

# Product data sheet

Specifications



Contactor, TeSys K, 3P, AC-3/  
AC-3e,440V 12A, aux. 1NO, 100V  
AC coil

LC1K12106K7

## Main

Range	TeSys
Product Or Component Type	Contactor
Device Short Name	LC1K
Device Application	Control
Contactor Application	Resistive load Motor control

## Complementary

Utilisation Category	AC-3 AC-3e AC-1 AC-4
Poles Description	3P
Power Pole Contact Composition	3 NO
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC <= 400 Hz Signalling circuit: <= 690 V AC <= 400 Hz
[Ie] Rated Operational Current	12 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 12 A (at <60 °C) at <= 440 V AC AC-3e for power circuit 20 A (at <60 °C) at <= 690 V AC AC-1 for power circuit
Control Circuit Type	AC at 50/60 Hz
[Uc] Control Circuit Voltage	100 V AC 50/60 Hz
Motor Power Kw	3 kW at 220...230 V AC 50/60 Hz AC-3 5.5 kW at 380...415 V AC 50/60 Hz AC-3 5.5 kW at 440 V AC 50/60 Hz AC-3 4 kW at 690 V AC 50/60 Hz AC-3 3 kW at 220...230 V AC 50/60 Hz AC-3e 5.5 kW at 380...415 V AC 50/60 Hz AC-3e 5.5 kW at 440 V AC 50/60 Hz AC-3e 4 kW at 690 V AC 50/60 Hz AC-3e 3 kW at 220...230 V AC 50/60 Hz AC-4 5.5 kW at 380...415 V AC 50/60 Hz AC-4 5.5 kW at 440 V AC 50/60 Hz AC-4 4 kW at 690 V AC 50/60 Hz AC-4
Auxiliary Contact Composition	1 NO
[Uimp] Rated Impulse Withstand Voltage	8 kV
Overvoltage Category	III
[Ith] Conventional Free Air Thermal Current	20 A (at 60 °C) for power circuit 10 A (at 50 °C) for signalling circuit
Irms Rated Making Capacity	144 A AC for power circuit conforming to IEC 60947 110 A AC for signalling circuit 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

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
[Icw] Rated Short-Time Withstand Current	115 A 50 °C - 1 s for power circuit 105 A 50 °C - 5 s for power circuit 100 A 50 °C - 10 s for power circuit 75 A 50 °C - 30 s for power circuit 55 A 50 °C - 1 min for power circuit 50 A 50 °C - 3 min for power circuit 25 A 50 °C - >= 15 min for power circuit 80 A - 1 s for signalling circuit 90 A - 500 ms for signalling circuit 110 A - 100 ms for signalling 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 - lth 20 A 50 Hz for power circuit
[Ui] Rated Insulation Voltage	Power circuit: 600 V conforming to UL 508 Power circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-5-1 Signalling circuit: 600 V conforming to UL 508 Power circuit: 600 V conforming to CSA C22.2 No 14 Signalling circuit: 600 V conforming to CSA C22.2 No 14
Insulation Resistance	> 10 MOhm for signalling circuit
Inrush Power In Va	30 VA (at 20 °C)
Hold-In Power Consumption In Va	4.5 VA (at 20 °C)
Heat Dissipation	1.3 W
Control Circuit Voltage Limits	Operational: 0.8...1.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C)
Connections - Terminals	Lugs-ring terminals (external diameter: 7 mm)
Maximum Operating Rate	3600 cyc/h
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
Mounting Support	Rail Plate
Tightening Torque	0.8...1.3 N.m - on lugs-ring terminals Philips No 2 0.8...1.3 N.m - on lugs-ring terminals flat Ø 6 mm 0.8...1.3 N.m - on lugs-ring terminals pozidriv No 2
Operating Time	10...20 ms coil de-energisation and NO opening 10...20 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
Non Overlap Distance	0.5 mm
Mechanical Durability	10 Mcycles
Electrical Durability	1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3e at Ue <= 440 V 0.3 Mcycles 20 A AC-1 at Ue <= 690 V 0.02 Mcycles 72 A AC-4 at Ue <= 440 V

Mechanical Robustness	Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6
Height	58 mm
Width	45 mm
Depth	57 mm
Net Weight	0.18 kg

## Environment

Standards	EN/IEC 60947-4-1 GB/T 14048.4 UL 60947-4-1 CSA C22.2 No 60947-4-1 JIS C8201-4-1
Product Certifications	CB Scheme CCC UL CSA EAC CE UKCA
Ip Degree Of Protection	IP2X conforming to VDE 0106
Protective Treatment	TC conforming to IEC 60068 TC conforming to DIN 50016
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

## Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	4.6 cm
Package 1 Width	4.8 cm
Package 1 Length	6.2 cm
Package 1 Weight	180.0 g

## Contractual warranty

Warranty	18 months
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency   RoHS/REACH

## Well-being performance

✓ Reach Free Of Svhc

✓ Toxic Heavy Metal Free

✓ Mercury Free

✓ Rohs Exemption Information   Yes

## Certifications & Standards

Reach Regulation	<a href="#">REACH Declaration</a>
Eu Rohs Directive	Compliant <a href="#">EU RoHS Declaration</a>
China Rohs Regulation	<a href="#">China RoHS declaration</a> Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	<a href="#">End of Life Information</a>