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Annex to Solar Keymark Certificate		Licence Number											
Supplementary Information		140BN/0											
		Issued											
		2016-11-11											
Annual collector output in kWh/collector at mean fluid temperature ϑ_m, based on ISO 9806:2013 test results													
Collector name	Standard Locations	Athens			Davos			Stockholm			Würzburg		
		ϑ	25°C	50°C	75°C	25°C	50°C	75°C	25°C	50°C	75°C	25°C	50°C
POLYSUN 2		771	75	1	288	14		270	21		316	32	0
Annual output per m ² gross area		1.118	108	1	417	21		391	30		459	47	0
Fixed or tracking collector		Fixed (slope = latitude - 15°; rounded to nearest 5°)											
Annual irradiation on collector plane		1765 kWh/m ²			1714 kWh/m ²			1166 kWh/m ²			1244 kWh/m ²		
Mean annual ambient air temperature		18,5°C			3,2°C			7,5°C			9,0°C		
Collector orientation or tracking mode		South, 25°			South, 30°			South, 45°			South, 35°		
The collector is operated at constant temperature ϑ_m (mean of in- and outlet temperatures). The calculation of the annual collector performance is performed with the official Solar Keymark spreadsheet tool Scenocalc Ver. 5.01 (March 2016). A detailed description of the calculations is available at www.solarkeymark.org/scenocalc													
Additional Information													
Collector heat transfer medium											Water-Glycole		
Hybrid Thermal and Photo Voltaic collector											No		
The collector is deemed to be suitable for roof integration											No		
The collector was tested successfully according to EN ISO 9806:2013 under the following conditions:													
Climate class (A, B or C)											A		--
Maximum tested positive load											2400		Pa
Maximum tested negative load											2400		Pa
Hail resistance using steel ball (maximum drop height)											m		
Energy Labelling Information													
		Reference Area, A _{sol} (m ²)		Data required for CDR (EU) No 811/2013 - Reference Area A _{ref}									
POLYSUN 2		0,69		Collector efficiency (η_{col})		8		%					
Remark: Collector efficiency (η_{col}) is defined in CDR (EU) No 811/2013 as collector efficiency of the solar collector at a temperature difference between the solar collector and the surrounding air of 40 K and a global solar irradiance of 1000 W/m ² , expressed in % and rounded to the nearest integer. Deviating from the regulation η_{col} is based on reference area (A _{sol}) which is aperture area for values according to EN 12975-2 or gross area for ISO 9806:2013.													
Data required for CDR (EU) No 812/2013 - Reference Area A _{ref}													
Zero-loss efficiency (η_{z})											0,858		--
First-order coefficient (a ₁)											19,36		W/(m ² K)
Second-order coefficient (a ₂)											0,000		W/(m ² K ²)
Incidence angle modifier IAM (50°)											0,90		--
Remark: The data given in this section are related to collector reference area (A _{sol}) which is aperture area for values according to EN 12975-2 or gross area for ISO 9806. Consistent data sets for either aperture or gross area can be used in calculations like in the regulation 811 and 812 and simulation programs.													