DATA SHEET

ITEM NO. 10019386

Mains and system protection in accordance with VDE-AR-N 4105/4110

PowerShield 500 power cabinet

enwitec
greenLink Group
Scherrwies 2 | 84329 Wurmannsquick
info@enwitec.eu

All values in [mm]
Dimensions "blue"
Fastening points "orange"

Internal arrangement and components may differ depending on the variant!

Minimum distances

above	200
below	400
lateral	200
front	1400

The electrical connection between the cabinets must be provided by the customer!
When installing parallel connecting cables (several conductors per phase), the usual installation guidelines must be observed, including the same cable length and short-circuit-proof installation!

SCOPE OF DELIVERY

Quantity	Designation
1	Power Shield 500 power cabinet
1	General installation instructions

Quantity	Designation
1	Circuit diagram

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TECHNICAL DATA

NOMINAL VALUES		• applicable / - not applicable
Rated insulation voltage U_i	[VAC]	660
Rated operating voltage U_e	[VAC]	3PH - 230/400
Rated current I_{nA} (at cos ϕ 0.9)	[A]	800
Rated current I_{nA} (at cos ϕ 1)	[A]	720
Operating frequency f_n	[Hz]	50
Net shape		TN-S
Max. Value of the back-up fuse (gG/gL)	[A]	1000
Max. Apparent power of the generation system	[kVA]	552
Max. Active power of the generation system	[kW]	497
Type of generating system (VDE-AR-N 4105/4110)		Type 2

DOME SWITCH TEMPORARILY STORED		
Rated current I_n	[A]	800
Utilisation category		AC-21/AC-22 (A+B)
Undervoltage release	[V]	24
Rated limit short-circuit breaking capacity (I_{CU})	[kA]	70
Separation		three-pole
Type		with motorised drive

DOME SWITCH SUPERORDINATE		
Rated current I_n	[A]	800
Utilisation category		AC-21/AC-22 (A+B)
Undervoltage release	[V]	24
Rated limit short-circuit breaking capacity (I_{CU})	[kA]	70
Separation		three-pole
Type		with motorised drive

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TECHNICAL DATA

OVERVOLTAGE PROTECTION		• applicable / - not applicable
Test class according to EN 61643-11 (type)		I+II/BC
Back-up fuse type		NH1 isolator
Max. Back-up fuse	[A]	200
Highest permissible continuous voltage U_{cpv}	[V]	350
For type 1: Lightning impulse current max. I_{imp} 10/350	[kA]	12,5

NETWORK CONNECTION		
Cable entry		
Introduction		over cut-out base
Clamping range (from - to)	[mm]	-
Connection L1, L2, L3, N, PE		
Connection type		Cable lug M10#
Stripping length	[mm]	-
Tightening torque	[Nm]	30 - 35
Cable cross-section (from - to)		
Cu/Al#	[mm²]	max. 240

FUSE-SWITCH DISCONNECTOR FOR MAINS		
Fuse link		4 x NH1
Max. Fuse value	[A]	per separator 250

Use bimetal cable lugs when connecting aluminium conductors! Please observe the processing guidelines for aluminium conductors! The standard processing guidelines must be observed! The contact surfaces of the aluminium conductors must be cleaned, brushed and treated with suitable grease. Cable lugs are NOT included in the scope of delivery.

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TECHNICAL DATA

CONNECTION PV / LOADS		• applicable / - not applicable
Cable entry		
Introduction		over cut-out base
Clamping range (from - to)	[mm]	-
Connection L1, L2, L3		
Connection type		Cable lug M10#
Stripping length	[mm]	-
Tightening torque	[Nm]	30 - 35
Cable cross-section (from - to)		
Cu/Al#	[mm²]	max. 240
Connection N, PE		
Connection type		Cable lug M12#
Stripping length	[mm]	-
Tightening torque	[Nm]	35 - 40
Cable cross-section (from - to)		
Cu/Al#	[mm²]	max. 240

FUSE-SWITCH DISCONNECTOR FOR MAINS		
Fuse link		5 x NH1
Max. Fuse value	[A]	per separator 250

Use bimetal cable lugs when connecting aluminium conductors! Please observe the processing guidelines for aluminium conductors! The standard processing guidelines must be observed! The contact surfaces of the aluminium conductors must be cleaned, brushed and treated with suitable grease. Cable lugs are NOT included in the scope of delivery.

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TECHNICAL DATA

COMMUNICATION		• applicable / - not applicable
Interface		Feedback and circuit-breaker control
Cable entries		
Introduction		over cut-out base
Clamping range (from - to)	[mm]	-
Connections		
Connection type		Spring clamp
Stripping length	[mm]	10 - 12
Tightening torque	[Nm]	-
Cable 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

VOLTAGE TAP		
Fuse link		10 x 38
Fuse value	[A]	see circuit diagram
Cable entries		
Introduction		over cut-out base
Clamping range (from - to)	[mm]	-
Connections		
Connection type		Spring clamp
Stripping length	[mm]	10 - 12
Tightening torque	[Nm]	-
Cable 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

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TECHNICAL DATA

CURRENT CONVERTER		• applicable / - not applicable
Transducer lugs	[mm]	80 x 10 x 250
Current transformer position	[A]	between the supply line and the higher-level Dome switch
Current transformer	[A]	1000/5
Accuracy class	[A]	0,5
Connections		
Connection type		Spring clamp
Stripping length	[mm]	13 - 15
Tightening torque	[Nm]	-
Cable cross-section (from - to)		
Fine copper wire with ferrule	[mm]	0,5 - 6
Fine-stranded copper	[mm]	0,5 - 10
Solid or stranded copper wire	[mm]	0,5 - 10

GENERAL		
Dimensions WxHxD (without screw connections)	[mm]	2 x 1286 x 1279 x 470
Weight, approx.	[kg]	232
Operating temperature range	[°C]	-25...+35
Temperature - transport/storage (24 hours 70°C)	[°C]	-25...+55
Humidity - condensing permitted		-
Humidity - permissible range	[%]	5...70
max. installation height above N.N.	[m]	2000
Protection class IP (EN 60529)		43
Outdoor suitability (protected area)		•
Protection class (EN 61140)		II
Housing material		Polyester (GRP)
RoHS-compliant (2011/65/EU)		•
Housing colour		RAL 7035
Mounting type		Floor mounting
Closure type		Locking cylinder

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TECHNICAL DATA

OTHER	- applicable / - not applicable
Customs tariff number	85371098

ACCESSORIES (not included in the scope of delivery)
Mounting base (500 mm)*
Buried base*

*** Either a mounting base or a recessed base is essential for installation**

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