

Main

Range	TeSys
Product name	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
Power pole contact composition	3 NO
[Ue] rated operational voltage	≤ 1000 V AC 50/60 Hz ≤ 460 V DC
[Ie] 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 380...400 V AC 50/60 Hz AC-3) 425 kW 415 V AC 50/60 Hz AC-3) 425 kW 440 V AC 50/60 Hz AC-3) 450 kW 500 V AC 50/60 Hz AC-3) 475 kW 660...690 V AC 50/60 Hz AC-3) 220 kW 220...230 V AC 50/60 Hz AC-3) 110 kW 400 V AC 50/60 Hz AC-4)
[Uc] control circuit voltage	110 V AC 40...400 Hz

Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	1600 A 104 °F (40 °C)
Rated breaking capacity	6240 A 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 ≤ 440 V 800 A aM ≤ 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
Mounting support	Plate
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
Connections - terminals	Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²)flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)solid without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)solid without cable end Power circuit bar 2 100 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 0.85...1.1 Uc 40...400 Hz 131 °F (55 °C)) Drop-out 0.2...0.4 Uc 40...400 Hz 131 °F (55 °C))
Inrush power in VA	2100 VA 40...400 Hz 0.9 68 °F (20 °C))
Hold-in power consumption in VA	50 VA 40...400 Hz cos phi 0.9 (at 20 °C)
Heat dissipation	44 W
Operating time	40...80 ms closing 130...230 ms opening
Mechanical durability	5 Mcycles
Maximum operating rate	600 cyc/h 55 °C
Compatibility code	LC1F
Motor power range	250...500 KW 380...440 V 3 phase 110...220 KW 200...240 V 3 phase 250...500 kW 480...500 V 3 phase
Motor starter type	Direct on-line contactor
Contactor coil voltage	110 V AC standard 120 V AC standard

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	23...131 °F (-5...55 °C)
Ambient air temperature for storage	-76...176 °F (-60...80 °C)
Permissible ambient air temperature around the device	-40...158 °F (-40...70 °C)
Height	17.09 in (434 mm)
Width	27.64 in (702 mm)
Maximum Depth	10.04 in (255 mm)
Net Weight	87.08 lb(US) (39.5 kg)

Ordering and shipping details

Category	22336 - CTR,F-LINE,AC,OPEN,NONREV
Discount Schedule	I12
GTIN	00785901166139
Nbr. of units in pkg.	1
Package weight(Lbs)	115 lb(US) (52.16 kg)
Returnability	No
Country of origin	CZ

Packing Units

Package 1 Height	4.000 dm
Package 1 width	4.450 dm
Package 1 Length	9.500 dm

Offer Sustainability

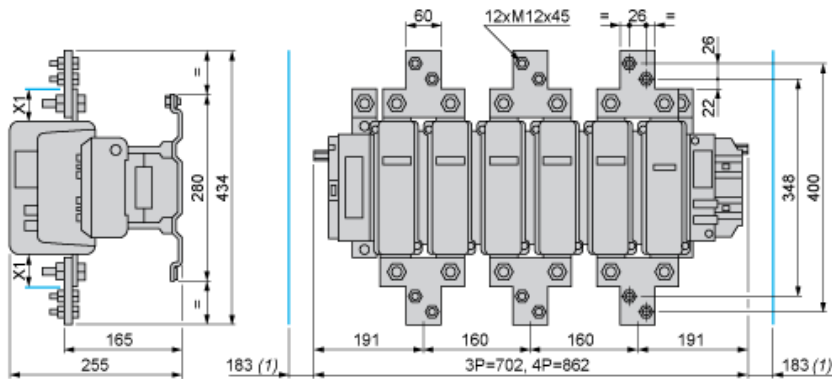
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
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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Dimensions and Drawings

LC1 F780

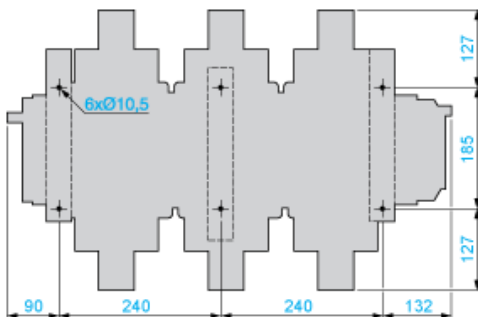


(1) Minimum distance required for coil removal.

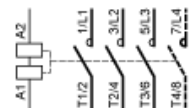
NOTE: X1 (mm) = Minimum electrical clearance according to operating voltage and breaking capacity.

Voltage	200...500 V	690...1000 V
X1 (mm)	30	35

Fixing centers of LC1 F780



Connections and Schema



LC1 F780 ~ or ☐

