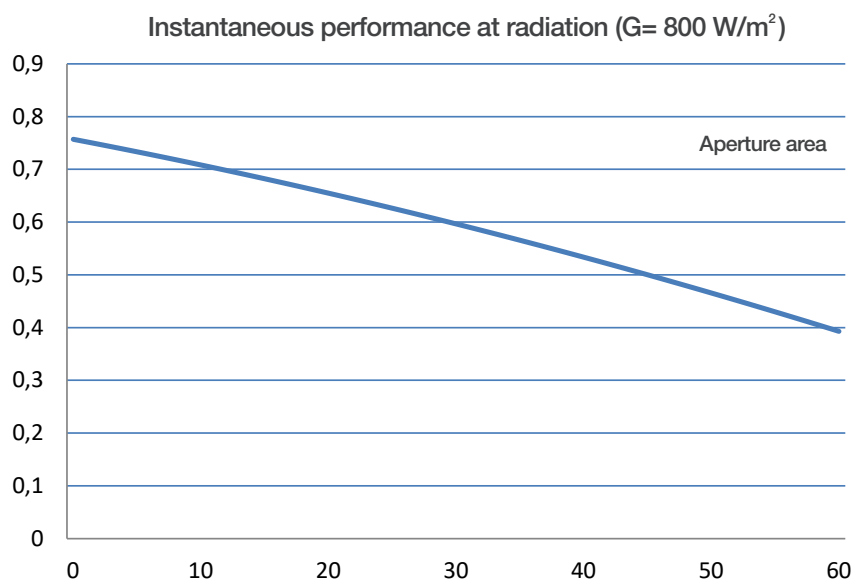


F20 COLLECTOR



Technical Characteristics

EN 12975 Standard

EN ISO 9806 Standard

	Referred to aperture area and T_m	Referred to gross area and T_m
Zero-loss efficiency (η_{0b})	0.770	0.727
Loss factor K_1 (W / Km^2)	4.63	4.372
Loss factor K_2 (W / $\text{K}^2 \text{ m}^2$)	0.024	0.023
Peak power (W)	1504	
Incident Angle Modifier 50°	0.86	

Dimensions

External dimensions

Length (mm)	2047
Width (mm)	1047
Thickness (mm)	49
Gross Area (m^2)	2.15
Aperture Area (m^2)	2.03



Absorber	
Type	Arp One-n
Fin material	Aluminum
Pipes Material	Copper
Type of welding	Laser
Number of manifolds pipes	2
Number of secondary pipes	9

External Diameter	
Manifold pipes (mm)	18
Secondary pipes (mm)	8

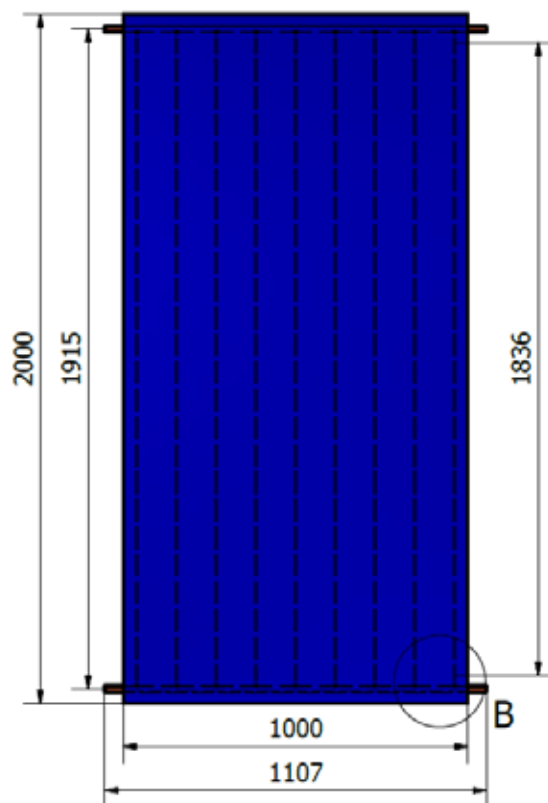
Coating	
Type	Ultrasselective Tinox Robust
Base Material	Aluminum
Method of applying	Sputtering
Absorptance (%)	94
Emittance (%)	4

Insulation	
Type	Blanked
Material	Glass Wool
Length (mm)	2019
Width (mm)	1019
Thickness (mm)	15
Conductivity (W/m²k)	0.033

Frame	
Type	Extruded
Material	Aluminum AL 6063
Length (mm)	2047
Width (mm)	1047
Thickness (mm)	49

General Characteristics	
Cover	Solar tempered glass 3.2 mm
Optimal ow	30 l/hm²
Empty weigth (kg)	29
Heat transfer fluid	Propilenglicol
Capacity (litres)	1.15
Maximum work pressure (bar)	8
Stagnation Temperature (°C)	201
Heat capacity (J/K)	8975
Connections	Compress Fitting

Presure drop					
Flow (l/h)	36	84	132	186	234
Pressure loss (Pa)	45	126	231	376	531
Equation (Pa)					



Detail B

