

CPS 3.81/20/180F SN GN BX

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

www.weidmueller.com



General ordering data

Order No.	2642840000
Type	CPS 3.81/20/180F SN GN BX
GTIN (EAN)	4050118644135
Qty.	48 pc(s).
Product data	IEC: 320 V / 8 A / 0.2 - 1.5 mm ² UL: 300 V / 8 A / AWG 30 - AWG 16
Packaging	Box

Creation date April 16, 2021 6:11:40 AM CEST

Catalogue status 09.04.2021 / We reserve the right to make technical changes.

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Technical data**Dimensions and weights**

Net weight 15.8 g

System Parameters

Product family		Type of connection	
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)	0.15 inch	Conductor outlet direction	180°
Number of poles	20	L1 in mm	72.39 mm
L1 in inches	2.85 inch	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	150	Plugging force/pole, max.	1 N
Pulling force/pole, max.	1 N		

Material data

Insulating material		Colour	
Insulating material	PA	Colour	Pale green
Colour chart (similar)	RAL 6021	Insulating material group	I
Insulation strength	500 MΩ	UL 94 flammability rating	V-0
Contact base material	Copper alloy	Contact material	Copper 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.		Clamping range, max.	
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

Rated data acc. to IEC

Rated current, min. number of poles (Tu=20°C)		Rated voltage for surge voltage class / pollution degree II/2	
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)		Rated current (Use group B / 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

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Technical data

Rated data acc. to UL 1059

Institute (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 0

VPE width 0

VPE height 0

Classifications

ETIM 6.0 EC002638

ETIM 7.0 EC002638

ECLASS 9.0 27-44-03-09

ECLASS 9.1 27-44-03-09

ECLASS 10.0 27-44-03-09

ECLASS 11.0 27-46-02-02

Important note

Notes

- 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.
- 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 E60693

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Brochure/Catalogue [Catalogues in PDF-format](#)

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Drawings

