

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

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)

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    | Potential distributor terminal, Screw connection, 1000 V, 490 A, Number of poles: 1, Mounting plate, TS 35, red |
| Order No.  | <a href="#">2725270000</a>  |
| Type       | WPD 109 1X185/2X35+3X25+4X16 RD   |
| GTIN (EAN) | 4050118796612   |
| Qty.       | 1 pc(s).  |

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

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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 | 454 g   |                 |            |

## Temperatures

|                                  |                |                                  |        |
|----------------------------------|----------------|----------------------------------|--------|
| Storage temperature              | -25 °C...55 °C | Continuous operating temp., min. | -50 °C |
| Continuous operating temp., max. | 130 °C         |                                  |        |

## Material data

|                           |       |        |     |
|---------------------------|-------|--------|-----|
| Material                  | Wemid | Colour | red |
| 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 <sup>2</sup> | 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 |
| N-function                          | Yes              | PE function                   | No                    |
| PEN function                        | No               |                               |                       |

## Additional technical data

|                          |         |            |        |
|--------------------------|---------|------------|--------|
| Explosion-tested version | Yes     | Open sides | closed |
| Type of mounting         | Snap-on |            |        |

## CSA rating data

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

## Conductors for clamping (additional connection)

|  |                  |
|--|------------------|
| Connection type, additional connection | Screw connection |
|--|------------------|

## Conductors for clamping (rated connection)

|                      |         |                    |                  |
|----------------------|---------|--------------------|------------------|
| Connection direction | on side | Type of connection | Screw connection |
|----------------------|---------|--------------------|------------------|

## General

|                 |                        |      |                       |
|-----------------|------------------------|------|-----------------------|
| Number of poles | 1                      | Rail | Mounting plate, TS 35 |
| Standards       | IEC 60947-7-1, UL 1059 |      |                       |

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**Technical data****Rating data**

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

**UL rating data**

|                         |        |
|-------------------------|--------|
| Certificate No. (cURus) | E60693 |
|-------------------------|--------|

**Classifications**

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC000897    | ETIM 7.0    | EC000897    |
| ETIM 8.0    | EC000897    | ETIM 9.0    | 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 | ECLASS 13.0 | 27-25-01-19 |

**Environmental Product Compliance**

|            |                                      |
|------------|--------------------------------------|
| REACH SVHC | Lead 7439-92-1                       |
| SCIP       | e1c310ef-6b67-4efa-80a6-d307472f4de9 |

**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 | <a href="#">Attestation of Conformity</a><br><a href="#">UKCA Ex Attestation of Conformity</a><br><a href="#">CB Certificate</a><br><a href="#">VDE Certificate</a><br><a href="#">DNV Certificate</a><br><a href="#">UKCA Ex Certificate</a><br><a href="#">CE Declaration of Conformity</a><br><a href="#">UKCA declaration of conformity</a><br><a href="#">Confirmation of Standards EN 45545-2_2020-10</a> |
| Engineering Data                            | <a href="#">CAD data – STEP</a>   |
| User Documentation                          | <a href="#">DATA SHEET WPD 109</a>  |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>  |

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

**Weidmüller Interface GmbH & Co. KG**

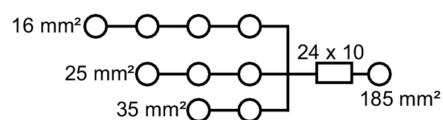
Klingenbergstraße 26

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Germany

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# Drawings



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

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Slotted screwdriver**

Slotted screwdriver with rounded blade SD DIN 5265,  
ISO 2380/2, output to DIN 5264, ISO 2380/1.  
ChromTop tip, SoftFinish grip

**General ordering data**

|            |                            |                          |
|------------|----------------------------|--------------------------|
| Type       | SDS 0.6X3.5X100            | Version                  |
| Order No.  | <a href="#">9008330000</a> | Screwdriver, Screwdriver |
| GTIN (EAN) | 4032248056286              |                          |
| Qty.       | 1 pc(s).                   |                          |

**Cross connection****General ordering data**

|            |                            |  |
|------------|----------------------------|--|
| Type       | WQB WPD X08-09/2           | Version  |
| Order No.  | <a href="#">1561900000</a> | Cross-connector (terminal), Plugged, Number of poles: 2, Pitch in mm |
| GTIN (EAN) | 4050118367096              | (P): 51.10, Insulated: Yes, 353 A, grey                              |
| Qty.       | 3 pc(s).                   |  |

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Socket wrench sets**

Allen key made from fully hardened, high-alloy chromium-vanadium- steel, acc. to DIN ISO 2936 L (DIN 911), high-quality refined surface.

**General ordering data**

|            |                            |                 |
|------------|----------------------------|-----------------|
| Type       | SKS 2,0-8,0 MR             | Version         |
| Order No.  | <a href="#">9008870000</a> | socket wrenches |
| GTIN (EAN) | 4032248266623              |                 |
| Qty.       | 1 pc(s).                   |                 |

## Power distribution

### Screw connection

#### W-Series

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



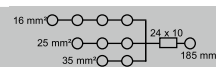
WPD 109

185 mm<sup>2</sup>



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

55.1 / 77 / 95  
353 / 185  
50...185



#### Technical data

| Rated data             |                     |                 |
|------------------------|---------------------|-----------------|
| Rated voltage          | V                   |                 |
| Rated current          | A                   |                 |
| for wire cross-section | 185 mm <sup>2</sup> | mm <sup>2</sup> |

Rated impulse withstand voltage / Pollution severity

Overvoltage category / UL 94 flammability rating

Approvals

#### Clamped conductors (H05V/H07V)

|                               |                     |                 |
|-------------------------------|---------------------|-----------------|
| Solid / Stranded              | 185 mm <sup>2</sup> | mm <sup>2</sup> |
|                               | 35 mm <sup>2</sup>  | mm <sup>2</sup> |
|                               | 25 mm <sup>2</sup>  | mm <sup>2</sup> |
|                               | 16 mm <sup>2</sup>  | mm <sup>2</sup> |
| Flexible with ferrule         | 185 mm <sup>2</sup> | mm <sup>2</sup> |
|                               | 35 mm <sup>2</sup>  | mm <sup>2</sup> |
|                               | 25 mm <sup>2</sup>  | mm <sup>2</sup> |
|                               | 16 mm <sup>2</sup>  | mm <sup>2</sup> |
| Stripping length / Blade size | 185 mm              | mm/-            |
|                               | 35 mm               | mm/-            |
|                               | 25 mm               | mm <sup>2</sup> |
|                               | 16 mm               | mm <sup>2</sup> |
| Tightening torque             |                     | Nm              |

#### Note

#### 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<br>350 | AWG 2/0...kcmil<br>350 | 185        |
| 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 |



#### Ordering data

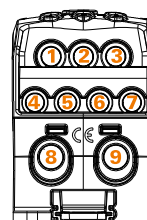
| Version |  |
|---------|--|
| grey    |  |
| blue    |  |
| red     |  |
| black   |  |
| Note    |  |

| 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 |

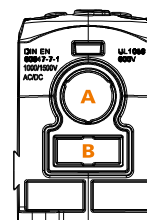
#### Accessories

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

| 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

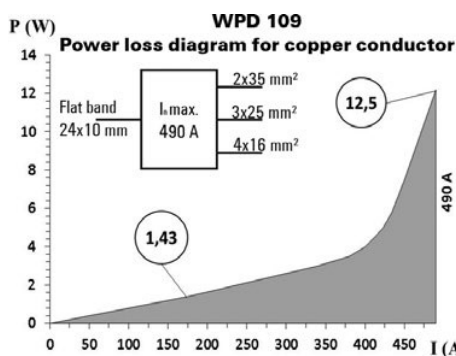














input

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






| connection point A  |   |   |   |   |   | CP** B |
|---|---|---|---|---|---|--------|
| Input   | Copper  |   | Aluminium*  |   | Copper  |        |
|   |  |  |  |  |  |        |
| 120 mm <sup>2</sup>                                       | 19 Nm   | 19 Nm   | 22,6 Nm   | 22,6 Nm   |   |        |
| 95 mm <sup>2</sup>  |   |   |   |   |   |        |
| 70 mm <sup>2</sup>  |   |   |   |   |   |        |
| 50 mm <sup>2</sup>  |   |   |   |   |   |        |
| 35 mm <sup>2</sup>  |   |   |   |   |   |        |
| 25 mm <sup>2</sup>  |   |   |   |   |   |        |
| Flat band 24x10mm   |   |   |   |   |   |        |
|   |   |   |   |   | 3 Nm  |        |
| Stripping lengths   | 27 mm   |   |   |   | 22 mm   |        |
| Allen screw   | M14   |   |   |   | M6  |        |
| * Values according to UL 1059    ** CP - connection point |   |   |   |   |   |        |

\* Values according to UL 1059 \*\* 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*  |   |  |  |  |  |  |  |  |  |  |
|                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35 mm²                        | 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   |  |  |  |  |  |  |  |  |  |
| 25 mm²                        |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |
| 16 mm²                        |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |
| 10 mm²                        |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |
| 6 mm²                         |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |
| 4 mm²                         |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |
| 2.5 mm²                       |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |
| 1.5 mm²                       |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |
| Stripping lengths             | 12 mm   |   |   |   | 12 mm   |   |   |   | 18 mm   |   |   |   |  |  |  |  |  |  |  |  |  |
| Allen screw                   | M6  |   |   |   | M6  |   |   |   | M8  |   |   |   |  |  |  |  |  |  |  |  |  |
| * Values according to UL 1059 |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |

\* Values according to UL 1059

 Stranded
  Solid
  Flexible with ferrule
  Sector shaped
  Flat band

## UL Rating data according to UL 1059













| Certificate no. (UR)  | XCFR2.E60693  |   |   |   | CP* B   |
|-----------------------|---|---|---|---|---|
|                       | connection point A  |   | Aluminium   |   | Copper  |
|                       |  |  |  |  |  |
| kcmil 250             | 168.2 Lb In.  | 168.2 Lb In.  | 200 Lb In.  | 200 Lb In.  | 17.7 Lb In.   |
| AWG 4/0               |   |   |   |   |   |
| AWG 3/0               |   |   |   |   |   |
| AWG 2/0               |   |   |   |   |   |
| AWG 1/0               |   |   |   |   |   |
| AWG 2                 |   |   |   |   |   |
| AWG 4                 |   |   |   |   |   |
| Flat band 24x10 mm    |   |   |   |   |   |
| 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. | 3 Nm      | 3 Nm        | 6 Nm  |
| AWG 2                 | 19 Nm  |           |             |       |
| AWG 4                 |        |           |             |       |
| 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                 | 22.6 Lb In.   | 22.6 Lb In.   | 45.1 Lb In.   | 45.1 Lb In.   |   |   | 45.1 Lb In.   |   | 53.1 Lb In.   | 53.1 Lb In.   | 100 Lb In.  | 100 Lb In.  |
| AWG 4                 |   |   |   |   |   |   |   |   |   |   |   |   |
| 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   |   |   |   |   |   |   |   |   |   |   |   |

 Stranded
  Solid
  Flexible with ferrule
  Sector shaped
  Flat band