

CPS 3.81/03/90F SN GN BX

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

www.weidmueller.com



General ordering data

Order No.	2642480000
Type	CPS 3.81/03/90F SN GN BX
GTIN (EAN)	4050118644494
Qty.	180 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 December 4, 2023 11:08:55 AM CET

Catalogue status 24.11.2023 / We reserve the right to make technical changes.

CPS 3.81/03/90F SN GN BX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Dimensions and weights

Net weight	3.17 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	90°
Number of poles	3	L1 in mm	7.62 mm
L1 in inches	0.3 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	25	Plugging force/pole, max.	10 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
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.		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 (T _u =20°C)		Rated voltage for surge voltage class / pollution degree II/2	
Rated current, min. number of poles (T _u =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

Creation date December 4, 2023 11:08:55 AM CET

Catalogue status 24.11.2023 / We reserve the right to make technical changes.

2

CPS 3.81/03/90F SN GN BX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

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	169 mm
VPE width	134 mm	VPE height	52 mm

Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ETIM 9.0	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
ECLASS 12.0	27-46-02-02	ECLASS 13.0	27460202

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	d5655e4a-7bb0-47c8-bd67-25d5021f9ded

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.
- 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

Approvals

Approvals



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

Creation date December 4, 2023 11:08:55 AM CET

Catalogue status 24.11.2023 / We reserve the right to make technical changes.

Data sheet

CPS 3.81/03/90F SN GN BX

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

www.weidmueller.com

Technical data

Downloads

Catalogues

[Catalogues in PDF-format](#)

CPS 3.81/03/90F SN GN BX

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

www.weidmueller.com

Drawings

