

PBK 4191, 4291

13286.0

PBK 4291/2/3,50-KD LG

- Push-in Connection
- 9A to 130V
- Up to 20 Poles



PRODUCT DESCRIPTION

The PBK 4191 and PBK 4291 terminal blocks feature CONTA-CLIP's push-in (spring-pressure) connection principle, facilitating fast and secure tool-free insertion of solid or ferruled conductors. They are available in 3.50 mm pitch (PBK 4291) and 2.54 mm pitch (PBK 4191) variants, offering pole counts up to 20. The push-in design supports conductor cross-sections typically from 0.2 mm² to 0.75 mm², with rated currents up to 9 A and voltages up to 130 V, classified for use in overvoltage category III and contamination class 3 environments. The PCB pins are typically around 0.7 mm in diameter, requiring roughly 1.2–1.3 mm drill holes, and provide sufficient solderable protrusion of approximately 3–4 mm. The housings are made of flame-retardant polyamide (UL 94 V-0), boasting high insulation resistance, CTI rating of 600, glow-wire compliance (GWFI 850 °C / GWIT 775 °C), and compatibility with standard wave-solder reflow processes.

The PBK 4191 and 4291 series are ideal for compact PCB-mounted applications where space is at a premium and wiring needs to be fast, reliable, and service-accessible. They are commonly used in control electronics, I/O connector boards, test or measurement devices, and small automation modules, connecting multiple low-current wires in minimal footprint. The push-in system accelerates assembly and reduces installation errors, while the high spring contact force maintains mechanical stability in environments with vibration or thermal cycling. Their small pitch layouts enable high-density wiring solutions on PCB designs, making them especially suitable for manufacturing equipment, embedded control circuits, and compact industrial instruments where reliability and compactness are key.

TECHNICAL DATA

GENERAL DATA

| | |
|-----------------|--------------|
| Type | PCB terminal |
| Pitch | 3.5 mm |
| Colour | Light grey |
| Number of poles | 2 |
| Approvals | VDE |

RATINGS

| | |
|-----------------------|-------------------|
| Rated current | 3 A |
| Rated voltage | 130 V |
| Rated cross section | 1 mm ² |
| Rated impulse voltage | 2 kV |
| Overvoltage category | III |
| Contamination degree | 3 |

DIMENSIONS

| | |
|---------------------------------------|---------|
| Length | 12 mm |
| Width | 8.5 mm |
| Height | 13 mm |
| Width left | 3.25 mm |
| Width right | 1.75 mm |
| Drillhole diameter | 1 mm |
| Diameter of the connection pin | 0.4 mm |
| Length of pin | 3.6 mm |

CONNECTION DATA

| | |
|---|-------------------------------|
| Connector type/principle | Push-in |
| Number of levels | 1 |
| Angle of PCB/wire connection | 45°/135° (diagonally upwards) |
| Type of attachment to PCB | Solder |
| Electrical connection type to PCB | Connecting contact |
| Cross section single wire from | 0.08 mm ² |
| Cross section single wire to | 1.5 mm ² |
| Cross section stranded wire from | 0.14 mm ² |
| Cross section stranded with ferrule to | 0.5 mm ² |
| Cross section stranded wire to | 1 mm ² |
| Cross section stranded with ferrule from | 0.14 mm ² |
| Rated wire cross section to (AWG) | 16 |
| Rated wire cross section from (AWG) | 22 |
| Stripping length | 9 mm |

MATERIALS

| | |
|-----------------------------------|---------------|
| Housing material | Polyamide 6.6 |
| Flammability class | UL94-V0 |
| Operating temperature from | -30 °C |
| Operating temperature to | 105 °C |
| Contact flag | Copper alloy |

APPROVALS

| | |
|-------------------------|---------|
| UL test standard | UL 1059 |
| Rated voltage UL | 300 V |
| Rated current UL | 6 A |

| | |
|--|---------------------------|
| cUL test standard | CSA 22.2 No.158 |
| Rated voltage cUL | 300 V |
| Rated current cUL | 6 A |
| VDE test standard | DIN EN 60998 |
| Rated voltage VDE | 130 V |
| Rated current VDE | 3 A |
| Recommended wave solder duration max | 4 s |
| Recommended wave solder duration min | 3 s |
| Recommended wave soldering temperature | 265 °C |
| Tariff code | 85369010 |
| Pack size | 50 |
| Weight | 1.1 g |
| Connection cycles acc. to standard | 10 |
| Country of origin | QU |
| Current creepage resistance | CTI 600 |
| Glow wire flammability index (GWFI) | GWFI 850 |
| Glow wire ignition temperature (GWIT) | GWIT 775 |
| GWFI after-glow time | 30 s |
| GWIT exposure time | 5 s |
| Insulation resistance | 1*10 ¹³ Ω x cm |



