Product data sheet

Specifications





contactor, TeSys F, 3P(3NO), AC-3, <=440V 780A, coil 110V AC

LC1F780F7

! To be discontinued on: 31/12/2025

(!) To be 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-4 AC-1 AC-3	
poles description	3P	
[Ue] rated operational voltage	<= 1000 V AC 50/60 Hz <= 460 V DC	
[Uc] control circuit voltage	110 V AC 40400 Hz	
[le] rated operational current	1600 A (at <40 °C) at <= 440 V AC AC-1 780 A (at <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 40 °C)
Rated breaking capacity	6240 A conforming to IEC 60947-4-1
[lcw] rated short-time withstand current	3000 A 40 °C - 3 min 6250 A 40 °C - 10 s 5600 A 40 °C - 30 s 4600 A 40 °C - 1 min 2200 A 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 conforming to IEC 60947-4-1 1500 V conforming to 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

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 (at 55 °C) Drop-out: 0.20.4 Uc 40400 Hz (at 55 °C)	
Mechanical durability	5 Mcycles	
Inrush power in VA	2100 VA, 40400 Hz cos phi 0.9 (at 20 °C)	
Hold-in power consumption in VA	50 VA, 40400 Hz cos phi 0.9 (at 20 °C)	
Maximum operating rate	600 cyc/h 55 °C	
Operating time	4080 ms closing 130230 ms opening	
Connections - terminals	Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²solid without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²solid without cable end Power circuit: bar 2 cable(s) - busbar cross section: 100 x 5 mm Power circuit: bolted connection	
Tightening torque	Control circuit: 1.2 N.m Power circuit: 58 N.m	
Mounting support	Plate	
Heat dissipation	44 W	
motor power range	250500 kW at 380440 V 3 phases 110220 kW at 200240 V 3 phases 250500 kW at 480500 V 3 phases	
Motor starter type	Direct on-line contactor	
Contactor coil voltage	110 V AC standard 120 V AC standard	
Standards	EN 60947-1	
	JIS C8201-4-1 IEC 60947-4-1	
	IEC 60947-1	
	EN 60947-4-1	
Product certifications	UL	
	RINA	
	ABS	
	CB	
	RMRoS	
	CSA	
	LROS (Lloyds register of shipping)	
	DNV	
	BV	
	UKCA	
Compatibility code	LC1F	
Control circuit type	AC at 40400 Hz	
Environment		
IP degree of protection	IP20 front face with shrouds conforming to IEC 60529 IP20 front face with shrouds conforming to VDE 0106	
Protective treatment	тн	
Ambient air temperature for	-555 °C	
operation		

Ambient air temperature for storage	-6080 °C
Permissible ambient air temperature around the device	-4070 °C
Height	434 mm
Width	702 mm
Depth	255 mm
Operating altitude	3000 m without derating
Net weight	39.5 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	40.0 cm
Package 1 Width	44.5 cm
Package 1 Length	95.0 cm
Package 1 Weight	57.0 kg
Unit Type of Package 2	PAL
Number of Units in Package 2	2
Package 2 Height	195.0 cm
Package 2 Width	120.0 cm
Package 2 Length	80.0 cm
Package 2 Weight	141.0 kg

Contractual warranty

Warranty 18 months

Sustainability Screen Premium

Green PremiumTM **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-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

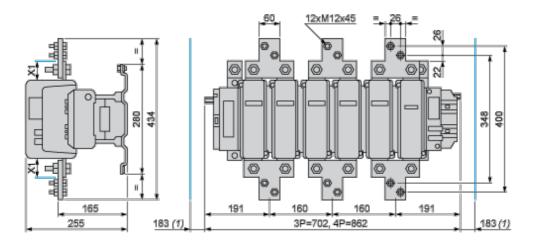
Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
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

LC1 F780

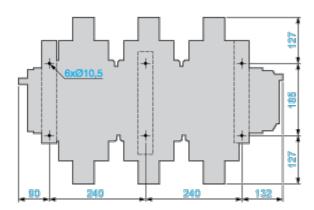


(1) Minimum distance required for coil removal.

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

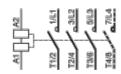


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LC1F780F7

Connections and Schema

Connections and Schema



LC1 F780 ~ or =