

Product data sheet

Specifications



Contactor, TeSys K, 3P, AC-3/ AC-3e, 440V, 9A, coil 24V DC

LP1K09105BDTQ

⚠ Discontinued

Main

Range	TeSys
Product or Component Type	Contactor
Device short name	LP1K
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
[Ie] rated operational current	9 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 9 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit 20 A (at <140 °F (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	2.2 kW 220...230 V AC 50/60 Hz AC-3 4 kW 380...415 V AC 50/60 Hz AC-3 4 kW 440/690 V AC 50/60 Hz AC-3 2.2 kW 220...230 V AC 50/60 Hz AC-3e 4 kW 380...415 V AC 50/60 Hz AC-3e 4 kW 440/690 V AC 50/60 Hz AC-3e 2.2 kW 220...230 V AC 50/60 Hz AC-4 4 kW 380...415 V AC 50/60 Hz AC-4 4 kW 440/690 V AC 50/60 Hz AC-4
Auxiliary contact composition	1 NO
[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	20 A (at 140 °F (60 °C)) for power circuit 10 A (at 122 °F (50 °C)) for signalling circuit
Irms rated making capacity	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 220...230 V conforming to IEC 60947 110 A at 380...400 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 660...690 V conforming to IEC 60947

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[Icw] rated short-time withstand current	90 A 122 °F (50 °C) - 1 s for power circuit 85 A 122 °F (50 °C) - 5 s for power circuit 80 A 122 °F (50 °C) - 10 s for power circuit 60 A 122 °F (50 °C) - 30 s for power circuit 45 A 122 °F (50 °C) - 1 min for power circuit 40 A 122 °F (50 °C) - 3 min for power circuit 20 A 122 °F (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	10 A gG for control circuit conforming to IEC 60947 10 A gG for control circuit conforming to VDE 0660 25 A gG at <= 440 V for power circuit
Average impedance	3 mOhm - Ith 20 A 50 Hz for power circuit
[Ui] rated insulation voltage	Control circuit 690 V BS 5424 Control circuit 690 V IEC 60947 Power circuit 690 V BS 5424 Power circuit 690 V IEC 60947 Power circuit 690 V NF C 20-040 Control circuit 750 V VDE 0110 group C Power circuit 750 V VDE 0110 group C Control circuit 600 V CSA C22.2 No 14 Power circuit 600 V UL 508 CSA C22.2 No 14
Insulation resistance	> 10 MOhm for control circuit
Inrush power in W	3 W 68 °F (20 °C))
Hold-in power consumption in W	3 W 68 °F (20 °C)
Heat dissipation	1.3 W
Control circuit voltage limits	Operational: 0.8...1.15 Uc (at <122 °F (50 °C)) Drop-out: >= 0.10 Uc (at <122 °F (50 °C))
Connections - terminals	solder pins 0.001 in (0.035 mm))
Maximum operating rate	3600 cyc/h
Coil technology	Without built-in suppressor module
Minimum switching current	5 mA for control circuit
Minimum switching voltage	17 V for control circuit
Mounting Support	Plate Rail
Operating time	10 ms coil de-energisation and NO opening 15 ms coil de-energisation and NC opening 25...35 ms coil energisation and NC opening 30...40 ms between energisation of coil and closing of NO contact
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	10 Mcycles
Electrical durability	1.3 Mcycles 9 A AC-3 <= 440 V 1.3 Mcycles 9 A AC-3e <= 440 V 0.16 Mcycles 20 A AC-1 <= 690 V 0.02 Mcycles 54 A AC-4 <= 440 V
Height	2.3 in (58 mm)
Width	1.8 in (45 mm)
Depth	2.2 in (57 mm)
Net Weight	0.496 lb(US) (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
Protective treatment	TC IEC 60068
Ambient air temperature for operation	-13...122 °F (-25...50 °C)
Ambient Air Temperature for Storage	-58...176 °F (-50...80 °C)
Operating altitude	6561.68 ft (2000 m) without derating
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	Class C2 conforming to NF F 16-101 Class C2 conforming to NF F 16-102 V1 conforming to UL 94

Ordering and shipping details

Category	22321-CTR,K-LINE,DC,OPEN,NONREV
Discount Schedule	I12
GTIN	3389110496574
Returnability	No

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.890 in (4.800 cm)
Package 1 Width	2.598 in (6.600 cm)
Package 1 Length	2.441 in (6.200 cm)
Package weight(Lbs)	8.254 oz (234.000 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	30
Package 2 Height	2.756 in (7.000 cm)
Package 2 Width	11.417 in (29.000 cm)
Package 2 Length	11.811 in (30.000 cm)
Package 2 Weight	15.966 lb(US) (7.242 kg)
Unit Type of Package 3	S04
Number of Units in Package 3	120
Package 3 Height	11.811 in (30.000 cm)
Package 3 Width	15.748 in (40.000 cm)
Package 3 Length	23.622 in (60.000 cm)

Package 3 Weight	65.297 lb(US) (29.618 kg)
------------------	---------------------------

Contractual warranty

Warranty (in months)	18
----------------------	----



Environmental Data

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	114 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	1 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	113 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.4 kg CO2 eq.

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

Use Longer



Lifetime extension

Repair	No
--------	----

Use Again



Repack and remanufacture

Recyclability potential, in %	64
Circularity Profile	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

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 finger-safe 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



Offer Marketing Illustration

Product benefits / Features

TeSys K



- Built-in in all 3 pole versions: 1NO or 1NC
- 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 S207) and electrodomeestic (TeSys S335) applications