Technische Specificaties
Solar Heat Multi Paneel

Solar Heat Multi Panel

As the name say, this combines any solar panel to a PVT pane. To be placed under an existing or in combination with new solar panel. Due to the modular construction of the pane, it can be made suitable for almost any solar panel and fully compatible with the solar panels on the roof. Because it is under each panel applicable, an aesthetic whole is created and roof the source for the heat pump. The Solar Heat Multi Panel has been developed as a source for a water/water heat pump, for heating water for you shower and heating your home. The panel can be used in any energy concept such as zero energy cost and all_electric solution and applicable to make existing homes energy neutral. To be prepared for the future, the installation can also be used as support for your current heating system.

Characteristics

By applying the panel under a solar panel, the product unique. In addition, the product has some characteristics:

Advantages:

- No additional outdoor unit
- No sound
- Optimal use of the roof surface
- As a source for your heat pump
- Multiple subsidy options
- Passive cooling

Plug & Play:

- Can be fixed under the solar panel with a clamping system
- Standard 16mm water connection
- Can be placed parallel to the Tichelmann principle

Specifications

Length : 1635mm excluding press fittings and 1695mm incl press fittings
Width : 956,2mm
Height :19,3mm
Weight : 12KG incl 1,mtr pipes and press couplings and Glycol.
Content : 1,2 Ltr
Liquid : Monopropyleneglycol with corrosion protection
Gross surface : solar panel surface = 1755x1038mm= 1,82M2
Net thermal surface LxW : SHMP= 1,42M2
Label indicating that this panel is TÜV Reinland approved and a Solar Keymark has a DIN Certco certification

Use all energy ZONNE SYSTEMEN

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Type	UAE SHMP-21-1
Size	1755X1038X35mm
Empty weight	12 KG
Maximum Operation pressure	4 Bar
Stagnation temperature	68°C
Volume of heat transfer fluid	1.2 Liter
Gross collector area	1.82m²
Serial number	202104
Tested	8 Bar
Date	2021/06/09

Rated Maximum Power (Pmax)	360 W
Power Tolerance	0 ~ +5 W
Voltage at Pmax(Vmp)	34.8 V
Current at Pmax(Imp)	10.35 A
Open-Circuit Voltage (Voc)	40.8 V
Short-Circuit Current (Isc)	11.33 A
Voc & Isc Tolerrance	±3%
Maximum System Voltage	1000V
Maximum Series Fuse Rating	20 A
Operating Temperature	-40°C ~ +85°C
Protection Class	Protection Class II

All electrical data shown are at standard test conditions (STC) (1 000 W/m2, 25 °C, AM 1,5 acc. to IEC 60904-3

Data required for CDR (EU) No 812/2013 - Reference Area A_{sol}		
Zero-loss efficiency (η_0)	0.35	--
First-order coefficient (a_1)	13.07	W/(m²K)
Second-order coefficient (a_2)	0.000	W/(m²K²)
Incidence angle modifier IAM (50°)	0.97	--

Collector power output record [W]			
Standard Reporting Conditions			
$\vartheta_m - \vartheta_a$ [K]	Grey Sky at 400 W/m² (G_b = 0 W/m², G_d = 400 W/m² u=1.3 m/s; E_L-σ*ϑ_a^4 = 0 W/m²)	Hazy Sky at 700 W/m² (G_b = 440 W/m², G_d = 260 W/m² u=1.3 m/s; E_L-σ*ϑ_a^4 = -50 W/m²)	Blue Sky at 1000 W/m² (G_b = 850 W/m², G_d = 150 W/m²; u=1.3 m/s; E_L-σ*ϑ_a^4 = -100 W/m²)
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