



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-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	500 A (at <40 °C) at ≤ 440 V AC AC-1 400 A (at <55 °C) at ≤ 440 V AC AC-3
Motor power kW	75 kW at 400 V AC 50/60 Hz (AC-4) 200 kW at 380...400 V AC 50/60 Hz (AC-3) 220 kW at 415 V AC 50/60 Hz (AC-3) 250 kW at 440 V AC 50/60 Hz (AC-3) 257 kW at 500 V AC 50/60 Hz (AC-3) 280 kW at 660...690 V AC 50/60 Hz (AC-3) 185 kW at 1000 V AC 50/60 Hz (AC-3) 110 kW at 220...230 V AC 50/60 Hz (AC-3)
[Uc] control circuit voltage	380 V AC 40...400 Hz

Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	500 A (at 40 °C)
Rated breaking capacity	3200 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	3600 A 40 °C - 10 s 2400 A 40 °C - 30 s 1700 A 40 °C - 1 min 1200 A 40 °C - 3 min 1000 A 40 °C - 10 min
Associated fuse rating	400 A aM at ≤ 440 V 500 A gG at ≤ 440 V
Average impedance	0.26 mOhm - Ith 500 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	65 W AC-1 42 W AC-3
Mounting support	Plate
Standards	IEC 60947-4-1 EN 60947-1 EN 60947-4-1 IEC 60947-1 JIS C8201-4-1

Product certifications	LROS (Lloyds register of shipping) CCC RINA ABS BV CB DNV UL RMRoS
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: 30 x 5 mm Power circuit: lugs-ring terminals 2 cable(s) 150 mm ² 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 _c 40...400 Hz (at 55 °C) Drop-out: 0.3...0.5 U _c 40...400 Hz (at 55 °C)
Inrush power in VA	1075 VA 40...400 Hz cos phi 0.9 (at 20 °C)
Hold-in power consumption in VA	15 VA 40...400 Hz cos phi 0.9 (at 20 °C)
Heat dissipation	14 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	-5...55 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C
Height	206 mm
Width	213 mm
Depth	219 mm
Net weight	9.1 kg

Packing Units

Package 1 Weight	9.260 kg
Package 1 Height	2.500 dm
Package 1 width	2.400 dm
Package 1 Length	2.900 dm

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