

DATA SHEET

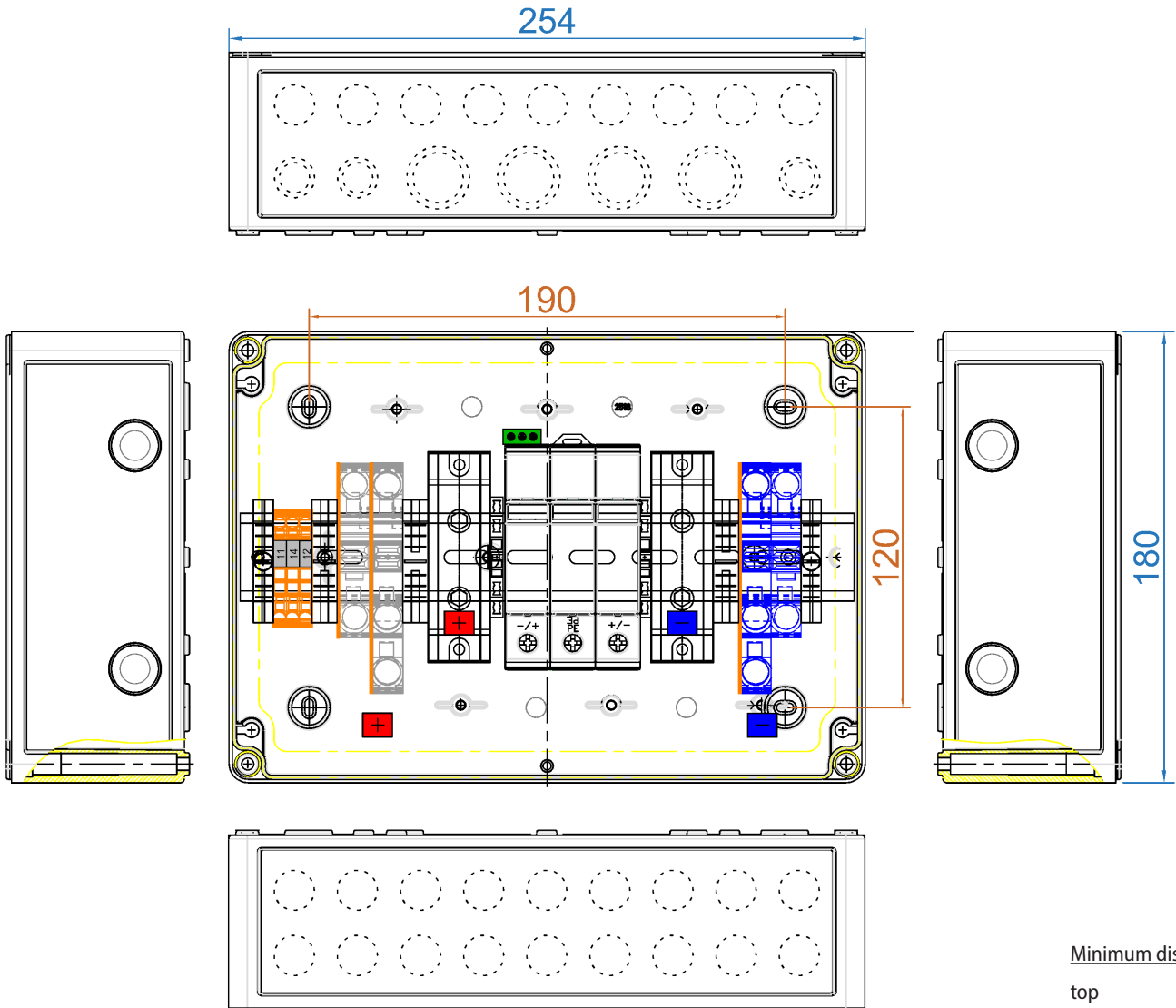
DC Generator Junction Box

GAK-S-1000-3R-X-BC-PC-1.2

Art.No. 10013926

All values in [mm]
Dimensions
Fastening points

„blue“
„orange“



Minimum distances

top	200
bottom	200
lateral	100
front	800

SCOPE OF DELIVERY

Quantity	Designation
1	Installation instructions GAK Standard
2	Cable gland M25 incl. locknut
1	Cable gland M20 incl. locknut

Quantity	Designation
7	Cable gland M16 incl. locknut
1	Pressure equalising valve M12 incl. locknut

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TECHNICAL DATA

• applicable / - not applicable

NOMINAL VALUES

Rated insulation voltage U_i	[VDC]	1000
Number of isolated MPP inputs		1
Rated operating voltage U_e	[VDC]	1000
Rated current I_{na} ($= \sum I_{SCSTC}$)	[ADC]	60
Dimensioning value* I_{SCMAX} ($= \sum I_{SCSTC} \times 1,25$)	[ADC]	75
Max. number of PV strings IN/OUT		3/3

PER STRING

Rated current I_{na} ($= \sum I_{SCSTC}$)	[ADC]	20
Dimensioning value* I_{SCMAX} ($= I_{SCSTC} \times 1,25$)	[ADC]	25
Fuse in „+“ potential	•/-	-
Fuse in „-“ potential	•/-	-

OVERVOLTAGE PROTECTION

Test category acc. to EN 61643-11 (Type)		I + II - BC
Max. permissible continuous voltage U_{cpv}	[VDC]	1000
Only type 1: impulse current max. I_{imp} 10/350	[kA]	5 per pole

EARTH CONNECTION

<u>Cable entry</u>		
Cable glands (EN 50262)		M20
Clamping range (from-to)	[Ømm]	6 - 13
<u>Connections</u>		
Connection type		screw terminal
Stripping length	[mm]	12
Tightening torque	[Nm]	3
<u>Wire cross-section (from-to)</u>		
Cu-fine stranded with wire ferrule	[mm ²]	max. 25
Cu-solid or stranded	[mm ²]	max. 25

INPUT (TO THE PV-GENERATOR)

<u>Cable entry</u>		
Cable glands (EN 50262)		M16
Clamping range (from-to)	[Ømm]	4,5 - 10
<u>Connections</u>		
Connection type		spring-loaded terminal
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 or stranded	[mm ²]	0,5 - 16

OUTPUT (TO THE PV-INVERTER)

<u>Cable entry</u>		
Cable glands (EN 50262)		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 - 2,5mm ²) 5 (4 - 10mm ²) 10 (16 - 50mm 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
Alu - round/single wire #	[mm ²]	1,5 - 50
Alu - round/stranded #	[mm ²]	1,5 - 50
Alu - sector/single wire #	[mm ²]	1,5 - 50
Alu - sector/stranded #	[mm ²]	1,5 - 50

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

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

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TECHNICAL DATA

• applicable / - not applicable

COMMUNICATION

<u>Cable entry</u>		
Cable glands (EN 50262)		M16
Clamping range (from-to)	[Ømm]	4,5 - 10
<u>Connections</u>		
Connection type		spring-loaded terminal
Stripping length	[mm]	10 - 12
<u>Wire cross-section (from-to)</u>		
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]	254 x 180 x 111
Weight, approx.	[kg]	2,3
Operating temperature range	[°C]	-25...+35
Temperature - transport/storage (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		polycarbonate
RoHS-conformity (2011/65/EU)	•/-	•
Case colour		RAL7035
Cover		transparent
Mounting method		wall mounting
Locking system		screw cover

MISCELLANEOUS

Customs tariff number		85371098
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EC DECLARATION OF CONFORMITY

The product, designation: **GAK-S-1000-3R-X-BC-PC-1.2**

article number: **10013926**

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

description: **Generator Junction Box**

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

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: **29.03.2019**

enwitec electronic GmbH



Name / Signature

Johann Wimmer
CEO