



### Main

Range	TeSys
Product name	TeSys F
Product or component type	Contactors
Device short name	LC1F
Contactors 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	400 A 104 °F (40 °C) <= 440 V AC AC-1 330 A 131 °F (55 °C) <= 440 V AC AC-3
Motor power kW	160 kW 380...400 V AC 50/60 Hz AC-3) 180 kW 415 V AC 50/60 Hz AC-3) 200 kW 440 V AC 50/60 Hz AC-3) 200 kW 500 V AC 50/60 Hz AC-3) 220 kW 660...690 V AC 50/60 Hz AC-3) 160 kW 1000 V AC 50/60 Hz AC-3) 100 kW 220...230 V AC 50/60 Hz AC-3) 59 kW 400 V AC 50/60 Hz AC-4)
[Uc] control circuit voltage	208 V AC 40...400 Hz

### Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	400 A 104 °F (40 °C)

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Rated breaking capacity	2640 A IEC 60947-4-1
[I <sub>cw</sub> ] rated short-time withstand current	2650 A 104 °F (40 °C) - 10 s 1800 A 104 °F (40 °C) - 30 s 1300 A 104 °F (40 °C) - 1 min 900 A 104 °F (40 °C) - 3 min 750 A 104 °F (40 °C) - 10 min
Associated fuse rating	400 A aM at ≤ 440 V 500 A gG at ≤ 440 V
Average impedance	0.28 mOhm - I <sub>th</sub> 400 A 50 Hz
[U <sub>i</sub> ] rated insulation voltage	1000 V conforming to IEC 60947-4-1 1500 V conforming to VDE 0110 group C
Power dissipation per pole	44 W AC-1 31 W AC-3
Mounting support	Plate
Standards	EN 60947-4-1 JIS C8201-4-1 IEC 60947-1 EN 60947-1 IEC 60947-4-1
Product certifications	RINA BV RMRoS UL LROS (Lloyds register of shipping) CB DNV CCC ABS
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: lugs-ring terminals 1 cable(s) 240 mm <sup>2</sup> Power circuit: bar 2 cable(s) - busbar cross section: 30 x 5 mm Power circuit bolted connection
Tightening torque	Control circuit: 1.2 N.m Power circuit: 35 N.m
Control circuit voltage limits	Operational 0.85...1.1 U <sub>c</sub> 40...400 Hz 131 °F (55 °C) Drop-out 0.35...0.55 U <sub>c</sub> 40...400 Hz 131 °F (55 °C)
Inrush power in VA	650 VA 40...400 Hz 0.9 68 °F (20 °C)
Hold-in power consumption in VA	10 VA 40...400 Hz cos phi 0.9 (at 20 °C)
Heat dissipation	8 W
Operating time	40...65 ms closing 100...170 ms opening
Mechanical durability	10 Mcycles
Maximum operating rate	2400 cyc/h 55 °C
Compatibility code	LC1F

## 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	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...70 °C
Height	8.11 in (206 mm)
Width	8.39 in (213 mm)
Depth	8.62 in (219 mm)
Net weight	18.96 lb(US) (8.6 kg)

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	20.06 lb(US) (9.1 kg)
Package 1 Height	9.84 in (25 cm)
Package 1 width	9.84 in (25 cm)
Package 1 Length	12.20 in (31 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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