

Technical Data Sheet

K420-DH glazed flat plate collector

Mounting systems for on-roof, flat-roof and facade mounting

Total weight dry 34 kg (75 lbs)

Size 1,870 mm x 1,150 mm (6'1" x 3'8")

Gross area 2.15 m² (approx. 22 square feet)

Height 95 mm (3.7")

Absorber type KBB absorber with Al-sheet and Cu-tubes

Absorber with 10 harp tubes ø8mm and 2 manifolds ø18mm

Absorber area (net) 2.0 m² (=aperture area) (20 square feet)

Liquid content 1.13 l (approx. 0.3 gallons)

Efficiency η_0 80.1%, related to the aperture area

Heat loss coefficient a1 3.72 W/(m²K)

Heat loss coefficient a2 0.0157 W/(m²K²)

Max. stagnation temperature 203 °C (397 F)

Absorber coating highly selective on Aluminum

Absorption 95 %

Emission 5%

Covering low iron, structured, solar safety glass (ESG)

Transmission of covering 91 %

Hydraulic connection in-series with collectors side-by-side, 1/2" male thread, flat sealing

Impact resistance of cover passed the optional impact resistance tests following EN12975-2.

Nominal flow 100 l/h (approx. 25 gallons per hour); (low flow conditions: 50 l/h)

Nominal pressure loss 10 mbar (low flow conditions: 5 mbar, water/propylene-glycol 20°C)

Max. operation pressure 10 bar (approx. 150 psi)

Heat insulation Mineral wool 50 mm (2")

Collector case aluminum frame, powder coated

Angle of inclination 20 – 90°

Wind and snow load up to 3 kN/m² suction, 5 kN/m² pressure

Recommended heat transfer fluid antifreeze mix based on propylene-glycol

Warranty 10 years for functionality and weathering resistance

