

Product data sheet

Specifications



TeSys F contactor - 3P (3 NO) - AC-3 - <= 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	<= 460 V DC <= 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 <= 440 V AC-1 185 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	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 <= 440 V 315 A gG at <= 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.

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	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)
Control Circuit Voltage Limits	Operational 0.85...1.1 Uc 40...400 Hz 131 °F (55 °C)) Drop-out 0.35...0.55 Uc 40...400 Hz 131 °F (55 °C))
Mechanical Durability	10 Mcycles
Inrush Power In Va	1070 VA, 40...400 Hz 0.9 68 °F (20 °C))
Hold-In Power Consumption In Va	9.9 VA, 40...400 Hz 0.9 68 °F (20 °C))
Maximum Operating Rate	2400 cyc/h 131 °F (55 °C)
Operating Time	20...35 ms closing 7...15 ms opening
Connections - Terminals	Control circuit screw clamp terminals 1 0.00...0.01 in² (1...4 mm²)flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in² (1...4 mm²)flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in² (1...4 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in² (1...2.5 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in² (1...4 mm²)solid without cable end Control circuit screw clamp terminals 2 0.00...0.01 in² (1...4 mm²)solid without cable end Power circuit bar 2 25 x 3 mm Power circuit lugs-ring terminals 1 0.23 in² (150 mm²) Power circuit connector 1 0.23 in² (150 mm²) Power circuit bolted connection
Tightening Torque	Control circuit 10.62 lbf.in (1.2 N.m) Power circuit 159.31 lbf.in (18 N.m)
Mounting Support	Plate
Heat Dissipation	8...9.8 W
Standards	IEC 60947-4-1 IEC 60947-1 EN 60947-1 JIS C8201-4-1 EN 60947-4-1
Product Certifications	CCC BV RINA RMRoS LROS (Lloyds register of shipping) ABS UL DNV CB
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	23...131 °F (-5...55 °C)
Ambient Air Temperature For Storage	-76...176 °F (-60...80 °C)
Permissible Ambient Air Temperature Around The Device	-40...158 °F (-40...70 °C)

Height	6.85 in (174 mm)
Width	6.63 in (168.5 mm)
Depth	7.13 in (181 mm)
Operating Altitude	9842.52 ft (3000 m) without derating
Net Weight	10.25 lb(US) (4.65 kg)

Ordering and shipping details

Category	22336-CTR,F-LINE,AC,OPEN,NONREV
Discount Schedule	I12
Gtin	3389110544084
Returnability	No

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1

Contractual warranty

Warranty	18 months
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Sustainability

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Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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Well-being performance



Mercury Free



Rohs Exemption Information

Yes

Eu Rohs Directive

Compliant

[EU RoHS Declaration](#)

China Rohs Regulation

[China RoHS declaration](#)

Product out of China RoHS scope. Substance declaration for your information.