

# Product data sheet

Specifications



## TeSys F contactor - 3P (3 NO) - AC-3 - $\leq 440$ V 275 A - coil 380 V AC

LC1F1857Q7

⚠ Discontinued

### Main

Range	TeSys
Range of Product	TeSys F
Product or Component Type	Contactor
Device short name	LC1F
Contactor application	Induction furnace
Utilisation category	AC-4 AC-1 AC-3
Poles description	3P
[Ue] rated operational voltage	$\leq 460$ V DC $\leq 690$ V AC 50/60 Hz
[Uc] control circuit voltage	380 V AC 40...400 Hz
[Ie] rated operational current	275 A (at $<104$ °F (40 °C)) at $\leq 440$ V AC-1 185 A (at $<131$ °F (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 $104$ °F (40 °C))
Rated breaking capacity	1480 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1500 A $104$ °F (40 °C) - 10 s 920 A $104$ °F (40 °C) - 30 s 740 A $104$ °F (40 °C) - 1 min 500 A $104$ °F (40 °C) - 3 min 400 A $104$ °F (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 IEC 60947-4-1 1500 V VDE 0110 group C
Power dissipation per pole	12 W AC-3 25 W AC-1
Overvoltage category	III
power pole contact composition	1 NO (early break) + 2 NO

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

<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 U <sub>c</sub> 40...400 Hz 131 °F (55 °C)) Drop-out 0.35...0.55 U <sub>c</sub> 40...400 Hz 131 °F (55 °C))
<b>Mechanical durability</b>	10 Mcycles
<b>Inrush power in VA</b>	1070 VA, 40...400 Hz 0.9 68 °F (20 °C))
<b>Hold-in power consumption in VA</b>	9.9 VA, 40...400 Hz 0.9 68 °F (20 °C))
<b>Maximum operating rate</b>	2400 cyc/h 131 °F (55 °C)
<b>Operating time</b>	20...35 ms closing 7...15 ms opening
<b>Connections - terminals</b>	Control circuit screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 2 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end Control circuit screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end Power circuit bar 2 25 x 3 mm Power circuit lugs-ring terminals 1 0.2 in <sup>2</sup> (150 mm <sup>2</sup> ) Power circuit connector 1 0.2 in <sup>2</sup> (150 mm <sup>2</sup> ) Power circuit bolted connection
<b>Tightening torque</b>	Control circuit 10.6 lbf.in (1.2 N.m) Power circuit 159.3 lbf.in (18 N.m)
<b>Mounting Support</b>	Plate
<b>Heat dissipation</b>	8...9.8 W
<b>Standards</b>	IEC 60947-4-1 IEC 60947-1 EN 60947-1 JIS C8201-4-1 EN 60947-4-1
<b>Product Certifications</b>	CCC BV RINA RMRoS LROS (Lloyds register of shipping) ABS UL DNV CB
<b>Compatibility code</b>	LC1F
<b>Control circuit type</b>	AC 40...400 Hz

## Environment

<b>IP degree of protection</b>	IP2X front face with shrouds IEC 60529 IP2X front face with shrouds VDE 0106
<b>Protective treatment</b>	TH
<b>Ambient Air Temperature for Operation</b>	23...131 °F (-5...55 °C)
<b>Ambient Air Temperature for Storage</b>	-76...176 °F (-60...80 °C)
<b>Permissible ambient air temperature around the device</b>	-40...158 °F (-40...70 °C)

<b>Height</b>	6.9 in (174 mm)
<b>Width</b>	6.6 in (168.5 mm)
<b>Depth</b>	7.1 in (181 mm)
<b>Operating altitude</b>	9842.52 ft (3000 m) without derating
<b>Net Weight</b>	10.25 lb(US) (4.65 kg)

## Ordering and shipping details

<b>Category</b>	22336-CTR,F-LINE,AC,OPEN,NONREV
<b>Discount Schedule</b>	112
<b>GTIN</b>	3389110544084
<b>Returnability</b>	No

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1

## Contractual warranty

<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

[EU RoHS Directive](#)

Compliant

### 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.