

Product datasheet

Specifications



TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 225 A - coil 440 V AC

LC1F225R7

⚠ Discontinued on: 11 Jan 2023

⚠ 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-4 AC-3 AC-1
Poles description	3P
[Ue] rated operational voltage	<= 460 V DC <= 690 V AC 50/60 Hz
[Uc] control circuit voltage	440 V AC 40...400 Hz
[Ie] rated operational current	315 A (at <40 °C) at <= 440 V AC-1 225 A (at <55 °C) at <= 440 V AC-3

Complementary

[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	315 A (at 40 °C)
Rated breaking capacity	1800 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1800 A 40 °C - 10 s 1000 A 40 °C - 30 s 850 A 40 °C - 1 min 560 A 40 °C - 3 min 440 A 40 °C - 10 min
Associated fuse rating	315 A gG at <= 440 V 250 A aM at <= 440 V
Average impedance	0.32 mOhm - Ith 315 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	32 W AC-1 16 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	110 kW at 380...400 V AC 50/60 Hz (AC-3) 110 kW at 415 V AC 50/60 Hz (AC-3) 110 kW at 440 V AC 50/60 Hz (AC-3) 129 kW at 500 V AC 50/60 Hz (AC-3) 129 kW at 660...690 V AC 50/60 Hz (AC-3) 63 kW at 220...230 V AC 50/60 Hz (AC-3) 40 kW at 400 V AC 50/60 Hz (AC-4)
Control circuit voltage limits	Operational: 0.85...1.1 Uc 40...400 Hz (at 55 °C) Drop-out: 0.2...0.55 Uc 40...400 Hz (at 55 °C)
Mechanical durability	10 Mcycles
Inrush power in VA	1070 VA, 40...400 Hz cos phi 0.9 (at 20 °C)
Hold-in power consumption in VA	9.9 VA, 40...400 Hz cos phi 0.9 (at 20 °C)
Maximum operating rate	2400 cyc/h 55 °C
Operating time	35 ms closing (at Uc) 130 ms opening (at Uc)
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: 32 x 4 mm Power circuit: lugs-ring terminals 1 cable(s) 185 mm² Power circuit: connector 1 cable(s) 185 mm² Power circuit: bolted connection
Tightening torque	Control circuit: 1.2 N.m Power circuit: 35 N.m
Mounting support	Plate
Heat dissipation	8...9.8 W
Standards	EN 60947-4-1 EN 60947-1 IEC 60947-4-1 JIS C8201-4-1 IEC 60947-1
Product certifications	UL BV CCC ABS CB RMRoS LROS (Lloyds register of shipping) RINA DNV UKCA
Compatibility code	LC1F
Control circuit type	AC at 40...400 Hz

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	197 mm
Width	168.5 mm

Depth	181 mm
Operating altitude	3000 m without derating
Product weight	4.75 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	21.0 cm
Package 1 Width	24.0 cm
Package 1 Length	26.5 cm
Package 1 Weight	5.484 kg

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 >](#)



Environmental footprint

Total lifecycle Carbon footprint	888 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	95 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.9 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.4 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	783 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	9 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

SCIP Number	B2d4179a-eb65-40a3-a1ef-d9a33060486f
EU RoHS Directive	Compliant By Exemption
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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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