

Product data sheet

Specifications



TeSys K contactor , 3P , AC-3 <= 440 V 12 A , 1 NO aux. , 42 V AC coil

LC1K12107D72

ⓘ Discontinued

Main

Range Of Product	TeSys K
Range	TeSys
Product Name	TeSys K
Device Application	Control
Product Or Component Type	Contactors
Utilisation Category	AC-1 AC-4 AC-3
Coil Technology	Built-in bidirectional peak limiting diode suppressor
Poles Description	3P
Pole Contact Composition	3 NO
[Ie] Rated Operational Current	20 A (at <50 °C) at <= 440 V AC AC-1 for power circuit 12 A at <= 440 V AC AC-3 for power circuit 16 A (at <70 °C) at 690 V AC AC-1 for power circuit
[Uc] Control Circuit Voltage	type instantaneous 1 NO
Signalling Circuit Frequency	<= 400 Hz
Non Overlap Distance	0.5 mm

Complementary

Contactors Application	Resistive load Motor control
Auxiliary Contact Composition	1 NO
Control Circuit Voltage Limits	Operational: 0.8...1.15 Uc (at <50 °C) Drop-out: 0.2...0.75 Uc (at <50 °C)
Control Circuit Type	AC at 50/60 Hz
[Uc] Control Circuit Voltage	42 V AC 50/60 Hz

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, 5...300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6
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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

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
Protective Treatment	TC conforming to IEC 60068 TC conforming to DIN 50016
Overvoltage Category	III
Product Certifications	CB Scheme CCC UL CSA EAC CE UKCA
Operating Altitude	2000 m without derating
[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 signalling circuit conforming to IEC 60947 144 A AC for power circuit conforming to NF C 63-110 144 A AC for power circuit conforming to IEC 60947
Rated Breaking Capacity	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
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
Inrush Power In Va	30 VA (at 20 °C)
Hold-In Power Consumption In Va	4.5 VA (at 20 °C)
Operating Time	10...20 ms coil de-energisation and NO opening 10...20 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
Maximum Operating Rate	3600 cyc/h
Minimum Switching Current	5 mA for signalling circuit
Minimum Switching Voltage	17 V for signalling circuit
Insulation Resistance	> 10 MOhm for signalling circuit
Height	58 mm
Width	45 mm
Depth	57 mm
Compatibility Code	LC1K

Environment

Motor Power Kw	4 kW at 480 V AC 50/60 Hz 4 kW at 500...600 V AC 50/60 Hz 4 kW at 660...690 V AC 50/60 Hz 3 kW at 220...230 V AC 50/60 Hz 5.5 kW at 380...415 V AC 50/60 Hz 5.5 kW at 440 V AC 50/60 Hz
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[Icw] Rated Short-Time Withstand Current	115 A 50 °C - 1 s for power circuit
	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
	80 A - 1 s for signalling circuit
	90 A - 500 ms for signalling circuit
	110 A - 100 ms for signalling circuit
	25 A 50 °C - >= 15 min for power circuit
Heat Dissipation	1.3 W
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

Contractual warranty

Warranty	18 months
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