Product data sheet
Characteristics

LC1F150F7
TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 250 A - coil 110 V AC

Main

Range	TeSys
Product name	TeSys F
Product or component type	Contactor
Device short name	LC1F
Contactor 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	150 A (<= 55 °C) at <= 440 V AC AC-3 250 A (<= 40 °C) at <= 440 V AC AC-1
Motor power kW	40 kW at 220...230 V AC 50/60 Hz 100 kW at 660…690 V AC 50/60 Hz 90 kW at 500 V AC 50/60 Hz 80 kW at 440 V AC 50/60 Hz 80 kW at 415 V AC 50/60 Hz 75 kW at 380...400 V AC 50/60 Hz 65 kW at 1000 V AC 50/60 Hz
Control circuit type	AC 40...400 Hz
Control circuit voltage	110 V AC 40...400 Hz
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	250 A at <= 40 °C
Irms rated making capacity	1500 A AC conforming to IEC 60947-4-1
Rated breaking capacity	1200 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	350 A <= 40 °C 10 min 450 A <= 40 °C 3 min 600 A <= 40 °C 1 min 700 A <= 40 °C 30 s 1200 A <= 40 °C 10 s
Associated fuse rating	250 A gG at <= 440 V 160 A aM at <= 440 V
Average impedance	0.35 mOhm at 50 Hz - Ith 250 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	8 W AC-3 22 W AC-1
Mounting support	Plate
Standards	EN 60947-1 EN 60947-4-1 IEC 60947-1 IEC 60947-4-1 JEM 1038
Product certifications	BV CCC CSA DNV GL RINA RMRoS UL LROS

Connections - terminals	Power circuit : connector 1 cable(s) 120 mm² Power circuit : lugs-ring terminals 1 cable(s) 120 mm² Power circuit : bar 2 x (25 x 3 mm) Control circuit : screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end
Tightening torque	Power circuit : 18 N.m Control circuit : 1.2 N.m
Operating time	5...15 ms opening 23...35 ms closing
Mechanical durability	10 Mcycles
Operating rate	2400 cyc/h at <= 55 °C

Complementary

Control circuit voltage limits	0.35...0.55 Uc at 55 °C drop-out 50/60 Hz 0.85...1.1 Uc at 55 °C operational 50/60 Hz
Inrush power in VA	660 VA at 20 °C (cos ϕ 0.3) 60 Hz 550 VA at 20 °C (cos ϕ 0.3) 50 Hz
Hold-in power consumption in VA	55 VA at 20 °C (cos ϕ 0.3) 60 Hz 45 VA at 20 °C (cos ϕ 0.3) 50 Hz
Heat dissipation	12...16 W

Environment

IP degree of protection	IP2x front face with shrouds (ordered separately) conforming to VDE 0106 IP2x 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
Permissible ambient air temperature around the device	-40...70 °C
Operating altitude	3000 m without derating in temperature
Mechanical robustness	Shocks contactor closed 15 Gn for 11 ms Shocks contactor open 9 Gn for 11 ms Vibrations contactor closed 6 Gn, 5...300 Hz Vibrations contactor open 2 Gn, 5...300 Hz
Height	170 mm
Width	163.5 mm
Depth	171 mm
Product weight	3.43 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 Download Product Environmental
Product end of life instructions	Available Download End Of Life Manual