

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	≤ 690 V AC 50/60 Hz ≤ 460 V DC
[Uc] control circuit voltage	24 V DC
[Ie] rated operational current	250 A (at <40 °C) at ≤ 440 V AC-1 150 A (at <55 °C) at ≤ 440 V AC-3

Complementary

[Uimp] rated impulse withstand voltage	8 kV
[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 ≤ 440 V 250 A gG at ≤ 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
Overvoltage category	III
Power pole contact composition	3 NO
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)
Control circuit voltage limits	Operational: 0.85...1.1 U _c (at 55 °C) Drop-out: 0.15...0.2 U _c (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	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
Mounting support	Plate
Heat dissipation	4.5 W
Standards	EN 60947-1 IEC 60947-4-1 JIS C8201-4-1 IEC 60947-1 EN 60947-4-1
Product certifications	BV[RETURN]RMRoS[RETURN]ABS[RETURN]RINA[RETURN]UL[RETURN]CCC[RETURN]CB[R (Lloyds register of shipping)[RETURN]DNV[RETURN]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	170 mm
Width	163.5 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	21.5 cm
Package 1 Width	20.0 cm
Package 1 Length	24.0 cm
Package 1 Weight	4.245 kg

Offer Sustainability

SCIP Number	Fd9a8828-e2ec-48b0-8cbe-cb8a9fd887e0
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	455

Contractual warranty

Warranty	18 months
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