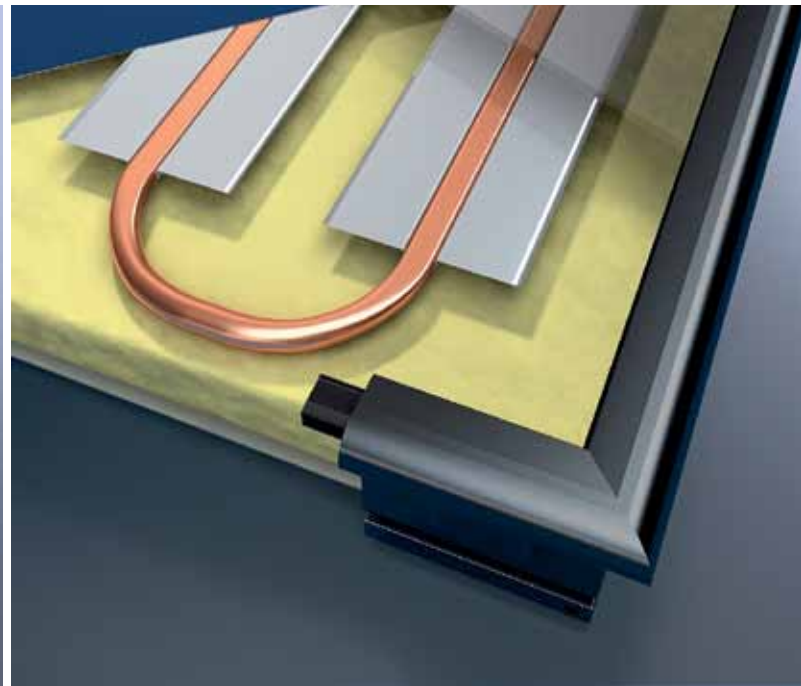


# Schüco Advance Collector

CTE 215 CH



## Efficiency and Aesthetics

The innovative Schüco Advance Series solar collector is a superior choice for small and mid size thermal applications. Maximum energy gain is yield using high-tech engineering techniques such as: a unique proprietary absorber/tube joining process, a highly selective absorber coating and optimal thermal insulation to minimize losses. A combination of the dark anodized frame and uniform absorber plate provides superior aesthetics that complements the homes exterior.

## Key Features

- Integrated sensor well provides precise temperature measurements
- Suitable for sloped or flat installation
- Serpentine piping, 1 connection on each long side for portrait orientation of collector
- Unique 360 bonding technology provides high efficiency thermal transfer
- Serpentine design allows the collector to manage all climatic conditions resulting in high system reliability
- Hail resistance clear glass with exceptional light transmission for high solar outputs
- Long life span and durability due to temperature and corrosion resistance materials

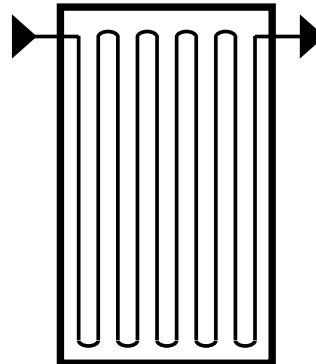


Green Technology for the Blue Planet  
Clean energy from solar and windows

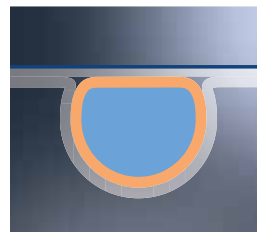
**SCHÜCO**

# Schüco Advance Collector – Technical Data

Applications	Advance – Schüco CTE 215 CH
Domestic hot water production	Yes
Space heating	Yes
<b>Application type</b>	
On-roof	Yes
Flat-roof	Yes
In-roof	No
Façade	No
Direction	Portrait
Max. collectors in series	5
<b>Size and weight</b>	
Gross area	22.00 ft <sup>2</sup> / 2.05 m <sup>2</sup>
Absorber surface area	20.23 ft <sup>2</sup> / 1.88 m <sup>2</sup>
Aperture surface area	20.23 ft <sup>2</sup> / 1.88 m <sup>2</sup>
Dimensions ( L × W × D)	76.85" × 41.42" × 3.14" (1952 × 1052 × 80 mm)
Weight	77 lb / 35 kg
<b>Performance values</b>	
Rated thermal output	1.5 kW
<b>Hydraulics / Pipwork</b>	
Pipwork	Serpentine
Orientation	Portrait
Hydraulic connection Cu pipe	12 mm
Number of hydraulic connections	2
Type of connectors	Compression fitting
Position of hydraulic connection	On long side
<b>Absorber</b>	
Absorber coating	Highly selective
Absorption	95 %
Emission	5 %
Absorber material	Aluminium
Absorber pipe	Copper
Bonding technology absorber plate/pipe	Thermal conduction technology
<b>Hydraulic values</b>	
Permitted heat transfer fluid	Schüco (water/glycol mixture)
Volume	0.29 gal / 1.1 l
Pressure drop (0.65 g/min / 2.5 l/min solar fluid)	1.26 psi / 87.5 mbar
Maximum certified pressure	145 psi / 10 bar
Stagnation temperature (1000 W/m <sup>2</sup> , 30 °C)	381 °F / 194 °C
<b>Front cover</b>	
Solar glass	Clearglass, low iron content
Transmittance	> 90 %
Thickness	4 mm
<b>Insulation</b>	
Insulation material	Mineral wool, 1.57" / 40 mm
<b>Frame</b>	
Frame material	Aluminium
Seals	EPDM
Color	Anodized black
<b>Art. no.</b>	
Color: Natural aluminium	271 828



Hydraulic scheme Schüco Advance Collector



Innovative Schüco thermal conduction technology with a 360° enclosed absorber pipe

Collector pressure drop table water/glycol mixture (60/40), average temperature	
Flow rate gpm (l/h)	Pressure drop ft.hd (mbar)
0.21 (5.0)	0.90 (27)
0.42 (10.0)	1.94 (58)
0.64 (15.0)	3.10 (93)
0.85 (20.0)	4.34 (130)
1.06 (25.0)	5.75 (172)
1.27 (30.0)	7.25 (217)

Collector thermal performance rating Thousands of BTU per panel per day (MJ per panel per day)			
Category	Clear Day	Mildly Cloudy	Cloudy Day
A (-9 °F / -5 °C)	31.3 (33.1)	23.7 (25.0)	16.1 (17.0)
B (9 °F / 5 °C)	28.7 (30.1)	21.1 (22.2)	13.5 (14.2)
C (36 °F / 20 °C)	24.5 (25.8)	17.0 (18.0)	9.7 (10.2)
D (90 °F / 50 °C)	16.8 (17.7)	9.7 (10.2)	3.2 (3.4)
E (144 °F / 80 °C)	9.5 (10.0)	3.6 (3.8)	0.0 (0.0)

