DC generator terminal box

Solarconnect 1500

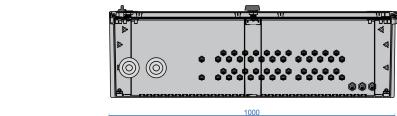
Scherrwies 2 | 84329 Wurmannsquick info@enwitec.eu

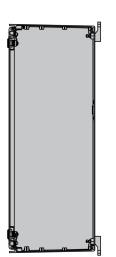
All values in [mm]
Dimensions "blue"

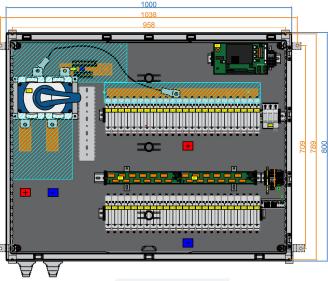
Fastening points "orange"

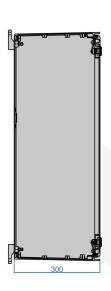
#### Minimum distances

above 200 below 200 lateral 100 front 1200 Internal arrangement and components may differ depending on the variant!









# SCOPE OF DELIVERY

Quantity	Designation
1	GAK
1	Installation instructions GAK-Standard
1	Circuit diagram
1	Wall mounting bracket set

Quantity	Designation
48	M16 cable gland incl. locknut
3	M20 cable gland incl. lock nut
2	Cable grommet M63
1	Blanking plug BS 13

#### Status: (a)

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NOMINAL VALUES		• applicable / - not applicable
Rated insulation voltage U <sub>i</sub>	[VDC]	1500
Rated operating voltage U <sub>e</sub>	[VDC]	1500
Rated current $_{InA}$ ( $\Sigma I_{SCSTC}$ )	[ACD]	396
Design current* I <sub>SCMAX</sub> (=Σ I <sub>SCSTC</sub> x 1.25)	[ACD]	495
Number of independent MPP inputs		1
Max. Number of PV strings IN/OUT		24/1

PRO STRANG		
Rated current I <sub>nc</sub> (=I <sub>SCSTC</sub> )	[ADC]	16,5
Design current* I <sub>SC MAX</sub> (=I <sub>SC STC</sub> X 1.25)	[ADC]	20,6

SURGE PROTECTION DEVICE			
surge protection PV			
Test class according to EN 61643-11 (type)		I+II	
Highest permissible continuous voltage U <sub>cpv</sub>	[VDC]	1500	
For type 1: Lightning impulse current max. I imp 10/350	[nA]	5	

SURGE PROTECTION DEVICE		
surge protection communication		
Test class according to EN 61643-11 (type)		II/P1
Highest permissible continuous voltage U <sub>cpv</sub>	[VDC]	8,5
For type 1: Lightning impulse current max. I imp 10/350	[nA]	-

SWITCH-DISCONNECTOR			
Thermal current I <sub>th</sub> at 60°C	[A]	500	
Utilisation category according to DIN EN 60947-3		DC-21B	

#### Status: (a)

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<sup>\*</sup> the design current ISC MAX according to VDE 0100-712:2016-10 includes the factor 1.25 for ISC STC of the PV module or PV string.

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INPUT (TO THE PV GENERATOR)		• applicable / - not applicable
Cable entries		
Fittings (EN 62444)		M16
Clamping range (from - to)	[Ømm]	5 - 10
Connections		
Connection type		Spring clamp directly on the fuse holder
Stripping length	[mm]	14
Tightening torque	[Nm]	-
Conductor cross-section (from - to)		
Fine copper wire with ferrule	[mm²]	2,5 - 16
Fine-stranded copper	[mm²]	2,5 - 16
Solid or stranded copper wire	[mm²]	-

OUTPUT (TO THE PV INVERTER)		
Cable entries		
Fittings (EN 62444)		Cable grommet M63
Clamping range (from - to)	[Ømm]	23 - 55
Connections		
Connection type		Cable lug M16#
Stripping length	[mm]	-
Tightening torque	[Nm]	70 <sup>+</sup>
Conductor cross-section (from - to)		
Fine copper wire with ferrule	[mm²]	-
Fine-stranded copper	[mm²]	-
Cu/Al* solid or stranded	[mm²]	max. 400

<sup>#</sup> Bimetal cable lugs must be used for aluminium cables! When connecting aluminium conductors, the customary processing guidelines must be observed! The contact surfaces of the aluminium conductors must be cleaned, brushed and treated with suitable grease.

<sup>\*</sup> Attention: The nut must be held against the back with a spanner!

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EARTHING CONNECTION		• applicable / - not applicable
Cable entries		
Fittings (EN 62444)		M20
Clamping range (from - to)	[Ømm]	7 - 13
<u>Connections</u>		
Connection type		Screw terminal
Stripping length	[mm]	19
Tightening torque	[Nm]	2,5
Conductor cross-section (from - to)		
Fine copper wire with ferrule	[mm²]	1,5 - 16
Fine-stranded copper	[mm²]	-
Solid or stranded copper wire	[mm²]	2,5 - 25

COMMUNICATION AND MONITORING		
Channels/channels occupied		24/24
Single line monitoring		24
Board (operating instructions under		2 x Weidmüller SOLAR SMS SLAVE 12IN25A
www.weidmueller.de)		+
		Weidmüller SOLAR SMS MASTER
Communication protocol		Modbus RS485
Supply board		self-powered (incl. DC/DC converter)
<u>Cable entries</u>		
Fittings (EN 62444)		M20
Clamping range (from - to)	[Ømm]	7 - 13
Connections		
Connection type		Spring clamp
Stripping length	[mm]	10 - 12
Tightening torque	[Nm]	·
Conductor cross-section (from - to)		
Fine copper wire with ferrule	[mm²]	0,25 - 2,5
Fine-stranded copper	[mm²]	0,25 - 4
Solid or stranded copper wire	[mm²]	0,25 - 4

## **DATA SHEET**

## ITEM NO. 10019463

DC generator terminal box

Solarconnect 1500



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# **TECHNICAL DATA**

GENERAL		• applicable / - not applicable
Dimensions WxHxD (without screw connections)	[mm]	1000 x 800 x 300
Weight, approx.	[kg]	46,5
Operating temperature range	[°C]	-25+35
Temperature - transport/storage (24 hours 70°C)	[°C]	-25+35
Humidity - condensing permitted		-
Humidity - permissible range	[%]	595
Degree of soiling		4
max. installation height above N.N.	[m]	2000
Protection class IP (EN 60529)		65
Outdoor suitability (protected area)		•
Protection class (EN 61140)		II
Housing material		Polyester
RoHS-compliant (2011/65/EU)		•
Housing colour		similar to RAL 7035
Lid		Hinged door
Mounting type		Wall mounting
Closure type		Double-bit closure

OTHER	
Customs tariff number	85372091