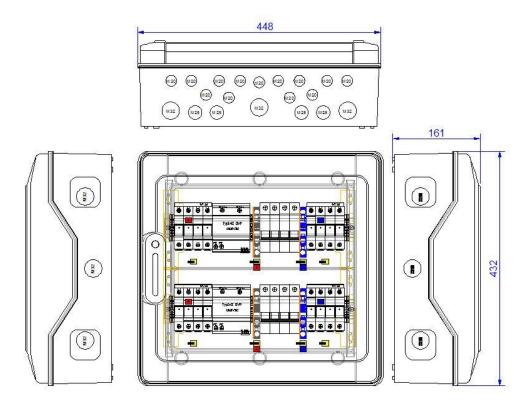
#### Data sheet Rev1.0

### DC - generator junction box



enwitec-order-number	10012887
customer-article-number	
type designation	GAK-S-1000-2x4(x2)Sxx-T50-BC-PC-1.0



scope of delivery			
description	order-nr.	pcs	comment
Cable Gland M20x1.5	10000737	9	
Locknut M20x1.5	10000722	14	
Locknut M32x1.5	10000724	1	
Sealing insert MFD 20/20/065	10007322	8	
Cable Gland M16x1.5	10000736	4	
Cable Gland reducer KRM 20/16	10008653	4	
Cable Gland reducer KRM 20/12	10008652	1	
Pressure compensation element DAE M12x1.5	10001971	1	
Cable Gland reducer KRM 32/20	10008658	1	

# Data sheet Rev1.0

## DC - generator junction box



#### technical specification

rated insulation voltage U <sub>i</sub>	[VDC]		1000		
number of isolated MPP-input(s)	[n]	1	2		
rated operating voltage $U_{\rm e}$	[VDC]	1000	1000		
rated operating current I <sub>nA</sub>	[ADC]	40	40		
max. number of PV-strings	[n]	4	4		
rated operating current per string $I_{\text{nc}}$	[ADC]	10	10		
string fuse in the "+" potential	•/-	•	•		
string fuse in the "-" potential	•/-	•	•		
fuse is inserted at factory setting	•/-	-	-		
rated current value at factory setting	[A]	-	-		
load circuit breaker					
thermal current I <sub>th</sub> at 60°C	[A]		50		
utilization category acc. DIN EN	N 60947-3		DC-221	В	
manufacturer and type designation		Noark-DC Isolator Ex9IP 4P 50A			
surge protective device (SPD)					
test category acc. EN 61643-11 (type)			1+2		
max. continuous operating voltage U <sub>cpv</sub> [VDC]		1000			
only type 1: impulse current max. I <sub>imp</sub> 10/350 [kA]		6.25 per Pol			
input (for pv-generator)					
cable entry					
cable glands (EN 50262)	•/-		•		
clamping range [Ømm]		16x 5-6.5			
PV-connectors					
PV-connectors - manufacturer/type-des	ignation		-		
terminals					
"+" potential / "-" potential		+plu	S	-minus	
screw terminal/spring clamp		Scre	W	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 <sup>2</sup> ]	0,75	16	0,7516	
Cu-finely stranded without end sleeve	[mm <sup>2</sup> ]	-		-	
Cu-solid or stranded	[mm²]	11	6	116	
output (for pv-inverter) cable entry					
cable glands (EN 50262)	•/-		•		
clamping range	[Ømm]	4x 4.5-10		10	
PV-connectors	•/-		-		
PV-connectors - manufacturer/type-des	ignation		-		

terminals		
screw terminal/spring clamp		Screw
insulation stripping length	[mm]	12
tightening torque	[Nm]	23.5
appropriate conductor material	Al/Cu	Cu
wire cross section		
Cu-finely stranded with end sleeve	e [mm²]	1035
Cu-finely stranded without end sleev	re [mm²]	-
Cu-solid or stranded	[mm <sup>2</sup> ]	1035
Alu - round, solid	[mm²]	-
Alu - round, stranded	[mm <sup>2</sup> ]	-
Alu - sector, solid	[mm <sup>2</sup> ]	-
Alu - sector, stranded	[mm <sup>2</sup> ]	-
connection to ground		
cable entry		
cable glands (EN 50262)	•/-	•
clamping range	[Ømm]	6-13
Clamping range	والاللالوا	0-13
terminals	נווווושן	0-13
, ,	נוווווקן	Screw
terminals	[mm]	
terminals screw terminal/spring clamp		Screw
terminals screw terminal/spring clamp Min. insulation stripping length	[mm]	Screw 12
terminals screw terminal/spring clamp Min. insulation stripping length tightening torque	[mm] [Nm]	Screw 12 4
terminals screw terminal/spring clamp Min. insulation stripping length tightening torque appropriate conductor material	[mm] [Nm] Al/Cu	Screw 12 4
terminals screw terminal/spring clamp Min. insulation stripping length tightening torque appropriate conductor material wire cross section	[mm] [Nm] Al/Cu e [mm²]	Screw 12 4 Cu
terminals screw terminal/spring clamp Min. insulation stripping length tightening torque appropriate conductor material wire cross section Cu-finely stranded with end sleeve	[mm] [Nm] Al/Cu e [mm²]	Screw 12 4 Cu
terminals screw terminal/spring clamp Min. insulation stripping length tightening torque appropriate conductor material wire cross section Cu-finely stranded with end sleeve Cu-finely stranded without end sleeve	[mm] [Nm] AI/Cu [mm²] re [mm²]	Screw 12 4 Cu Max. 25
terminals screw terminal/spring clamp Min. insulation stripping length tightening torque appropriate conductor material wire cross section Cu-finely stranded with end sleeve Cu-finely stranded without end sleeve Cu-solid or stranded	[mm] [Nm] Al/Cu e [mm²] re [mm²] [mm²]	Screw 12 4 Cu Max. 25 - Max. 25
terminals screw terminal/spring clamp Min. insulation stripping length tightening torque appropriate conductor material wire cross section Cu-finely stranded with end sleeve Cu-finely stranded without end sleeve Cu-solid or stranded Alu - round, solid	[mm] [Nm] Al/Cu e [mm²] re [mm²] [mm²]	Screw 12 4 Cu Max. 25 - Max. 25
terminals screw terminal/spring clamp Min. insulation stripping length tightening torque appropriate conductor material wire cross section Cu-finely stranded with end sleeve Cu-finely stranded without end sleeve Cu-solid or stranded Alu - round, solid Alu - round, stranded	[mm] [Nm] AI/Cu e [mm²] re [mm²] [mm²] [mm²]	Screw 12 4 Cu Max. 25 - Max. 25

# Data sheet Rev1.0 DC - generator junction box



general data		
dimensions (WxHxD)	[mm]	448 x 432 x 161
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	[%]	595
max. altitude above sea level NN	[m]	2000
protection class IP	(EN 60529)	65
outdoor-application permitted	•/-	-
exposure to <u>direct</u> weathering	•/-	-
protection against electric shock (EN 61140)		II
cabinet material		PC Polycarbonate
RoHS-conformity (2011/65/EU)	•/-	•
colour of cabinet		similar to RAL7035
way of mounting		wall mounting
quantity of expanded clay (only ground mounting)	[1]	-
locking system		Folding lid/ Screw 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.
Noark-DC Isolator Ex9IP 4P 50A		10011912
DG YPV SCI 1000 FM Kompakt (BC)		10010504
PV Protec BR 5/1000Y TD		10012614