Product datasheet

Specifications

contactor TeSys LP1-K - 4P (2NO + 2NC) - AC-1 440V 20 A - coil 24 V DC

LP1K090085BDTQ

To be discontinued on: 15 Aug 2025

Discontinued

EAN Code: 3389110496000

Main

Product or component type	Contactor
Device short name	LP1K
Contactor application	Resistive load

Complementary

Utilisation category	AC-1
Poles description	4P
power pole contact composition	2 NO + 2 NC
[Ue] rated operational voltage	Power circuit: <= 690 V AC <= 400 Hz Signalling circuit: <= 690 V AC <= 400 Hz
[Ie] rated operational current	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
[Uimp] rated impulse withstand voltage	8 kV
[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	110 A AC for power 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
[Icw] rated short-time withstand current	90 A 50 °C - 1 s for power circuit 85 A 50 °C - 5 s for power circuit 80 A 50 °C - 10 s for power circuit 60 A 50 °C - 30 s for power circuit 45 A 50 °C - 1 min for power circuit 40 A 50 °C - 3 min for power circuit 20 A 50 °C - >= 15 min for power 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 conforming to BS 5424 Control circuit: 690 V conforming to IEC 60947 Power circuit: 690 V conforming to BS 5424 Power circuit: 690 V conforming to IEC 60947 Power circuit: 690 V conforming to NF C 20-040 Control circuit: 750 V conforming to VDE 0110 group C Power circuit: 750 V conforming to VDE 0110 group C Control circuit: 600 V conforming to CSA C22.2 No 14 Power circuit: 600 V UL 508 certified conforming to CSA C22.2 No 14
Insulation resistance	> 10 MOhm for control 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: 0.8...1.15 Uc (at <50 °C) Drop-out: >= 0.10 Uc (at <50 °C)
Connections - terminals	Solder pins (external diameter: 0.035 mm)
Maximum operating rate	3600 cyc/h
Coil technology	Without built-in bidirectional peak limiting diode suppressor
Minimum switching current	5 mA for control circuit
Minimum switching voltage	17 V for control circuit
Mounting support	Rail Plate
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 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	0.16 Mcycles 20 A AC-1 at Ue <= 690 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
Protective treatment	TC conforming to IEC 60068
Ambient air temperature for operation	-25…50 °C

Ambient air temperature for storage	-50…80 °C
Operating altitude	2000 m without derating
Fire resistance	850 °C conforming to 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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.8 cm
Package 1 Width	6.2 cm
Package 1 Length	6.6 cm
Package 1 Weight	255.0 g
Unit Type of Package 2	CAR
Number of Units in Package 2	30
Package 2 Height	4.8 cm
Package 2 Width	6.2 cm
Package 2 Length	6.6 cm
Package 2 Weight	7.65 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

Total lifecycle Carbon footprint	150
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	No
Packaging without single use plastic	No
EU RoHS Directive	Compliant
REACh Regulation	REACh Declaration

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

Offer Marketing Illustration

Product benefits / Features