

Product Datasheet

Characteristic

LC1F225U7

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



Main

range	TeSys
product name	TeSys F
product or component type	Contacteur
device short name	LC1F
contactor application	Resistive load Motor control
utilisation category	AC-3 AC-4 AC-1
poles description	3P
pole contact composition	3 NO
System Voltage	<= 460 V DC <= 690 V AC 50/60 Hz
[Ie] rated operational current	315 A (<= 104 °F (40 °C)) at <= 440 V AC-1 225 A (<= 131 °F (55 °C)) at <= 440 V AC-3
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 63 kW at 220...230 V AC 50/60 Hz AC-3 40 kW at 400 V AC 50/60 Hz AC-4 129 kW at 660...690 V AC 50/60 Hz AC-3
[Uc] control circuit voltage	240 V AC 40...400 Hz

Complementary

[Uimp] rated impulse withstand voltage	8 kV
overvoltage category	III
[Ith] conventional free air thermal current	315 A at <= 104 °F (40 °C)
rated breaking capacity	1800 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1800 A <= 104 °F (40 °C) 10 s 1000 A <= 104 °F (40 °C) 30 s 850 A <= 104 °F (40 °C) 1 min 560 A <= 104 °F (40 °C) 3 min 440 A <= 104 °F (40 °C) 10 min
associated fuse rating	315 A gG at <= 440 V 250 A aM at <= 440 V

average impedance	0.32 mOhm at 50 Hz - lth 315 A
[Ui] rated insulation voltage	1000 V conforming to IEC 60947-4-1 1500 V conforming to VDE 0110 group C
power dissipation per pole	16 W AC-3 32 W AC-1
mounting support	Plate
standards	EN 60947-4-1 IEC 60947-4-1 IEC 60947-1 EN 60947-1 JIS C8201-4-1
product certifications	DNV BV UL RMRoS CB ABS RINA LROS (Lloyds register of shipping) CSA
connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 0...0 in ² (1...2.5 mm ²) - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 0.29 in ² (185 mm ²) Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Power circuit: lugs-ring terminals 1 cable(s) 0.29 in ² (185 mm ²) Power circuit: bolted connection Power circuit: bar 2 x (32 x 4 mm)
tightening torque	Power circuit: 309.73 lbf.in (35 N.m) Control circuit: 10.62 lbf.in (1.2 N.m)
control circuit voltage limits	0.35...0.55 Uc at 131 °F (55 °C) drop-out 50/60 Hz 0.85...1.1 Uc at 131 °F (55 °C) operational 50/60 Hz
inrush power in VA	805 VA at 68 °F (20 °C) (cos φ 0.3) 50 Hz 970 VA at 68 °F (20 °C) (cos φ 0.3) 60 Hz
hold-in power consumption in VA	55 VA at 68 °F (20 °C) (cos φ 0.3) 50 Hz 66 VA at 68 °F (20 °C) (cos φ 0.3) 60 Hz
heat dissipation	18...24 W
operating time	35 ms closing (at Uc) 130 ms opening (at Uc)
mechanical durability	10 Mcycles
operating rate	2400 cyc/h at ≤ 131 °F (55 °C)

Environment

IP degree of protection	IP20 front face with shrouds (ordered separately) conforming to IEC 60529 IP20 front face with shrouds (ordered separately) conforming to VDE 0106
protective treatment	TH
ambient air temperature for operation	23...131 °F (-5...55 °C)
ambient air temperature for storage	-76...176 °F (-60...80 °C)
permissible ambient air temperature around the device	-40...158 °F (-40...70 °C)
operating altitude	9842.52 ft (3000 m) without derating
height	7.76 in (197 mm)
width	6.63 in (168.5 mm)
depth	7.13 in (181 mm)
product weight	10.47 lb(US) (4.75 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0843 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available