# Product data sheet Characteristics

## LC1K09103B7

TeSys K contactor - 3P - AC-3 <= 440 V 9 A - 1 NO aux. - 24 V AC coil





#### Main

Range	TeSys
Product or component type	Contactor
Product name	TeSys K
Device short name	LC1K
Device application	Control
Contactor application	Motor control Resistive load

#### Complementary

Utilisation category	AC-1	
	AC-4 AC-3	
Poles description	3P	
Power pole contact composition	3 NO	
[le] rated operational current	20 A (at <50 °C) at <= 440 V AC AC-1 for power circuit 9 A at <= 440 V AC AC-3 for power circuit 16 A (at <70 °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	2.2 KW at 220230 V AC 50/60 Hz AC-3 4 KW at 380415 V AC 50/60 Hz AC-3 4 KW at 440 V AC 50/60 Hz AC-3 4 KW at 480 V AC 50/60 Hz AC-3 4 KW at 500600 V AC 50/60 Hz AC-3 4 KW at 660690 V AC 50/60 Hz AC-3 2.2 kW at 400 V AC 50/60 Hz AC-4	
Auxiliary contact composition	1 NO	
Overvoltage category	III	
[Ith] 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 NF C 63-110 110 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 415 V conforming to IEC 60947 110 A at 440 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947 110 A at 220230 V conforming to IEC 60947 110 A at 380400 V conforming to IEC 60947 70 A at 660690 V conforming to IEC 60947	
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	

Control circuit voltage limits	Operational: 0.81.15 Uc (at <50 °C) Drop-out: 0.20.75 Uc (at <50 °C)
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	Plate Rail
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 13849-1
Non overlap distance	0.5 mm
Mechanical durability	10 Mcycles
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

Environment	
Standards	BS 5424 IEC 60947 NF C 63-110 VDE 0660
Product certifications	CSA UL
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 Weight	183 g
Package 1 Height	4.8 cm
Package 1 width	6.2 cm
Package 1 Length	6.5 cm
Unit Type of Package 2	S02
Number of Units in Package 2	50
Package 2 Weight	9.545 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

#### Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	☑REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant <sup>₫</sup> EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	₫Yes
China RoHS Regulation	☑ China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

#### Contractual warranty

Warranty	18 months
----------	-----------