

KPG1 ALC Solar Collector



Main Features	
Description	Flat plate collector, harp type, with highly selective absorber
Installation	Installation above roofing, follow instructions
Working fluid	Propylene glycol - water solution
Code	10336

Technical Data	
Absorber design	harp type, laser welded
Max. working pressure	10 bar
Max. working temperature	120 °C
Stagnation temperature	200 °C
Recommended flowrate	60 – 120 l/h
Total (gross) area	2.52 m ²
Aperture area	2.31 m ²
Glass thickness	3.2 mm
Insulation thickness	40 mm
Empty weight	38 kg
Height x Width x Depth	2150 x 1170 x 85 mm
Absorber tube size	12 x Cu Ø 8 mm x 0,4 mm
Connecting piping	4 x Cu Ø 22 mm x 0,8 mm

Data for Designers	
Incidence angle modifier IAM (50°)	0,98
Max. collector output at 1000 W/m ² solar irradiance Q _{max}	1866 W
Collector efficiency at zero heat loss η _{0b}	0,744 per gross area 0,812 per aperture
Linear collector heat loss coefficient a _{1a}	3,716 W/m ² K per gross area 4,054 W/m ² K per aperture
Quadratic collector heat loss coefficient a _{2a}	0,013 W/m ² K ² per gross area 0,014 W/m ² K ² per aperture

Materials	
Absorber material	aluminium, 0.4mm thick
Absorber surface coating	TiNOx
Glazing material	tempered low-iron glass
Insulation material	mineral wool
Backplate material	aluminium alloy, 0.5mm thick
Frame material	aluminium alloy, frame colour silver

