

Product data sheet

Specifications



TeSys F - star delta starter - 3 x 3P (3 NO) - 185 A - 48 V AC coil

LC3F185E7

⚠ Discontinued on: Jul 12, 2021

⚠ Discontinued

Main

Range	TeSys
Product Name	TeSys F
Product Or Component Type	Star delta starter
Device Short Name	LC3F
Contactor Application	Motor control
Utilisation Category	AC-3
Device Presentation	Pre-wired
Poles Description	3 x 3P
Power Pole Contact Composition	3 x 3 NO
[Ue] Rated Operational Voltage	Power circuit <= 1000 V AC 16 Hz 2/3...200 Hz
[Ie] Rated Operational Current	185 A (at <131 °F (55 °C)) at <= 440 V AC AC-3 for power circuit
Motor Power Kw	160 kW 380/400 V AC 50/60 Hz 160 kW 415 V AC 50/60 Hz 185 kW 440 V AC 50/60 Hz 90 kW 220/230 V AC 50/60 Hz
Control Circuit Type	AC 50/60 Hz
[Uc] Control Circuit Voltage	48 V AC 50/60 Hz
Auxiliary Contact Composition	1 NC KM1 star contactor 1 NO KM1 star contactor 2 NC KM2 line contactor 1 NO KM2 line contactor 1 NC KM3 delta contactor 2 NO KM3 delta contactor
[Uimp] Rated Impulse Withstand Voltage	8 kV
[Ui] Rated Insulation Voltage	1000 V IEC 60947-4-1 1500 V VDE 0110 group C
Interlocking Type	Without start delta mechanical interlock
Mounting Support	Plate
Standards	IEC 60947-1 EN 60947-4-1 JIS C8201-4-1 IEC 60947-4-1 EN 60947-1

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

Product Certifications	RINA
	UL
	CSA
	ABS
	DNV
	RMRoS
	CB
	LROS (Lloyds register of shipping)
	CCC

Complementary

[Ith] Conventional Free Air Thermal Current	275 A 104 °F (40 °C)
Irms Rated Making Capacity	1850 A IEC 60947-4-1
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	315 A gG <= 440 V 200 A aM <= 440 V
Connections - Terminals	Power circuit: lugs-ring terminals 1 0.23 in² (150 mm²) Power circuit: connector 1 0.23 in² (150 mm²) Control circuit: screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.00...0.00 in² (1...2.5 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.00...0.01 in² (1...4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.00...0.01 in² (1...4 mm²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.00...0.01 in² (1...4 mm²) - cable stiffness: solid without cable end Power circuit: bar 2 - busbar cross section: 25 x 3 mm Power circuit: bolted connection
Connections Bolt Diameter	M8
Tightening Torque	Control circuit 10.62 lbf.in (1.2 N.m) Power circuit 159.31 lbf.in (18 N.m)
Operating Time	20...35 ms closing 7...15 ms opening
Mechanical Durability	10 Mcycles
Maximum Operating Rate	2400 cyc/h 131 °F (55 °C)
Starting Time	20 s
Control Circuit Voltage Limits	Operational: 0.85...1.1 Uc at 50/60 Hz (at <131 °F (55 °C)) Drop-out: 0.35...0.55 Uc at 50/60 Hz (at <131 °F (55 °C))
Inrush Power In Va	805 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C)) 970 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C))
Hold-In Power Consumption In Va	55 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C)) 66 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C))
Heat Dissipation	18...24 W
Width	20.67 in (525 mm)
Height	4.33 in (110 mm)
Depth	9.25 in (235 mm)
Net Weight	36.38 lb(US) (16.5 kg)

Environment

Ip Degree Of Protection	IP20 front face with shrouds IEC 60529 IP20 front face with shrouds VDE 0106
Protective Treatment	TH
Ambient Air Temperature For Storage	-76...176 °F (-60...80 °C)
Ambient Air Temperature For Operation	23...131 °F (-5...55 °C) -40...158 °F (-40...70 °C) at Uc
Operating Altitude	9842.52 ft (3000 m) without derating
Mechanical Robustness	Vibrations contactor open2 Gn, 5...300 Hz Shocks contactor closed15 Gn for 11 ms

Ordering and shipping details

Category	18401-WORLD SERVICE PARTS(CTR ACCESS)
Discount Schedule	CP10
Gtin	3389110227635
Returnability	No

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	11.42 in (29 cm)
Package 1 Width	21.46 in (54.5 cm)
Package 1 Length	25.39 in (64.5 cm)
Package 1 Weight	41.89 lb(US) (19 kg)

Contractual warranty

Warranty	18 months
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Sustainability

Green Premium™ label is Schneider Electric’s commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

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

[Learn more about Green Premium >](#)

[Guide to assess a product’s sustainability >](#)



Transparency RoHS/REACH

Well-being performance

✓ Mercury Free	
✓ Rohs Exemption Information	Yes
✓ Pvc Free	

Certifications & Standards

Eu Rohs Directive	Compliant EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information.
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Circularity Profile	End of Life Information

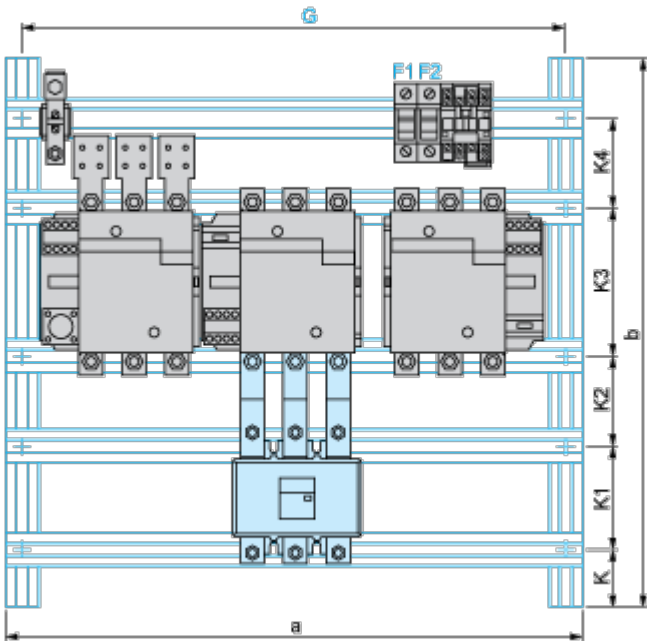
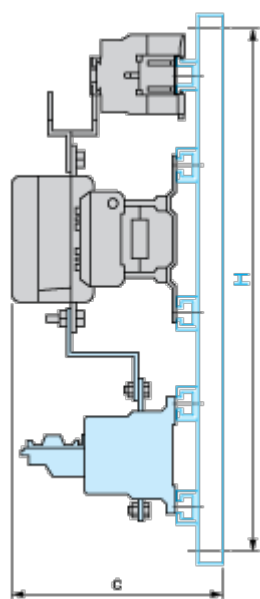
Dimensions Drawings

Dimensions and Drawings

Chassis mounted starters

Pre-assembled: LC3 F185 to LC3 F400

For customer assembly: 2 x LC1 F●●● and 1 x LC1 D150 or 3 x LC1 F●●●



	a	b	c	G	H	K	K1	K2	K3	K4
LC3 F185 or 2 x LC1 F●●● + 1 x LC1 D with components F185	565	675	235	525	625	160	110	80	110	80
LC3 F225 or 3 x LC1 F●●● with components F225	565	675	235	525	625	160	110	80	110	80

	a	b	c	G	H	K	K1	K2	K3	K4
LC3 F265 or 3 x LC1 F●●● with components F265	665	775	266	625	725	165	110	100	110	110
LC3 F330 or 3 x LC1 F●●● with components F330	765	975	276	725	825	195	140	100	110	180
LC3 F400 or 3 x LC1 F●●● with components F400	765	975	276	725	925	195	140	100	180	110

Motor Starter BOM
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