LP1K0901BD
TeSys K contactor - 3P(3 NO) - AC-3 - <= 440 V 9 A

- 24 V DC coil

Green Premium"


| Range | TeSys |
| :---: | :---: |
| Product name | TeSys K |
| Product or component type | Contactor |
| Device short name | LP1K |
| Contactor application | Motor control Resistive load |
| Utilisation category | $\begin{aligned} & \mathrm{AC}-1 \\ & \mathrm{AC}-3 \\ & \mathrm{AC}-4 \end{aligned}$ |
| Poles description | 3P |
| Pole contact composition | 3 NO |
| [Ue] rated operational voltage | 690 V AC $50 / 60 \mathrm{~Hz}$ for power circuit <= 690 V AC $50 / 60 \mathrm{~Hz}$ for signalling circuit |
| [le] rated operational current | 9 A at $<=440 \mathrm{~V}$ AC AC-3 for power circuit $20 \mathrm{~A}\left(<=50^{\circ} \mathrm{C}\right)$ at $<=440 \mathrm{~V}$ AC AC- -1 for power circuit $16 \mathrm{~A}\left(<=70^{\circ} \mathrm{C}\right)$ at 690 V AC AC-1 for power circuit |
| Motor power kW | 4 kW at $380 \ldots 415 \mathrm{~V}$ AC $50 / 60 \mathrm{~Hz}$ 4 kW at 440 V AC $50 / 60 \mathrm{~Hz}$ 4 kW at 480 V AC $50 / 60 \mathrm{~Hz}$ 4 kW at $500 \ldots 600 \mathrm{~V}$ AC $50 / 60 \mathrm{~Hz}$ 4 kW at $660 . . .690$ V AC $50 / 60 \mathrm{~Hz}$ <br> 2.2 kW at 220 ... 230 V AC $50 / 60 \mathrm{~Hz}$ |
| Control circuit type | DC standard |
| Control circuit voltage | 24 V DC |
| Auxiliary contact composition | 1 NC |
| [Uimp] rated impulse withstand voltage | 8 kV |
| Overvoltage category | III |
| [lth] conventional free air thermal current | 20 A at $<=50^{\circ} \mathrm{C}$ for power circuit 10 A at $<=50^{\circ} \mathrm{C}$ for signalling circuit |
| Irms rated making capacity | 110 A AC for power circuit conforming to NF C 63- <br> 110 <br> 110 A AC for power circuit conforming to IEC $60947$ <br> 110 A AC for signalling circuit conforming to IEC 60947 |
| Rated breaking capacity | 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 110 A at 220... 230 V conforming to IEC 60947 110 A at $380 \ldots 400 \mathrm{~V}$ conforming to IEC 60947 70 A at 660... 690 V conforming to IEC 60947 |
| [lcw] rated short-time withstand current | $90 \mathrm{~A}<=50^{\circ} \mathrm{C} 1$ s power circuit $85 \mathrm{~A}<=50^{\circ} \mathrm{C} 5$ s power circuit $80 \mathrm{~A}<=50^{\circ} \mathrm{C} 10$ s power circuit $60 \mathrm{~A}<=50^{\circ} \mathrm{C} 30$ s power circuit $45 \mathrm{~A}<=50^{\circ} \mathrm{C} 1 \mathrm{~min}$ power circuit $40 \mathrm{~A}<=50^{\circ} \mathrm{C} 3 \mathrm{~min}$ power circuit 80 A 1 s signalling circuit 90 A 500 ms signalling circuit 110 A 100 ms signalling circuit $20 \mathrm{~A}<=50^{\circ} \mathrm{C}>=15$ s power circuit |
| Associated fuse rating | 25 AgG at $<=440 \mathrm{~V}$ for power circuit <br> 25 A aM for power circuit <br> 10 A gG for signalling circuit conforming to IEC 60947 |

10 A gG for signalling circuit conforming to VDE 0660

| Average impedance | 3 mOhm at 50 Hz - Ith 20 A for power circuit |
| :---: | :---: |
| [Ui] rated insulation voltage | 690 V for power circuit conforming to IEC 60947-41 <br> 600 V for power circuit conforming to UL 508 <br> 690 V for signalling circuit conforming to IEC 60947-4-1 <br> 690 V for signalling circuit conforming to IEC $60947-5-1$ <br> 600 V for signalling circuit conforming to UL 508 600 V for power circuit conforming to CSA C22.2 <br> No 14 <br> 600 V for signalling circuit conforming to CSA <br> C22.2 No 14 |
| Electrical durability | 0.18 Mcycles 20 A AC-1 at $\mathrm{Ue}<=440 \mathrm{~V}$ 1.3 Mcycles 9 A AC-3 at $\mathrm{Ue}<=440 \mathrm{~V}$ |
| Mounting support | Plate <br> Rail |
| Standards | BS 5424 <br> IEC 60947 <br> NF C 63-110 <br> VDE 0660 |
| Product certifications | $\begin{aligned} & \text { CSA } \\ & \text { UL } \end{aligned}$ |
| Connections - terminals | Screw clamp terminals 1 cable(s) 1.5... $4 \mathrm{~mm}^{2}$ cable stiffness: solid Screw clamp terminals 1 cable(s) $0.75 \ldots 4 \mathrm{~mm}^{2}$ cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) $0.34 \ldots 2.5 \mathrm{~mm}^{2}$ cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) $1.5 . . .4 \mathrm{~mm}^{2}$ cable stiffness: solid Screw clamp terminals 2 cable(s) $0.75 \ldots 4 \mathrm{~mm}^{2}$ cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) $0.34 \ldots 1.5 \mathrm{~mm}^{2}$ cable stiffness: flexible - with cable end |
| Tightening torque | 1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2 <br> 1.3 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm |
| Operating time | 10 ms coil de-energisation and NO opening $30 . . .40 \mathrm{~ms}$ coil energisation and NO closing |
| Safety reliability level | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 <br> B10d $=20000000$ cycles contactor with mechanical load conforming to EN/ISO 13849-1 |
| Mechanical durability | 10 Mcycles |
| Operating rate | $3600 \mathrm{cyc} / \mathrm{h}$ |

Complementary

| Control circuit voltage limits | $0.8 \ldots 1.15 \mathrm{Uc}$ at $<=50^{\circ} \mathrm{C}$ operational <br> $0.1 \ldots . .75 \mathrm{Uc}$ at $<=50^{\circ} \mathrm{C}$ drop-out |
| :--- | :--- |
| Inrush power in W | 3 W at $20^{\circ} \mathrm{C}$ |
| Hold-in power consumption in W | 3 W at $20^{\circ} \mathrm{C}$ |
| Heat dissipation | 3 W |
| Auxiliary contacts type | Type instantaneous (1 NC) |
| Minimum switching current | 5 mA for signalling circuit |
| Minimum switching voltage | 17 V for signalling circuit |
| Non overlap distance | 0.5 mm |
| Insulation resistance | $>10 \mathrm{MOhm}$ for signalling circuit |

Environment

| IP degree of protection | IP2x conforming to VDE 0106 |
| :--- | :--- |
| protective treatment | TC conforming to IEC 60068 |
|  | TC conforming to DIN 50016 |


| ambient air temperature for operation | $-25 . .50^{\circ} \mathrm{C}$ |
| :---: | :---: |
| ambient air temperature for storage | $-50 . .80^{\circ} \mathrm{C}$ |
| operating altitude | 2000 m without derating in temperature |
| flame retardance | V1 conforming to UL 94 <br> Requirement 2 conforming to NF F 16-101 <br> Requirement 2 conforming to NF F 16-102 |
| mechanical robustness | Shocks contactor closed, on Z axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on $Z$ axis 10 Gn for 11 ms IEC 60068-2-27 Vibrations contactor closed $4 \mathrm{Gn}, 5 \ldots . .300 \mathrm{~Hz}$ IEC 60068-2-6 Vibrations contactor opened 2 Gn, $5 . . .300 \mathrm{~Hz}$ IEC 60068-2-6 Shocks contactor opened, on X axis 10 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Y axis 6 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on X axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Y axis 10 Gn for 11 ms IEC 60068-2-27 |
| height | 58 mm |
| width | 45 mm |
| depth | 57 mm |
| product weight | 0.225 kg |

Offer Sustainability

| Sustainable offer status | Green Premium product |
| :--- | :--- |
| RoHS (date code: YYWW) | Compliant - since 0633-Schneider Electric declaration of conformity |
| REACh | Reference not containing SVHC above the threshold |
| Product environmental profile | Available |
| Product end of life instructions | Need no specific recycling operations |

