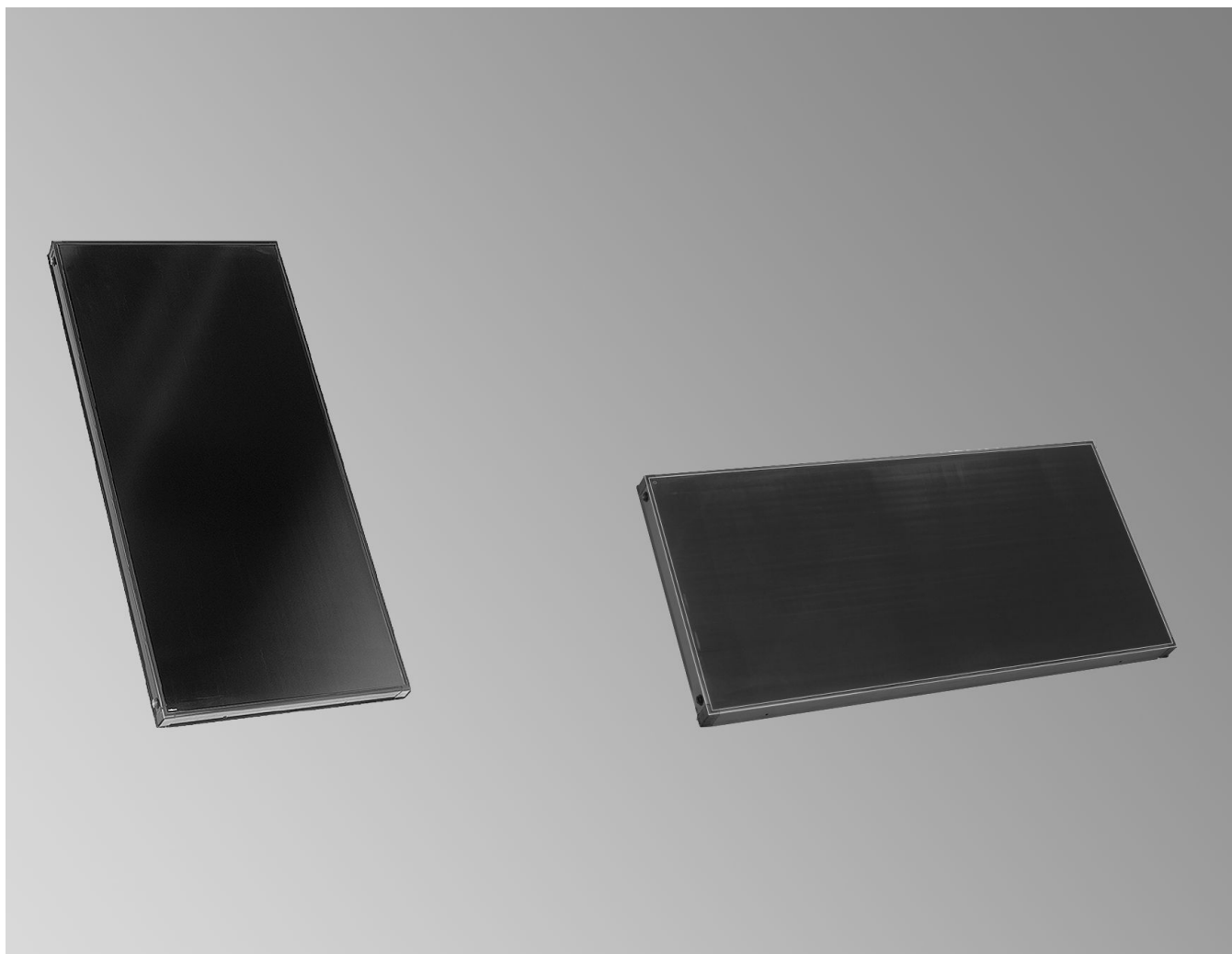


Datasheet

Part no. and prices: see pricelist



VITOSOL 300-F Type SV3A/B and SH3A/B

Flat-plate collector for vertical or horizontal installation, for installation on flat and pitched roofs as well as for integration into roofs and freestanding installation.

Type SH3A/B also on walls.

For the heating of DHW, central heating and swimming pool water via a heat exchanger as well as for the generation of process heat.

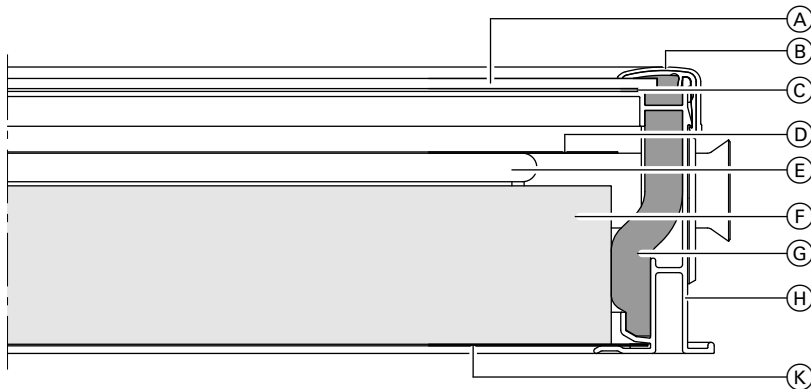
Product description

The main component of the Vitosol 300-F, type SV3A/SH3A, is the highly selectively coated absorber and the cover with an anti-reflex glass pane. This cover significantly improves the optical efficiency of the collector. The absorber ensures high absorption of insolation and low emissions of thermal radiation. A meander-shaped copper pipe through which the heat transfer medium flows is part of the absorber. The heat transfer medium absorbs the absorber heat through the copper pipe. The absorber is encased in a highly insulated collector housing that minimises the thermal losses of the collector. The high-grade thermal insulation is resistant to temperature, releases no gas and is optimised for the demands made of a high performance collector.

Up to 12 collectors can be combined together to create a single collector array. For this purpose, the standard delivery includes flexible connecting pipes with O-rings.

A connection set with locking ring fittings enables the collector array to be readily connected to the pipes of the solar circuit. The collector temperature sensor is mounted in a sensor well set in the solar circuit flow.

The Vitosol 300-F, type SV3B/SH3B with a special absorber coating is designed for coastal regions (see chapter "Specification").



- | | |
|---|---|
| Ⓐ Cover made from solar glass with an anti-reflex coating, 3.2 mm | Ⓕ Melamine epoxy foam insulation |
| Ⓑ Aluminium cover strip | Ⓖ Melamine epoxy foam insulation |
| Ⓒ Pane gasket | Ⓗ Aluminium frame in RAL 8019 |
| Ⓓ Absorber | Ⓚ Steel bottom plate with an aluminium-zinc coating |
| Ⓔ Meander-shaped copper pipe | |

Benefits

- High performance flat-plate collector with anti-reflex glass.
- Attractive collector design; frame in RAL 8019 (brown). Upon request, the frame is also available in any other RAL colour.
- Absorber designed as meander layout with integral headers. Up to 12 collectors can be linked in parallel.
- Universal application for above roof and freestanding installation — either in vertical (type SV) or horizontal (type SH) orientation. Type SH is suitable for installation on walls.
- High efficiency through highly selectively coated absorber and cover made from translucent anti-reflex glass.
- Permanently sealed and highly stable through all-round folded aluminium frame and seamless pane seal.
- Puncture-proof and corrosion-resistant back panel made from zinc plated sheet steel.
- Easy to assemble Viessmann fixing system with statically-tested and corrosion-resistant components made from stainless steel and aluminium – standard for all Viessmann collectors.
- Quick and reliable collector connection through flexible corrugated stainless steel pipe push-fit connectors.

Specification

Vitosol 300-F is available with 2 different absorber coatings. Type SV3B/SH3B has a special absorber coating that allows these collectors to be used in coastal regions.

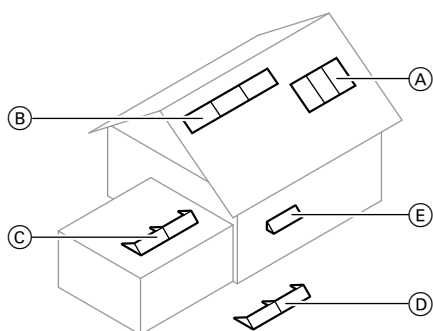
Note

Viessmann accepts no liability if type SV3A/SH3A is used in such regions.

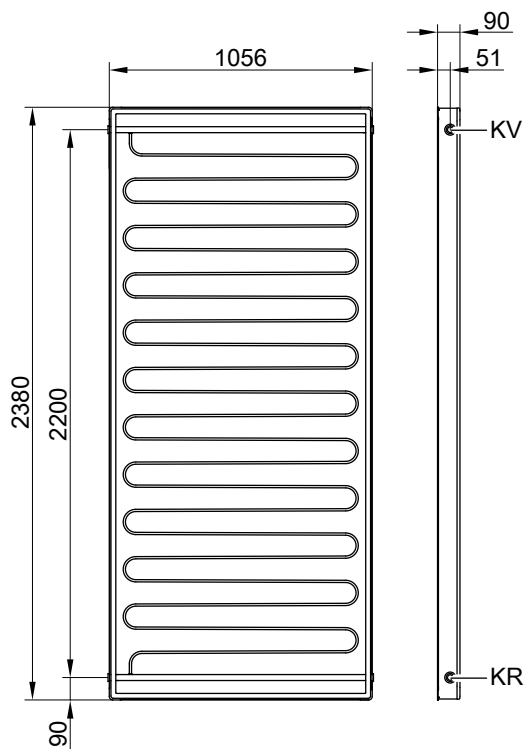
Distance to the coast:

- up to 100 m:
only use type SV3B/SH3B
- between 100 and 1000 m:
type SV3B/SH3B is recommended

| Type | | SV3A | SH3A | SV3B | SH3B |
|--|--------------------------------------|---|--|---|--|
| Gross area (required when applying for subsidies) | m ² | | | | 2.51 |
| Absorber area | m ² | | | | 2.32 |
| Aperture area | m ² | | | | 2.33 |
| Installation position (see following diagram) | | Ⓐ (above roof and roof integration), Ⓒ, Ⓓ | Ⓑ (above roof and roof integration), Ⓒ, Ⓓ, Ⓔ | Ⓐ (above roof and roof integration), Ⓒ, Ⓓ | Ⓑ (above roof and roof integration), Ⓒ, Ⓓ, Ⓔ |
| Clearance between collectors | mm | | | | 21 |
| Dimensions | | | | | |
| Width | mm | 1056 | 2380 | 1056 | 2380 |
| Height | mm | 2380 | 1056 | 2380 | 1056 |
| Depth | mm | 90 | 90 | 90 | 90 |
| The following values apply to the absorber area: | | | | | |
| – Optical efficiency | % | | | 83.4 | 80.3 |
| – Heat loss factor k₁ | W/(m ² · K) | | | 3.66 | 3.77 |
| – Heat loss factor k₂ | W/(m ² · K ²) | | | 0.0169 | 0.0156 |
| Thermal capacity | kJ/(m ² · K) | 5.0 | 5.0 | 4.6 | 4.6 |
| Weight | kg | | | | 41 |
| Liquid content (heat transfer medium) | litre | 1.83 | 2.48 | 1.83 | 2.48 |
| Permiss. operating pressure (see chapter "Solar expansion vessel") | bar/MPa | | | | 6/0.6 |
| Max. stagnation temperature | °C | | | 206 | 205 |
| Steam output | | | | | |
| – Favourable installation position | W/m ² | | | | 60 |
| – Unfavourable installation position | W/m ² | | | | 100 |
| Connection | Ø mm | | | | 22 |

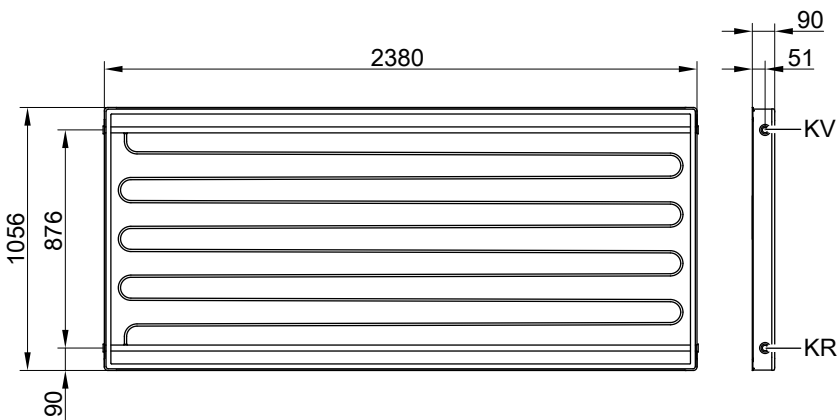


Specification (cont.)



Type SV3A/SV3B

KR Collector return (inlet)
KV Collector flow (outlet)




Type SH3A/SH3B

KR Collector return (inlet)
KV Collector flow (outlet)

Tested quality

Approved quality

The collectors meet the requirements of the "Blue Angel" certificate of environmental excellence to RAL UZ 73.
Tested in accordance with Solar KEYMARK and EN 12975.

 CE designation according to current EC Directives.



Subject to technical modifications.

Viessmann Werke GmbH&Co KG
D-35107 Allendorf
Telephone: +49 6452 70-0
Fax: +49 6452 70-2780
www.viessmann.com

Viessmann Limited
Hortonwood 30, Telford
Shropshire, TF1 7YP, GB
Telephone: +44 1952 675000
Fax: +44 1952 675040
E-mail: info-uk@viessmann.com

5815 132 GB