

Product data sheet

Specifications



TeSys F contactor - 3P (3 NO) - AC-3 - ≤ 440 V 225 A - coil 440 V AC

LC1F225R7

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-3 AC-1
Poles description	3P
[Ue] rated operational voltage	≤ 460 V DC ≤ 690 V AC 50/60 Hz
[Uc] control circuit voltage	440 V AC 40...400 Hz
[Ie] rated operational current	315 A (at <40 °C) at ≤ 440 V AC-1 225 A (at <55 °C) at ≤ 440 V AC-3

Complementary

[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	315 A (at 40 °C)
Rated breaking capacity	1800 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1800 A 40 °C - 10 s 1000 A 40 °C - 30 s 850 A 40 °C - 1 min 560 A 40 °C - 3 min 440 A 40 °C - 10 min
Associated fuse rating	315 A gG at ≤ 440 V 250 A aM at ≤ 440 V
Average impedance	0.32 mOhm - Ith 315 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	32 W AC-1 16 W AC-3
Overvoltage category	III
Power pole contact composition	3 NO

Motor power kW	110 kW at 380...400 V AC 50/60 Hz (AC-3) 110 kW at 415 V AC 50/60 Hz (AC-3) 110 kW at 440 V AC 50/60 Hz (AC-3) 129 kW at 500 V AC 50/60 Hz (AC-3) 129 kW at 660...690 V AC 50/60 Hz (AC-3) 63 kW at 220...230 V AC 50/60 Hz (AC-3) 40 kW at 400 V AC 50/60 Hz (AC-4)
Control circuit voltage limits	Operational: 0.85...1.1 U _c 40...400 Hz (at 55 °C) Drop-out: 0.2...0.55 U _c 40...400 Hz (at 55 °C)
Mechanical durability	10 Mcycles
Inrush power in VA	1070 VA, 40...400 Hz cos phi 0.9 (at 20 °C)
Hold-in power consumption in VA	9.9 VA, 40...400 Hz cos phi 0.9 (at 20 °C)
Maximum operating rate	2400 cyc/h 55 °C
Operating time	35 ms closing (at U _c) 130 ms opening (at U _c)
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: 32 x 4 mm Power circuit: lugs-ring terminals 1 cable(s) 185 mm ² Power circuit: connector 1 cable(s) 185 mm ² Power circuit: bolted connection
Tightening torque	Control circuit: 1.2 N.m Power circuit: 35 N.m
Mounting support	Plate
Heat dissipation	8...9.8 W
Standards	EN 60947-4-1 EN 60947-1 IEC 60947-4-1 JIS C8201-4-1 IEC 60947-1
Product certifications	UL BV CCC ABS CB RMRoS LROS (Lloyds register of shipping) RINA 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	197 mm
Width	168.5 mm
Depth	181 mm
Operating altitude	3000 m without derating

Net weight	4.75 kg
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Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	21.0 cm
Package 1 Width	24.0 cm
Package 1 Length	26.5 cm
Package 1 Weight	5.484 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 Product out of China RoHS scope. Substance declaration for your information
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
PVC free	Yes

Contractual warranty

Warranty	18 months
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