



### 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-3 AC-1 AC-4
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	$\leq$ 690 V AC 50/60 Hz
[Ie] rated operational current	200 A (at $\leq$ 40 °C) at $\leq$ 440 V AC-1 115 A (at $\leq$ 55 °C) at $\leq$ 440 V AC-3
Motor power kW	55 kW at 380...400 V AC 50/60 Hz (AC-3) 59 kW at 415 V AC 50/60 Hz (AC-3) 59 kW at 440 V AC 50/60 Hz (AC-3) 75 kW at 500 V AC 50/60 Hz (AC-3) 80 kW at 660...690 V AC 50/60 Hz (AC-3) 30 kW at 220...230 V AC 50/60 Hz (AC-3) 18.5 kW at 400 V AC 50/60 Hz (AC-4)
[Uc] control circuit voltage	220 V AC 40...400 Hz

### Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	200 A (at 40 °C)
Rated breaking capacity	920 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1100 A 40 °C - 10 s

	640 A 40 °C - 30 s 520 A 40 °C - 1 min 400 A 40 °C - 3 min 320 A 40 °C - 10 min
Associated fuse rating	125 A aM at <= 440 V 200 A gG at <= 440 V
Average impedance	0.37 mOhm - lth 200 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	15 W AC-1 5 W AC-3
Mounting support	Plate
Standards	IEC 60947-4-1 IEC 60947-1 EN 60947-4-1 EN 60947-1 JIS C8201-4-1
Product certifications	RINA BV RMRoS CB LROS (Lloyds register of shipping) DNV UL CCC ABS
Connections - terminals	Power circuit: bar 2 cable(s) - busbar cross section: 20 x 3 mm Power circuit: lugs-ring terminals 1 cable(s) 95 mm <sup>2</sup> Power circuit: connector 1 cable(s) 95 mm <sup>2</sup> Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> solid without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> solid without cable end Power circuit: bolted connection
Tightening torque	Power circuit: 10 N.m Control circuit: 1.2 N.m
Control circuit voltage limits	Operational: 0.85...1.1 Uc 40...400 Hz (at 55 °C) Drop-out: 0.35...0.55 Uc 40...400 Hz (at 55 °C)
Inrush power in VA	770 VA 40...400 Hz cos phi 0.9 (at 20 °C)
Hold-in power consumption in VA	8.1 VA 40...400 Hz cos phi 0.9 (at 20 °C)
Heat dissipation	5.9...7.2 W
Operating time	35 ms closing (at Uc) 130 ms opening (at Uc)
Mechanical durability	10 Mcycles
Maximum operating rate	2400 cyc/h 55 °C
Compatibility code	LC1F

## Environment

IP degree of protection	IP2x front face with shrouds conforming to IEC 60529 IP2x front face with shrouds conforming to VDE 0106
Protective treatment	TH
Ambient air temperature for operation	-40...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	60...70 °C at Uc
Operating altitude	3000 m without derating
Height	162 mm
Width	163.3 mm
Depth	171 mm
Net weight	3.43 kg

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	3.945 kg
Package 1 Height	18.8 cm
Package 1 width	20.2 cm
Package 1 Length	22.4 cm
Unit Type of Package 2	P06
Number of Units in Package 2	18
Package 2 Weight	80.176 kg
Package 2 Height	80 cm
Package 2 width	80 cm
Package 2 Length	60 cm

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
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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