

Product data sheet

Specifications



Contactor, TeSys F, 3P(3NO), AC-3 ≤440V 630A, 208V AC coil

LC1F630L7

⚠ Discontinued on: 31 Dec 2023

⚠ End-of-service on: 23 Dec 2025

⚠ To be discontinued

Main

Range	TeSys
Range of product	TeSys F
Product or component type	Contactor
Device short name	LC1F
Contactor application	Resistive load Motor control
Utilisation category	AC-3 AC-1 AC-4
Poles description	3P
[Ue] rated operational voltage	≤ 1000 V AC 50/60 Hz ≤ 460 V DC
[Uc] control circuit voltage	208 V AC 40...400 Hz
[Ie] rated operational current	1000 A (at <40 °C) at ≤ 440 V AC AC-1 630 A (at <55 °C) at ≤ 440 V AC AC-3

Complementary

[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	1000 A (at 40 °C) 1250 A
Rated breaking capacity	5040 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	5050 A 40 °C - 10 s 4400 A 40 °C - 30 s 3400 A 40 °C - 1 min 2200 A 40 °C - 3 min 1600 A 40 °C - 10 min
Associated fuse rating	1000 A gG at ≤ 440 V 630 A aM at ≤ 440 V
Average impedance	0.12 mOhm - Ith 1000 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	120 W AC-1 48 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	335 kW at 380...400 V AC 50/60 Hz (AC-3) 375 kW at 415 V AC 50/60 Hz (AC-3) 400 kW at 440 V AC 50/60 Hz (AC-3) 400 kW at 500 V AC 50/60 Hz (AC-3) 450 kW at 660...690 V AC 50/60 Hz (AC-3) 450 kW at 1000 V AC 50/60 Hz (AC-3) 200 kW at 220...230 V AC 50/60 Hz (AC-3) 100 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: 0.25...0.5 Uc 40...400 Hz (at 55 °C)
Mechanical durability	5 Mcycles
Inrush power in VA	1650 VA, 40...400 Hz cos phi 0.9 (at 20 °C)
Hold-in power consumption in VA	22 VA, 40...400 Hz cos phi 0.9 (at 20 °C)
Maximum operating rate	1200 cyc/h 55 °C
Operating time	40...80 ms closing 100...200 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: 60 x 5 mm Power circuit: bolted connection
Tightening torque	Control circuit: 1.2 N.m Power circuit: 58 N.m
Mounting support	Plate
Heat dissipation	20 W
Standards	IEC 60947-1 EN 60947-4-1 JIS C8201-4-1 EN 60947-1 IEC 60947-4-1
Product certifications	CB UL ABS RMRoS CCC DNV LROS (Lloyds register of shipping) RINA BV 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	304 mm
Width	309 mm
Depth	255 mm

Operating altitude	3000 m without derating
Product weight	18.6 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	28.0 cm
Package 1 Width	28.0 cm
Package 1 Length	35.0 cm
Package 1 Weight	18.7 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	4 298 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	11 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.6 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	4 282 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	4 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
SCIP Number	975ba4d0-bc82-40e2-8faa-6f6819f63b0c
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	95
End of life manual availability	End of Life Information
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