



Main

Range	TeSys
Range of product	TeSys F
Product or component type	Contactor
Device short name	LC1F
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-3 AC-4
Poles description	3P
[Ue] rated operational voltage	≤ 690 V AC 50/60 Hz ≤ 460 V DC
[Uc] control circuit voltage	220 V DC
[Ie] rated operational current	200 A (at ≤ 40 °C) at ≤ 440 V AC-1 115 A (at ≤ 55 °C) at ≤ 440 V AC-3

Complementary

[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	200 A (at 40 °C)
Rated breaking capacity	920 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1100 A 40 °C - 10 s 640 A 40 °C - 30 s 520 A 40 °C - 1 min 400 A 40 °C - 3 min 320 A 40 °C - 10 min
Associated fuse rating	125 A aM at ≤ 440 V 200 A gG at ≤ 440 V
Average impedance	0.37 mOhm - Ith 200 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	15 W AC-1 5 W AC-3
Overvoltage category	III
Power pole contact composition	3 NO
Motor power kW	55 kW at 380...400 V AC 50/60 Hz (AC-3) 59 kW at 415 V AC 50/60 Hz (AC-3) 59 kW at 440 V AC 50/60 Hz (AC-3) 75 kW at 500 V AC 50/60 Hz (AC-3) 80 kW at 660...690 V AC 50/60 Hz (AC-3) 30 kW at 220...230 V AC 50/60 Hz (AC-3) 18.5 kW at 400 V AC 50/60 Hz (AC-4)
Control circuit voltage limits	Operational: 0.85...1.1 Uc (at 55 °C) Drop-out: 0.15...0.2 Uc (at 55 °C)
Mechanical durability	10 Mcycles
Inrush power in W	560 W (at 20 °C)
Hold-in power consumption in W	4.5 W at 20 °C
Maximum operating rate	2400 cyc/h 55 °C
Operating time	30...40 ms closing 30...50 ms opening

Connections - terminals	Power circuit: bar 2 cable(s) - busbar cross section: 20 x 3 mm Power circuit: lugs-ring terminals 1 cable(s) 95 mm ² Power circuit: connector 1 cable(s) 95 mm ² 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: bolted connection
Tightening torque	Power circuit: 10 N.m Control circuit: 1.2 N.m
Mounting support	Plate
Heat dissipation	4.5 W
Standards	JIS C8201-4-1 EN 60947-4-1 IEC 60947-4-1 EN 60947-1 IEC 60947-1
Product certifications	BV RINA RMRoS LROS (Lloyds register of shipping) DNV CB UL ABS CCC UKCA
Compatibility code	LC1F
Control circuit type	DC standard

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 _c
Height	162 mm
Width	163.3 mm
Depth	171 mm
Operating altitude	3000 m without derating
Net weight	3.43 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	22.0 cm
Package 1 Width	19.5 cm
Package 1 Length	24.5 cm
Package 1 Weight	4.13 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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