

## powerSol



Register number 011-7S2928 F

Assembly:	
Glass 1 (top cover):	Hardened, hail proof ( <b>HW 3</b> ), structured solar glass, 3,2 mm, with little iron content, with low reflection, double AR coated, interchangeable glass cover
Glass 2 (bottom cover):	Hardened, hail proof ( <b>HW 3</b> ), structured solar glass, 3,2 mm, with little iron content, with low reflection, double AR coated, interchangeable glass cover
Absorber:	Aluminium-copper-absorber (laser welded) with intelligent hydraulics, highly selective coating Absorption 95 % +/- 2 %, Emission 4-5 %
Frame:	Double-walled frame made of aluminium with integrated glass-holder and optimized ventilation-system, fully welded (screwless design), with strong middle-bar (cross piece)
Rear wall:	Made of aluminium
Rear wall insulation:	80 mm of degassing-free mineral wool
Side insulation:	20 mm of degassing-free mineral wool
Glass sealing:	Durable EPDM triple seal, with integrated webbing thread
Cover system:	With ALU-clip profile - ensures a reliable seal and a great appearance (optic), smoothly to open and resealable

Technical data:			
Type	powerSol 136	powerSol 120	powerSol 55
Gross area (m <sup>2</sup> )	13,59	12,00	5,46
Aperture area (m <sup>2</sup> )	12,50	11,00	5,04
Absorber area (m <sup>2</sup> )	12,40	10,90	4,93
Weight without heat carrier (kg)	ca. 335	ca. 295	ca. 140
Total volume of the collector (lt.)	8,6	7,4	4,8
Max. inclination (°)		75	
Min. inclination (°)		20	
Max. operating pressure (bar)		10	
Dimension of manifold (mm)		28 mm	

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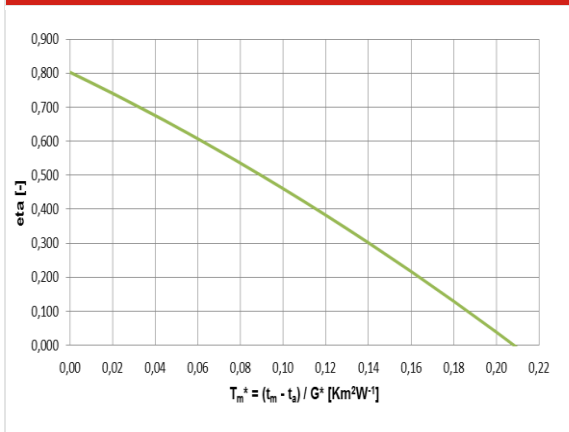
## Efficiency values according to EN ISO 9806 (Test report No. 21244613.001)

Test collector	<b>HT55_SR28</b>
Data reference	<b>aperture area</b>
Conversion factor $\eta_0$	0,803
Thermal transmittance coefficient simple $a_1$	3,022
Thermal transmittance coefficient square $a_2$	0,005

## Power output in Watt according to EN ISO 9806

	400 W/m <sup>2</sup>	700 W/m <sup>2</sup>	1000 W/m <sup>2</sup>
$\eta$ $\vartheta_k - \vartheta_a = 10$ K	1298	2583	3854
$\eta$ $\vartheta_k - \vartheta_a = 30$ K	972	2257	3528
$\eta$ $\vartheta_k - \vartheta_a = 50$ K	624	1909	3180

## Power characteristic (G\*Norm = 1000 W / m<sup>2</sup>)



## Power output in Watt (at G = 1000 W / m<sup>2</sup>)

Temperature gap	0 K	10 K	30 K	50 K	70 K
powerSol 136	9887	9553	8790	7899	6881
powerSol 120	8731	8436	7761	6975	6076
powerSol 55	3972	3838	3531	3174	2765

Item No.	Type	Height (mm)	Width (mm)	Depth (mm)	Division	Gross area (m <sup>2</sup> )
K070-5-LR	powerSol 136	2166	6275	150	5	13,59
K071-5-LR	powerSol 120	2080	5770		5	12,00
K070-2-LR	powerSol 55	2166	2528		2	5,46

**NOTE: In case of combination of a couple of powerSol please declare at the time of order the desired arrangement of the panels!**

## Measurements powerSol – vertical

