

LC1F225U7

TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 225 A - coil 240 V AC



Main

Commercial Status	Commercialised
Range of product	TeSys F
Product or component type	Contacteur
Device short name	LC1F
Contacteur application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	<= 460 V DC <= 1000 V AC 50/60 Hz
[Ie] rated operational current	225 A (<= 55 °C) at <= 440 V AC AC-3 315 A (<= 40 °C) at <= 440 V AC AC-1
Motor power kW	63 kW at 220...230 V AC 50/60 Hz 129 kW at 660...690 V AC 50/60 Hz 129 kW at 500 V AC 50/60 Hz 110 kW at 440 V AC 50/60 Hz 110 kW at 415 V AC 50/60 Hz 110 kW at 380...400 V AC 50/60 Hz 100 kW at 1000 V AC 50/60 Hz
Control circuit type	AC 40...400 Hz
Control circuit voltage	240 V AC 40...400 Hz
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	315 A at <= 40 °C
Irms rated making capacity	2250 A AC conforming to IEC 60947-4-1
Rated breaking capacity	1800 kA conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	440 A <= 40 °C 10 min 560 A <= 40 °C 3 min 850 A <= 40 °C 1 min 1000 A <= 40 °C 30 s 1800 A <= 40 °C 10 s
Associated fuse rating	250 A aM at <= 440 V 315 A gG at <= 440 V
Average impedance	0.32 mOhm at 50 Hz - Ith 315 A
[Ui] rated insulation voltage	1500 V conforming to VDE 0110 group C 1000 V conforming to IEC 60947-4-1
Power dissipation per pole	16 W AC-3 32 W AC-1
Mounting support	Plate
Standards	EN 60947-1 EN 60947-4-1 IEC 60947-1 IEC 60947-4-1 JEM 1038

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Product certifications	BV CCC CSA DNV GL RINA RMRoS UL LROS
Connections - terminals	Power circuit: bar 2 x (32 x 4 mm) Power circuit: connector 1 cable(s) 185 mm ² Power circuit: lugs-ring terminals 1 cable(s) 185 mm ² Control circuit: screw clamp terminals 2 cable(s) 1...4 mm ² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm ² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm ² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: flexible - without cable end
Tightening torque	Power circuit: 35 N.m Control circuit: 1.2 N.m
Operating time	7...15 ms opening 20...35 ms closing
Mechanical durability	10 Mcycles
Operating rate	2400 cyc/h at <= 55 °C

Complementary

Control circuit voltage limits	0.35...0.55 U _c at 55 °C drop-out 50/60 Hz 0.85...1.1 U _c at 55 °C operational 50/60 Hz
Inrush power in VA	805 VA at 20 °C (cos φ 0.3) 50 Hz 970 VA at 20 °C (cos φ 0.3) 60 Hz
Hold-in power consumption in VA	66 VA at 20 °C (cos φ 0.3) 60 Hz 55 VA at 20 °C (cos φ 0.3) 50 Hz
Heat dissipation	18...24 W

Environment

IP degree of protection	IP20 front face with shrouds (ordered separately) conforming to VDE 0106 IP20 front face with shrouds (ordered separately) conforming to IEC 60529
Protective treatment	TH
Ambient air temperature for operation	-5...55 °C
Ambient air temperature for storage	-60...80 °C
Operating altitude	3000 m without derating in temperature
Mechanical robustness	Shocks contactor open 7 Gn for 11 ms Vibrations contactor closed 5 Gn, 5...300 Hz Shocks contactor closed 15 Gn for 11 ms Vibrations contactor open 2 Gn, 5...300 Hz
Height	197 mm
Width	168.5 mm
Depth	181 mm
Product weight	4.75 kg

RoHS compliance

RoHS EUR status	Compliant
RoHS EUR conformity date(YYWW)	0843

Contractual warranty

Period	18 months
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