# Product datasheet Characteristics

## LC1K0610B7

TeSys K contactor - 3P(3 NO) - AC-3 - <= 440 V 6 A - 24 V AC coil



#### Main

Range of product	TeSys K	•
Range	TeSys	
Product or component type	Contactor	
Product name	TeSys K	;
Device short name	LC1K	
Contactor application	Motor control	
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#### Complementary

Utilisation category	AC-4	
	AC-3	•
Poles description	3P	
Pole contact composition	3 NO	
[Ue] rated operational voltage	<= 690 V AC 50/60 Hz for signalling circuit 690 V AC 50/60 Hz for power circuit	
[le] rated operational current	6 A at <= 440 V AC AC-3 for power circuit	
Control circuit type	AC 50/60 Hz	
Control circuit voltage	24 V AC 50/60 Hz	
Motor power kW	3 kW at 480 V AC 50/60 Hz 3 kW at 500600 V AC 50/60 Hz 3 kW at 660690 V AC 50/60 Hz 1.5 kW at 220230 V AC 50/60 Hz 2.2 kW at 380415 V AC 50/60 Hz 3 kW at 440 V AC 50/60 Hz	
Auxiliary contact composition	1 NO	
[Uimp] rated impulse withstand voltage	8 kV	
Overvoltage category	III	
[lth] 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	110 A AC for power circuit conforming to IEC 60947 110 A 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 380400 V conforming to IEC 60947 110 A at 415 V conforming to IEC 60947 110 A at 220230 V conforming to IEC 60947 110 A at 440 V conforming to IEC 60947 70 A at 660690 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947
[Icw] rated short-time withstand current	110 A 100 ms signalling circuit  90 A <= 50 °C 1 s power circuit  40 A <= 50 °C 3 min power circuit  80 A 1 s signalling circuit  85 A <= 50 °C 5 s power circuit  90 A 500 ms signalling circuit  45 A <= 50 °C 1 min power circuit  60 A <= 50 °C 30 s power circuit  20 A <= 50 °C >= 15 s power circuit  80 A <= 50 °C 10 s 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 VDE 0660 10 A gG for signalling circuit conforming to IEC 60947
Average impedance	3 mOhm at 50 Hz - Ith 20 A for power circuit
[Ui] rated insulation voltage	600 V for signalling circuit conforming to UL 508 600 V for power circuit conforming to UL 508 690 V for signalling circuit conforming to IEC 60947-5-1 690 V for signalling circuit conforming to IEC 60947-4-1 600 V for power circuit conforming to CSA C22.2 No 14 690 V for power circuit conforming to IEC 60947-4-1 600 V for signalling circuit 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	0.81.15 Uc at <= 50 °C operational 0.20.75 Uc at <= 50 °C drop-out
Connections - terminals	Screw clamp terminals 1 cable(s) 0.342.5 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 0.754 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 0.341.5 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid
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	1.3 N.m - on screw clamp terminals - with screwdriver flat $\varnothing$ 6 mm 1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2
Operating time	1020 ms coil energisation and NO closing 1020 ms coil de-energisation and NO opening
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1
Non overlap distance	0.5 mm
Mechanical durability	10 Mcycles
Electrical durability	1.3 Mcycles 6 A AC-3 at Ue <= 440 V
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 Vibrations contactor opened 2 Gn, 5300 Hz IEC 60068-2-6 Shocks contactor opened, on X axis 6 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Z axis 10 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 closed, on Z axis 15 Gn for 11 ms IEC 60068-2-27 Vibrations contactor closed 4 Gn, 5300 Hz IEC 60068-2-6



Height	58 mm	
Width	45 mm	
Depth	57 mm	
Product weight	0.18 kg	
Compatibility code	LC1K	

#### Environment

Standards	VDE 0660			
	IEC 60947			
	BS 5424			
	NF C 63-110			
Product certifications	CSA			
	UL			
IP degree of protection	IP2x conforming to VDE 0106			
Protective treatment	TC conforming to DIN 50016			
	TC conforming to IEC 60068			
Ambient air temperature for operation	-2550 °C			
Ambient air temperature for storage	-5080 °C			
Operating altitude	2000 m without derating in temperature			
Flame retardance	V1 conforming to UL 94			
	Requirement 2 conforming to NF F 16-102			
	Requirement 2 conforming to NF F 16-101			

### Offer Sustainability

Sustainable offer status	Green Premium product		
RoHS (date code: YYWW)	Compliant - since 0633 - Schneider Electric declaration of conformity		
	Schneider Electric declaration of conformity		
REACh	Reference not containing SVHC above the threshold		
	Reference not containing SVHC above the threshold		
Product environmental profile	Available		
	End of life manual		
Product end of life instructions	Available		

#### Contractual warranty

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Warranty period		18 months			