Product data sheet
Characteristics

LC1K0601F72
Contactor, TeSys K, 3P, AC-3/AC-3e,440V 6A, 1NC aux, 110V 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

Complementary

Utilisation category	AC-3 AC-4 AC-3e
Poles description	3P
Pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit: 690 V AC 50/60 Hz Signalling circuit: <= 690 V AC 50/60 Hz
[Ie] rated operational current	6 A at <= 440 V AC AC-3 for power circuit 6 A at <= 440 V AC AC-3e for power circuit
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	110 V AC 50/60 Hz
Motor power kW	1.5 KW at 220...230 V AC 50/60 Hz AC-3 2.2 KW at 380...415 V AC 50/60 Hz AC-3 3 KW at 440 V AC 50/60 Hz AC-3 3 KW at 480 V AC 50/60 Hz AC-3 3 KW at 500...600 V AC 50/60 Hz AC-3 3 KW at 660...690 V AC 50/60 Hz AC-3 1.5 KW at 400 V AC 50/60 Hz AC-4 1.5 KW at 220...230 V AC 50/60 Hz AC-3e 2.2 KW at 380...415 V AC 50/60 Hz AC-3e 3 KW at 440 V AC 50/60 Hz AC-3e 3 KW at 480 V AC 50/60 Hz AC-3e 3 KW at 500...600 V AC 50/60 Hz AC-3e 3 KW at 660...690 V AC 50/60 Hz AC-3e
Auxiliary contact composition	1 NC
[Uimp] rated impulse withstand voltage	8 KV
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

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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 220...230 V conforming to IEC 60947 110 A at 380...400 V conforming to IEC 60947 70 A at 660...690 V conforming to IEC 60947
[Icw] rated short-time withstand current	90 A 50 °C - 1 s for power circuit 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 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
Control circuit voltage limits	Operational: 0.8...1.15 Uc (at <50 °C) Drop-out: 0.2...0.75 Uc (at <50 °C)
Connections - terminals	Screw clamp terminals 1 cable(s) 1.5…4 mm²solid Screw clamp terminals 1 cable(s) 0.75…4 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.34…2.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.5…4 mm²solid Screw clamp terminals 2 cable(s) 0.75…4 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.34…1.5 mm²flexible with cable end
Maximum operating rate	3600 Cyc/H
Coil technology	Built-in bidirectional peak limiting diode suppressor
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
Mounting support	Plate Rail
Tightening torque	0.8…1.3 N.M - on screw clamp terminals Philips No 2 0.8…1.3 N.M - on screw clamp terminals flat Ø 6 mm 0.8…1.3 N.M - on screw clamp terminals pozidriv No 2
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
Non overlap distance	0.5 Mm
Mechanical durability	10 Mcycles
Electrical durability	1.3 Mcycles 6 A AC-3 at Ue <= 440 V 1.3 Mcycles 6 A AC-3e 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, 5...300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5...300 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 UKCA
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	-50…80 °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	6.5 Cm
Package 1 Width	6.2 Cm
Package 1 Length	4.8 Cm
Package 1 Weight	182.0 G

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
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
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Contractual warranty

Warranty	18 months

Product Life Status : Commercialised