Product data sheet

Specifications

Contactor, TeSys K, 3P, AC-3, lt or eq to 440V, 9A, 1 NO aux, 110VDC coil

LP1K0910FD

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Range	TeSys
Product or Component Type	Contactor
Device short name	LP1K
Contactor application	Motor control Resistive load

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	110 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
Overvoltage category	III
[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.

[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	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 UL 508 Power circuit 690 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-5-1 Signalling circuit 600 V UL 508 Power circuit 600 V CSA C22.2 No 14 Signalling circuit 600 V CSA C22.2 No 14
Insulation resistance	> 10 MOhm for signalling 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	screw clamp terminals 1 0.002…0.006 in² (1.5…4 mm²)solid screw clamp terminals 1 0.001…0.006 in² (0.75…4 mm²)flexible without cable end screw clamp terminals 1 0.0005…0.004 in² (0.34…2.5 mm²)flexible with cable end screw clamp terminals 2 0.002…0.006 in² (1.5…4 mm²)solid screw clamp terminals 2 0.001…0.006 in² (0.75…4 mm²)flexible without cable end screw clamp terminals 2 0.0005…0.002 in² (0.34…1.5 mm²)flexible with cable end Power circuit screw clamp terminals 2 0.002 in² (1.5 mm²)flexible with cable end
Maximum operating rate	3600 cyc/h
Auxiliary contacts 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	7.08…11.5 lbf.in (0.8…1.3 N.m) screw clamp terminals Philips No 2 7.08…11.5 lbf.in (0.8…1.3 N.m) screw clamp terminals flat Ø 6 mm 7.08…11.5 lbf.in (0.8…1.3 N.m) screw clamp terminals pozidriv No 2
Operating time	30...40 ms coil energisation and NO closing 10 ms coil de-energisation and NO opening
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
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
Flame retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102

Ordering and shipping details

Category	US10I1222321
Discount Schedule	0I12
GTIN	3389110496406
Returnability	No
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.9 in (4.8 cm)
Package 1 Width	2.4 in (6.2 cm)
Package 1 Length	2.6 in (6.6 cm)
Package weight(Lbs)	7.7 oz (218.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	5.9 in (15.0 cm)
Package 2 Width	11.8 in (30.0 cm)
Package 2 Length	15.7 in (40.0 cm)
Package 2 Weight	20.181 lb(US) (9.154 kg)

Contractual warranty

Warranty	18 months

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

Carbon footprint (kg CO2 eq, Total Life cycle)	114
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

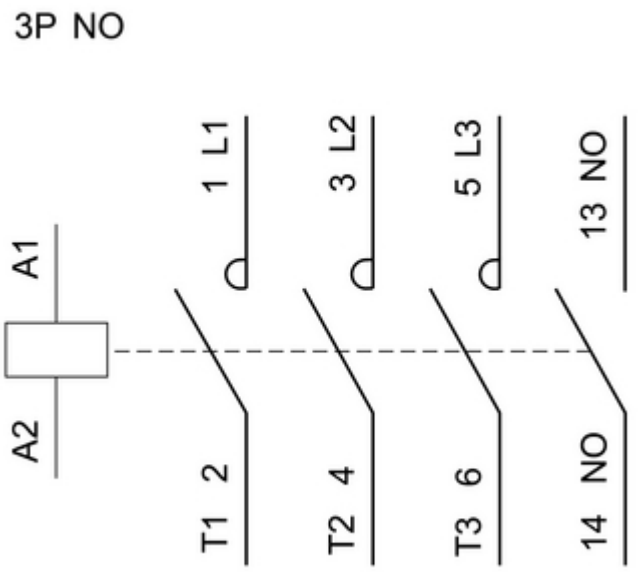
Use Again

Repack and remanufacture

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.

Technical Illustration

Wiring diagram

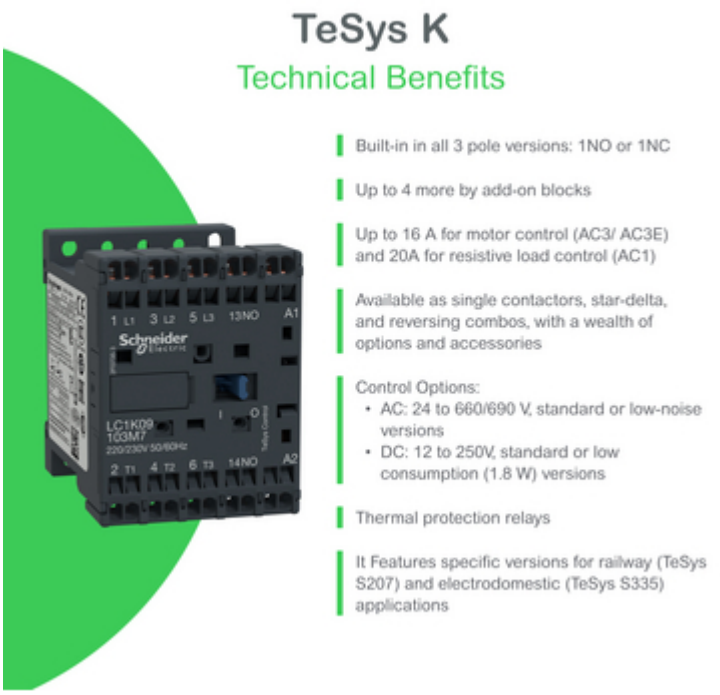


Offer Marketing Illustration

Product benefits / Features

Offer Marketing Illustration

Product benefits / Features



Technical Illustration

Assembly's dimensions