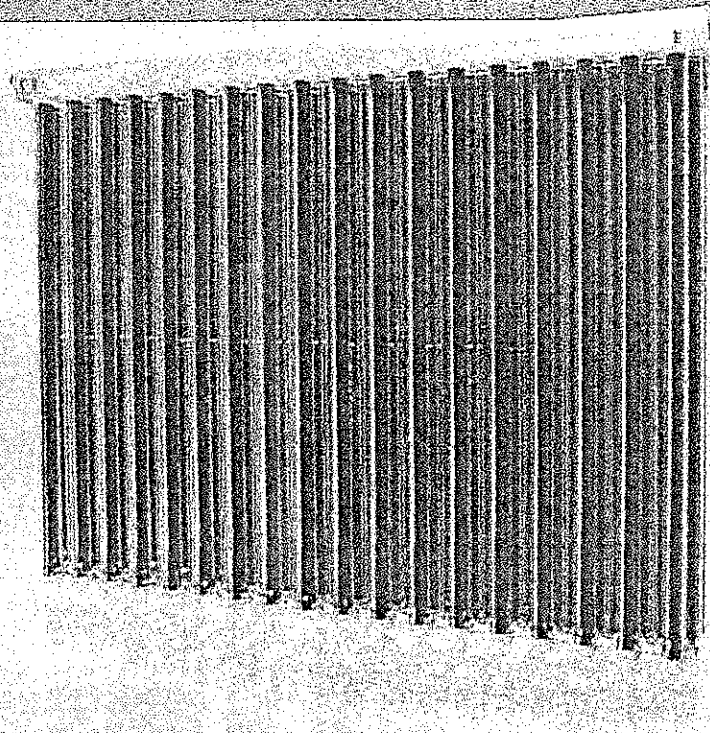
B

COLLECTOR

SKY 18 CPC 58

GROSS AREA 3.22 m²



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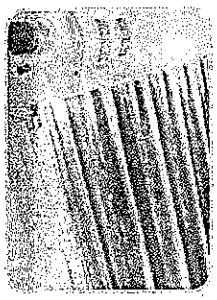
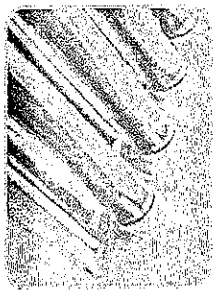
SOLAR KEYMARK

DIN CERTCO
Gesellschaft für Konformitätsbewertung mbH





"EASY CHANGE" fixing system

PRODUCT DESCRIPTION

The Kloben solar collector mod. SKY 18 CPC 58 composed of a series of borosilicate glass pipes with double air gap, welded at the end, inside which a vacuum is caused. The internal air gap is made selective due to the absorption of solar electromagnetic radiation through a multi-layer metallisation called "CERMET", created using completely recyclable products.

The absorption unit is made up of a copper circuit bent into a U shape, positioned in contact with specific aluminium heat absorbers, which increases the heat exchange surface. Each unit is contained in a glass pipe, and is then connected in parallel to a collector situated on the head of the panel, which collects the carrier fluid which flows through every circuit. A metal frame with electro-coloured aluminium edging of a suitable thickness, as envisaged by regulations for saline mist corrosion resistance. The assembly of the individual components which make up the structure takes place using special brackets for simplified interlocking assembly. The protective structure of the copper distribution collector is made of electro-coloured aluminium, fully insulated with special non-flammable class 0 (ISO - DIS 1182.2) insulation, which is water repellent with low biopersistence. Low iridescence rolled section (regulations EN 573/3 - EN 485/2 - EN 485/4 and standard test for anodic oxidation DIN 50943) purposely created to reflect with percentages greater than 90% of the total light, taking advantage of the CPC (Compound Parabolic Concentrator) system.

15 APR 2009

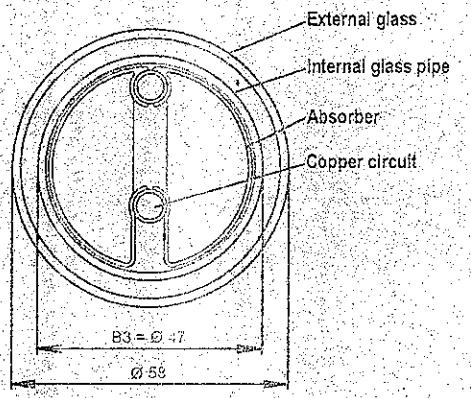
ADVANTAGES

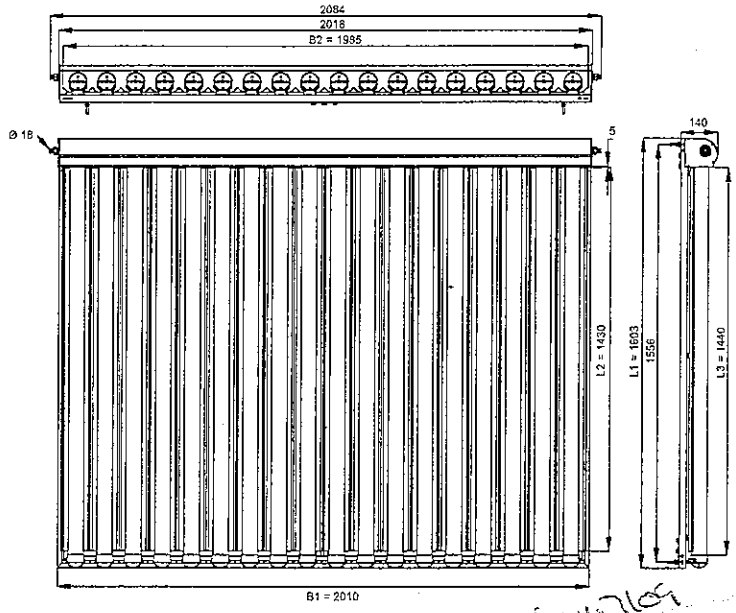
- Designed and dimensioned for the most common requirements
- Excellent quality/price ratio
- Ø 18 mm collector attachments
- Simplified pipe removal thanks to the new EASY CHANGE system
- Reduced heat losses thanks to the vacuum technology

PRICE LIST

101010054	COLLECTOR SKY 18 CPC 58	SOLAR COLLECTOR 3.22 m²	1	1.940,00	1.492,30

TECHNICAL DRAWINGS



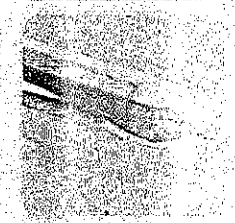


CERTIFICATION

Solar collector certified as conforming to regulations EN 12975-1:2006 and EN 12975-2:2006 in accordance with the Solar Keymark European regulation scheme.

Certifying body: DIN CERTCO

Certifying laboratory: ITW, Institut für Thermodynamik



POWER SUPPLIED

Würzburg Test
(3 m² opening area)
[illegible] kWh/(m² year)

TECHNICAL CHARACTERISTICS

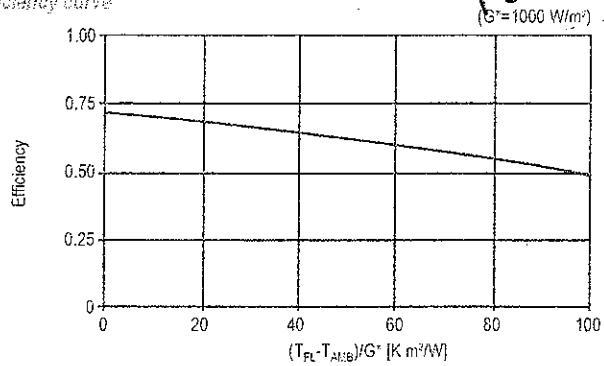
Number of pipes	18
External diameter of vacuum pipes	58 mm
Collector attachments	18 mm
Efficiency (η_0)	71.80%
Heat loss coefficient (a_1)	0.974 W/m²K
Heat loss coefficient (a_2)	0.005 W/m²K²
Maximum working pressure	6.0 bar
Optimal flow rate	1 l/min m²
Weight when empty	65 kg
Liquid content	2.29 l
Gross area	3.22 m²
Opening surface	2.84 m²
Absorption surface	1.22 m²

DIMENSIONS

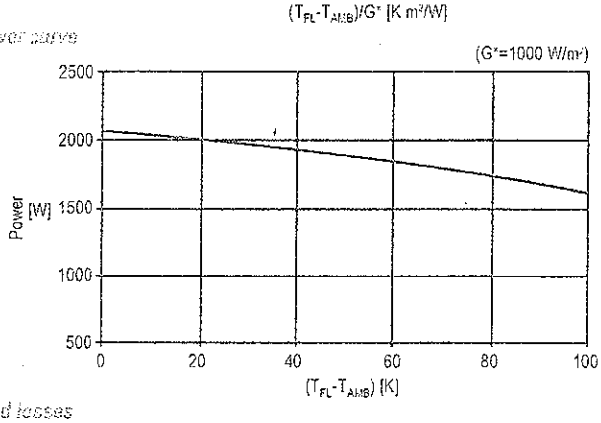
Width (with fittings)	2018 (2084) mm
Height	1603 mm
Depth	140 mm

PERFORMANCE

Efficiency curve



Power curve



Head losses

