

Art.Nr. 10014330

DC-GENERATOR JUNCTION BOX | GAK-enwitec-S-1000-3R-X-BC-PC-1.0

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

All values in [mm]

Dimensions

Fastening points

„blue“

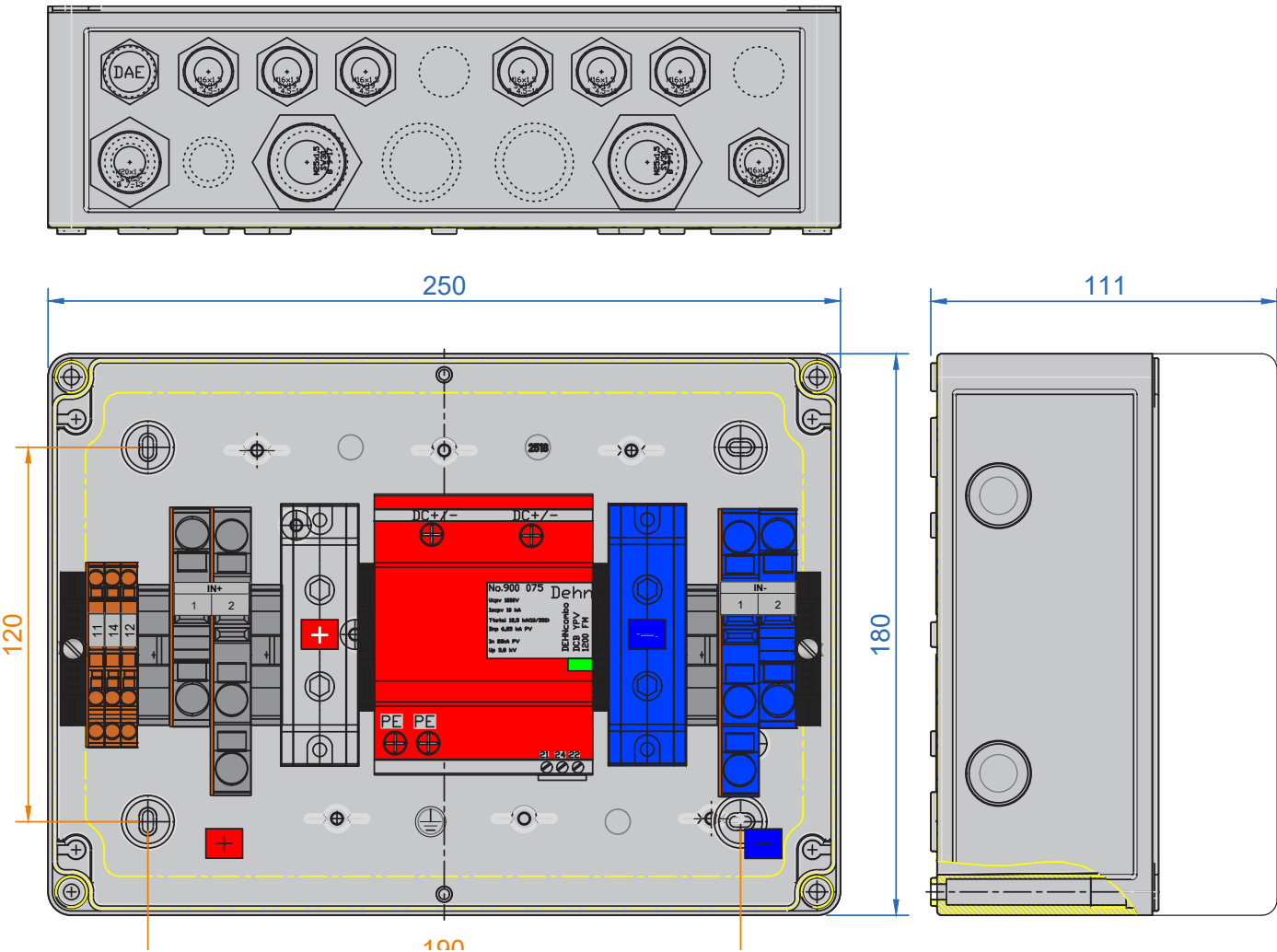
„orange“

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

Minimum distances

top	200
bottom	200
lateral	100
front	800

unten



SCOPE OF DELIVERY

Quantity	Designation	Quantity	Designation
1	Installation instructions standard	1	Cable gland M20 incl. locknut
1	Cable gland M12 incl. Locknut	1	Cable gland M25 incl. Locknut
7	Cable gland M16 incl. Locknut	1	Pressure compensation element

Status: January 2023

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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]	60
Dimensioning value* $I_{SC\ MAX} (= \sum I_{SC\ STC} \times 1,25)$	[ADC]	75
Number of isolated MPP inputs		1
Max. number of PV strings IN/OUT		3/3

PER STRING

Rated current $I_{nA} (= \sum I_{SC\ STC})$	[ADC]	20
Dimensioning value* $I_{SC\ MAX} (= I_{SC\ STC} \times 1,25)$	[ADC]	25

OVERVOLTAGE PROTECTION

Test category acc. to EN 61643-11 (Typ)		I+II/BC
Max. permissible continuous voltage U_{cpv}	[VDC]	1000
Only type 1: impulse current max. I_{imp} 10/350	[kA]	6,25

INPUT (TO THE PV-GENERATOR)

<u>Cable entry</u>		
Cable glands (EN 62444)		M16
Clamping range (from-to)	[Ømm]	4,5 - 10
<u>Connections</u>		
Connection type		push-in cage clamp
Stripping length	[mm]	18 - 20
<u>Wire cross-section (from-to)</u>		
Cu-fine stranded with wire ferrule	[mm ²]	0,5 - 16
Cu - fine stranded	[mm ²]	0,5 - 25
Cu - solid	[mm ²]	0,5 - 16

* 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.

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OUTPUT (TO THE PV-INVERTER)

• applicable / - not applicable

<u>Cable entry</u>		
Cable glands (EN 62444)		M25
Clamping range (from-to)	[Ømm]	9 - 17
<u>Connections</u>		
Connection type		Screw terminal
Stripping length	[mm]	15
Tightening torque	[Nm]	1,5 (1,5 - 2,5 mm ²) 5 (4 - 10 mm ²) 10 (16 - 50 mm ²)
<u>Wire cross-section (from-to)</u>		
Cu-fine stranded with wire ferrule	[mm ²]	2,5 - 35
Cu-solid or stranded	[mm ²]	1,5 - 50
Al - round/solid or stranded	[mm ²]	1,5 - 50
Al sector/solid or stranded	[mm ²]	1,5 - 50

EARTH CONNECTION

<u>Cable entry</u>		
Cable glands (EN 62444)	[Ømm]	M20
Clamping range (from-to)	[Ømm]	6 - 13
<u>Connections</u>		
Connection type		Screw terminal
Stripping length	[mm]	12
Tightening torque	[Nm]	4
<u>Wire cross-section (from-to)</u>		
Cu-fine stranded	[mm ²]	1,5 - 25
Cu-solid or stranded	[mm ²]	1,5 - 25

When using aluminium conductors, the processing instructions of the terminal manufacturer must be observed.

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TECHNICAL DATA

COMMUNICATION • applicable / - not applicable

Interface		
Type		remote indication contact
Cable entry		
Cable glands (EN 62444)		M16
Clamping range (from-to)	[Ømm]	4,5 - 10
Connections		
Connection type		push-in cage clamp
Stripping length	[mm]	10 - 12
Wire cross-section (from-to)		
Cu-fine stranded with wire ferrule	[mm ²]	0,25 - 2,5
Cu-fine stranded	[mm ²]	0,25 - 4
Cu-solid	[mm ²]	0,25 - 4

GENERAL DATA

Dimensions WxHxD (without cable glands)	[mm]	250 x 180 x 111
Weight, approx.	[kg]	2,3
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		transparent
Mounting method		wall mounting
Locking system		screw cover

MISCELLANEOUS

Customs tariff number	85371098
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 EC DECLARATION OF CONFORMITY

Das Produkt,	designation:	GAK-enwitec-S-1000-3R-X-BC-PC-1.0
	article number:	10014330
	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: 2019

Date of issue: 03.09.2019

enwitec electronic GmbH



Name / Signature

Johann Wimmer
CEO