



Main

Range	TeSys
Product name	TeSys F
Product or component type	Contactor
Device short name	LC1F
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-4 AC-1
Poles description	3P
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	500 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 \leq 440 V 250 A gG at \leq 440 V
Average impedance	0.35 MOhm - Ith 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 EN 60947-1 IEC 60947-1
Product certifications	RINA RMRoS LROS (Lloyds register of shipping) CCC ABS CB DNV UL BV
Connections - terminals	Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm ² flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm ² flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² solid without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm ² 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 ² Power circuit: connector 1 cable(s) 120 mm ² 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 _c 50/60 Hz (at 55 °C) Drop-out: 0.35...0.55 U _c 50/60 Hz (at 55 °C)
Inrush power in VA	550 VA 50 Hz cos phi 0.3 (at 20 °C) 660 VA 60 Hz cos phi 0.3 (at 20 °C)
Hold-in power consumption in VA	45 VA 50 Hz cos phi 0.3 (at 20 °C) 55 VA 60 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	12...16 W
Operating time	35 ms closing (at U _c) 130 ms opening (at U _c)
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	-5...55 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C
Operating altitude	3000 m without
Height	170 Mm
Width	163.5 Mm
Depth	171 Mm
Net weight	3.43 Kg

Offer Sustainability

Sustainable offer status	Green Premium product
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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Product Life Status :	Commercialised
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