

Contactor, TeSys K, 3P, AC-3/ AC-3e,<=440V 12A, aux. 1NC, 24V AC coil

LC1K1201B7

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		
[le] 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	24 V AC 50/60 Hz		
Motor Power Kw	3 kW at 220230 V AC 50/60 Hz AC-3 5.5 kW at 380415 V AC 50/60 Hz AC-3 4 kW at 690 V AC 50/60 Hz AC-3 3 kW at 220230 V AC 50/60 Hz AC-3e 5.5 kW at 380415 V AC 50/60 Hz AC-3e 5.5 kW at 380415 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 220230 V AC 50/60 Hz AC-3e 5.5 kW at 380415 V AC 50/60 Hz AC-4 5.5 kW at 380415 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 NC		
[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		

144 A AC for power circuit conforming to IEC 60947 110 A AC for signalling circuit conforming to IEC 60947

Irms Rated Making Capacity

Rated Breaking Capacity	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	115 A 50 °C - 1 s for power circuit			
Current	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			
	- 100 M3 for Signaling 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 - Ith 20 A 50 Hz for power circuit			
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			
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Control Circuit Voltage Limits	Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.20 Uc (at <50 °C)			
Connections - Terminals	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			
Maximum Operating Rate	3600 cyc/h			
Auxiliary Contacts Type	type instantaneous 1 NC			
Signalling Circuit Frequency	<= 400 Hz			
Minimum Switching Current	5 mA for signalling circuit			
Minimum Switching Voltage	17 V for signalling circuit			
Operating Time	1020 ms coil de-energisation and NO opening			
	1020 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			
	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1			
Non Overlap Distance	•			
Non Overlap Distance Mechanical Durability	13849-1			
Mechanical Durability	13849-1 0.5 mm			
Mechanical Durability	13849-1 0.5 mm 10 Mcycles 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3e at Ue <= 440 V			
Mechanical Durability	13849-1 0.5 mm 10 Mcycles 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			
Mechanical Durability Electrical Durability	13849-1 0.5 mm 10 Mcycles 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 Durability Electrical Durability	13849-1 0.5 mm 10 Mcycles 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 Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27			
Mechanical Durability Electrical Durability	13849-1 0.5 mm 10 Mcycles 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 Durability Electrical Durability	13849-1 0.5 mm 10 Mcycles 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 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			
Mechanical Durability Electrical Durability	13849-1 0.5 mm 10 Mcycles 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 12 A AC-1 at Ue <= 690 V 0.02 Mcycles 72 A AC-4 at Ue <= 440 V 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 Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27			
Mechanical Durability Electrical Durability	13849-1 0.5 mm 10 Mcycles 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 0.3 Mcycles 12 A AC-3 at Ue <= 690 V 0.02 Mcycles 72 A AC-4 at Ue <= 690 V 0.02 Mcycles 72 A AC-4 at Ue <= 440 V 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 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27			
	13849-1 0.5 mm 10 Mcycles 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 12 A AC-1 at Ue <= 690 V 0.02 Mcycles 72 A AC-4 at Ue <= 440 V 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 Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27			
Mechanical Durability Electrical Durability Mechanical Robustness	13849-1 0.5 mm 10 Mcycles 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 12 A AC-3e at Ue <= 690 V 0.02 Mcycles 72 A AC-4 at Ue <= 690 V 0.02 Mcycles 72 A AC-4 at Ue <= 440 V 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			
Mechanical Durability Electrical Durability	1.3 Mcycles 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 12 A AC-3e at Ue <= 690 V 0.02 Mcycles 20 A AC-1 at Ue <= 690 V 0.02 Mcycles 72 A AC-4 at Ue <= 440 V 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			
Mechanical Durability Electrical Durability Mechanical Robustness Height	1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 at Ue <= 440 V 0.3 Mcycles 12 A AC-3 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 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			

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	
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	4.500 cm
Package 1 Width	6.000 cm
Package 1 Length	6.500 cm
Package 1 Weight	180.700 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	9.276 kg

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.

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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 WARNING: This product can expose you to chemicals including: Antimony oxide &California Proposition 65 Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov