

CPS 3.81/20/90 SN GN BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com



General ordering data

| | |
|--------------|---|
| Order No. | 2642080000 |
| Type | CPS 3.81/20/90 SN GN BX |
| GTIN (EAN) | 4050118644890 |
| Qty. | 56 items |
| Product data | IEC: 320 V / 8 A / 0.2 - 1.5 mm ² UL: 300 V / 8 A / AWG 30 - AWG 16 |
| Packaging | Box |

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Technical data

Approvals

Approvals



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

Dimensions and weights

| | |
|------------|--------|
| Net weight | 15.8 g |
|------------|--------|

Environmental Product Compliance

| | |
|--------------------------------------|--------------------------------------|
| RoHS Compliance Status | Compliant with exemption |
| RoHS Exemption (if applicable/known) | 6c |
| REACH SVHC | Lead 7439-92-1 |
| SCIP | d5655e4a-7bb0-47c8-bd67-25d5021f9ded |

System Parameters

| Product family | OMNIMATE basic – Series CPS | Type of connection | Field connection |
|--------------------------|-----------------------------|----------------------------|------------------|
| Wire connection method | Clamping yoke connection | Pitch in mm (P) | 3.81 mm |
| Pitch in inches (P) | 0.150 " | Conductor outlet direction | 90° |
| Number of poles | 20 | L1 in mm | 72.39 mm |
| L1 in inches | 2.850 " | Number of rows | 1 |
| Pin series quantity | 1 | Stripping length | 6.5 mm |
| Tightening torque, min. | 0.22 Nm | Tightening torque, max. | 0.25 Nm |
| Clamping screw | M 2 | Screwdriver blade | 0.4 x 2.5 |
| Plugging cycles | 25 | Plugging force/pole, max. | 10 N |
| Pulling force/pole, max. | 1 N | | |

Material data

| | | | |
|-----------------------------|----------|-----------------------------|------------|
| Insulating material | PA | Colour | Pale green |
| Colour chart (similar) | RAL 6021 | Insulating material group | I |
| Moisture Level (MSL) | | UL 94 flammability rating | V-0 |
| Contact base material | Cu-alloy | Contact material | Cu-alloy |
| Contact surface | tinned | Tinning type | matt |
| Storage temperature, min. | -40 °C | Storage temperature, max. | 70 °C |
| Operating temperature, min. | -40 °C | Operating temperature, max. | 105 °C |

Conductors suitable for connection

| | | | |
|---|----------------------|---|----------------------|
| Clamping range, min. | 0.2 mm ² | Clamping range, max. | 1.5 mm ² |
| Wire connection cross section AWG, min. | AWG 30 | Wire connection cross section AWG, max. | AWG 16 |
| Solid, min. H05(07) V-U | 0.2 mm ² | Solid, max. H05(07) V-U | 1.5 mm ² |
| Stranded, min. H07V-R | 0.05 mm ² | Stranded, max. H07V-R | 1.5 mm ² |
| Flexible, min. H05(07) V-K | 0.2 mm ² | Flexible, max. H05(07) V-K | 1 mm ² |
| w. plastic collar ferrule, DIN 46228 pt 4, min. | 0.2 mm ² | w. plastic collar ferrule, DIN 46228 pt 4, max. | 0.75 mm ² |
| w. wire end ferrule, DIN 46228 pt 1, min. | 0.2 mm ² | w. wire end ferrule, DIN 46228 pt 1, max. | 0.75 mm ² |

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Rated data acc. to IEC

| | | | |
|---|--------|---|--------|
| Rated current, min. number of poles (Tu=20°C) | 8 A | Rated voltage for surge voltage class / pollution degree II/2 | 320 V |
| Rated voltage for surge voltage class / pollution degree III/2 | 160 V | Rated voltage for surge voltage class / pollution degree III/3 | 160 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 | | |

Rated data acc. to CSA

| | | | |
|-----------------------------------|--------|-----------------------------------|--------|
| Rated voltage (Use group B / CSA) | 300 V | Rated current (Use group B / CSA) | 8 A |
| Wire cross-section, AWG, min. | AWG 30 | Wire cross-section, AWG, max. | AWG 16 |

Rated data acc. to UL 1059

| | | | |
|---------------------------------------|--|---------------------------------------|--------|
| Institute (cURus) | CURUS | Certificate No. (cURus) | E60693 |
| Rated voltage (Use group B / UL 1059) | 300 V | Rated current (Use group B / UL 1059) | 8 A |
| Wire cross-section, AWG, min. | AWG 30 | Wire cross-section, AWG, max. | AWG 16 |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Packing

| | | | |
|-----------|-----------|------------|-----------|
| Packaging | Box | VPE length | 338.00 mm |
| VPE width | 130.00 mm | VPE height | 33.00 mm |

Important note

| | |
|-------|---|
| Notes | <ul style="list-style-type: none"> • Only compatible with OMNIMATE basic products • P on drawing = pitch • Rated current related to rated cross-section & min. No. of poles. • 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. • In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load • Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months |
|-------|---|

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 8.0 | EC002638 | ETIM 9.0 | EC002638 |
| ETIM 10.0 | EC002638 | ECLASS 14.0 | 27-46-02-02 |
| ECLASS 15.0 | 27-46-02-02 | | |

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Drawings

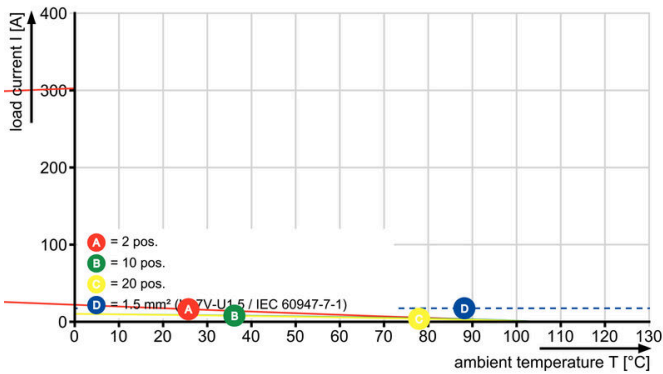
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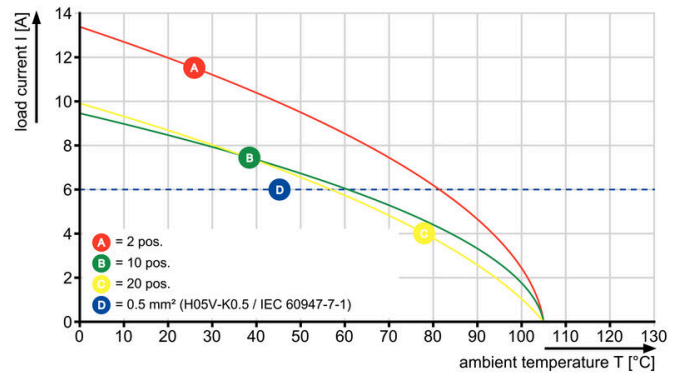
CPS 3.81/./90 - CH 3.81/./90G



CPS 3.81/./90 - CH 3.81/./90G



CPS 3.81/./90 - CH 3.81/./180G



CPS 3.81/./90 - CH 3.81/./180G

