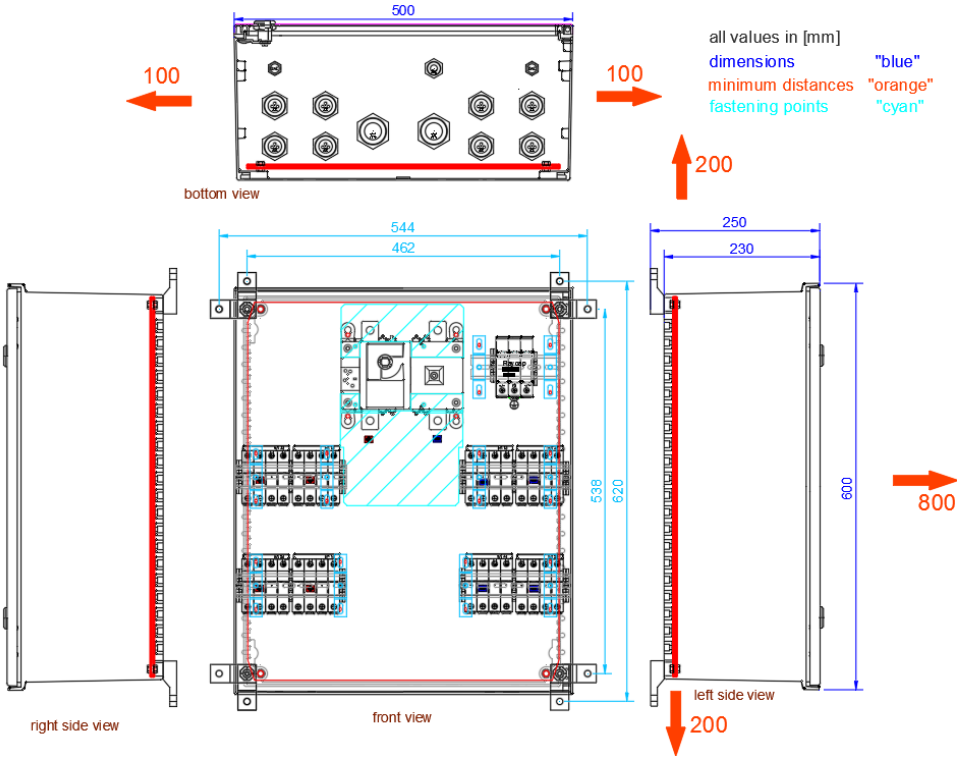
Data sheet Rev1.1

DC - generator junction box

enwitec-order-number	10013315
customer-article-number	
type designation	GAK-enwitec-S-1000-16S(x2)xx-T250-Y-PES-1.1



scope of delivery			
description	order-nr.	pcs	comment
General installation instructions GAK	10011928	1	
Cable Gland M32x1.5 incl MFD 32/04/070	10011347	8	
Locknut M32x1.5	10000724	8	
Cable Gland M40x1.5	10000740	2	
Locknut M40x1.5	10000725	2	
Cable Gland M20x1.5	10000737	1	
Lock Nut M20x1.5	10000722	1	
Pressure compensation element DAE M12x1.5	10001971	2	
Lock Nut M12x1.5	10001476	2	

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technical specification

Rated insulation voltage U_i	[VDC]	1000	
Number of isolated MPP-input(s)	[n]	**1**	
Rated operating voltage U_e	[VDC]	1000	
Rated operating current I_{nA} (= ∑ $I_{SC\,STC}$)	[ADC]	192	
Dimensioning value* $I_{SC\,MAX}$ (=∑ $I_{SC\,STC}$ x 1,25)	[ADC]	250	
Max. number of PV-strings	[n]	16	
Pro string			
Rated operating current I_{nc} (=$I_{SC\,STC}$)	[ADC]	12	
Dimensioning value* $I_{SC\,MAX}$ (=$I_{SC\,STC}$ x 1,25)	[ADC]	15	
Fuse in the "+" potential	•/-	•	
Fuse in the "-" potential	•/-	•	
Fuse inserted at factory setting	•/-	-	
Rated current value at factory setting	[A]	-	
load circuit breaker			
thermal current I_{th} at 60°C	[A]	250	
utilization category acc. DIN EN 60947-3		DC-21B	
manufacturer and type designation		SIRCO PV 500V/P 2X250A	
rated operating current per string I_{nc}	[ADC]	10	
string fuse in the "+" potential	•/-	•	
string fuse in the "-" potential	•/-	•	
fuse is inserted at factory setting	•/-	-	
rated current value at factory setting	[A]	-	
surge protective device (SPD)			
test category acc. EN 61643-11 (type)		2	
max. continuous operating voltage U_{cpv}	[VDC]	1000	
only type 1: impulse current max. I_{imp} 10/350	[kA]	-	
input (for pv-generator)			
cable entry			
cable glands (EN 50262)	•/-	•	
clamping range	[Ømm]	28x 5-7	
terminals			
"+" potential / "-" potential		+plus	-minus
screw terminal/spring clamp		Screw	Screw
insulation stripping length	[mm]	12	12
tightening torque	[Nm]	2.2	2.2
appropriate conductor material	Al/Cu	Cu	Cu
wire cross section			
Cu-finely stranded with end sleeve	[mm^2]	0.75…16	0.75…16
Cu-finely stranded without end sleeve	[mm^2]	-	-
Cu-solid or stranded	[mm^2]	1…16	1…16
output (for pv-inverter)			
cable entry			
cable glands (EN 50262)	•/-	•	
clamping range	[Ømm]	2x 16-28	

terminals		
screw terminal/spring clamp		M10 Screw connection
insulation stripping length	[mm]	-
tightening torque	[Nm]	26
appropriate conductor material	Al/Cu	Al**/Cu
wire cross section		
Cu-finely stranded with end sleeve	[mm^2]	Max. 120
Cu-finely stranded without end sleeve	[mm^2]	Max. 120
Cu-solid or stranded	[mm^2]	Max. 120
Alu - round, solid	[mm^2]	Max. 120
Alu - round, stranded	[mm^2]	Max. 120
Alu - sector, solid	[mm^2]	Max. 120
Alu - sector, stranded	[mm^2]	Max. 120
connection to ground		
cable entry		
cable glands (EN 50262)	•/-	•
clamping range	[Ømm]	6-13
terminals		
screw terminal/spring clamp		Screw
insulation stripping length	[mm]	19
tightening torque	[Nm]	2.5
appropriate conductor material	Al/Cu	Cu
wire cross section		
Cu-finely stranded with end sleeve	[mm^2]	Max. 16
Cu-finely stranded without end sleeve	[mm^2]	-
Cu-solid or stranded	[mm^2]	Max. 16
Alu - round, solid	[mm^2]	-
Alu - round, stranded	[mm^2]	-
Alu - sector, solid	[mm^2]	-
Alu - sector, stranded	[mm^2]	-

**For aluminum cables, bimetal cable lugs must be used! Bimetallic cable lugs are not included

When connecting aluminum conductors, the usual processing guidelines must be observed! The contact surfaces of the aluminum conductors must be cleaned, brushed and treated with suitable grease.

*

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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general data		
dimensions (WxHxD)	[mm]	500 x 600 x 230
weight	[kg]	-
operating temperature range	[°C]	-25°C - + 35
derating above temperature	[°C]	-
transport + storage temperature	[°C]	-25°C - + 35
humidity - condensing permitted	•/-	•
humidity within the range of	[%]	5....95
max. altitude above sea level NN	[m]	2000
protection class IP	(EN 60529)	65
outdoor-application permitted	•/-	-
exposure to direct weathering	•/-	-
protection against electric shock (EN 61140)		II
cabinet material		PES Polyester
RoHS-conformity (2011/65/EU)	•/-	•
colour of cabinet		similar to RAL7035
way of mounting		wall mounting
quantity of expanded clay (only ground mounting)	[l]	-
Locking system		Double bit key lock
relevant standards		
switching devices		EN 61439-1 EN 61439-2
surge/overvoltage protection		DIN EN 62305-3 supplementary sheet 5
PV power supply systems		DIN IEC 60364-7-712
miscellaneous		
customs tariff number		85371098
spare parts		order-nr.