# **Product datasheet** Characteristics

# LP4K1210BW3

TeSys K contactor - 3P - AC-3 <= 440 V 12 A - 1 NO aux. - 24 V DC coil



## Main

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Main		
Range of product	TeSys K	
Range	TeSys	
Product or component type	Contactor	
Product name	TeSys K	
Device short name	LP4K	
Device application	Control	 ;
Contactor application	Resistive load	
	Motor control	
Complementary		
Utilisation category	AC-1	
	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	
	<= 690 V AC 50/60 Hz for signalling circuit	
[le] rated operational current	20 A (<= 50 °C) at <= 440 V AC AC-1 for power circuit	
	16 A (<= 70 °C) at 690 V AC AC-1 for power circuit 12 A at <= 440 V AC AC-3 for power circuit	
Control circuit type	DC low consumption	
Control circuit voltage	24 V DC	
Motor power kW	3 kW at 220230 V AC 50/60 Hz AC-3	
	2.2 kW at 400 V AC 50/60 Hz AC-4	
	5.5 kW at 440 V AC 50/60 Hz AC-3	
	5.5 kW at 380415 V AC 50/60 Hz AC-3 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	
Auxiliary contact composition	1 NO	
[Uimp] rated impulse withstand voltage	8 kV	
Max 00, 2047		



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 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
[Icw] rated short-time withstand current	80 A 1 s signalling circuit 90 A 500 ms signalling circuit 110 A 100 ms signalling circuit 115 A $\leq$ 50 °C 1 s power circuit 105 A $\leq$ 50 °C 5 s power circuit 100 A $\leq$ 50 °C 10 s power circuit 75 A $\leq$ 50 °C 30 s power circuit 55 A $\leq$ 50 °C 1 min power circuit 50 A $\leq$ 50 °C 3 min power circuit 25 A $\leq$ 50 °C $\geq$ 15 s 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 at 50 Hz - Ith 20 A for power circuit
[Ui] rated insulation voltage	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 14 690 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit conforming to UL 508
Insulation resistance	> 10 MOhm for signalling circuit
Inrush power in W	1.8 W at 20 °C
Hold-in power consumption in W	1.8 W at 20 °C
Heat dissipation	1.8 W
Control circuit voltage limits	0.71.30 Uc at <= 50 °C operational 0.10.7 Uc at <= 50 °C drop-out
Connections - terminals	Screw clamp terminals 1 cable(s) 1.54 mm <sup>2</sup> - cable stiffness: solid Screw clamp terminals 1 cable(s) 0.754 mm <sup>2</sup> - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.54 mm <sup>2</sup> - cable stiffness: solid Screw clamp terminals 2 cable(s) 0.754 mm <sup>2</sup> - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 0.754 mm <sup>2</sup> - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 0.754 mm <sup>2</sup> - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end
Operating rate	3600 cyc/h
Coil technology	Built-in bidirectional peak limiting diode suppressor
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	Rail Plate
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 3040 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	30 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 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, 5300 Hz IEC 60068-2-6 Vibrations contactor opened 2 Gn, 5300 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

Height	58 mm	
Width	45 mm	
Depth	57 mm	
Product weight	0.235 kg	

### Environment

Standards	BS 5424 IEC 60947 NF C 63-110 VDE 0660
Product certifications	UL CSA
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 operation	-2550 °C
Ambient air temperature for storage	-5080 °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 0825 - Schneider Electric declaration of conformity	
	Schneider Electric declaration of conformity	
REACh	Reference not containing SVHC above the threshold	
	Reference not containing SVHC above the threshold	
Product environmental profile	Available	
	Product environmental	
Product end of life instructions	Available	
	🛃 End of life manual	

#### Contractual warranty

18 months