

Product data sheet

Specifications



TeSys F contactor - 3P (3 NO) - AC-3 - ≤ 440 V 500 A - coil 250 V DC

LC1F500UD

⚠ Discontinued on: Jul 12, 2021

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Main

Range	TeSys
Range of Product	TeSys F
Product or Component Type	Contactors
Device short name	LC1F
Contactors application	Motor control Resistive load
Utilisation category	AC-3 AC-1
Poles description	3P
[Ue] rated operational voltage	≤ 1000 V AC 50/60 Hz ≤ 460 V DC
[Uc] control circuit voltage	250 V DC
[Ie] rated operational current	700 A (at <104 °F (40 °C)) at ≤ 440 V AC AC-1 500 A (at <131 °F (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 104 °F (40 °C))
Rated breaking capacity	4000 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	4200 A 104 °F (40 °C) - 10 s 3200 A 104 °F (40 °C) - 30 s 2400 A 104 °F (40 °C) - 1 min 1500 A 104 °F (40 °C) - 3 min 1200 A 104 °F (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 IEC 60947-4-1 1500 V 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

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Motor power kW	250 kW at 380...400 V AC 50/60 Hz 280 kW at 415 V AC 50/60 Hz 295 kW at 440 V AC 50/60 Hz 355 kW at 500 V AC 50/60 Hz 335 kW at 660...690 V AC 50/60 Hz 335 kW at 1000 V AC 50/60 Hz 147 kW at 220...230 V AC 50/60 Hz
Control circuit voltage limits	Operational 0.85...1.1 Uc 131 °F (55 °C)) Drop-out 0.2...0.35 Uc 131 °F (55 °C))
Mechanical durability	10 Mcycles
Inrush power in W	1100 W 68 °F (20 °C))
Hold-in power consumption in W	6 W 68 °F (20 °C)
Maximum operating rate	2400 cyc/h 131 °F (55 °C)
Operating time	50...60 ms closing 45...60 ms opening
Connections - terminals	Control circuit screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 2 0.002...0.006 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²)flexible with cable end Control circuit screw clamp terminals 2 0.002...0.004 in ² (1...2.5 mm ²)flexible with cable end Control circuit screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²)solid without cable end Control circuit screw clamp terminals 2 0.002...0.006 in ² (1...4 mm ²)solid without cable end Power circuit bar 2 40 x 5 mm Power circuit lugs-ring terminals 2 0.4 in ² (240 mm ²)
Tightening torque	Control circuit 10.6 lbf.in (1.2 N.m) Power circuit 309.8 lbf.in (35 N.m)
Mounting Support	Plate
Heat dissipation	6 W
Standards	JIS C8201-4-1 IEC 60947-4-1 EN 60947-1 IEC 60947-1 EN 60947-4-1
Product Certifications	CCC LROS (Lloyds register of shipping) BV ABS DNV UL CB RMRoS RINA
Control circuit type	DC standard

Environment

IP degree of protection	IP20 front face with shrouds IEC 60529 IP20 front face with shrouds VDE 0106
Protective treatment	TH
Ambient Air Temperature for Operation	23...131 °F (-5...55 °C)
Ambient Air Temperature for Storage	-76...176 °F (-60...80 °C)
Permissible ambient air temperature around the device	-40...158 °F (-40...70 °C)
Height	9.4 in (238 mm)
Width	9.2 in (233 mm)

Depth	9.1 in (232 mm)
Operating altitude	9842.52 ft (3000 m) without derating
Net Weight	25.02 lb(US) (11.35 kg)

Ordering and shipping details

Category	22331-CTR,F-LINE,DC,OPEN,NONREV
Discount Schedule	I12
Returnability	No

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1



Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Use Better



Materials and Substances

[EU RoHS Directive](#)

Compliant

PVC free

Yes

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

WEEE Label



The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.