

WPD 109 1X185/2X35+3X25+4X16 BL**Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com

www.weidmueller.com

Product image

Our WPD 1XX distribution blocks are used in all situations where power is supplied and distributed. Their user-friendly design creates a better overview and enables Rapid, efficient implementation of space-saving power distribution.

General ordering data

| | |
|------------|---|
| Version | W-Series, Distribution block, Rated cross-section: Screw connection, Terminal rail / mounting plate |
| Order No. | 2519490000 |
| Type | WPD 109 1X185/2X35+3X25+4X16 BL |
| GTIN (EAN) | 4050118531916 |
| Qty. | 1 pc(s). |

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Technical data**Dimensions and weights**

| | | | |
|------------|---------|-----------------|------------|
| Depth | 77 mm | Depth (inches) | 3.031 inch |
| Height | 95 mm | Height (inches) | 3.74 inch |
| Width | 51.1 mm | Width (inches) | 2.012 inch |
| Net weight | 455 g | | |

Temperatures

| | | | |
|---------------------|----------------|----------------------------------|--------|
| Storage temperature | -25 °C...55 °C | Continuous operating temp., min. | -50 °C |
|---------------------|----------------|----------------------------------|--------|

Material data

| | | | |
|---------------------------|-------|--------|------|
| Material | Wemid | Colour | blue |
| UL 94 flammability rating | V-0 | | |

Rating data IECEx/ATEX

| | | | |
|--------------------------------|---------------------|-------------------------|-------------------|
| Certificate No. (ATEX) | CNEX16ATEX0005U | Certificate No. (IECEX) | IECEXCNEX16.0005U |
| Max. voltage (ATEX) | 1100 V | Current (ATEX) | 353 A |
| Wire cross section max. (ATEX) | 185 mm ² | Max. voltage (IECEX) | 1100 V |
| Current (IECEX) | 353 A | | |

System specifications

| | | | |
|-------------------------------------|------------------|-------------------------------|-----------------------|
| Version | Screw connection | End cover plate required | No |
| Number of potentials | 1 | Number of levels | 1 |
| Number of clamping points per level | 2 | Number of potentials per tier | 1 |
| Levels cross-connected internally | Yes | Rail | Mounting plate, TS 35 |
| PE function | No | PEN function | No |

Additional technical data

| | | | |
|---------------------|--------------------------------|------------|--------|
| Installation advice | Terminal rail / mounting plate | Open sides | closed |
| Type of mounting | Snap-on | | |

CSA rating data

| | |
|-----------------------------|----------|
| Certificate number (cCSAus) | 70128467 |
|-----------------------------|----------|

Conductors for clamping (rated connection)

| | | | |
|----------------------|---------------|--------------------|------------------|
| Connection direction | None, on side | Type of connection | Screw connection |
|----------------------|---------------|--------------------|------------------|

General

| | | | |
|---------------------|--------------------------------|-----------------|------------------------|
| Installation advice | Terminal rail / mounting plate | Number of poles | 1 |
| Rail | Mounting plate, TS 35 | Standards | IEC 60947-7-1, UL 1059 |

Rating data

| | | | |
|------------------|------------------------|------------------|------------|
| Rated voltage | 1,000 V | Rated AC voltage | 1,000 V AC |
| Rated DC voltage | 1,500 V DC | Rated current | 490 A |
| Standards | IEC 60947-7-1, UL 1059 | | |

Creation date March 13, 2023 9:07:50 AM CET

Catalogue status 03.03.2023 / We reserve the right to make technical changes.

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Technical data**UL rating data**

Certificate No. (cURus) E60693

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC000897 | ETIM 7.0 | EC000897 |
| ETIM 8.0 | EC000897 | ECLASS 9.0 | 27-14-11-20 |
| ECLASS 9.1 | 27-14-11-20 | ECLASS 10.0 | 27-14-11-20 |
| ECLASS 11.0 | 27-14-11-20 | ECLASS 12.0 | 27-14-11-20 |

Environmental Product Compliance

| | |
|------------|--------------------------------------|
| REACH SVHC | Lead 7439-92-1 |
| SCIP | 9b5f0838-1f0b-4c14-9fc7-3f5e6ee75be2 |

Important note

Product information The socket complies with flammability class V-2 according to UL94.

Approvals

Approvals



| | |
|-------------------------|------------|
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate No. (cURus) | E60693 |

Downloads

| | |
|---|--|
| Approval/Certificate/Document of Conformity | Attestation of Conformity Attestation of Conformity CB Certificate ATEX Certificate IECEX Certificate VDE Certificate EAC EX Certificate CCC Ex Certificate DNV Certificate UKCA Ex Certificate UKCA declaration of conformity |
| Engineering Data | CAD data – STEP |
| User Documentation | StorageConditionsTerminalBlocks DATA SHEET WPD 109 NTI WPD 109 |
| Catalogues | Catalogues in PDF-format |

Data sheet

WPD 109 1X185/2X35+3X25+4X16 BL

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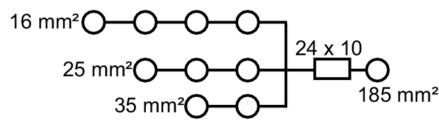
Tel. +49 5231 14-0

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Drawings



Power distribution
Screw connection

W-Series

WPD 109 1X185/2X35+3X25+4X16 GY



| | |
|-------------------------------|-------------------|
| Width / Height / Depth | mm |
| max. current / max. conductor | A/mm ² |
| max. clamping range | mm ² |

Technical data

| | |
|------------------------|-------------------------------------|
| Rated data | |
| Rated voltage | V |
| Rated current | A |
| for wire cross-section | 185 mm ² mm ² |

Rated impulse withstand voltage / Pollution severity
Overvoltage category / UL 94 flammability rating
Approvals

Clamped conductors (H05V/H07V)

| | | |
|-------------------------------|---------------------|-----------------|
| Solid / Stranded | 185 mm ² | mm ² |
| | 35 mm ² | mm ² |
| | 25 mm ² | mm ² |
| | 16 mm ² | mm ² |
| Flexible with ferrule | 185 mm ² | mm ² |
| | 35 mm ² | mm ² |
| | 25 mm ² | mm ² |
| | 16 mm ² | mm ² |
| Stripping length / Blade size | 185 mm ² | mm/- |
| | 35 mm ² | mm/- |
| | 25 mm ² | mm ² |
| | 16 mm ² | mm ² |

Tightening torque

Note

Ordering data

| | |
|----------------|--|
| Version | |
| grey | |
| blue | |
| red | |
| black | |

Note

Accessories

| | |
|-------------------------|------------|
| Cross connection | |
| | 2-pole |
| End bracket | |
| | dark beige |
| | dark beige |
| Screwdriver | |
| | SET |

WPD 109

185 mm²



| | | | |
|----------------|--------------------|---------|---------------------|
| 55.1 / 77 / 95 | 16 mm | 24 x 10 | 185 mm ² |
| 353 / 185 | 25 mm ² | | |
| 50...185 | 35 mm ² | | |

IEC 60947-7-1 (Cu), UL 1059 (Cu+Al)

| | | | |
|------------|-----------------|-----------------|-------------------|
| IEC | UL | CSA | EN 60079-7 |
| 1000 | 600 | 600 | 880 |
| 353 | 310 | 310 | 353 |
| 185 | AWG 2/0...kcmil | AWG 2/0...kcmil | 185 |
| | 350 | 350 | |
| 8 kV / 3 | | | |
| III / V-0 | | | |

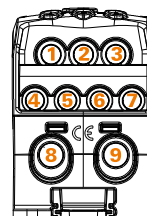
Bemessungsanschluss

| |
|---------------------|
| 70...185 / 70...185 |
| 4...35 / 4...35 |
| 2.5...25 / 2.5...25 |
| 1.5...16 / 1.5...16 |
| 50...150 |
| 2.5...25 |
| 1.5...16 |
| 1.5...10 |
| 27 / M14 |
| 18 / M8 |
| 12 / M6 |
| 12 / M6 |

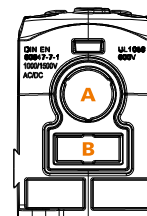
siehe Anhang am Kapitelende

| | | |
|---------------------------------|-------------|------------------|
| Type | Qty. | Order No. |
| WPD 109 1x185/2x35+3x25+4x16 GY | 1 | 1562090000 |
| WPD 109 1x185/2x35+3x25+4x16 BL | 1 | 2519490000 |
| WPD 109 1x185/2x35+3x25+4x16 RD | 1 | 2725270000 |
| WPD 109 1x185/2x35+3x25+4x16 BK | 1 | 2725370000 |

| | | |
|-------------------|-------------|------------------|
| Type | Qty. | Order No. |
| WQB WPD X08-09/2 | 20 | 1561900000 |
| WEW 35/2 | 100 | 1061200000 |
| AEB 35 SC/1 | 50 | 1991920000 |
| SDK PZ2 X 100 | 1 | 2749450000 |
| SK WSD-S 1,5-10,0 | 1 | 9008850000 |



output



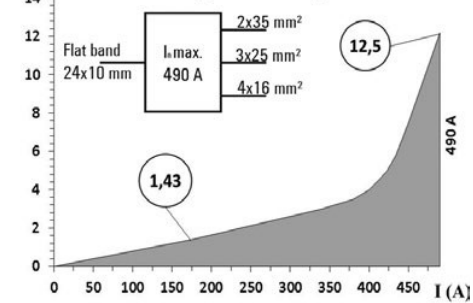
input

Conductor connection data according to IEC 60947-7-1 (Cu), UL 1059 (Cu+Al)

| Input | connection point A | | | | CP** B |
|---------------------|--------------------|-------|------------|---------|--------|
| | Copper | | Aluminium* | | Copper |
| 120 mm ² | | | | | |
| 95 mm ² | 19 Nm | 19 Nm | 22,6 Nm | 22,6 Nm | |
| 70 mm ² | | | | | |
| 50 mm ² | | | | | |
| 35 mm ² | | | | | |
| 25 mm ² | | | | | |
| Flat band 24x10mm | | | | | 3 Nm |
| Stripping lengths | 27 mm | | | | 22 mm |
| Allen screw | M14 | | | | M6 |

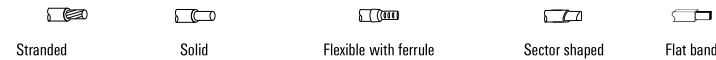
* Values according to UL 1059 ** CP - connection point

WPD 109
Power loss diagram for copper conductor



| Output | connection point 1 / 2 / 3 | | | | connection point 4 / 5 / 6 / 7 | | | | connection point 8 / 9 | | | |
|---------------------|----------------------------|------|------------|--------|--------------------------------|------|------------|--|------------------------|--------|------------|---------|
| | Copper | | Aluminium* | | Copper | | Aluminium* | | Copper | | Aluminium* | |
| 35 mm ² | | | | | | | | | | | | |
| 25 mm ² | 2 Nm | 2 Nm | 5,1 Nm | 5,1 Nm | 2 Nm | 2 Nm | 5,1 Nm | | 2,5 Nm | 2,5 Nm | 11,3 Nm | 11,3 Nm |
| 16 mm ² | | | | | | | | | | | | |
| 10 mm ² | | | | | | | | | | | | |
| 6 mm ² | | | | | | | | | | | | |
| 4 mm ² | | | | | | | | | | | | |
| 2,5 mm ² | | | | | | | | | | | | |
| 1,5 mm ² | | | | | | | | | | | | |
| Stripping lengths | 12 mm | | | | 12 mm | | | | 18 mm | | | |
| Allen screw | M6 | | | | M6 | | | | M8 | | | |

* Values according to UL 1059



UL Rating data according to UL 1059

| Certificate no. (UR) | XCFR2.E60693 | | | | |
|-----------------------|--------------------|--------------|------------|------------|-------------|
| | connection point A | | | | CP* B |
| Input (line) | Copper | | Aluminium | | Copper |
| kcmil 250 | | | | | |
| AWG 4/0 | 168.2 Lb In. | 168.2 Lb In. | 200 Lb In. | 200 Lb In. | |
| AWG 3/0 | | | | | |
| AWG 2/0 | | | | | |
| AWG 1/0 | | | | | |
| AWG 2 | | | | | |
| AWG 4 | | | | | |
| Flat band 24x10 mm | | | | | 17.7 Lb In. |
| max. current | 250 A | 200 A | 155 A | 205 A | 250 A |
| Voltage size B,C (UR) | 600 V | | | | |

* CP - connection point

CSA rating data according to CSA 22.2 No. 158

| Certificate No. (CSA) | 269832 | | | |
|-----------------------|--------|-----------|-------------|-------|
| | Input | | Output | |
| | CP* A | CP* 1/2/3 | CP* 4/5/6/7 | CP* B |
| kcmil 250 | 19 Nm | | | |
| AWG 2 | 19 Nm | | | |
| AWG 4 | | 3 Nm | 3 Nm | 6 Nm |
| AWG 6 | | | | |
| AWG 8 | | | | |
| AWG 10 | | | | |
| AWG 12 | | | | |
| AWG 14 | | | | |
| AWG 16 | | | | |
| max. current | 255 A | 85 A | 65 A | 115 A |
| Voltage size C (CSA) | 600 V | | | |

* CP - connection point

| Output | connection point 1 / 2 / 3 | | | | connection point 4 / 5 / 6 / 7 | | | | connection point 8 / 9 | | | |
|-----------------------|----------------------------|-------------|-------------|-------------|--------------------------------|-------------|-------------|--|------------------------|-------------|------------|------------|
| | Copper | | Aluminium | | Copper | | Aluminium | | Copper | | Aluminium | |
| AWG 2 | | | | | | | | | | | | |
| AWG 4 | 22.6 Lb In. | 22.6 Lb In. | 45.1 Lb In. | 45.1 Lb In. | 22.6 Lb In. | 22.6 Lb In. | 45.1 Lb In. | | 53.1 Lb In. | 53.1 Lb In. | 100 Lb In. | 100 Lb In. |
| AWG 6 | | | | | | | | | | | | |
| AWG 8 | | | | | | | | | | | | |
| AWG 10 | | | | | | | | | | | | |
| AWG 12 | | | | | | | | | | | | |
| AWG 14 | | | | | | | | | | | | |
| AWG 16 | | | | | | | | | | | | |
| max. current | 85 A | 65 A | 65 A | 50 A | 65 A | 50 A | 50 A | | 115 A | 85 A | 90 A | 65 A |
| Voltage size B,C (UR) | 600 V | | | | | | | | | | | |

