



### Main

Range	TeSys
Range of Product	TeSys F
Product or Component Type	Contacteur
Device short name	LC1F
Contacteur 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 40...400 Hz
[Ie] 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
Motor power kW	450 kW at 1000 V AC 50/60 Hz (AC-3) 400 kW at 380...400 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 660...690 V AC 50/60 Hz (AC-3) 220 kW at 220...230 V AC 50/60 Hz (AC-3) 110 kW at 400 V AC 50/60 Hz (AC-4)
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)
Mechanical durability	5 Mcycles
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 0.9 68 °F (20 °C)
Maximum operating rate	600 cyc/h 131 °F (55 °C)
Operating time	40...80 ms closing 130...230 ms opening

Connections - terminals	Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )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	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	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[RETURN]RMRoS[RETURN]LROS (Lloyds register of shipping) [RETURN]CSA[RETURN]CB[RETURN]JUL[RETURN]RINA[RETURN]ABS[RETURN]BV
Compatibility code	LC1F
Control circuit type	AC 40...400 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	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)
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	I12
GTIN	3389110227260
Returnability	No
Country of origin	CZ

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	17.32 in (44.0 cm)
Package 1 Width	16.14 in (41.0 cm)
Package 1 Length	37.40 in (95.0 cm)
Package 1 Weight	104.92 lb(US) (47.59 kg)
Unit Type of Package 2	PAL

Number of Units in Package 2	2
Package 2 Height	76.77 in (195.0 cm)
Package 2 Width	47.24 in (120.0 cm)
Package 2 Length	31.50 in (80.0 cm)
Package 2 Weight	269.41 lb(US) (122.2 kg)

### Offer Sustainability

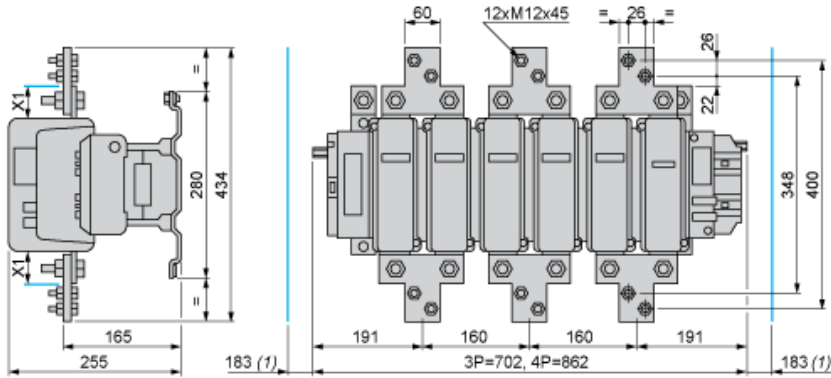
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
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

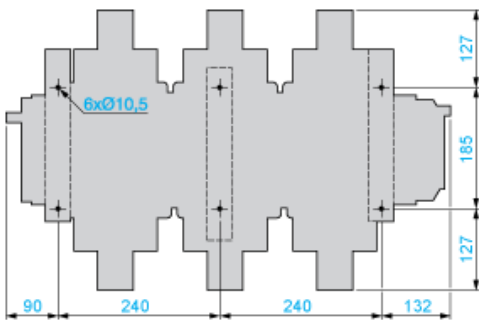


(1) Minimum distance required for coil removal.

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

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

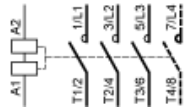
Fixing centers of LC1 F780



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Connections and Schema

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LC1 F780 ~ or ☐



