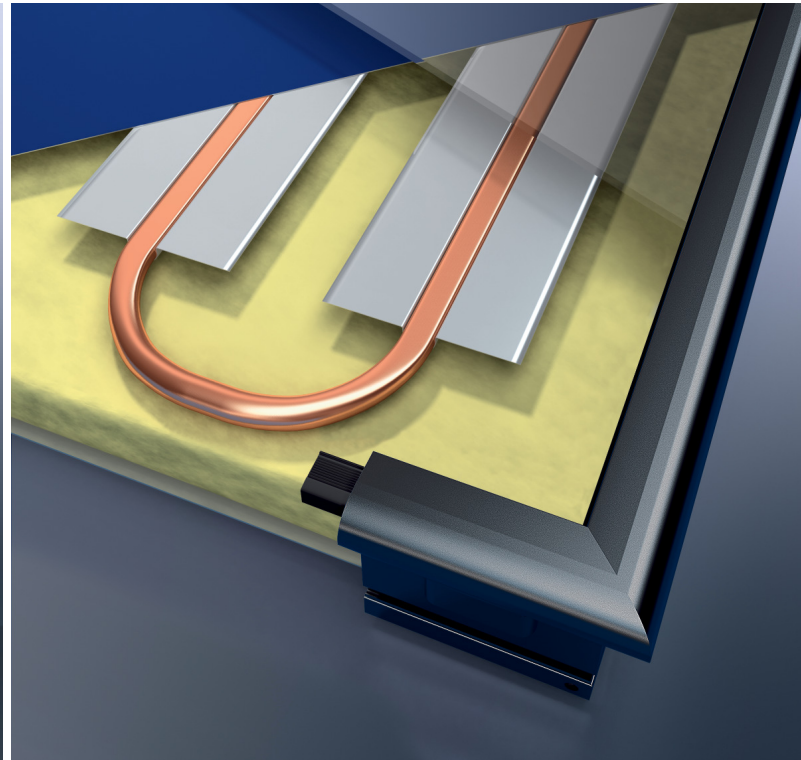
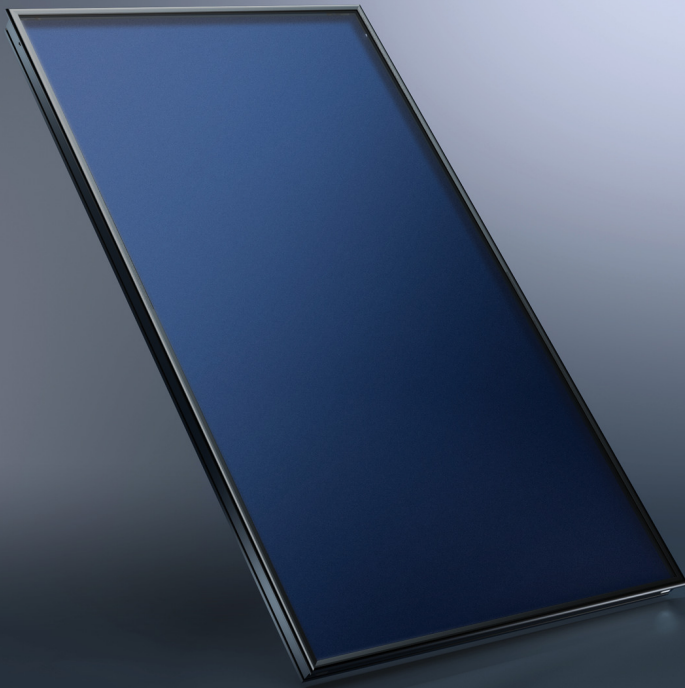


Schüco Collector CTE 319 CH

Compact line



Focusing on the essentials without compromising on quality

Schüco Compact collectors demonstrate the impressive expertise that Schüco has in building collectors. The distinguishing features of this high-quality collector are a black anodised complete aluminium frame, clear glass and an absorber surface with a special coating. The collector surface (gross) is 2.53 m².

Key benefits

- Heat transfer technology with a 360° enclosed absorber pipe for highly efficient heat transfer and outstanding design
- Ventilation of the system in conjunction with the meander hydraulics ensures reliable operation

- The 4 mm solar glass, tested in accordance with DIN EN 12975, increases hail-resistance
- Frame and rear panel tested for corrosion resistance
- Long service life as absorbers are tested for temperature and corrosion resistance
- Attractive look with black anodised collector frames
- Very high solar outputs as entire surface of the absorber is covered with a highly selective coating
- Fast installation with dimensional tolerance due to the screw channel in the profile



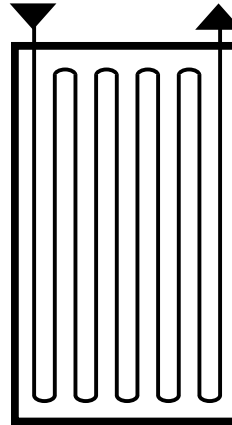
Green Technology for the Blue Planet
Clean Energy from Solar and Windows

SCHÜCO

Technical data – Schüco Collector CTE 319 CH

Use	Schüco CTE 319 CH
Heating domestic hot water	Yes
Auxiliary heating solar installations (family home)	Yes
Mounting type	
On-roof mounting	Yes
Flat-roof mounting	Yes
Canopy/façade mounting	No
Installation type / alignment	Portrait, adjacent Landscape, one above the other
Max. number of collectors in series	5
Dimensions and weights	
Gross surface area	2.53 m ²
Absorber surface area	2.35 m ²
Aperture surface area	2.34 m ²
External dimensions (L × W × D)	2102 × 1202 × 80 mm
Weight (empty)	44 kg
Performance values	
Rated thermal output	1.9 kW
Efficiency	79.7 %
Coefficient of heat loss a1	4.403 W/m ² K
Coefficient of heat loss a2	0.009 W/m ² K ²
Hydraulics / pipework	
Pipework	Meander
Alignment	Portrait
Hydraulic connections on copper pipe	12 mm
Number of hydraulic connections	2
Type of connector	Clamping ring fitting
Position of hydraulic connection	On the short side
Absorber	
Absorber coating	Highly selective
Absorption	95 %
Emission	5 %
Absorber material	Aluminium*
Meander	Copper
Bonding technology for absorber plate/ pipe	Heat transfer technology
Hydraulic values	
Permitted heat transfer fluid	Schüco solar fluid (water-glycol mixture)
Heat transfer fluid volume	1.7 l
Pressure loss (2.5 l/min solar fluid)	76 mbar
Permitted operating excess pressure	10 bar
Stagnation temperature for climate class A (1000 W/m ² ; 30°C)	203°C
Stagnation temperature for climate class B (1100 W/m ² ; 40°C)	225°C
Front cover	
Solar glass	Clear glass, low-iron, high transparency
Transmittance	> 91 %
Thickness	4.0 mm
Frame	
Material	Aluminium*
Gaskets	EPDM
Back panel	Aluminium*
Thermal insulation	
Mineral wool	35 mm
Art. No.	
Colour: black anodised	271 618

* Aluminium with a recycling proportion of approx. 40 %



Schüco CTE 319 CH hydraulics diagram

Collector output table	
Average fluid temperature	Collector output
20°C	1865 W
40°C	1650 W
60°C	1419 W
80°C	1171 W
100°C	906 W
120°C	624 W

Collector pressure loss table (Water/glycol mixture (60/40), average temperature 25°C)	
Mass flow [kg/h]	Pressure loss [mbar]
50	16
100	43
150	76
200	125
250	183
300	250



Certified in accordance with Solar Keymark