



### Main

Range	TeSys
Product name	TeSys F
Product or component type	Contactors
Device short name	LC1F
Contactors application	Motor control Resistive load
Utilisation category	AC-3 AC-4 AC-1
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	$\leq 690$ V AC 50/60 Hz
[Ie] rated operational current	250 A (at $\leq 40$ °C) at $\leq 440$ V AC-1 150 A (at $\leq 55$ °C) at $\leq 440$ V AC-3
Motor power kW	75 kW at 380...400 V AC 50/60 Hz (AC-3) 80 kW at 415 V AC 50/60 Hz (AC-3) 80 kW at 440 V AC 50/60 Hz (AC-3) 90 kW at 500 V AC 50/60 Hz (AC-3) 100 kW at 660...690 V AC 50/60 Hz (AC-3) 40 kW at 220...230 V AC 50/60 Hz (AC-3) 22 kW at 400 V AC 50/60 Hz (AC-4)
[Uc] control circuit voltage	415 V AC 40...400 Hz

### Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	250 A (at 40 °C)
Rated breaking capacity	1200 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1200 A 40 °C - 10 s

	700 A 40 °C - 30 s 600 A 40 °C - 1 min 450 A 40 °C - 3 min 350 A 40 °C - 10 min
Associated fuse rating	160 A aM at ≤ 440 V 250 A gG at ≤ 440 V
Average impedance	0.35 mOhm - lth 250 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	22 W AC-1 8 W AC-3
Mounting support	Plate
Standards	IEC 60947-4-1 EN 60947-4-1 JIS C8201-4-1 IEC 60947-1 EN 60947-1
Product certifications	BV LROS (Lloyds register of shipping) RMRoS CB RINA DNV CCC ABS UL
Connections - terminals	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: bar 2 cable(s) - busbar cross section: 25 x 3 mm Power circuit: lugs-ring terminals 1 cable(s) 120 mm <sup>2</sup> Power circuit: connector 1 cable(s) 120 mm <sup>2</sup> Power circuit: bolted connection
Tightening torque	Control circuit: 1.2 N.m Power circuit: 18 N.m
Control circuit voltage limits	Operational: 0.85...1.1 U <sub>c</sub> 40...400 Hz (at 55 °C) Drop-out: 0.35...0.55 U <sub>c</sub> 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 U <sub>c</sub> ) 130 ms opening (at U <sub>c</sub> )
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 U <sub>c</sub>
Operating altitude	3000 m without derating
Height	170 mm
Width	163.5 mm
Depth	171 mm
Net weight	3.43 kg

## Packing Units

Package 1 Weight	4.190 kg
Package 1 Height	2.100 dm
Package 1 width	2.000 dm
Package 1 Length	2.400 dm

## 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
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>

## Contractual warranty

Warranty	18 months
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