

LC8K12105F7 has not been replaced. Please contact your customer care center for more information.



⚠ Discontinued

## Main

Range	TeSys
Product name	TeSys K
Product or component type	Reversing contactor
Device short name	LC8K
Device application	Control
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3 AC-4
Device presentation	Preassembled with reversing power busbar
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	690 V AC 50/60 Hz for power circuit <= 690 V AC 50/60 Hz for signalling circuit
[Ie] rated operational current	20 A (<= 50 °C) at <= 440 V AC AC-1 for power circuit 16 A (<= 70 °C) at 690 V AC AC-1 for power circuit 12 A at <= 440 V AC AC-3 for power circuit
Motor power kW	3 kW at 220...230 V AC 50/60 Hz 4 kW at 480 V AC 50/60 Hz 4 kW at 500...600 V AC 50/60 Hz 4 kW at 660...690 V AC 50/60 Hz 5.5 kW at 380...415 V AC 50/60 Hz 5.5 kW at 440 V AC 50/60 Hz
Control circuit type	AC 50/60 Hz silent
[Uc] control circuit voltage	110 V AC 50/60 Hz
Auxiliary contact composition	1 NO
[Uimp] rated impulse withstand voltage	8 kV
Overtoltage category	III
[Ith] conventional free air thermal current	20 A at <= 50 °C for power circuit 10 A at <= 50 °C for signalling circuit
Irms rated making capacity	144 A at 690 V AC for power circuit conforming to IEC 60947 144 A at 690 V AC for power circuit conforming to NF C 63-110 110 A AC for signalling circuit conforming to IEC 60947
Rated breaking capacity	110 A at 440 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947 70 A at 660...690 V conforming to IEC 60947

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[I <sub>cw</sub> ] rated short-time withstand current	25 A ≤ 50 °C ≥ 15 min power circuit 80 A 1 s signalling circuit 90 A 500 ms signalling circuit 110 A 100 ms signalling circuit 115 A ≤ 50 °C 1 s power circuit 105 A ≤ 50 °C 5 s power circuit 100 A ≤ 50 °C 10 s power circuit 75 A ≤ 50 °C 30 s power circuit 55 A ≤ 50 °C 1 min power circuit 50 A ≤ 50 °C 3 min power circuit
Associated fuse rating	25 A gG at ≤ 440 V for power circuit 25 A aM for power circuit 10 A gG for signalling circuit conforming to IEC 60947 10 A gG for signalling circuit conforming to VDE 0660
Average impedance	3 mOhm at 50 Hz - I <sub>th</sub> 20 A for power circuit
[U <sub>i</sub> ] rated insulation voltage	690 V for signalling circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-5-1 600 V for signalling circuit conforming to UL 508 600 V for power circuit conforming to CSA C22.2 No 14 600 V for signalling circuit conforming to CSA C22.2 No 14 690 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit conforming to UL 508
Electrical durability	0.3 Mcycles 20 A AC-1 at U <sub>e</sub> ≤ 440 V 1.3 Mcycles 12 A AC-3 at U <sub>e</sub> ≤ 440 V
Interlocking type	Mechanical
Mounting support	Plate Rail
Standards	BS 5424 IEC 60947 NF C 63-110 VDE 0660
Product certifications	CSA UL
Connections - terminals	Solder pins 1.5 x 0.9 mm
Operating time	30 ms coil de-energisation and NO opening 30...40 ms coil energisation and NO closing
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	5 Mcycles
Operating rate	3600 cyc/h

## Complementary

Control circuit voltage limits	0.85...1.1 U <sub>c</sub> at ≤ 50 °C operational 0.1...0.75 U <sub>c</sub> at ≤ 50 °C drop-out
Inrush power in VA	3 VA at 20 °C
Hold-in power consumption in VA	3 VA at 20 °C
Heat dissipation	3 W
Auxiliary contacts type	Type instantaneous 1 NO
Signalling circuit frequency	≤ 400 Hz
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Non overlap distance	0.5 mm
Insulation resistance	> 10 MOhm for signalling circuit

## Environment

IP degree of protection	IP20 conforming to VDE 0106
Protective treatment	TC conforming to IEC 60068 TC conforming to DIN 50016
Ambient air temperature for operation	-25...50 °C
Ambient air temperature for storage	-50...80 °C
Operating altitude	2000 m without derating

Flame retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102
Mechanical robustness	Shocks contactor closed, on X axis 10 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Y axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Z axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on X axis 6 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Y axis 10 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Z axis 10 Gn for 11 ms IEC 60068-2-27 Vibrations contactor closed 4 Gn, 5...300 Hz IEC 60068-2-6 Vibrations contactor opened 2 Gn, 5...300 Hz IEC 60068-2-6
Height	58 mm
Width	90 mm
Depth	57 mm
Product weight	0.48 kg

### Contractual warranty

Warranty period	18 months
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