Product datasheet Characteristics

LC2K1601E7

TeSys K reversing contactor - 3P - AC-3 <= 440 V 16 A - 1 NC - 48 V AC coil





Main

Main		4
Range	TeSys	
Product name	TeSys K	
Product or component type	Reversing contactor	
Device short name	LC2K	<u>.</u>
Device application	Control	
Contactor application	Motor control	
Utilisation category	AC-4 AC-3	######################################
Device presentation	Preassembled with reversing power busbar	
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	16 A at <= 440 V AC AC-3 for power circuit	•
Motor power kW	4 kW at 480 V AC 50/60 Hz 4 kW at 500600 V AC 50/60 Hz 4 kW at 660690 V AC 50/60 Hz 5.5 kW at 440 V AC 50/60 Hz 4 kW at 220230 V AC 50/60 Hz 7.5 kW at 380415 V AC 50/60 Hz	
Control circuit type	AC at 50/60 Hz	
[Uc] control circuit voltage	48 V AC 50/60 Hz	7
Auxiliary contact composition	1 NC	
[Uimp] rated impulse withstand voltage	8 kV	<u></u>
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	160 A at 690 V AC for power circuit conforming to NF C 63-110 160 A at 690 V AC for power circuit conforming to IEC 60947 110 A AC for signalling 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 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	
Electrical durability	1.3 Mcycles 16 A AC-3 at Ue <= 440 V	
Interlocking type	Mechanical	
Mounting support	Rail Plate	
Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1	
Product certifications	CB Scheme	
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	
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 Ø 6 mm	
Operating time	1020 ms coil energisation and NO closing 1020 ms coil de-energisation and NO opening	
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	
Mechanical durability	5 Mcycles	
Maximum operating rate	3600 cyc/h	

Complementary

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Control circuit voltage limits	Drop-out: 0.20.75 Uc (at <50 °C) Operational: 0.851.15 Uc (at <50 °C)
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
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
Non overlap distance	0.5 mm
Insulation resistance	> 10 MOhm for signalling circuit

Environment

IP degree of protection	IP20 conforming to VDE 0106
Protective treatment	TC conforming to IEC 60068 TC conforming to DIN 50016
Ambient air temperature for operation	-2550 °C
Ambient air temperature for storage	-5080 °C
Operating altitude	2000 m without
Flame retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102
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	90 mm
Depth	57 mm
Net weight	0.39 kg

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	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

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Warranty	18 months	