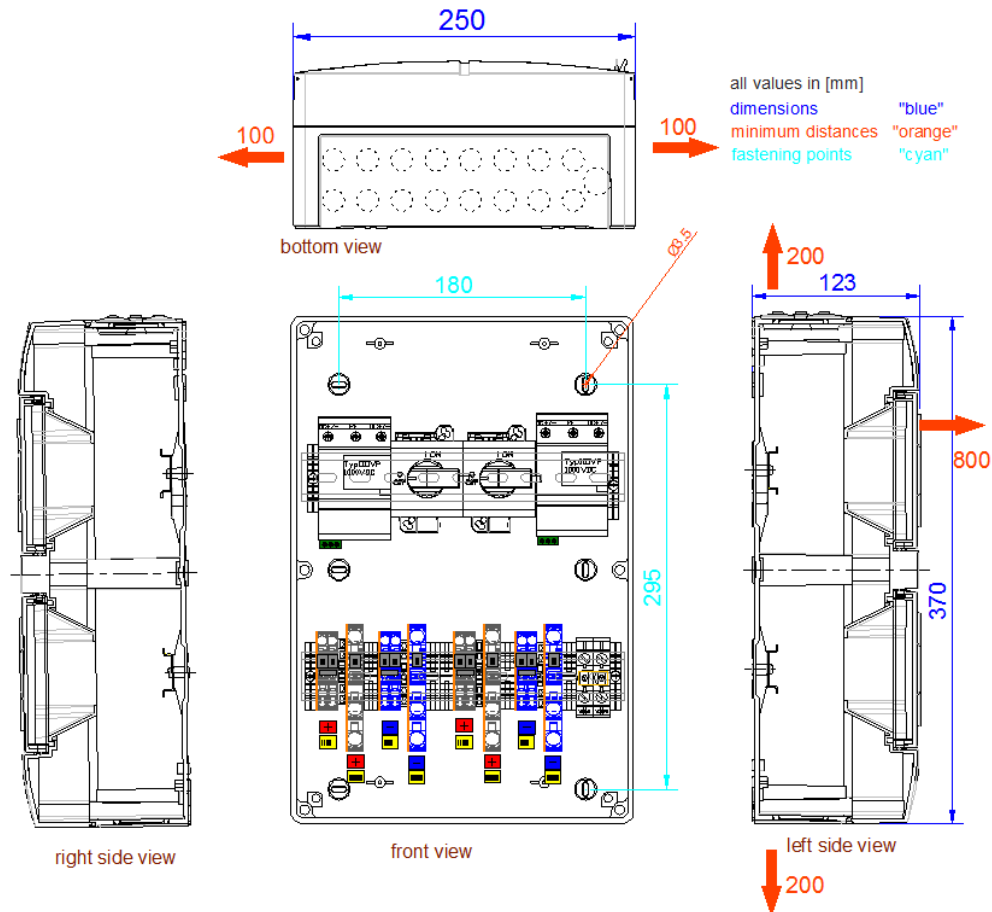


# Data sheet Rev1.1

## DC - generator junction box

enwitec-order-number	10012756
customer-article-number	
type designation	GAK-enwitec-S-1000-2x2R-T25-Y-PC-1.0



scope of delivery			
description	order-nr.	pcs	comment
Cable Gland M20x1.5	10000737	1	
Locknut M20x1.5	10000722	1	
Cable Gland M16x1.5	10000736	12	
Locknut M16x1.5	10000721	12	
Pressure compensation element	10001971	1	
Locknut M12x1.5	10001476	1	

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## DC - generator junction box

### technical specification

rated insulation voltage $U_i$	[VDC]	1000		
number of isolated MPP-input(s)	[n]	<b>1</b>	<b>2</b>	<b>3</b>
rated operating voltage $U_e$	[VDC]	1000	1000	
rated operating current $I_{nA}$	[ADC]	20	20	
max. number of PV-strings	[n]	2	2	
rated operating current per string $I_{nc}$	[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 $I_{th}$ at 60°C	[A]	25		
utilization category	acc. DIN EN 60947-3	DC-21B		
manufacturer and type designation		MERZ MDC1A-040-600		

#### 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]	8x 4,5-10		
PV-connectors	•/-	-		
PV-connectors - manufacturer/type-designation		-		

##### terminals

"+" potential / "-" potential		+plus	-minus	
screw terminal/spring clamp		Spring	Spring	
insulation stripping length	[mm]	13...15	13...15	
tightening torque	[Nm]	-	-	
appropriate conductor material	Al/Cu	Cu	Cu	

##### wire cross section

Cu-finely stranded with end sleeve	[mm <sup>2</sup> ]	from 1.5	from 1.5	
Cu-finely stranded without end sleeve	[mm <sup>2</sup> ]	0.5...10	0.5...10	
Cu-solid or stranded	[mm <sup>2</sup> ]	1...10	1...10	

#### output (for pv-inverter)

##### cable entry

cable glands (EN 50262)	•/-	•		
clamping range	[Ømm]	4x 4.5-10		
PV-connectors	•/-	-		
PV-connectors - manufacturer/type-designation		-		

##### terminals

screw terminal/spring clamp		Spring	
insulation stripping length	[mm]	18...20	
tightening torque	[Nm]	-	
appropriate conductor material	Al/Cu	Cu	
wire cross section			
Cu-finely stranded with end sleeve	[mm <sup>2</sup> ]	from 2.5	
Cu-finely stranded without end sleeve	[mm <sup>2</sup> ]	0.5...25	
Cu-solid or stranded	[mm <sup>2</sup> ]	0.5...16	
Alu - round, solid	[mm <sup>2</sup> ]	-	
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	

##### terminals

screw terminal/spring clamp		Screw	
insulation stripping length	[mm]	15	
tightening torque	[Nm]	2.5	
appropriate conductor material	Al/Cu	Cu	
wire cross section			
Cu-finely stranded with end sleeve	[mm <sup>2</sup> ]	4...16	
Cu-finely stranded without end sleeve	[mm <sup>2</sup> ]	-	
Cu-solid or stranded	[mm <sup>2</sup> ]	Solid wire 1.5...25 Stranded wire 16...25	
Alu - round, solid	[mm <sup>2</sup> ]	-	
Alu - round, stranded	[mm <sup>2</sup> ]	-	
Alu - sector, solid	[mm <sup>2</sup> ]	-	
Alu - sector, stranded	[mm <sup>2</sup> ]	-	

# Data sheet Rev1.1

## DC - generator junction box

### general data

dimensions (WxHxD)	[mm]	250 x 370 x 123
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 <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)	[I]	-
locking system		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
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### spare parts

	order-nr.
Merz MDC1A-040-600	10009572
DG YPV SCI 1000 FM Kompakt (950535)	10010313
PV Protec CR 40/1000 Y TD	10013645