

Product data sheet

Specifications



TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 150 A - coil 48V AC

LC1F150E7

⚠ Discontinued on: Sep 13, 2024

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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-1 AC-4 AC-3
Poles description	3P
[Ue] rated operational voltage	<= 690 V AC 50/60 Hz <= 460 V DC
[Uc] control circuit voltage	48 V AC 40...400 Hz
[Ie] rated operational current	250 A (at <104 °F (40 °C)) at <= 440 V AC-1 150 A (at <131 °F (55 °C)) at <= 440 V AC-3

Complementary

[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	250 A (at 104 °F (40 °C))
Rated breaking capacity	1200 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1200 A 104 °F (40 °C) - 10 s 700 A 104 °F (40 °C) - 30 s 600 A 104 °F (40 °C) - 1 min 450 A 104 °F (40 °C) - 3 min 350 A 104 °F (40 °C) - 10 min
Associated fuse rating	160 A aM at <= 440 V 250 A gG at <= 440 V
Average impedance	0.35 mOhm - Ith 250 A 50 Hz
[Ui] rated insulation voltage	1000 V IEC 60947-4-1 1500 V VDE 0110 group C
Power dissipation per pole	22 W AC-1 8 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	75 kW at 380...400 V AC 50/60 Hz (AC-3) 80 kW at 415 V AC 50/60 Hz (AC-3) 80 kW at 440 V AC 50/60 Hz (AC-3) 90 kW at 500 V AC 50/60 Hz (AC-3) 100 kW at 660...690 V AC 50/60 Hz (AC-3) 40 kW at 220...230 V AC 50/60 Hz (AC-3) 22 kW at 400 V AC 50/60 Hz (AC-4)
Control circuit voltage limits	Operational 0.85...1.1 Uc 40...400 Hz 131 °F (55 °C)) Drop-out 0.2...0.55 Uc 40...400 Hz 131 °F (55 °C))
Mechanical durability	10 Mcycles
Inrush power in VA	770 VA, 40...400 Hz 0.9 68 °F (20 °C))
Hold-in power consumption in VA	8.1 VA, 40...400 Hz 0.9 68 °F (20 °C))
Maximum operating rate	2400 cyc/h 131 °F (55 °C)
Operating time	35 ms closing at Uc) 130 ms opening at Uc)
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 bar 2 25 x 3 mm Power circuit lugs-ring terminals 1 0.2 in² (120 mm²) Power circuit connector 1 0.2 in² (120 mm²) Power circuit bolted connection
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	5.9...7.2 W
Standards	EN 60947-1 EN 60947-4-1 IEC 60947-1 IEC 60947-4-1 JIS C8201-4-1
Product certifications	RMRoS DNV BV CCC CB RINA ABS LROS (Lloyds register of shipping) UL UKCA
Compatibility code	LC1F
Control circuit type	AC 40...400 Hz

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	-40...140 °F (-40...60 °C)
Ambient air temperature for storage	-76...176 °F (-60...80 °C)

Permissible ambient air temperature around the device	140...158 °F (60...70 °C) at Uc
Height	6.7 in (170 mm)
Width	6.4 in (163.5 mm)
Depth	6.7 in (171 mm)
Operating altitude	3000 m without derating
Net weight	7.56 lb(US) (3.43 kg)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.3 in (21.0 cm)
Package 1 Width	7.9 in (20.0 cm)
Package 1 Length	9.4 in (24.0 cm)
Package 1 Weight	9.143 lb(US) (4.147 kg)

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 >](#)

 Environmental footprint	
Total lifecycle Carbon footprint	552 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	71 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.7 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.3 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	474 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	6 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better

 Materials and Substances	
SCIP Number	B2d4179a-eb65-40a3-a1ef-d9a33060486f

Use Longer

 Lifetime extension	
Repair	No

Use Again

 Repack and remanufacture	
Recyclability potential, in %	91
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins