

## TOP4GS5/180 6.35 OR

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

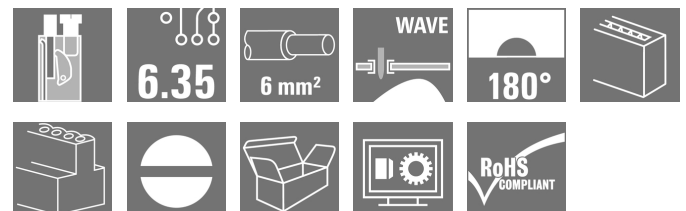
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### Product image



Similar to illustration

Conductor entry and screw connection in the same direction on this PCB terminal with 6.35 mm pitch for conductor cross-sections up to 6.0 mm<sup>2</sup>. Conductor outlet direction 90° and 180°.

### General ordering data

Version	Printed circuit board terminals, 6.35 mm, Number of poles: 5, 180°, Solder pin length (l): 3.5 mm, tinned, orange, TOP connection, Clamping range, max.: 6 mm <sup>2</sup> , Box
Order No.	<a href="#">1786220000</a>
Type	TOP4GS5/180 6.35 OR
GTIN (EAN)	4032248200856
Qty.	50 pc(s).
Product data	IEC: 320 V / 26 A / 0.5 - 6 mm <sup>2</sup> UL: 300 V / 30 A / AWG 26 - AWG 10
Packaging	Box
Delivery status	<b>This article will no longer be available in the future.</b>
Available until	2023-03-31

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## Technical data

## Dimensions and weights

Depth	26 mm	Depth (inches)	1.024 inch
Height	29.5 mm	Height (inches)	1.161 inch
Height of lowest version	26 mm	Width	33.25 mm
Width (inches)	1.309 inch	Net weight	39.18 g

## Temperatures

Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
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## System parameters

Product family	OMNIMATE Signal - series TOP4G	Wire connection method	TOP connection
Mounting onto the PCB	THT solder connection	Conductor outlet direction	180°
Pitch in mm (P)	6.35 mm	Pitch in inches (P)	0.25 inch
Number of poles	5	Pin series quantity	1
Fitted by customer	No	Number of rows	1
Solder pin length (l)	3.5 mm	Solder pin dimensions	0.8 x 0.8 mm
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance (D)	+ 0,1 mm
Number of solder pins per pole	2	Screwdriver blade	0.6 x 3.5
Screwdriver blade standard	DIN 5264	Tightening torque, min.	0.5 Nm
Tightening torque, max.	0.6 Nm	Clamping screw	M 3
Stripping length	13 mm	L1 in mm	25.4 mm
L1 in inches	1 inch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Protection degree	IP20	Volume resistance	1.40 mΩ

## Material data

Insulating material	PA	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	I
Comparative Tracking Index (CTI)	≥ 600	UL 94 flammability rating	V-2
Contact material	E-Cu	Contact surface	tinned
Layer structure of solder connection	6...10 µm Sn	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	100 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	100 °C		

## Conductors suitable for connection

Clamping range, min.	0.13 mm <sup>2</sup>
Clamping range, max.	6 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 26
Wire connection cross section AWG, max.	AWG 10
Solid, min. H05(07) V-U	0.5 mm <sup>2</sup>
Solid, max. H05(07) V-U	6 mm <sup>2</sup>
Stranded, min. H07V-R	0.22 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.5 mm <sup>2</sup>
Flexible, max. H05(07) V-K	4 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm <sup>2</sup> min.	
w. plastic collar ferrule, DIN 46228 pt 4, 4 mm <sup>2</sup> max.	

Creation date February 28, 2023 1:24:53 PM CET

Catalogue status 18.02.2023 / We reserve the right to make technical changes.

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**Technical data**

w. wire end ferrule, DIN 46228 pt 1, min. 0.5 mm<sup>2</sup>

w. wire end ferrule, DIN 46228 pt 1, max. 4 mm<sup>2</sup>

Plug gauge in accordance with EN 60999 a x b; ø 2.8 mm x 2.4 mm

Clampable conductor

Cross-section for conductor connection	Type	fine-wired
	nominal	0.5 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	<a href="#">H0.5/18 OR</a>
Cross-section for conductor connection	Type	fine-wired
	nominal	1 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal 15 mm
	Recommended wire-end ferrule	<a href="#">H1.0/18 GE</a>
Cross-section for conductor connection	Type	fine-wired
	nominal	1.5 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal 15 mm
	Recommended wire-end ferrule	<a href="#">H1.5/18D SW</a>
	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	<a href="#">H1.5/12</a>
Cross-section for conductor connection	Type	fine-wired
	nominal	0.75 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	<a href="#">H0,75/18 W</a>
Cross-section for conductor connection	Type	fine-wired
	nominal	2.5 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	<a href="#">H2.5/19D BL</a>
	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	<a href="#">H2.5/12</a>
Cross-section for conductor connection	Type	fine-wired
	nominal	4 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal 12 mm
	Recommended wire-end ferrule	<a href="#">H4.0/12</a>
	Stripping length	nominal 14 mm
	Recommended wire-end ferrule	<a href="#">H4.0/20D GR</a>

Reference text Length of ferrules is to be chosen depending on the product and the rated voltage., The outside diameter of the plastic collar should not be larger than the pitch (P)

**Rated data acc. to IEC**

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	26 A
Rated current, min. number of poles (Tu=40°C)	32 A	Rated voltage for surge voltage class / pollution degree II/2	320 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	320 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	2.5 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	2.5 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	2.5 kV		

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**Technical data**

**Rated data acc. to CSA**

Institute (CSA)		Certificate No. (CSA)	154685-1501716
			www.weidmueller.com
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	25 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 10
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

**Rated data acc. to UL 1059**

Institute (UR)		Certificate No. (UR)	E60693
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group B / UL 1059)	30 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 10
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

**Packing**

Packaging	Box	VPE length	209 mm
VPE width	144 mm	VPE height	72 mm

**Classifications**

ETIM 6.0	EC002643	ETIM 7.0	EC002643
ETIM 8.0	EC002643	ECLASS 9.0	27-44-04-01
ECLASS 9.1	27-44-04-01	ECLASS 10.0	27-44-04-01
ECLASS 11.0	27-46-01-01	ECLASS 12.0	27-46-01-01

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### Important note

IPC conformity Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

- Notes
- Additional variants on request
  - Rated current related to rated cross-section & min. No. of poles.
  - Wire end ferrule without plastic collar to DIN 46228/1
  - Wire end ferrule with plastic collar to DIN 46228/4
  - Crimp form A for wire end ferrules with PZ 6/5 crimping tool are recommended for the largest cable sizes.
  - P on drawing = pitch
  - Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.
  - Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

### Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (UR)	E60693

### Downloads

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Engineering Data	<a href="#">WSCAD</a>
Product Change Notification	<a href="#">20220201 Visual change OMNIMATE® Power PCB terminal blocks and connectors</a> <a href="#">20220201 Visuelle Änderung OMNIMATE® Power Leiterplattenklemmen und -steckverbinder</a>
User Documentation	<a href="#">QR-Code product handling video</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">FL APPL. INVERTER EN</a> <a href="#">FL_BASE_STATION_EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a> <a href="#">PO OMNIMATE EN</a>

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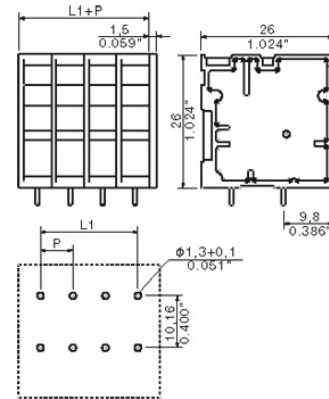
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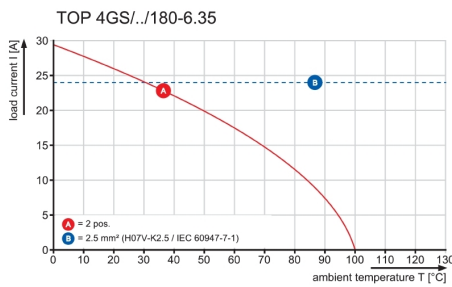
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**Drawings**

**Dimensional drawing** [info@weidmueller.com](mailto:info@weidmueller.com)



**Graph**



## Recommended wave soldering profiles

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 Germany  
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### Single Wave:



### Double Wave:



### Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.