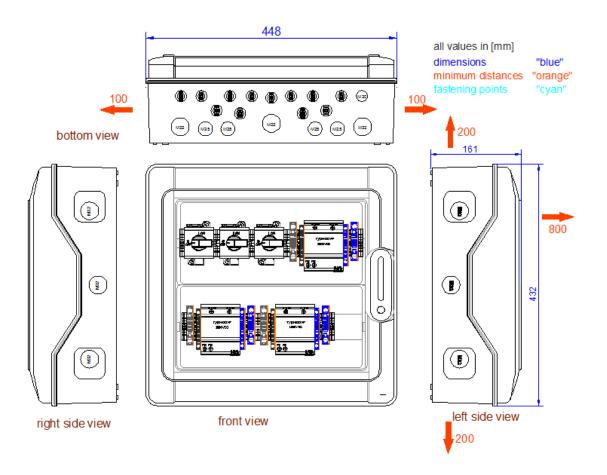
#### Data sheet Rev1.1

## DC - generator junction box



enwitec-order-number	10012879
customer-article-number	
type designation	GAK-enwitec-S-1000-3x2R-T25-BC-PC-1.0_MC4



scope of delivery			
description	order-nr.	pcs	comment
Cable Gland M20x1.5	10000737	1	
Pressure compensation element	10001971	1	
Cable Gland reducer KRM 20/12	10008652	1	
Cable Gland reducer KRM 32/20	10008658	1	
Cable Gland reducer KRM 25/16	10008655	6	
Cable Gland reducer KRM 32/25	10008659	2	
Locknut M20x1.5	10000722	1	
Locknut M25x1.5	10000723	4	
Locknut M32x1.5	10000724	3	

## Data sheet Rev1.1

## DC - generator junction box



#### technical specification

rated insulation voltage U <sub>i</sub>	[VDC]		1000	
number of isolated MPP-input(s)	[n]	1	2	3
rated operating voltage $U_{\rm e}$	[VDC]	1000	1000	1000
rated operating current I <sub>nA</sub> [ADC]		20	20	20
max. number of PV-strings [n]		2	2	2
rated operating current per string $I_{\text{nc}}$	[ADC]	10	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]		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)			1+2	
max. continuous operating voltage U <sub>CDV</sub> [VDC]			1000	
only type 1: impulse current max. I <sub>imp</sub> 10/350 [kA]		6.	25 per p	ole
input (for pv-generator)				
cable entry				
cable glands (EN 50262)	•/-		-	
clamping range	[Ømm]		-	
PV-connectors	•/-	•		
PV-connectors - manufacturer/type-design	gnation	MC PV-ADBP4-S2/6		
		MC F	V-ADSP	4-S2/6
terminals				
"+" potential / "-" potential		+plu	is ·	-minus
screw terminal/spring clamp		-		-
insulation stripping length	[mm]	-		-
tightening torque	[Nm]	-		-
appropriate conductor material	Al/Cu	-		-
wire cross section				
Cu-finely stranded with end sleeve	[mm <sup>2</sup> ]	-		-
Cu-finely stranded without end sleeve	[mm²]	-		-
Cu-solid or stranded	[mm <sup>2</sup> ]	-		-
output (for pv-inverter) cable entry				
cable glands (EN 50262)	•/-		-	
clamping range [Ømm]		-		
PV-connectors •/-		•		
PV-connectors - manufacturer/type-desi	gnation		PV-ADBP4 PV-ADSP4	

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

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general data dimensions (WxHxD)	[mm]	448 x 432 x 161
weight	[kg]	446 X 432 X 101
operating temperature range	[°C]	-25°C - + 35
derating above temperature	[°C]	-23 C - 1 33
transport + storage temperature	[°C]	-25°C - + 35
humidity - condensing permitted	[ C <sub>J</sub>	-23 C - 1 33
humidity within the range of	[%]	595
max. altitude above sea level NN	[m]	2000
protection class IP	(EN 60529)	65
outdoor-application permitted	(LIV 00329) ●/-	
	•/-	-
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.
MERZ MDC1A-040-600		10009572
DG YPV SCI 1000 FM Kompakt (BC)		10010504
PV Protec BR 5/1000Y TD		10012614