



Main

Range	TeSys
Range of product	TeSys F
Product or component type	Contactor
Device short name	LC1F
Contactor application	Motor control Resistive load
Utilisation category	AC-4 AC-1 AC-3
Poles description	3P
[Ue] rated operational voltage	≤ 1000 V AC 50/60 Hz ≤ 460 V DC
[Uc] control circuit voltage	380 V AC 40...400 Hz
[Ie] rated operational current	400 A (at ≤40 °C) at ≤ 440 V AC AC-1 330 A (at ≤55 °C) at ≤ 440 V AC AC-3

Complementary

[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	400 A (at 40 °C)
Rated breaking capacity	2640 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	2650 A 40 °C - 10 s 1800 A 40 °C - 30 s 1300 A 40 °C - 1 min 900 A 40 °C - 3 min 750 A 40 °C - 10 min
Associated fuse rating	400 A aM at ≤ 440 V 500 A gG at ≤ 440 V
Average impedance	0.28 mOhm - Ith 400 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	44 W AC-1 31 W AC-3
Overvoltage category	III
Power pole contact composition	3 NO
Motor power kW	160 kW at 380...400 V AC 50/60 Hz (AC-3) 180 kW at 415 V AC 50/60 Hz (AC-3) 200 kW at 440 V AC 50/60 Hz (AC-3) 200 kW at 500 V AC 50/60 Hz (AC-3) 220 kW at 660...690 V AC 50/60 Hz (AC-3) 160 kW at 1000 V AC 50/60 Hz (AC-3) 100 kW at 220...230 V AC 50/60 Hz (AC-3) 59 kW at 400 V AC 50/60 Hz (AC-4)
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)
Mechanical durability	10 Mcycles
Inrush power in VA	650 VA, 40...400 Hz cos phi 0.9 (at 20 °C)
Hold-in power consumption in VA	10 VA, 40...400 Hz cos phi 0.9 (at 20 °C)
Maximum operating rate	2400 cyc/h 55 °C
Operating time	40...65 ms closing 100...170 ms opening

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: lugs-ring terminals 1 cable(s) 240 mm ² 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
Mounting support	Plate
Heat dissipation	8 W
Standards	EN 60947-4-1 IEC 60947-4-1 IEC 60947-1 JIS C8201-4-1 EN 60947-1
Product certifications	BV CCC UL CB RINA ABS RMRoS LROS (Lloyds register of shipping) DNV UKCA
Compatibility code	LC1F
Control circuit type	AC at 40...400 Hz

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
Operating altitude	3000 m without derating
Net weight	8.6 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	25.5 cm
Package 1 Width	23.8 cm
Package 1 Length	29.3 cm
Package 1 Weight	9.307 kg
Unit Type of Package 2	P06
Number of Units in Package 2	10
Package 2 Height	77.0 cm
Package 2 Width	80.0 cm
Package 2 Length	60.0 cm
Package 2 Weight	101.6 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Compliant  EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	 China RoHS Declaration
RoHS exemption information	 Yes
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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