

## PK 104

10077.1

PK 104/2/5,00-V GN

- 2 kV impulse voltage
- 32 A at 250 V
- Supports various wire types



### PRODUCT DESCRIPTION

The PK 104 series comprises fixed PCB terminal blocks with a wire-protection connection design, offering a 5 mm pitch and available in pole counts ranging from 2 up to 24, and in both green and dark grey variants. Each terminal is rated for 32 A at 250 V, with 2 kV impulse voltage support, conforming to Overvoltage Category III and Pollution Degree 3. The connector housing is moulded from flame-retardant polyamide 6.6 (UL94-V0), featuring a horizontal (0°/180°) wire-to-PCB configuration and securing wires via robust wire-protection clamping. Mechanical precision is evident in its compact dimensions, 9.3 mm length, 10.7 mm width, and 12.5 mm height, with a 2 mm drill hole, 1.2 mm pin diameter, and 2.5 mm pin protrusion. It accommodates a wide range of conductor types: solid wires from 0.2 to 4 mm<sup>2</sup>, stranded wires up to 4 mm<sup>2</sup> (with ferrules up to 2.5 mm<sup>2</sup>), and even supports AWG 22 to 12, secured by M3 screws torqued to 0.5 Nm. Additional robust features include a CTI of 600, glow-wire resistance (GWFI 850 °C / GWIT 775 °C with 30 s after-glow), insulation resistance of  $1 \times 10^{13} \Omega \cdot \text{cm}$ , and support for wave-soldering at 265 °C for 3–4 s.

The PK 104 series is ideal for high-current PCB wiring in control panels, automation systems, and industrial equipment where compact, reliable, and safe wire-to-board terminations are required. Its wire-protection clamp design enhances conductor security by reducing stress and preventing strand damage, thereby improving longevity and assembly quality. The high current and voltage capability makes it suitable for power distribution, motor control, and heavy-duty sensor or actuator interfaces. The broad conductor size compatibility, including ferrule support, ensures clean and dependable terminations in field assembly or maintenance work. Safety and quality are further assured by UL, cUL, and VDE approvals, making the PK 104 suitable for compliance-focused markets and demanding industrial environments.

## TECHNICAL DATA

### GENERAL DATA

Type	PCB terminal
Pitch	5 mm
Colour	Green
Number of poles	2
Approvals	UL, cUL, VDE

### RATINGS

Rated current	32 A
Rated voltage	250 V
Rated cross section	4 mm <sup>2</sup>
Rated impulse voltage	2 kV
Overvoltage category	III

Contamination degree	3
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## DIMENSIONS

Length	9.3 mm
Width	10.7 mm
Height	12.5 mm
Width left	3.2 mm
Width right	2.5 mm
Drillhole diameter	2 mm
Diameter of the connection pin	1.2 mm
Length of pin	2.5 mm

## CONNECTION DATA

Connector type/principle	Wire protection
Number of levels	1
Angle of PCB/wire connection	0°/180° (horizontal)
Type of attachment to PCB	Connecting contact
Electrical connection type to PCB	Solder
Cross section single wire from	0.2 mm <sup>2</sup>
Cross section single wire to	4 mm <sup>2</sup>
Cross section stranded wire from	0.2 mm <sup>2</sup>
Cross section stranded with ferrule to	2.5 mm <sup>2</sup>
Cross section stranded wire to	4 mm <sup>2</sup>
Cross section stranded with ferrule from	0.2 mm <sup>2</sup>
Rated wire cross section to (AWG)	12
Rated wire cross section from (AWG)	22
Stripping length	7 mm
Screw size	M 3
Torque	0.5

## MATERIALS

Housing material	Polyamide 6.6
Flammability class	UL94-V0
Operating temperature from	-30 °C
Operating temperature to	105 °C
Screw material	Steel

Clamp material	Brass
Wire protection	Stainless steel

## APPROVALS

UL test standard	UL 1059
Rated voltage UL	300 V
Rated current UL	20 A
cUL test standard	CSA 22.2 No.158
Rated voltage cUL	300 V
Rated current cUL	20 A
VDE test standard	DIN EN 60998
Rated voltage VDE	250 V
Rated current VDE	32 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	2.4 g
Connection cycles acc. to standard	5
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 <sup>13</sup> Ω x cm

