# Product data sheet





# TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 780 A - coil 240 V AC

LC1F780U7

! Discontinued on: Jan 23, 2021

#### (!) 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-1 AC-4 AC-3	
Poles Description	3P	
[Ue] Rated Operational Voltage	<= 1000 V AC 50/60 Hz <= 460 V DC	
[Uc] Control Circuit Voltage	240 V AC 40400 Hz	
[le] Rated Operational Current	1600 A (at <104 °F (40 °C)) at <= 440 V AC AC-1 780 A (at <131 °F (55 °C)) at <= 440 V AC AC-3	

### Complementary

[Uimp] Rated Impulse Withstand Voltage	8 kV
[Ith] Conventional Free Air Thermal Current	1600 A (at 104 °F (40 °C))
Rated Breaking Capacity	6240 A conforming to IEC 60947-4-1
[Icw] Rated Short-Time Withstand Current	3000 A 104 °F (40 °C) - 3 min 6250 A 104 °F (40 °C) - 10 s 5600 A 104 °F (40 °C) - 30 s 4600 A 104 °F (40 °C) - 1 min 2200 A 104 °F (40 °C) - 10 min
Associated Fuse Rating	1600 A gG at <= 440 V 800 A aM at <= 440 V
Average Impedance	0.1 mOhm - Ith 1600 A 50 Hz
[Ui] Rated Insulation Voltage	1000 V IEC 60947-4-1 1500 V VDE 0110 group C
Power Dissipation Per Pole	250 W AC-1 60 W AC-3
Overvoltage Category	III
Power Pole Contact Composition	3 NO

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

Motor Power Kw	450 kW at 1000 V AC 50/60 Hz (AC-3) 400 kW at 380400 V AC 50/60 Hz (AC-3) 425 kW at 415 V AC 50/60 Hz (AC-3) 425 kW at 440 V AC 50/60 Hz (AC-3) 450 kW at 500 V AC 50/60 Hz (AC-3) 475 kW at 660690 V AC 50/60 Hz (AC-3) 220 kW at 220230 V AC 50/60 Hz (AC-3) 110 kW at 400 V AC 50/60 Hz (AC-4)	
Control Circuit Voltage Limits	Operational 0.851.1 Uc 40400 Hz 131 °F (55 °C)) Drop-out 0.20.4 Uc 40400 Hz 131 °F (55 °C))	
Mechanical Durability	5 Mcycles	
Inrush Power In Va	2100 VA, 40400 Hz 0.9 68 °F (20 °C))	
Hold-In Power Consumption In Va	50 VA, 40400 Hz 0.9 68 °F (20 °C))	
Maximum Operating Rate	600 cyc/h 131 °F (55 °C)	
Operating Time	4080 ms closing 130230 ms opening	
Connections - Terminals	Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible without cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.000.00 in² (12.5 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)solid without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)solid without cable end Power circuit bar 2 100 x 5 mm Power circuit bolted connection	
Tightening Torque	Control circuit 10.62 lbf.in (1.2 N.m) Power circuit 513.34 lbf.in (58 N.m)	
Mounting Support	Plate	
Heat Dissipation	44 W	
Motor Power Range	250500 kW 380440 V 3 phase 110220 kW 200240 V 3 phase 250500 kW 480500 V 3 phase	
Motor Starter Type	Direct on-line contactor	
Contactor Coil Voltage	240 V AC standard	
Standards	EN 60947-1 IEC 60947-4-1 JIS C8201-4-1 EN 60947-4-1 IEC 60947-1	
Product Certifications	UL CB CSA ABS BV RMRoS RINA LROS (Lloyds register of shipping) DNV	
Compatibility Code	LC1F	
Control Circuit Type	AC 40400 Hz	
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 Operation	23131 °F (-555 °C)
Ambient Air Temperature For Storage	-76176 °F (-6080 °C)
Permissible Ambient Air Temperature Around The Device	-40158 °F (-4070 °C)
Height	17.09 in (434 mm)
Width	27.64 in (702 mm)
Depth	10.04 in (255 mm)
Operating Altitude	9842.52 ft (3000 m) without derating
Net Weight	87.08 lb(US) (39.5 kg)

# Ordering and shipping details

Category	22336-CTR,F-LINE,AC,OPEN,NONREV	
Discount Schedule	112	
Gtin	3389118094550	
Returnability	No	
Country Of Origin	CZ	

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	15.75 in (40 cm)
Package 1 Width	17.52 in (44.5 cm)
Package 1 Length	37.40 in (95 cm)
Package 1 Weight	125.66 lb(US) (57 kg)

## **Contractual warranty**

Warranty 18 months

# Sustainability Green Premium

**Green Premium**<sup>TM</sup> **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> 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

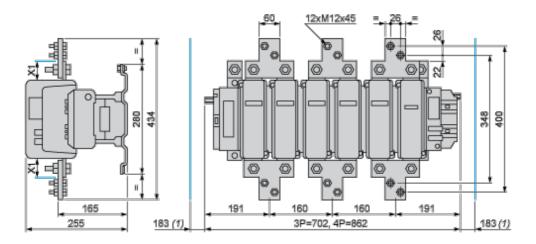
#### **Certifications & Standards**

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	
California Proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov	

**Dimensions Drawings** 

#### **Dimensions and Drawings**

#### LC1 F780

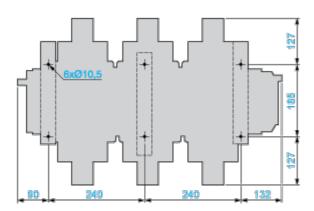


(1) Minimum distance required for coil removal.

**NOTE:** X1 (mm) = Minimum electrical clearance according to operating voltage and breaking capacity.

Voltage	200500 V	6901000 V
X1 (mm)	30	35

#### Fixing centers of LC1 F780

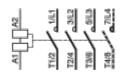


### **Product data sheet**

#### LC1F780U7

Connections and Schema

#### **Connections and Schema**



LC1 F780 ~ or =

### **Product data sheet**

### LC1F780U7

Motor Starter BOM Motor Starter BOM