

# Product data sheet

Specifications



Contactor, TeSys K, 3P, AC-3/  
AC-3e, <=440V 9A, aux. 1NO,  
400...415V AC coil

LC1K0910N7

## Main

Range	TeSys
Product Or Component Type	Contactor
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	9 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 9 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	400...415 V AC 50/60 Hz
Motor Power Kw	2.2 kW at 220...230 V AC 50/60 Hz AC-3 4 kW at 380...415 V AC 50/60 Hz AC-3 4 kW at 440/690 V AC 50/60 Hz AC-3 2.2 kW at 220...230 V AC 50/60 Hz AC-3e 4 kW at 380...415 V AC 50/60 Hz AC-3e 4 kW at 440/690 V AC 50/60 Hz AC-3e 2.2 kW at 220...230 V AC 50/60 Hz AC-4 4 kW at 380...415 V AC 50/60 Hz AC-4 4 kW at 440/690 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	110 A AC for power circuit conforming to IEC 60947 110 A AC for signalling circuit conforming to IEC 60947
Rated Breaking Capacity	110 A at 220...230 V conforming to IEC 60947 110 A at 380...400 V conforming to IEC 60947 110 A at 415 V conforming to IEC 60947 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

<b>[Icw] Rated Short-Time Withstand Current</b>	90 A 50 °C - 1 s for power circuit 85 A 50 °C - 5 s for power circuit 80 A 50 °C - 10 s for power circuit 60 A 50 °C - 30 s for power circuit 45 A 50 °C - 1 min for power circuit 40 A 50 °C - 3 min for power circuit 20 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
<b>Associated Fuse Rating</b>	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
<b>Average Impedance</b>	3 mOhm - lth 20 A 50 Hz for power circuit
<b>Insulation Resistance</b>	> 10 MOhm for signalling circuit
<b>Inrush Power In Va</b>	30 VA (at 20 °C)
<b>Hold-In Power Consumption In Va</b>	4.5 VA (at 20 °C)
<b>Heat Dissipation</b>	1.3 W
<b>Control Circuit Voltage Limits</b>	Operational: 0.8...1.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C)
<b>Connections - Terminals</b>	Screw clamp terminals 1 cable(s) 1.5...4 mm²solid Screw clamp terminals 1 cable(s) 0.75...4 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.34...2.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.5...4 mm²solid Screw clamp terminals 2 cable(s) 0.75...4 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.34...1.5 mm²flexible with cable end
<b>Maximum Operating Rate</b>	3600 cyc/h
<b>Auxiliary Contacts Type</b>	type instantaneous 1 NO
<b>Signalling Circuit Frequency</b>	<= 400 Hz
<b>Minimum Switching Current</b>	5 mA for signalling circuit
<b>Minimum Switching Voltage</b>	17 V for signalling circuit
<b>Operating Time</b>	10...20 ms coil de-energisation and NO opening 10...20 ms coil energisation and NO closing
<b>Safety Reliability Level</b>	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
<b>Non Overlap Distance</b>	0.5 mm
<b>Mechanical Durability</b>	10 Mcycles
<b>Electrical Durability</b>	1.3 Mcycles 9 A AC-3 at Ue <= 440 V 1.3 Mcycles 9 A AC-3e at Ue <= 440 V 0.16 Mcycles 20 A AC-1 at Ue <= 690 V 0.02 Mcycles 54 A AC-4 at Ue <= 440 V
<b>Mechanical Robustness</b>	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
<b>Height</b>	58 mm
<b>Width</b>	45 mm
<b>Depth</b>	57 mm
<b>Net Weight</b>	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
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	6.500 cm
Package 1 Width	6.000 cm
Package 1 Length	4.800 cm
Package 1 Weight	178.000 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	50
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	9.355 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	800
Package 3 Height	75.000 cm
Package 3 Width	80.000 cm
Package 3 Length	60.000 cm
Package 3 Weight	164.700 kg

## 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>