

Product data sheet

Specifications



TeSys F nonreversing contactor - 3P - Open - 600V 185A - 415VAC 50Hz Coil

LC1F185N522L

⚠ Discontinued on: Jul 12, 2021

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Main

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-4 AC-1
Poles description	3P
[Ue] rated operational voltage	<= 1000 V AC 50/60 Hz <= 460 V DC
[Uc] control circuit voltage	415 V AC 50 Hz
[Ie] rated operational current	275 A (at <104 °F (40 °C)) at <= 440 V AC AC-1 185 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	275 A (at 104 °F (40 °C))
Rated breaking capacity	1480 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1500 A 104 °F (40 °C) - 10 s 920 A 104 °F (40 °C) - 30 s 740 A 104 °F (40 °C) - 1 min 500 A 104 °F (40 °C) - 3 min 400 A 104 °F (40 °C) - 10 min
Associated fuse rating	200 A aM at <= 440 V 315 A gG at <= 440 V
Average impedance	0.33 mOhm - Ith 275 A 50 Hz
[Ui] rated insulation voltage	1000 V IEC 60947-4-1 1500 V VDE 0110 group C
Power dissipation per pole	12 W AC-3 25 W AC-1
Overvoltage category	III
power pole contact composition	3 NO
Auxiliary contact composition	2 NO + 2 NC

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	90 kW at 380...400 V AC 50/60 Hz (AC-3) 100 kW at 415 V AC 50/60 Hz (AC-3) 100 kW at 440 V AC 50/60 Hz (AC-3) 110 kW at 500 V AC 50/60 Hz (AC-3) 110 kW at 660...690 V AC 50/60 Hz (AC-3) 100 kW at 1000 V AC 50/60 Hz (AC-3) 55 kW at 220...230 V AC 50/60 Hz (AC-3) 33 kW at 400 V AC 50/60 Hz (AC-4)
motor power HP (UL / CSA)	50 hp at 200 V AC 60 hp at 230 V AC 125 hp at 460 V AC 150 hp at 575 V AC
Control circuit voltage limits	Operational 0.85...1.1 Uc 50/60 Hz 131 °F (55 °C)) Drop-out 0.35...0.55 Uc 50/60 Hz 131 °F (55 °C))
Mechanical durability	10 Mcycles
Inrush power in VA	805 VA, 50 Hz 0.3 68 °F (20 °C))
Maximum operating rate	2400 cyc/h 131 °F (55 °C)
Operating time	20...35 ms closing 7...15 ms opening
Connections - terminals	Control circuit screw clamp terminals 1 0.002...0.006 in² (1...4 mm²)flexible without cable end Control circuit screw clamp terminals 2 0.002...0.006 in² (1...4 mm²)flexible without cable end Control circuit screw clamp terminals 1 0.002...0.006 in² (1...4 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.002...0.004 in² (1...2.5 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.002...0.006 in² (1...4 mm²)solid without cable end Control circuit screw clamp terminals 2 0.002...0.006 in² (1...4 mm²)solid without cable end Power circuit bolted connection Power circuit 2 bars 25 x 3 mm Power circuit lugs-ring terminals 1 0.2 in² (150 mm²) Power circuit connector 1 0.2 in² (150 mm²)
Tightening torque	Control circuit 10.6 lbf.in (1.2 N.m) Power circuit 159.3 lbf.in (18 N.m)
Mounting Support	Plate
Heat dissipation	18...24 W
Standards	JIS C8201-4-1 IEC 60947-4-1 IEC 60947-1 EN 60947-1 EN 60947-4-1
Product Certifications	LROS (Lloyds register of shipping) CCC UL CB BV DNV RINA RMRoS ABS
Hold-in power consumption in VA	55 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))

Environment

IP degree of protection	IP2X front face with shrouds IEC 60529 IP2X 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)
Mechanical robustness	Vibrations contactor open2 Gn, 5...300 Hz Shocks contactor closed15 Gn for 11 ms Vibrations contactor closed5 Gn, 5...300 Hz Shocks contactor open7 Gn for 11 ms
Height	12.008 in (305 mm)
Width	6.6 in (168.5 mm)
Depth	7.1 in (181 mm)
Operating altitude	9842.52 ft (3000 m) without derating

Ordering and shipping details

Category	39997-CANADIAN PRODUCTS
Discount Schedule	NET
Returnability	No
Country of origin	US

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