



Main

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
Control circuit type	AC
Coil type	Standard
Poles description	3P
Pole contact composition	3 NO
Control circuit voltage	230 V AC 40...400 Hz
Connections - terminals	Bars power circuit 2 25 x 3 mm Connector control circuit 2 1...4 mm ² solid without Connector control circuit 1 1...4 mm ² solid without Connector control circuit 2 1...2.5 mm ² flexible with Connector control circuit 1 1...4 mm ² flexible with Connector control circuit 2 1...4 mm ² flexible without Connector control circuit 1 1...4 mm ² flexible without Connector power circuit 1 120 mm ² Ring lugs power circuit 1 120 mm ²

Complementary

Coil technology	Without built-in bidirectional peak limiting diode suppressor
[Ie] rated operational current	150 A ≤ 55 °C AC AC-3 power circuit 250 A ≤ 40 °C AC AC-1 power circuit
Motor power kW	40 kW 220...230 V AC 50/60 Hz 65 kW 1000 V AC 50/60 Hz 75 kW 380...400 V AC 50/60 Hz 80 kW 415 V AC 50/60 Hz 80 kW 440 V AC 50/60 Hz 90 kW 500 V AC 50/60 Hz 100 kW 660...690 V AC 50/60 Hz
Auxiliary contacts type	Integrated in coil
Auxiliary contact composition	1 NO
Control circuit voltage limits	0.35...0.55 U _c ≤ 55 °C drop-out 60 Hz 0.35...0.55 U _c ≤ 55 °C drop-out 50 Hz 0.85...1.1 U _c ≤ 55 °C operational 60 Hz 0.85...1.1 U _c ≤ 55 °C operational 50 Hz
[Ui] rated insulation voltage	1000 V IEC 60947-1 power circuit 1500 V VDE 0110 group C power circuit
[Uimp] rated impulse withstand voltage	8 kV coil not connected to the power circuit
Mounting support	Plate Rail
Tightening torque	1.2 N.m control circuit connector 1...4 mm ² 1.2 N.m control circuit connector 1...2.5 mm ² 18 N.m power circuit bars 18 N.m power circuit connector 120 mm ² 18 N.m power circuit ring lugs 120 mm ²
[Ue] rated operational voltage	≤ 1000 V AC 16 Hz 2/3...200 Hz power circuit
[Ith] conventional free air thermal current	250 A ≤ 40 °C power circuit
I _{rms} rated making capacity	1500 A ≤ 1000 V AC power circuit IEC 60497-4-1
Rated breaking capacity	1200 A ≤ 1000 V power circuit IEC 60497-4-1

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Permissible short-time rating	350 A ≤ 40 °C 10 min power circuit 450 A ≤ 40 °C 3 min power circuit 600 A ≤ 40 °C 1 min power circuit 700 A ≤ 40 °C 30 s power circuit 1200 A ≤ 40 °C 10 s power circuit
Associated fuse rating	160 A aM ≤ 440 V power circuit 200 A gG ≤ 440 V power circuit 250 A gG ≤ 440 V power circuit
Average impedance	0.35 mOhm 50 Hz 250 A power circuit
Power dissipation per pole	8 W AC-3 22 W AC-1
Inrush power in VA	550 VA 20 °C 0.3 50 Hz 660 VA 20 °C 0.3 60 Hz
Hold-in power consumption in VA	45 VA 20 °C 0.3 50 Hz 55 VA 20 °C 0.3 60 Hz
Operating time	5...15 ms on opening 23...35 ms on closing
Mechanical durability	10000000 cycles
Operating rate	2400 cyc/h ≤ 55 °C
Height	163.5 mm
Width	170 mm
Depth	171 mm
Product weight	3.43 kg

Environment

Standards	EN 60947-1 EN 60947-4-1 IEC 60947-1 IEC 60947-4-1 JEM 1038
Product certifications	BV CCC CSA DNV (Det Norske Veritas) GL GOST LROS (Lloyds register of shipping) RINA RMR0S UL
IP degree of protection	IP20 front face with cover VDE 0106 IP20 front face with cover IEC 60529
Protective treatment	TH
Ambient air temperature for operation	-60...80 °C
Ambient air temperature for storage	-5...55 °C
Permissible ambient air temperature around the device	-40...70 °C at U _c
Operating altitude	3000 m without
Fire resistance	850 °C IEC 60695-2-1
Shock resistance	9 gn contactor opened 15 gn contactor closed
Vibration resistance	2 gn contactor opened 5...300 Hz 6 gn contactor closed 5...300 Hz
Heat dissipation	12...16 W 40...400 Hz control circuit
RoHS EUR conformity date	0843
RoHS EUR status	Compliant