Product datasheet Characteristics

LC1K1201Q7

TeSys K contactor - 3P - AC-3 <= 440 V 12 A - 1 NC aux. - 380...400 V AC coil





Main

Range	TeSys	4
Product or component type	Contactor	ž
Product name	TeSys K	9
Device short name	LC1K	
Device application	Control	
Contactor application	Motor control Resistive load	ia r

Complementary

Complementary		
Utilisation category	AC-3 AC-1 AC-4	
Poles description	3P	
Power 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	
[le] 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	
Control circuit type	AC at 50/60 Hz	
[Uc] control circuit voltage	380400 V AC 50/60 Hz	
Motor power kW	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 3 kW at 220230 V AC 50/60 Hz AC-3 5.5 kW at 380415 V AC 50/60 Hz AC-3 5.5 kW at 440 V AC 50/60 Hz AC-3	
Auxiliary contact composition	1 NC	
[Uimp] rated impulse withstand voltage	8 kV	
Overvoltage category	III	

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[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 660690 V conforming to IEC 60947	
[lcw] 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	
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: 0.81.15 Uc (at <50 °C) Drop-out: 0.20.75 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	
Mounting support	Plate Rail	
Tightening torque	1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.m - on screw clamp terminals - with screwdriver flat \emptyset 6 mm	
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	
Electrical durability	0.3 Mcycles 20 A AC-1 at Ue <= 440 V 1.3 Mcycles 12 A AC-3 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, 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

2000 m without	

Offer Sustainability

Sustainable offer status	Green Premium product	
REACh Regulation	REACh Declaration	
REACh free of SVHC	Yes	
EU RoHS Directive	Compliant EU RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	Yes	
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information	
Environmental Disclosure	closure Product Environmental Profile	
Circularity Profile	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	