

Art.Nr. 10012769

DC-GENERATOR JUNCTION BOX | GAK-enwitec-S-1000-2x4(2x)S-X-Y-PC-1.1

enwitec electronic GmbH
Scherrwies 2 | 84329 Wurmansquick
Mail info@enwitec.eu
www.enwitec.eu

All values in [mm]

Dimensions

Fastening points

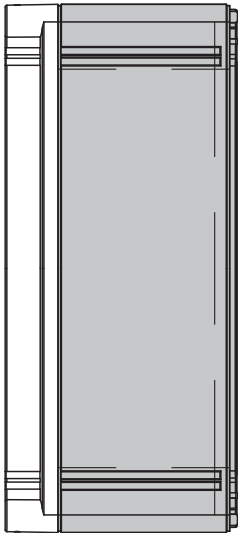
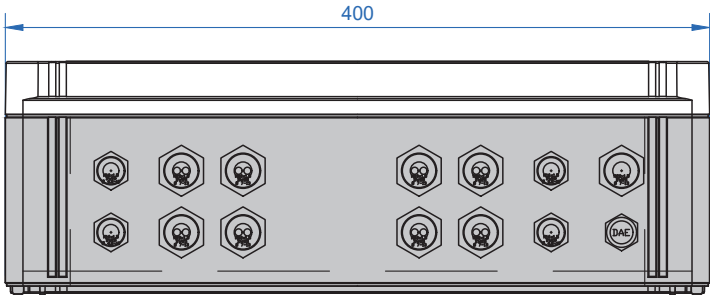
„blue“
„orange“

Inner construction as well as choice of components may differ within the variants!

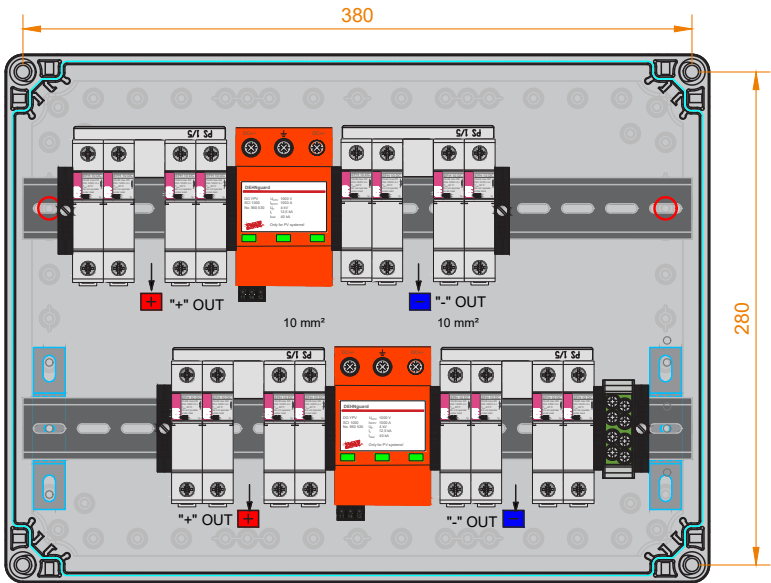
Minimum distances

top	200
bottom	200
lateral	100
front	800

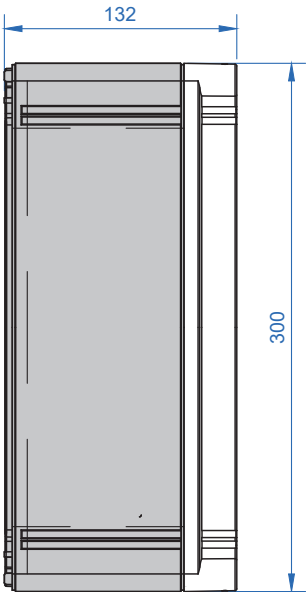
bottom view



right side view



front view



left side view

SCOPE OF DELIVERY

Quantity	Designation	Quantity	Designation
1	Installation instructions standard	4	Multiple seal MFD20
4	Cable gland M16 incl. locknut	1	Pressure compensation element M12 incl. locknut
9	Cable gland M20 incl. locknut		

Status: October 2020

10012769_datasheet_GAK-enwitec-S-1000-2x4(2x)S-X-Y-PC-1.1_2024_02_14

The text and illustrations correspond to the technical status at the time of printing, subject to change without notice. Despite careful editing, all information is without guarantee. Liability is excluded. ©enwitec electronic GmbH

Art.Nr. 10012769

DC-GENERATOR JUNCTION BOX | GAK-enwitec-S-1000-2x4(2x)S-X-Y-PC-1.1

enwitec electronic GmbH
Scherrwies 2 | 84329 Wurmannsquick
Mail info@enwitec.eu
www.enwitec.eu

TECHNICAL DATA

NOMINAL VALUES (Grid connection)

• applicable / - not applicable

Rated insulation voltage U_i	[VDC]	1000
Rated operating voltage U_e	[VDC]	1000
Rated current $I_{nA} (= \sum I_{SC\ STC})$	[ADC]	48
Dimensioning value* $I_{SC\ MAX} (= \sum I_{SC\ STC} \times 1,25)$	[ADC]	60
Number of isolated MPP inputs		2
Max. number of PV strings IN/OUT		8/4

PER STRING

Rated current $I_{nA} (= \sum I_{SC\ STC})$	[ADC]	12
Dimensioning value* $I_{SC\ MAX} (= I_{SC\ STC} \times 1,25)$	[ADC]	15

OVERVOLTAGE PROTECTION

Test category acc. to EN 61643-11 (Typ)		II/C
Max. permissible continuous voltage U_{cpv}	[VDC]	1000
Only type 1: impulse current max. I_{imp} 10/350	[kA]	-

INPUT (TO THE PV-GENERATOR)

<u>Cable entry</u>		
Cable glands (EN 62444)		M20 + multiple seal
Clamping range (from-to)	[Ømm]	5 - 6,5
<u>Connections</u>		
Connection type		screw terminal
Stripping length	[mm]	12
Tightening torque	[Nm]	2,2
<u>Wire cross-section (from-to)</u>		
Cu-fine stranded with wire ferrule	[mm ²]	1 - 16
Cu - fine stranded	[mm ²]	-
Cu - solid	[mm ²]	1 - 25

* The dimensioning value $I_{SC\ MAX}$ acc. to VDE 0100-712:2016-10, implies the factor 1.25 for $I_{SC\ STC}$ of the PV module, or of the PV string.

Art.Nr. 10012769

DC-GENERATOR JUNCTION BOX | GAK-enwitec-S-1000-2x4(2x)S-X-Y-PC-1.1

enwitec electronic GmbH
Scherrwies 2 | 84329 Wurmanssquick
Mail info@enwitec.eu
www.enwitec.eu

OUTPUT (TO THE PV-INVERTER)

• applicable / - not applicable

<u>Cable entry</u>		
Cable glands (EN 62444)		M16
Clamping range (from-to)	[Ømm]	5 - 10
<u>Connections</u>		
Connection type		screw terminal
Stripping length	[mm]	13 - 15
Tightening torque	[Nm]	
<u>Wire cross-section (from-to)</u>		
Cu-fine stranded with wire ferrule	[mm²]	1 - 16
Cu-fine stranded	[mm²]	-
Cu-solid	[mm²]	1 - 25

EARTH CONNECTION

<u>Cable entry</u>		
Cable glands (EN 62444)	[Ømm]	M20
Clamping range (from-to)	[Ømm]	7 - 13
<u>Connections</u>		
Connection type		screw terminal
Stripping length	[mm]	19
Tightening torque	[Nm]	2,5
<u>Wire cross-section (from-to)</u>		
Cu-fine stranded with wire ferrule	[mm²]	1,5 - 16
Cu-fine stranded	[mm²]	-
Cu-solid or stranded	[mm²]	2,5 - 25

Art.Nr. 10012769

DC-GENERATOR JUNCTION BOX | GAK-enwitec-S-1000-2x4(2x)S-X-Y-PC-1.1

enwitec electronic GmbH
Scherrwies 2 | 84329 Wurmannsquick
Mail info@enwitec.eu
www.enwitec.eu

TECHNICAL DATA

GENERAL DATA

• applicable / - not applicable

Dimensions WxHxD (without cable glands)	[mm]	448 x 432 x 161
Weight, approx.	[kg]	2,4
Operating temperature range	[°C]	-25...+35
Temperature - transport/storageg (24h 70°C)	[°C]	-25...+35
Humidity - condensing allowed	•/-	•
Humidity - permitted range	[%]	5...95
Max. altitude above sea level	[m]	2000
Protection class IP (EN 60529)		65
Outdoor suitability (protected area)	•/-	•
Protection against electric shock (EN 61140)		II
Case material		polycarbonat
RoHS-conformity (2011/65/EU)	•/-	•
Case colour		RAL 7035
Cover		hinged door
Mounting method		wall mounting
Locking system		screw cover

MISCELLANEOUS

Customs tariff number	85371098
-----------------------	----------

Art.Nr. 10012769

DC-GENERATOR JUNCTION BOX | GAK-enwitec-S-1000-2x4(2x)S-X-Y-PC-1.1

enwitec electronic GmbH
Scherrwies 2 | 84329 Wurmanssquick
Mail info@enwitec.eu
www.enwitec.eu

EC DECLARATION OF CONFORMITY

Das Produkt, designation: **GAK-enwitec-S-1000-2x4(2x)S-X-Y-PC-1.1**

article number: **10012769**

manufacturer: **enwitec electronic GmbH
Scherrwies 2
84329 Rogglfing**

description: **Generator junction box**

to which this declaration relates, is in conformity to the following standards or normative documents:

EN 61439-1	Low-voltage switchgear and controlgear assemblies
EN 61439-2	Power switchgear and controlgear assemblies
IEC 60364-7-712	Solar photovoltaic (PV) power supply systems
EN 62305-3 Supplement 5	Lightning and overvoltage protection for PV power supply systems

and is in accordance with the provisions of the following EC-directives:

Low-voltage directive 2014/35/EU
Restriction of Hazardous Substances Directive 2011/65/EU (RoHS)

Year of affixing CE-marking: **2017**

Date of issue: **24.10.2017**

enwitec electronic GmbH



Name / Signature

Johann Wimmer
CEO