Product datasheet
Characteristics

LC1F185M5
TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 275 A - coil 220 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
Pole contact composition	3 NO
[Ue] rated operational voltage	<= 1000 V AC 50/60 Hz <= 460 V DC
[Ie] rated operational current	275 A (<= 40 °C) at <= 440 V AC AC-1 185 A (<= 55 °C) at <= 440 V AC AC-3
Motor power kW	100 kW at 1000 V AC 50/60 Hz 100 kW at 415 V AC 50/60 Hz 100 kW at 440 V AC 50/60 Hz 110 kW at 500 V AC 50/60 Hz 55 kW at 220...230 V AC 50/60 Hz 90 kW at 380...400 V AC 50/60 Hz 110 kW at 660…690 V AC 50/60 Hz
Control circuit type	AC 50 Hz
Control circuit voltage	220 V AC 50 Hz
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	275 A at <= 40 °C
Irms rated making capacity	1850 A AC conforming to IEC 60947-4-1
Rated breaking capacity	1480 kA conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1500 A <= 40 °C 10 s 920 A <= 40 °C 30 s 740 A <= 40 °C 1 min 500 A <= 40 °C 3 min 400 A <= 40 °C 10 min
Associated fuse rating	200 A aM at <= 440 V 315 A gG at <= 440 V
Average impedance	0.33 mOhm at 50 Hz - Ith 275 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	12 W AC-3 25 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	Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm² - cable stiffness: flexible - with cable end Power circuit : connector 1 cable(s) 150 mm² Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - without 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 - with 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...4 mm² - cable stiffness: solid - without cable end Power circuit : lugs-ring terminals 1 cable(s) 150 mm² Power circuit : bar 2 x (25 x 3 mm)
Tightening torque	Control circuit : 1.2 N.m Power circuit : 18 N.m
Operating time	20...35 ms closing 7...15 ms opening
Mechanical durability	10 Mcycles
Operating rate	2400 cyc/h at <= 55 °C

Complementary

Control circuit voltage limits	0.85...1.1 Uc at 55 °C operational 50/60 Hz 0.35...0.55 Uc at 55 °C drop-out 50/60 Hz
Inrush power in VA	805 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) 50 Hz
Heat dissipation	18...24 W

Environment

IP degree of protection	IP2x front face with shrouds (ordered separately) conforming to IEC 60529 IP2x front face with shrouds (ordered separately) 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
Operating altitude	3000 m without derating in temperature
Mechanical robustness	Vibrations contactor open 2 Gn, 5...300 Hz Shocks contactor closed 15 Gn for 11 ms Vibrations contactor closed 5 Gn, 5...300 Hz Shocks contactor open 7 Gn for 11 ms
Height	174 mm
Width	168.5 mm
Depth	181 mm
Product weight	4.65 kg

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS	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