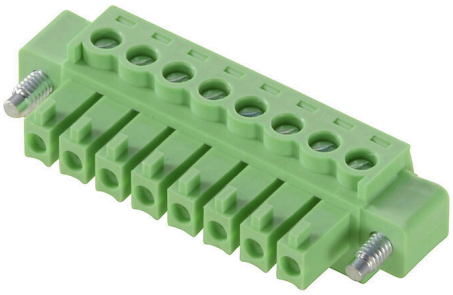
Data sheet

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 items
Product data	IEC: 320 V / 8 A / 0.2 - 1.5 mm² UL: 300 V / 8 A / AWG 30 - AWG 16
Packaging	Box

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Technical data

Approvals

Approvals	cULus
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	180°
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.	12 N
Pulling force/pole, max.	12 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	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.	0.2 mm²	Clamping range, max.	1.5 mm²
Wire connection cross section AWG, min.	AWG 30	Wire connection cross section AWG, max.	AWG 16
Solid, min. H05(07) V-U	0.2 mm²	Solid, max. H05(07) V-U	1.5 mm²
Stranded, min. H07V-R	0.05 mm²	Stranded, max. H07V-R	1.5 mm²
Flexible, min. H05(07) V-K	0.2 mm²	Flexible, max. H05(07) V-K	1 mm²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.2 mm²	w. plastic collar ferrule, DIN 46228 pt 4, max.	0.75 mm²
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 mm²	w. wire end ferrule, DIN 46228 pt 1, max.	0.75 mm²

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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	27.00 mm

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

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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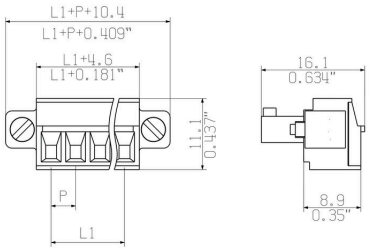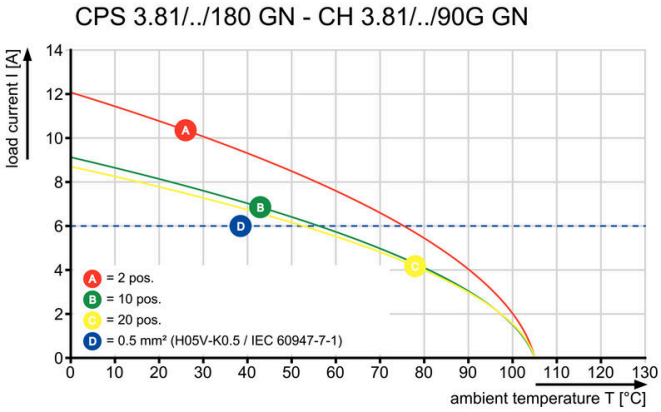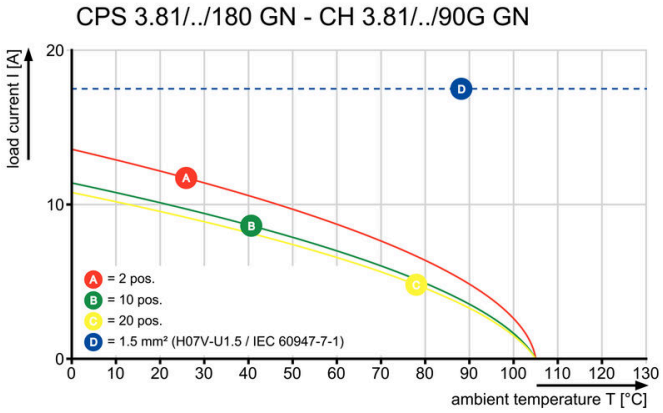
Drawings