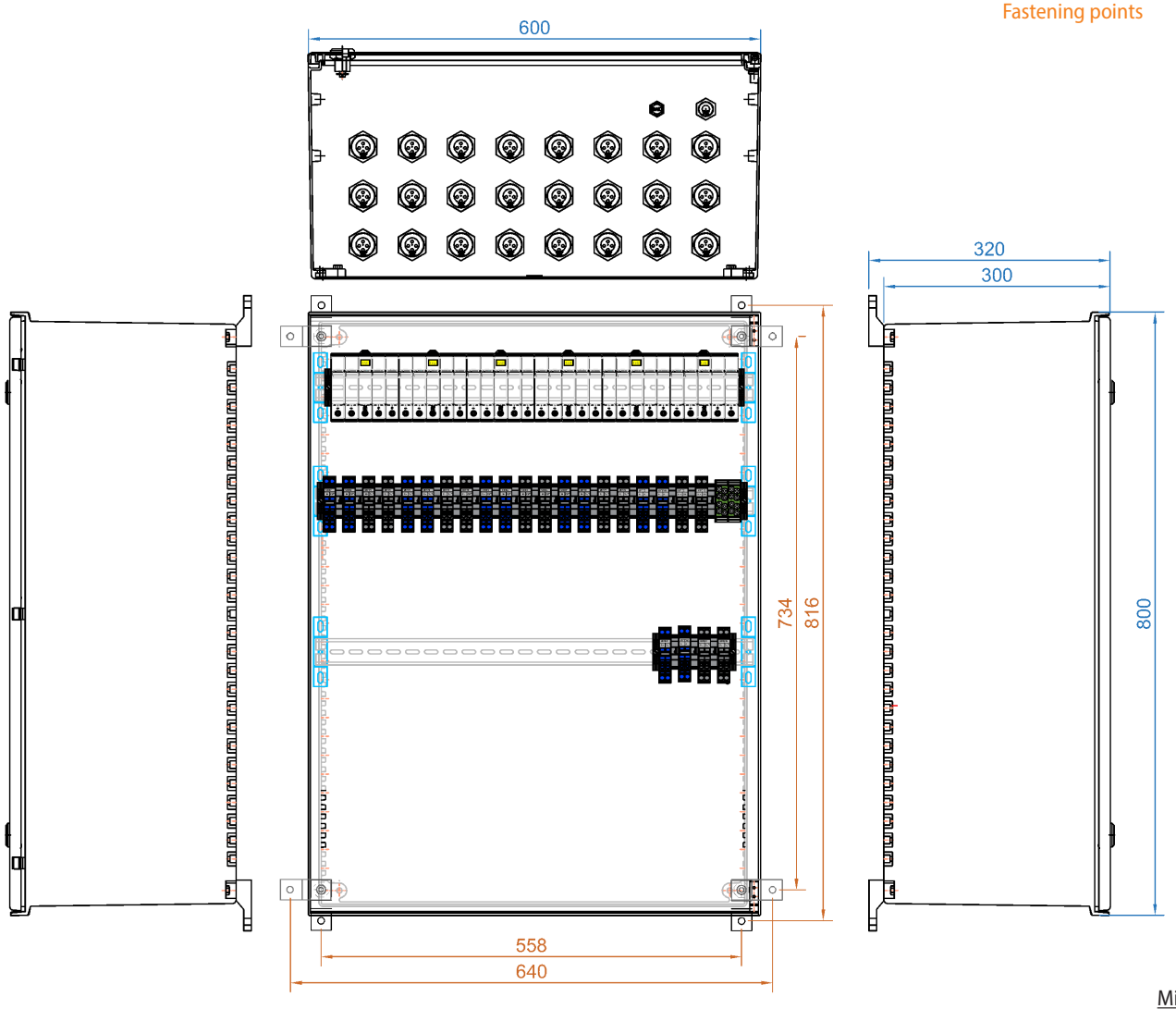
DATA SHEET

Generator Junction Box

GAK-S-1000-12x2R-X-BC-PES-1.0

Art.No. 10016461

All values in [mm]
Dimensions „blue“
Fastening points „orange“



Minimum distances

top	200
bottom	200
lateral	100
front	800

SCOPE OF DELIVERY

Quantity	Designation
1	Installation instructions standard
1	Wall mounting brackets - kit
24	Cable gland M32 incl. multiple seal

Quantity	Designation
24	Locknut M32
1	Cable gland M20 incl. locknut
1	Pressure equalisation valve M12 incl. locknut

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Status: April 2022

TECHNICAL DATA

• applicable / - not applicable

NOMINAL VALUES		
Rated insulation voltage U_i	[VDC]	1000
Number of isolated MPP inputs		12
Rated operating voltage U_e	[VDC]	1000
Rated current I_{nA} (= $\Sigma I_{SC\ STC}$)	[ADC]	384
Dimensioning value* $I_{SC\ MAX}$ (=$\Sigma I_{SC\ STC}$ x 1,25)	[ADC]	480
Max. number of PV strings IN/OUT		24/24

PER STRING		
Rated current I_{nA} (= $\Sigma I_{SC\ STC}$)	[ADC]	16
Dimensioning value* $I_{SC\ MAX}$ (=$I_{SC\ STC}$ x 1,25)	[ADC]	20

OVERVOLTAGE PROTECTION		
Test category acc. to EN 61643-11 (Typ)		I+II
Max. permissible continous voltage U_{cpv}	[VDC]	1000
Only type 1: impulse current max. Iimp 10/350	[kA]	5

INPUT (TO THE PV-GENERATOR)		
Cable entry		
Cable glands (EN 50262)		M32 with multiple seal
Clamping range (from-to)	[Ømm]	4 x 5 - 7
Connections		
Connection type		spring load terminal
Stripping length	[mm]	13 - 15
Wire cross-section (from-to)		
Cu-fine stranded with wire ferrule	[mm²]	0,5 - 6
Cu-fine stranded	[mm²]	0,5 - 10
Cu-solid or stranded	[mm²]	0,5 - 10

OUTPUT (TO THE PV-INVERTER)		
Cable entry		
Cable glands (EN 50262)		M32 with multiple seal
Clamping range (from-to)	[Ømm]	4 x 5 - 7
Connections		
Connection type		spring load terminal
Stripping length	[mm]	13 - 15
Wire cross-section (from-to)		
Cu-fine stranded with wire ferrule	[mm²]	0,5 - 6
Cu-fine stranded	[mm²]	0,5 - 10
Cu-solid or stranded	[mm²]	0,5 - 10

EARTH CONNECTION		
Cable entry		
Cable glands (EN 50262)		M20
Clamping range (from-to)	[Ømm]	6 - 13
Connections		
Connection type		screw terminal
Stripping length	[mm]	19
Tightening torque	[Nm]	2,5
Wire cross-section (from-to)		
Cu-fine stranded with wire ferrule	[mm²]	1,5 - 16
Cu-solid or stranded	[mm²]	2,5 - 25

* The dimensioning value ISC MAX, acc. to VDE 0100-712:2016-10, implies the factor 1.25 for ISC STC of the PV module, or of the PV string.

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TECHNICAL DATA

• applicable / - not applicable

GENERAL DATA		
Dimensions WxHxD (without cable glands)	[mm]	600 x 800 x 300
Weight, approx.	[kg]	18,5
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		Polyester
RoHS-conformity (2011/65/EU)	•/-	•
Case colour		RAL7035
Cover		hinged cover
Mounting method		wall mounting
Locking system		dual-bit lock

MISCELLANEOUS	
Customs tariff number	85371098

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EC DECLARATION OF CONFORMITY

The product,	designation:	**GAK-S-1000-12x2R-X-BC-PES-1.0**
	article number:	**10016461**
	manufacturer:	**enwitec electronic GmbH & Co. KG** **Scherrwies 2** **84329 Wurmannsquick** **Germany**
	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	**Lightning and overvoltage protection for PV power supply systems**
EN 62305-3 supplement 5	**Lightning and overvoltage protection for photovoltaic 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: **2022**

Date of issue: **24.02.2022**

enwitec electronic GmbH & Co. KG

Name / Signature

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CEO