

Product datasheet

Specifications



TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 275 A - coil 48 V AC

LC1F185E5

⚠ Discontinued on: 23 Jan 2021

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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	<= 460 V DC <= 690 V AC 50/60 Hz
[Uc] control circuit voltage	48 V AC 50 Hz
[Ie] rated operational current	275 A (at <40 °C) at <= 440 V AC-1 185 A (at <55 °C) at <= 440 V AC-3

Complementary

[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	275 A (at 40 °C)
Rated breaking capacity	1480 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1500 A 40 °C - 10 s 920 A 40 °C - 30 s 740 A 40 °C - 1 min 500 A 40 °C - 3 min 400 A 40 °C - 10 min
Associated fuse rating	200 aM at <= 440 V 315 aG at <= 440 V
Average impedance	0.33 mOhm - Ith 275 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	12 W AC-3 25 W AC-1
Overvoltage category	III
power pole contact composition	3 NO

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

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	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) 55 kW at 220...230 V AC 50/60 Hz (AC-3) 33 kW at 400 V AC 50/60 Hz (AC-4)
Control circuit voltage limits	Operational: 0.85...1.1 Uc 50/60 Hz (at 55 °C) Drop-out: 0.35...0.55 Uc 50/60 Hz (at 55 °C)
Mechanical durability	10 Mcycles
Inrush power in VA	805 VA, 50 Hz cos phi 0.3 (at 20 °C)
Hold-in power consumption in VA	55 VA, 50 Hz cos phi 0.3 (at 20 °C)
Maximum operating rate	2400 cyc/h 55 °C
Operating time	20...35 ms closing 7...15 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: 25 x 3 mm Power circuit: lugs-ring terminals 1 cable(s) 150 mm² Power circuit: connector 1 cable(s) 150 mm² Power circuit: bolted connection
Tightening torque	Control circuit: 1.2 N.m Power circuit: 18 N.m
Mounting support	Plate
Heat dissipation	18...24 W
Standards	JIS C8201-4-1 IEC 60947-1 IEC 60947-4-1 EN 60947-4-1 EN 60947-1
Product certifications	BV ABS CCC DNV RMRoS LROS (Lloyds register of shipping) UL RINA CB
Compatibility code	LC1F
Control circuit type	AC at 50 Hz

Environment

IP degree of protection	IP2X front face with shrouds conforming to IEC 60529 IP2X 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	174 mm
Width	168.5 mm
Depth	181 mm

Operating altitude	3000 m without derating
Net weight	4.65 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

Contractual warranty

Warranty (in months)	18
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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