AC 50/60 Hz (AC-3) 355 kW at 500 V AC 50/60 Hz (AC-3) 335 kW at 660...690 V AC 50/60 Hz (AC-3) 335 kW at 1000 V AC 50/60 Hz (AC-3) 147 kW at 220...230 V AC 50/60 Hz (AC-3) 80 kW at 400 V AC 50/60 Hz (AC-4)
Control Circuit Voltage Limits	Operational: 0.85...1.1 Uc (at 55 °C) Drop-out: 0.2...0.35 Uc (at 55 °C)
Mechanical Durability	10 Mcycles
Inrush Power In W	1100 W (at 20 °C)
Hold-In Power Consumption In W	6 W at 20 °C
Maximum Operating Rate	2400 cyc/h 55 °C
Operating Time	50...60 ms closing 45...60 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: 40 x 5 mm Power circuit: lugs-ring terminals 2 cable(s) 240 mm² Power circuit: bolted connection
Tightening Torque	Control circuit: 1.2 N.m Power circuit: 35 N.m
Mounting Support	Plate
Heat Dissipation	6 W
Standards	EN 60947-4-1 IEC 60947-1 EN 60947-1 JIS C8201-4-1 IEC 60947-4-1
Product Certifications	DNV RMRoS UL BV LROS (Lloyds register of shipping) ABS RINA CB CCC
Compatibility Code	LC1F
Control Circuit Type	DC standard

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	238 mm
Width	233 mm
Depth	232 mm

Operating Altitude	3000 m without derating
Net Weight	11.35 kg

Packing Units

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

Contractual warranty

Warranty	18 months
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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-CO₂ 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