

Contactor, TeSys K, 3P, AC-3/ AC-3e,<=440V 9A, aux. 1NC, 36V AC coil

LC1K0901C7

Main

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

Complementary

= 690 V AC <= 400 Hz : <= 690 V AC <= 400 Hz at <= 440 V AC AC-3 for power circuit at <= 440 V AC AC-3e for power circuit at <= 690 V AC AC-1 for power circuit
: <= 690 V AC <= 400 Hz at <= 440 V AC AC-3 for power circuit at <= 440 V AC AC-3e for power circuit at <= 690 V AC AC-1 for power circuit
: <= 690 V AC <= 400 Hz at <= 440 V AC AC-3 for power circuit at <= 440 V AC AC-3e for power circuit at <= 690 V AC AC-1 for power circuit
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at <= 440 V AC AC-3e for power circuit at <= 690 V AC AC-1 for power circuit
at <= 690 V AC AC-1 for power circuit
lz
iz
230 V AC 50/60 Hz AC-3
5 V AC 50/60 Hz AC-3
V AC 50/60 Hz AC-3
230 V AC 50/60 Hz AC-3e
5 V AC 50/60 Hz AC-3e
V AC 50/60 Hz AC-3e
230 V AC 50/60 Hz AC-4
5 V AC 50/60 Hz AC-4
V AC 50/60 Hz AC-4
or power circuit
or signalling circuit
wer circuit conforming to IEC 60947
nalling circuit conforming to IEC 60947

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Rated Breaking Capacity	110 A at 220230 V conforming to IEC 60947
	110 A at 380400 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 660690 V conforming to IEC 60947
[Icw] Rated Short-Time Withstand	90 A 50 °C - 1 s for power circuit
Current	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
Associated Fires Detina	
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 - Ith 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
Heat Dissipation Control Circuit Voltage Limits	1.3 W Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C)
Control Circuit Voltage Limits	Operational: 0.81.15 Uc (at <50 °C)
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Control Circuit Voltage Limits Connections - Terminals	Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C) Screw clamp terminals 1 cable(s) 1.54 mm²solid Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm²solid Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end
Control Circuit Voltage Limits Connections - Terminals Maximum Operating Rate	Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C) Screw clamp terminals 1 cable(s) 1.54 mm²solid Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm²solid Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end
Control Circuit Voltage Limits Connections - Terminals Maximum Operating Rate Auxiliary Contacts Type	Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C) Screw clamp terminals 1 cable(s) 1.54 mm²solid Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm²solid Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end 3600 cyc/h
Control Circuit Voltage Limits Connections - Terminals Maximum Operating Rate Auxiliary Contacts Type Signalling Circuit Frequency	Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C) Screw clamp terminals 1 cable(s) 1.54 mm²solid Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm²solid Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end 3600 cyc/h type instantaneous 1 NC <= 400 Hz
Control Circuit Voltage Limits Connections - Terminals Maximum Operating Rate Auxiliary Contacts Type Signalling Circuit Frequency Minimum Switching Current	Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C) Screw clamp terminals 1 cable(s) 1.54 mm²solid Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm²solid Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end 3600 cyc/h type instantaneous 1 NC <= 400 Hz 5 mA for signalling circuit
Control Circuit Voltage Limits Connections - Terminals Maximum Operating Rate Auxiliary Contacts Type Signalling Circuit Frequency Minimum Switching Current Minimum Switching Voltage	Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C) Screw clamp terminals 1 cable(s) 1.54 mm²solid Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm²solid Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end 3600 cyc/h type instantaneous 1 NC <= 400 Hz 5 mA for signalling circuit
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Control Circuit Voltage Limits Connections - Terminals Maximum Operating Rate Auxiliary Contacts Type Signalling Circuit Frequency Minimum Switching Current Minimum Switching Voltage Mounting Support	Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C) Screw clamp terminals 1 cable(s) 1.54 mm²solid Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm²solid Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end 3600 cyc/h type instantaneous 1 NC <= 400 Hz 5 mA for signalling circuit Rail Plate 0.81.3 N.m - on screw clamp terminals Philips No 2
Control Circuit Voltage Limits Connections - Terminals Maximum Operating Rate Auxiliary Contacts Type Signalling Circuit Frequency Minimum Switching Current Minimum Switching Voltage Mounting Support	Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C) Screw clamp terminals 1 cable(s) 1.54 mm²solid Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm²solid Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end 3600 cyc/h type instantaneous 1 NC <= 400 Hz 5 mA for signalling circuit Rail Plate
Control Circuit Voltage Limits Connections - Terminals Maximum Operating Rate Auxiliary Contacts Type Signalling Circuit Frequency Minimum Switching Current Minimum Switching Voltage Mounting Support Tightening Torque	Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C) Screw clamp terminals 1 cable(s) 1.54 mm²solid Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm²solid Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end 3600 cyc/h type instantaneous 1 NC <= 400 Hz 5 mA for signalling circuit Rail Plate 0.81.3 N.m - on screw clamp terminals Philips No 2 0.81.3 N.m - on screw clamp terminals flat Ø 6 mm
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Control Circuit Voltage Limits Connections - Terminals Maximum Operating Rate Auxiliary Contacts Type Signalling Circuit Frequency Minimum Switching Current Minimum Switching Voltage Mounting Support Tightening Torque	Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C) Screw clamp terminals 1 cable(s) 1.54 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.754 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm²flexible with cable end Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end 3600 cyc/h type instantaneous 1 NC <= 400 Hz 5 mA for signalling circuit Rail Plate 0.81.3 N.m - on screw clamp terminals Philips No 2 0.81.3 N.m - on screw clamp terminals flat Ø 6 mm 0.81.3 N.m - on screw clamp terminals pozidriv No 2 1020 ms coil de-energisation and NO opening 1020 ms coil energisation and NO closing B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1
Control Circuit Voltage Limits Connections - Terminals Maximum Operating Rate Auxiliary Contacts Type Signalling Circuit Frequency Minimum Switching Current Minimum Switching Voltage Mounting Support Tightening Torque Operating Time	Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C) Screw clamp terminals 1 cable(s) 1.54 mm²solid Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm²solid Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end 3600 cyc/h type instantaneous 1 NC <= 400 Hz 5 mA for signalling circuit Rail Plate 0.81.3 N.m - on screw clamp terminals Philips No 2 0.81.3 N.m - on screw clamp terminals flat Ø 6 mm 0.81.3 N.m - on screw clamp terminals pozidriv No 2 1020 ms coil de-energisation and NO opening 1020 ms coil energisation and NO closing
Control Circuit Voltage Limits Connections - Terminals Maximum Operating Rate Auxiliary Contacts Type Signalling Circuit Frequency Minimum Switching Current Minimum Switching Voltage Mounting Support Tightening Torque Operating Time Safety Reliability Level	Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C) Screw clamp terminals 1 cable(s) 1.54 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.754 mm²flexible with cable end Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end 3600 cyc/h type instantaneous 1 NC <= 400 Hz 5 mA for signalling circuit Rail Plate 0.81.3 N.m - on screw clamp terminals Philips No 2 0.81.3 N.m - on screw clamp terminals flat Ø 6 mm 0.81.3 N.m - on screw clamp terminals pozidriv No 2 1020 ms coil de-energisation and NO opening 1020 ms coil de-energisation and NO closing B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO
Control Circuit Voltage Limits Connections - Terminals Maximum Operating Rate Auxiliary Contacts Type Signalling Circuit Frequency Minimum Switching Current Minimum Switching Voltage Mounting Support Tightening Torque Operating Time	Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C) Screw clamp terminals 1 cable(s) 1.54 mm²solid Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm²solid Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end 3600 cyc/h type instantaneous 1 NC <= 400 Hz 5 mA for signalling circuit 17 V for signalling circuit Rail Plate 0.81.3 N.m - on screw clamp terminals Philips No 2 0.81.3 N.m - on screw clamp terminals flat Ø 6 mm 0.81.3 N.m - on screw clamp terminals pozidriv No 2 1020 ms coil de-energisation and NO opening 1020 ms coil de-energisation and NO closing B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 200000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1

Electrical Durability	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
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, 5300 Hz conforming to IEC 60068-2-6
	Vibrations contactor opened: 2 Gn, 5300 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
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	-5080 °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	4.8 cm
Package 1 Width	6.2 cm
Package 1 Length	6.6 cm
Package 1 Weight	180.0 g

Contractual warranty

Warranty 18 months

Sustainability

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ 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	REACh Declaration
Eu Rohs Directive	Compliant EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information