

Contactor, TeSys K, 3P, AC-3/ AC-3e, 440V, 12A, 1NO aux, 24V DC coil, with integral suppression device

LP1K12103BD3

Main

Range	TeSys
Product or component type	Contactor
Device short name	LP1K
Contactor application	Resistive load Motor control

Complementary

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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 standard
[Uc] control circuit voltage	24 V DC
Motor power kW	3 kW at 220230 V AC 50/60 Hz AC-3
motor power kiv	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
	4 kW at 690 V AC 50/60 Hz AC-4
Auxiliary contact composition	1 NO
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal	16 A (at 60 °C) for power circuit
current	10 A (at 50 °C) for signalling circuit
Irms rated making capacity	144 A AC for power circuit conforming to IEC 60947
5 . 5	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 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 - >= 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 16 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	3 W (at 20 °C)
Hold-in power consumption in W	3 W at 20 °C
Heat dissipation	1.3 W
Control circuit voltage limits	Operational: 0.81.15 Uc (at <50 °C) Drop-out: >= 0.10 Uc (at <50 °C)
Connections - terminals	Spring terminals 1 cable(s) 0.751.5 mm²solid Spring terminals 1 cable(s) 0.751.5 mm²flexible without cable end Spring terminals 2 cable(s) 0.751.5 mm²flexible without cable end
Maximum 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
Operating time	3040 ms coil energisation and NO closing 10 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	10 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	58 mm
Width	45 mm
Depth	57 mm
Net weight	0.225 kg

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	
	CCC	
	UL	
	CSA	
	EAC	
	CE	
	UKCA	
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	4.900 cm
Package 1 Width	6.200 cm
Package 1 Length	6.800 cm
Package 1 Weight	228.000 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	9.495 kg

Contractual warranty

Warranty 18 months



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

☑ Environmental footprint	
Total lifecycle Carbon footprint	119
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant
REACh Regulation	REACh Declaration
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Use Again

○ Repack and remanufacture	
End of life manual availability	End of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Offer Marketing Illustration

Product benefits / Features

TeSys K Technical Benefits



Up to 4 more by add-on blocks

Up to 16 A for motor control (AC3/ AC3E) and 20A for resistive load control (AC1)

Available as single contactors, star-delta, and reversing combos, with a wealth of options and accessories

Control Options:

- AC: 24 to 660/690 V, standard or low-noise versions
- DC: 12 to 250V, standard or low consumption (1.8 W) versions

Thermal protection relays

It Features specific versions for railway (TeSys \$207) and electrodomestic (TeSys \$335) applications



Offer Marketing Illustration

Product benefits / Features

TeSys K

Contactors



Flexibility

Designed with control voltages, low consumption, minimal noise levels, robust power connections, and a range of auxiliaries, and application-specific variants to meet diverse needs.



Safety

It provide ultimate protection with IP20 fingersafe terminals, built-in NO/NC auxiliary contacts, and IEC-certified mirror and mechanically linked contacts for safety applications.



Compact size

Up to 50% less volume is captured in your panels. One of he smallest contactors offerings in the market

Product data sheet

LP1K12103BD3

Technical Illustration

Assembly's dimensions

