

# Product datasheet

Specifications



## TeSys F contactor - 4P (4 NO) - AC-3 - $\leq 440$ V 185 A - coil 24 V AC

LC1F1854B7

⚠ Discontinued on: Apr 13, 2023

⚠ Discontinued

### Main

Range	TeSys
Range of product	TeSys F
Product or component type	Contacteur
Device short name	LC1F
Contacteur application	Motor control Resistive load
Utilisation category	AC-3 AC-4 AC-1
Poles description	4P
[Ue] rated operational voltage	$\leq 460$ V DC $\leq 690$ V AC 50/60 Hz
[Uc] control circuit voltage	24 V AC 40...400 Hz
[Ie] rated operational current	275 A (at $<40$ °C) at $\leq 440$ V AC-1 185 A (at $<55$ °C) at $\leq 440$ 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 A aM at $\leq 440$ V 315 A gG at $\leq 440$ 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	4 NO

<b>Motor power kW</b>	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)
<b>Control circuit voltage limits</b>	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)
<b>Mechanical durability</b>	10 Mcycles
<b>Inrush power in VA</b>	950...1180 VA, 40...400 Hz cos phi 0.9 (at 20 °C)
<b>Hold-in power consumption in VA</b>	8.9...10.9 VA, 40...400 Hz cos phi 0.9 (at 20 °C)
<b>Maximum operating rate</b>	2400 cyc/h 55 °C
<b>Operating time</b>	35 ms closing (at Uc) 130 ms opening (at Uc)
<b>Connections - terminals</b>	Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> solid without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> solid 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 mm <sup>2</sup> Power circuit: connector 1 cable(s) 150 mm <sup>2</sup> Power circuit: bolted connection
<b>Tightening torque</b>	Control circuit: 1.2 N.m Power circuit: 18 N.m
<b>Mounting support</b>	Plate
<b>Heat dissipation</b>	8...9.8 W
<b>Standards</b>	IEC 60947-4-1 JIS C8201-4-1 EN 60947-4-1 IEC 60947-1 EN 60947-1
<b>Product certifications</b>	LROS (Lloyds register of shipping) RMRoS UL BV RINA CSA DNV ABS CB
<b>Compatibility code</b>	LC1F
<b>Control circuit type</b>	AC at 40...400 Hz

## Environment

<b>IP degree of protection</b>	IP2X front face with shrouds conforming to IEC 60529 IP2X front face with shrouds conforming to VDE 0106
<b>Protective treatment</b>	TH
<b>Ambient air temperature for operation</b>	-5...55 °C
<b>Ambient air temperature for storage</b>	-60...80 °C
<b>Permissible ambient air temperature around the device</b>	-40...70 °C
<b>Height</b>	174 mm
<b>Width</b>	168.5 mm
<b>Depth</b>	181 mm

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<b>Operating altitude</b>	3000 m without derating
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<b>Product weight</b>	4.65 kg
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## Packing Units

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<b>Unit Type of Package 1</b>	PCE
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<b>Number of Units in Package 1</b>	1
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<b>Package 1 Height</b>	18.1 cm
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<b>Package 1 Width</b>	20.85 cm
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<b>Package 1 Length</b>	17.4 cm
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<b>Package 1 Weight</b>	5.47 kg
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## Contractual warranty

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<b>Warranty (in months)</b>	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

SCIP Number

B2d4179a-eb65-40a3-a1ef-d9a33060486f

EU RoHS Directive

[Compliant By Exemption](#)

### 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