Product datasheet Characteristics

LC1F780FD

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



Price*: 5,792.23 GBP



Main

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Range	TeSys	
Product name	TeSys F	
Product or component type	Contactor	
Device short name	LC1F	
Contactor application	Motor control Resistive load	
Utilisation category	AC-1 AC-4 AC-3	
Poles description	3P	
Power pole contact composition	3 NO	
[Ue] rated operational voltage	<= 1000 V AC 50/60 Hz <= 460 V DC	
[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	
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)	
[Uc] control circuit voltage	110 V DC	
Coil type	Standard	

Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III

[Ith] conventional free air thermal	1600 A (at 40 °C)
current	`
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
Mounting support	Plate
Standards	IEC 60947-1 EN 60947-4-1 JIS C8201-4-1 IEC 60947-4-1 EN 60947-1
Product certifications	DNV ABS CSA LROS (Lloyds register of shipping) BV UL RINA RMRoS CB
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
Control circuit voltage limits	Operational: 0.851.1 Uc (at 55 °C) Drop-out: 0.20.4 Uc (at 55 °C)
Inrush power in W	2000 W (at 20 °C)
Hold-in power consumption in W	42 W at 20 °C
Heat dissipation	42 W
Operating time	7080 ms closing 100130 ms opening
Mechanical durability	5 Mcycles
Maximum operating rate	600 cyc/h 55 °C
Compatibility code	LC1F
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 DC standard

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	TH	
Ambient air temperature for operation	-555 °C	
Ambient air temperature for storage	-6080 °C	

Permissible ambient air temperature around the device	-4070 °C
Operating altitude	3000 m without
Height	434 mm
Width	702 mm
Depth	255 mm
Product weight	39.5 kg

Offer Sustainability

Sustainable offer status	Green Premium product	
REACh Regulation	REACh Declaration	
EU RoHS Directive	Compliant EU RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	Yes	
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End of Life Information	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	

Contractual warranty

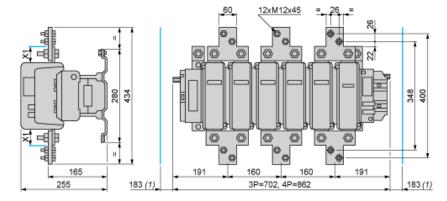
Warranty	18 months
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Product datasheet Dimensions Drawings

LC1F780FD

Dimensions and Drawings

LC1 F780

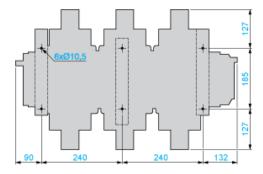


(1) Minimum distance required for coil removal.

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

Voltage	200500 V	6901000 V
X1 (mm)	30	35

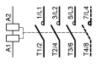
Fixing centers of LC1 F780



Product datasheet Connections and Schema

LC1F780FD

Connections and Schema



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