

# LP1K0610BD

TeSys K contactor - 3P - AC-3  $\leq$  440 V 6 A - 1 NO  
aux. - 24 V DC coil



## Main

Range of product	TeSys K
Range	TeSys
Product or component type	Contacteur
Product name	TeSys K
Device short name	LP1K
Device application	Control
Contacteur application	Motor control

## Complementary

Utilisation category	AC-3 AC-4
Poles description	3P
Pole contact composition	3 NO
[Ue] rated operational voltage	690 V AC 50/60 Hz for power circuit $\leq$ 690 V AC 50/60 Hz for signalling circuit
[Ie] rated operational current	6 A at $\leq$ 440 V AC AC-3 for power circuit
Control circuit type	DC standard
Control circuit voltage	24 V DC
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 1.5 kW at 400 V AC 50/60 Hz AC-4 3 kW at 660...690 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
Auxiliary contact composition	1 NO
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	20 A at $\leq$ 50 °C for power circuit 10 A at $\leq$ 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 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 $\leq$ 50 °C 1 s power circuit 85 A $\leq$ 50 °C 5 s power circuit 80 A $\leq$ 50 °C 10 s power circuit 60 A $\leq$ 50 °C 30 s power circuit 45 A $\leq$ 50 °C 1 min power circuit 40 A $\leq$ 50 °C 3 min power circuit 80 A 1 s signalling circuit 90 A 500 ms signalling circuit 110 A 100 ms signalling circuit 20 A $\leq$ 50 °C $\geq$ 15 s power circuit
Associated fuse rating	25 A gG at $\leq$ 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

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Average impedance	3 mOhm at 50 Hz - lth 20 A for power circuit
[U <sub>i</sub> ] rated insulation voltage	690 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit conforming to UL 508 690 V for signalling circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-5-1 600 V for signalling circuit conforming to UL 508 600 V for power circuit conforming to CSA C22.2 No 14 600 V for signalling circuit conforming to CSA C22.2 No 14
Insulation resistance	> 10 MOhm for signalling circuit
Inrush power in W	3 W at 20 °C
Hold-in power consumption in W	3 W at 20 °C
Heat dissipation	3 W
Control circuit voltage limits	0.8...1.15 U <sub>c</sub> at ≤ 50 °C operational 0.1...0.75 U <sub>c</sub> at ≤ 50 °C drop-out
Connections - terminals	Screw clamp terminals 1 cable(s) 1.5...4 mm <sup>2</sup> - cable stiffness: solid Screw clamp terminals 1 cable(s) 0.75...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.34...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.5...4 mm <sup>2</sup> - cable stiffness: solid Screw clamp terminals 2 cable(s) 0.75...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 0.34...1.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end
Operating rate	3600 cyc/h
Auxiliary contacts type	Type instantaneous (1 NO)
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	10 ms coil de-energisation and NO opening 30...40 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 U <sub>e</sub> ≤ 440 V
Mechanical robustness	Shocks contactor closed, on Z axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Z axis 10 Gn for 11 ms IEC 60068-2-27 Vibrations contactor closed 4 Gn, 5...300 Hz IEC 60068-2-6 Vibrations contactor opened 2 Gn, 5...300 Hz IEC 60068-2-6 Shocks contactor opened, on X axis 10 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Y axis 6 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on X axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Y axis 10 Gn for 11 ms IEC 60068-2-27
Depth	57 mm
Product weight	0.225 kg
Motor power range AC-3	0.55...1 kW 200...240 V 3 phases 0.55...1 kW 380...440 V 3 phases 0.55...1 kW 480...500 V 3 phases 1.1...2 kW 200...240 V 3 phases 1.1...2 kW 380...440 V 3 phases 2.2...3 kW 380...440 V 3 phases 2.2...3 kW 480...500 V 3 phases 0...0.5 kW 200...240 V 3 phases 0...0.5 kW 380...440 V 3 phases 0...0.5 kW 480...500 V 3 phases 1.1...2 kW 480...500 V 3 phases
Motor starter type	Direct on-line contactor
Contactors coil voltage	24 V DC standard

## Environment

standards	BS 5424
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IEC 60947  
 NF C 63-110  
 VDE 0660

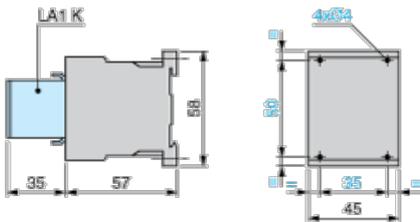
product certifications	CSA UL
IP degree of protection	IP2x conforming to VDE 0106
protective treatment	TC conforming to IEC 60068 TC conforming to DIN 50016
ambient air temperature for storage	-50...80 °C
operating altitude	2000 m without derating in temperature
flame retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102

### Offer Sustainability

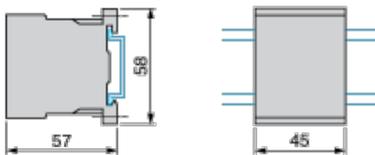
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0633 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

### Dimensions

#### Contactors LC1 K, LP1 K, LP4 K: Mounting on Panel

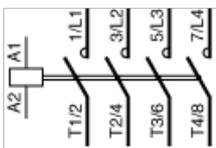


#### Contactors LC1 K, LP1 K, LP4 K: Mounting on Rail AM1 DP200 or AM1 DE200 (35 mm)

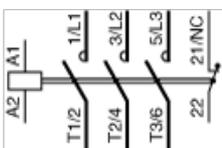


### Wiring

#### 3-Pole Contactors: 3P + N/O



#### 3-Pole Contactors: 3P + N/C



### Our Proposal - Type 1 : Circuit Breaker + Contactor for Motor Power from 0,06 to 3 kW and 415 VAC

Motor Power	Icu	Breaker	Contactor
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(kW)	(kA)		
0.06	> 100	 GV2ME02	 LP1K0610BD
0.09	> 100	 GV2ME03	 LP1K0610BD
0,12 to 0,18	> 100	 GV2ME04	 LP1K0610BD
0,25 to 0,37	> 100	 GV2ME05	 LP1K0610BD
0.55	> 100	 GV2ME06	 LP1K0610BD
0.75	> 100	 GV2ME07	 LP1K0610BD
1,1 to 1,5	> 100	 GV2ME08	 LP1K0610BD
2.2	> 100	 GV2ME10	 LP1K0610BD
3	> 100	 GV2ME14	 LP1K0610BD

*Non contractual pictures. Type 1 coordination requires that in a short-circuit condition, the contactor or starter must not present any danger to personnel or installations and must not be able to resume operation without repair or the replacement of parts.*