## **Product datasheet** Characteristics

# LC1K0601D5

TeSys K contactor 3P 6A AC-3 <= 440V - aux 1NC - coil 42V 50Hz





#### 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	
Poles description	3P	1
Power pole contact composition	3 NO	
[Ue] rated operational voltage	Power circuit: 690 V AC 50 Hz	
	Signalling circuit: 690 V AC 50 Hz	-
[le] rated operational current	6 A at <= 440 V AC AC-3 for power circuit	<u>.</u> 9
Control circuit type	AC at 50 Hz	
[Uc] control circuit voltage	42 V AC 50 Hz	
Motor power kW	1.5 kW at 220230 V AC 50 Hz AC-3	
	2.2 kW at 380415 V AC 50 Hz AC-3	ā
	3 kW at 440 V AC 50 Hz AC-3	, o
	3 kW at 480 V AC 50 Hz AC-3	7 9
	3 kW at 500600 V AC 50 Hz AC-3	i di
	3 kW at 660690 V AC 50 Hz AC-3	2.
	1.5 kW at 400 V AC 50 Hz AC-4	, o
Auxiliary contact composition	1 NC	
[Uimp] rated impulse withstand voltage	8 kV	a de la companya de l
Overvoltage category	III	
[Ith] conventional free air thermal	20 A (at 50 °C) for power circuit	
current	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 220230 V conforming to IEC 60947 110 A at 380400 V conforming to IEC 60947 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 70 A at 660690 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 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: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V conforming to UL 60947-4-1 Power circuit: 600 V conforming to CSA C22.2 No 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 600 V conforming to UL 60947-4-1 Signalling circuit: 600 V conforming to CSA C22.2 No 60947-4-1
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 Ø 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	1.3 Mcycles 6 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

01	ENUE 0 000 47 4 4
Standards	EN/IEC 60947-4-1 IEC 60947-4-1
	UL 60947-4-1
	CSA C22.2 No 60947-4-1
	BS 5424
	NF C 63-110
	VDE 0660
Product certifications	UL
	CSA
	CCC
	EAC
	KC
	LROS (Lloyds register of shipping)
	DNV-GL
	RINA
	BV
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 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

### 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	
EEE The product must be disposed on European Union markets following specific waste col never end up in rubbish bins		

#### Contractual warranty

Warranty	18 months