Product data sheet Characteristics

LP4K1201BW3

Contactor, TeSys K, 3P, AC-3/AC-3e, 440V, 12A, 1NC aux, 24V DC low consumption coil, screw clamps terminals





Main	
Range	TeSys
Product or component type	Contactor
Device short name	LP4K
Contactor application	Resistive load

Motor control

Complementary

Utilisation category	AC-3 AC-3e AC-1 AC-4	
Poles description	3P	
Power pole contact composition	3 NO	
[Ue] rated operational voltage	Power circuit: <= 690 V AC <= 400 Hz Signalling circuit: <= 690 V AC <= 400 Hz	
[le] rated operational current	12 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 12 A (at <60 °C) at <= 440 V AC AC-3e for power circuit 20 A (at <60 °C) at <= 690 V AC AC-1 for power circuit	
Control circuit type	DC wide range	
[Uc] control circuit voltage	24 V DC	
Motor power kW	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 4 KW at 690 V AC 50/60 Hz AC-3 3 KW at 220230 V AC 50/60 Hz AC-3e 5.5 KW at 380415 V AC 50/60 Hz AC-3e 5.5 KW at 440 V AC 50/60 Hz AC-3e 4 KW at 690 V AC 50/60 Hz AC-3e 3 KW at 220230 V AC 50/60 Hz AC-4 5.5 KW at 380415 V AC 50/60 Hz AC-4 5.5 KW at 440 V AC 50/60 Hz AC-4 5.5 KW at 690 V AC 50/60 Hz AC-4 4 kW at 690 V AC 50/60 Hz AC-4	
Auxiliary contact composition	1 NC	
[Uimp] rated impulse withstand voltage	8 kV	
Overvoltage category	III	
[Ith] conventional free air thermal current	20 A (at 60 °C) for power circuit 10 A (at 50 °C) for signalling circuit	
Irms rated making capacity	144 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 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	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 25 A 50 °C - 3 min for power circuit 25 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: 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 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	Operational: 0.71.3 Uc (at <50 °C) Drop-out: >= 0.10 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 Power circuit: screw clamp terminals 2 cable(s) 1.5 mm²flexible with cable end
Maximum operating rate	3600 cyc/h
Coil technology	Built-in bidirectional peak limiting diode suppressor
Auxiliary contacts type	Type instantaneous 1 NC
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Mounting support	Rail Plate
Tightening torque	0.81.3 N.M - on screw clamp terminals Philips No 2 0.81.3 N.M - on screw clamp terminals flat Ø 6 mm 0.81.3 N.m - on screw clamp terminals pozidriv No 2
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
Mechanical durability	30 Mcycles
Electrical durability	1.3 Mcycles 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3e at Ue <= 440 V
	0.3 Mcycles 20 A AC-1 at Ue <= 690 V 0.02 Mcycles 72 A AC-4 at Ue <= 440 V
Height	
Height Width	0.02 Mcycles 72 A AC-4 at Ue <= 440 V
	0.02 Mcycles 72 A AC-4 at Ue <= 440 V 58 mm

Environment

Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 UL 60947-5-1 CSA C22.2 No 60947-4-1 CSA C22.2 No 60947-5-1 GB/T 14048.4
Product certifications	CB Scheme[RETURN]CCC[RETURN]UL[RETURN]CSA[RETURN]EAC[RETURN]CE[RETURN]U
IP degree of protection	IP2X
Ambient air temperature for operation	-2550 °C
Ambient air temperature for storage	-5080 °C
Operating altitude	2000 m without derating
Flame retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.800 cm
Package 1 Width	6.200 cm
Package 1 Length	6.600 cm
Package 1 Weight	220.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	9.192 kg
Unit Type of Package 3	P06
Number of Units in Package 3	320
Package 3 Height	45.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	82.220 kg

Offer Sustainability

oner ouclamasing	
Sustainable offer status	Green Premium product
REACh Regulation	☑ REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EEU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	☑ China RoHS Declaration
RoHS exemption information	€Yes
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

Warranty	18 months