

contactor, TeSys F, 3P(3NO), AC-3, <=440V 780A, coil 220V AC

LC1F780M7

- ! To be discontinued on: Dec 31, 2025
- ! End-of-service on: Sep 13, 2024

! 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-3 AC-1 AC-4
Poles description	3P
[Ue] rated operational voltage	<= 1000 V AC 50/60 Hz <= 460 V DC
[Uc] control circuit voltage	220 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

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 (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
leat 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	220 V AC standard
Standards	EN 60947-4-1 IEC 60947-1 EN 60947-1 JIS C8201-4-1 IEC 60947-4-1
Product certifications	DNV RMRoS LROS (Lloyds register of shipping) CSA CB UL RINA ABS BV
Compatibility code	LC1F
Control circuit type	AC at 40400 Hz
Environment	
	IP20 front face with shrouds conforming to IEC 60529
IP degree of protection	IP20 front face with shrouds conforming to VDE 0106
	TH
Protective treatment ambient air temperature for operation	<u> </u>

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	44.0 cm
Package 1 Width	41.0 cm
Package 1 Length	95.0 cm
Package 1 Weight	47.59 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	122.2 kg

Contractual warranty

Warranty 18 months



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 >

∇ Environmental footprint	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	7135
Environmental Disclosure	Product Environmental Profile

Use Better

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Compliant with Exemptions
REACh Regulation	REACh Declaration

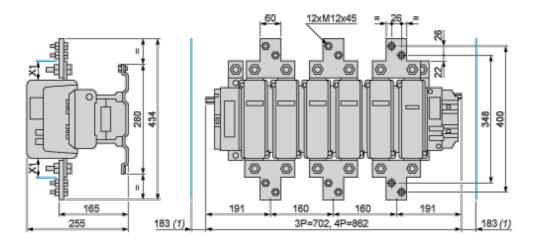
Use Again

○ Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

Dimensions and Drawings

LC1 F780

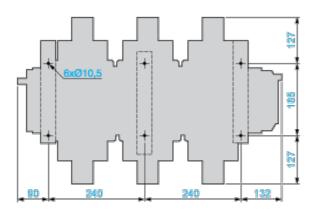


(1) Minimum distance required for coil removal.

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

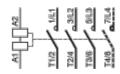


Product datasheet

LC1F780M7

Connections and Schema

Connections and Schema



LC1 F780 ~ or =