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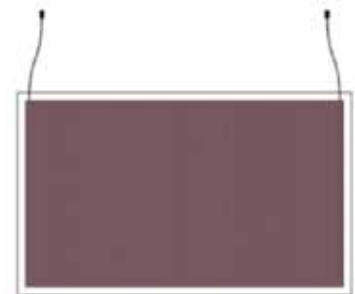
VIDURSOLAR • Thin-film Models VS0 L1 P43 / VS10 L1 P39 / VS20 L1 P35

VIDURSOLAR BIPV modules are specially designed to satisfy the highest quality standards in construction. Our modules have successfully passed trials under standard EN 14449:2005 and can be called "Laminated Safety Glass".

The encapsulation material is PVB, the material traditionally used for laminated safety glass for construction because of its advantages of penetration and post-breakage resistance. Therefore, they are specially indicated for building integration.

We use thin film PV elements from Schott, designed as PV cells applied on a glass substrate based on amorphous silicon technology. Different sizes of PV-modules can be conceived, composed of various basic PV elements (sub-modules). The configuration possibilities can be consulted in the corresponding data-sheets.

PREDEFINED THIN-FILM BIPV - MODULES



QUALITY AND SAFETY

- Production process controlled according to ISO 9001.
- VIDURSOLAR photovoltaic glasses are manufactured as a construction product under the CE mark denomination of "laminated safety glass".
- Maximum resistance against breakage and fall by the use of PVB (poly-vinyl-butyl) as encapsulation material, especially important in overhead glazing applications.
- Tested according to EN 14449, EN 12150, EN 12600, EN 12543, 1-6.
- Designed and produced according to EN 61646 and EN 61730. Certification process on-going.



CONSTRUCTIVE AND ELECTRICAL DATA

Model	VS0 L1 P43	VS10 L1 P39	VS20 L1 P35
Technology	Glass/glass laminate		
Front piece	Tempered extra-white glass, 6mm with polished edge		
Back piece	Tempered float glass , 6mm with polished edge		
Encapsulant	PVB, 2 x 1,14 mm		
Size (in mm)	1122 x 690 / 0,77 m ²		
Total thickness	16 mm +/- 0,2 mm		
Weight approx.	29 kg		
Transparency approx.	Opaque (1%)	10%	20%
Solar factor (g-value) approx.	0,27		
Type of PV cells	Amorphous silicon		
Connection terminals	2 junction boxes, 2 x 1 m solar cable, 4mm ² with connectors		
Mounting	With adequate frames or façade systems as for standard glazing units, all sided mounting		
Initial nominal power P _{nom}	53 Wp	48 Wp	43 Wp
Nominal power P _{nom}	43 Wp	39 Wp	35 Wp
MPP - Voltage V _{MPP}	83 V	83 V	83 V
MPP - Current I _{MPP}	0,52 A	0,47 A	0,42 A
Open circuit voltage V _{oc}	111 V	111 V	111 V
Short circuit current I _{sc}	0,62 A	0,55 A	0,50 A
Max. System voltage	600 V		
Tolerance of electrical data	+/- 10%		
Electrical protection class	Class II		

Temperature coefficients: P_{nom}: - 0.2%/K V_{oc}: -0,31%/K I_{sc}: + 0,08%/K

All electrical data refer to Standard Test Conditions (STC): radiation of 1000W/m² - temperature of 25°C - AM 1,5.
The initial output power can be approx. 18% higher than the indicated nominal power.