

Flat plate collector K423EM

Technical data

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| Type of construction | Flat plate collector for on-roof, in-roof, flat-roof and facade mounting |
| Absorber type | KBB absorber with Al-sheet and Cu-tubes, Absorber with 1 meander \varnothing 12mm |
| Measurement (L / W / H) | 2168 / 1158 mm / 75 mm |
| Gross area | 2,511 m ² |
| Aperture / absorber area (net) | 2.295 m ² / 2.293 m ² |
| Total Weight dry | 38.5 kg |
| Liquid content | 1.99 l |
| Efficiency η_0 | 80.2 %, related to the aperture area |
| Heat loss coefficient a1 | 4.11 W / (m ² x K) |
| Heat loss coefficient a2 | 0.0133 W / (m ² x K ²) |
| Heat loss coefficient a40 | 4.642 W / (m ² x K) |
| Max. stagnation temperature | 209 °C |
| Absorber coating | Highly selective on Aluminium (eta plus_al) |
| Absorptance / Emittance | 95 % / 5% |
| Covering | Low iron, structured, solar safety glass (ESG) |
| Transmission of covering | 91.5 % |
| Impact resistance of covering | Cover passed the optional impact resistance tests following EN12975-2. |
| Nominal flow | 80 l/h (low flow conditions: 50 l/h) |
| Nominal pressure loss | 60 mbar (low flow: 30 mbar, water/propylene-glycol 20°C) |
| Hydraulic connection | Series connection with collectors side-by-side |
| Collector connection | 2 connectors at upper short side, 12 mm for compression fittings |
| Max. operation pressure | 10 bar |
| Heat insulation | Mineral wool 30 mm |
| Collector case | Aluminium frame, powder coated |
| Angle of inclination | 15 – 90° |
| permissible wind and snow load | 3 kN/m ² suction, 4 kN/m ² pressure |
| Recommended heat transfer fluid | Antifreeze mix based on propylene-glycol |
| Report no. of Performance Test, | 132-12/KD, |
| Reliability Test acc. to EN12975 | 133-12/KQ |
| Solar Keymark no. / expiry date | 011-7S324 F / 2019-04-30 |
| Guarantee | 10 years for functionality and weathering resistance |

