## VONARIS solitary finished radiator

VONARIS: the solitary finished radiator in a fully welded horizontal design, with 1 to 4 layers of steel rectangular water-flow pipes arranged one-behind-the-other, each layer consisting of from 2 to 11 pipes arranged one-above-the-other.

Vertical design: with 1 or 2 layers of steel rectangular water-flow pipes, arranged one-behind-the-other, each layer consisting of from 3 to 12 steel pipes, arranged side-by-side.

A 2 mm space between the heating pipes guarantees additional resistance to corrosion. **VONARIS** solitary finished radiators are equipped with a built-in valve set, suitable for either double-pipe or single-pipe operation, using a one-pipe manifold, with a factory-fitted valve (already installed) and protective cap.

**VONARIS** solitary finished radiators will normally be delivered with side panels. The horizontal design is also equipped with a top cover. **VONARIS** solitary finished radiators, are not delivered with brackets as standard (exception: VHV 11, overall height 358 to 790 mm, does include brackets). For the vertical design, brackets are included. The **VONARIS** solitary finished radiator comes with a drain plug and a pivoting vent plug (with the vertical design, a dummy plug too), all of them factory-sealed. **VONARIS** solitary finished radiators are

**VONARIS** solitary finished radiators are Design radiators that are just waiting to be connected.

**Standard design:** rectangular steel pipes,  $70 \times 11 \times 1.5$  mm **High-pressure design:** rectangular steel pipes,  $70 \times 11 \times 2.0$  mm

**WVO design:** models 22, 34 and 47 (in the horizontal design and up to an overall height of 286 mm) are also available with a rear-welded heat reflector (no water-flow). The VHV 20 model (at overall heights of 358 to 574 mm), and the VHV 22 model (overall heights 358 to 646 mm) may have a heat reflector fitted subsequently.

#### **Dimensions:**

Horizontal design: overall lengths between 500 mm and 1400 mm are available (at increments of 100 mm), and between 1600 and 4000 mm (at increments of 200 mm).

Horizontal design:

the available overall heights are 142, 214, 286, 358, 430, 502, 574, 646, and 790 mm.

Vertical design: overall lengths between

214 and 862 mm are available (at increments of 72 mm)

Vertical design: overall heights of 1600, 1800, and 2000 mm are available.

#### Coatings:

- Undercoat: electrophoretic, using water-soluble paints, conforming to DIN 55900 part 1, stoved at 165° C;
- 2. Finish: electrostatic powder coating, conforming to DIN 55900 part 2, in a state-of-the-art facility. (On request, and at a supplementary charge, a range of RAL and sanitary ware colours can be offered.) This particularly robust coating is stoved at an object temperature of 180° C.

Packaging: 1. Cardboard packaging

- 2. Edge protection
- 3. Shrink foil



### **Connections:**

horizontal design:

3 x internal thread G 1/2", and 2 x external thread G 3/4", bottom right (by special order, bottom left). Types VHV 20, VHV 22, VHV 34, and VHV 46 are reversible and so can be connected either at bottom right or at bottom left. vertical design: 4 x internal thread G 1/2", and 2 x external thread G 3/4", bottom right (by special order,



Maximum positive operating pressure Standard design:

bottom left).

5 bar



Maximum positive operating pressure: High-pressure design

(supplementary charge): 8 bar



Maximum operating temperature: 110 °C

### Quality certificates

### Strong brands of the highest quality

VOGEL&NOOT offers its customers strong brands that meet highest quality standards. All the production sites' production processes are certified according to ISO. The quality and performance specifications of the convectors and heating panels have been verified by recognised European institutions.

The standards that the quality certificates require us to maintain give you security, the best heating performance and premium product quality. For the VOGEL&NOOT warranty conditions, please see the installation sheet, which is enclosed with each VONARIS/KONTEC convector or heating panel.

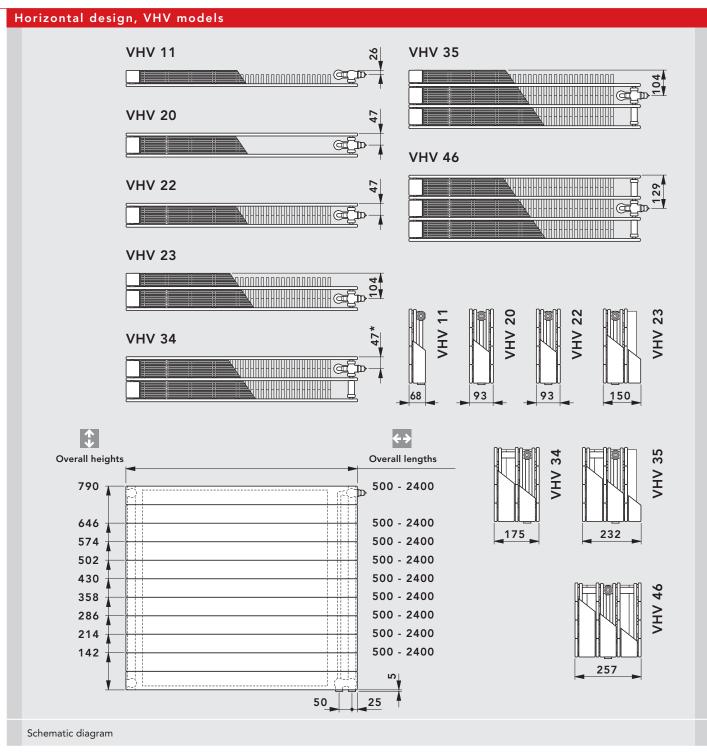










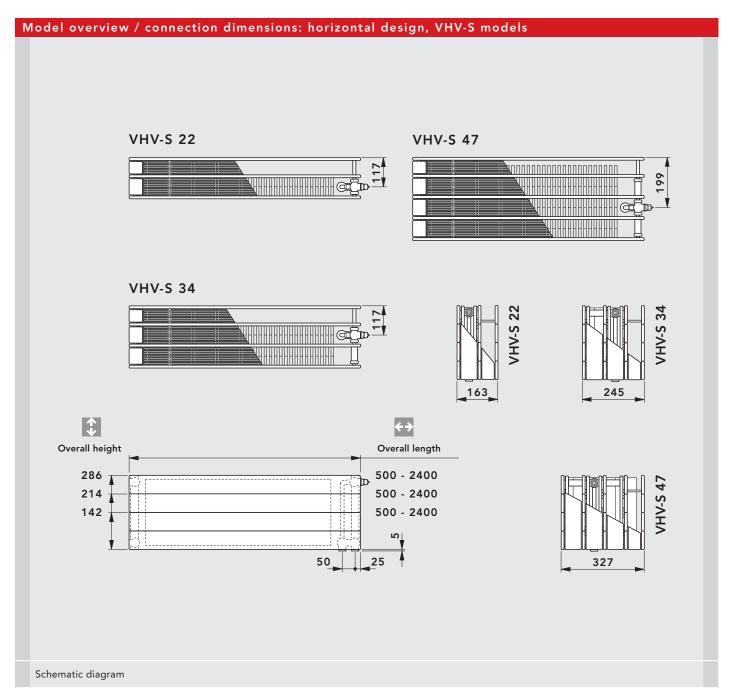


\* Please note: If the VHV 34 model is turned and used as a left-hand design, the distance between the VONARIS rear panel and the connection point is 129 mm.

Model	VHV 11			VHV 20			VHV 22			۷H۱	/ 23	۷H۱	/ 34	۷H۱	/ 35	VHV	/ 46					
Overall height	214	286	358	430	142	214	286	358	430	142	214	286	358	430	142	214	142	214	142	214	142	214
<b>1</b>	502	574	646	790	502	574	646	790		502	574	646	790		286		286		286		286	
Overall length  [mm]	500 - 2400 mm (for special overall lengths see output tables)																					
Increments		100 mm (for overall lengths of 1400 mm and above: 200 mm)																				

### The VHV-S models

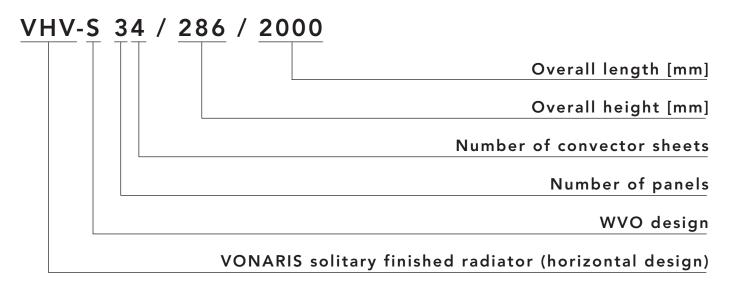
With their factory-welded heat reflector (no water-flow), the WVO designs return a major part of the otherwise lost heat to the room. They do so by means of convection between radiator and heat reflector.



Model		VHV-S 22			VHV-S 34		VHV-S 47		
Overall height  [mm]	142	214	286	142	214	286	142	214	286
Overall length [mm]	verall ength 500 - 2400 mm (for special overall lengths see output tables)								
Increments	ments 100 mm (for overall lengths of 1400 mm and above: 200 mm)								

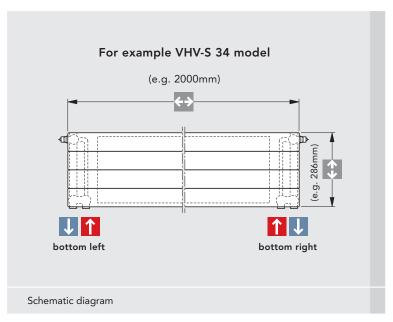
### Horizontal design

# Model description



For each individual horizontal design order, the following data must be specified:

- Model (VHV, VHV-S)
- Overall height [mm]
- Overall length [mm]
- Specification of the RAL or Sanitary-Ware Colour number
- Connections for supply / return (by default at bottom right, by special order at bottom left; the VHV 20, VHV 22, VHV 34 and VHV 46 models can be connected either at bottom right or at bottom left)
- Positive operating pressure
   (N (normal) = standard design 5 bar /
   H (high) = high-pressure design 8 bar)
- Without brackets = 0 / with brackets = 1
   (by default the VHV models will be delivered without brackets; exception: VHV 11 model: overall height between 358 and 790 mm, with brackets).

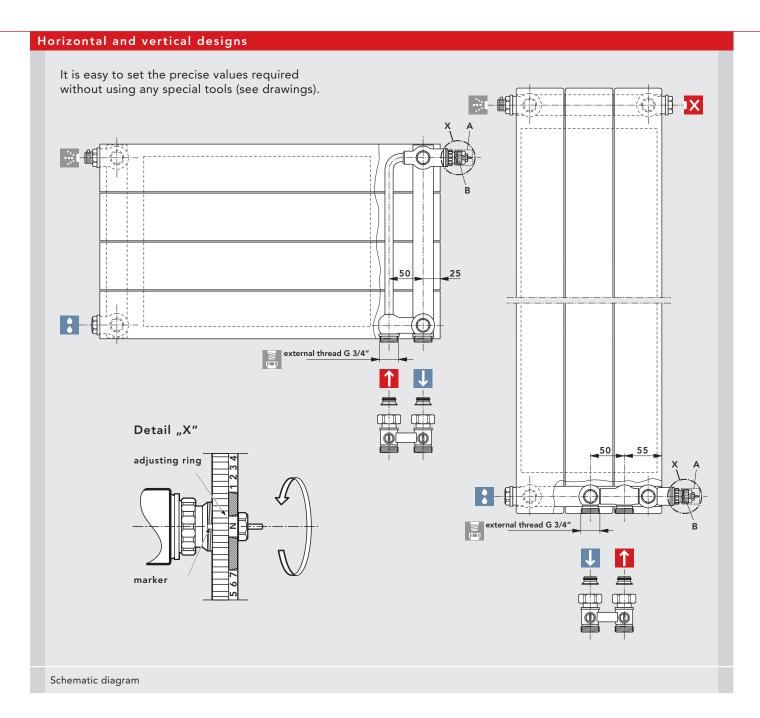


# Order example:

1 item in horizontal design (WVO); connection bottom left; VHV-S 34 model; overall height 286 mm; overall length 2000 mm; colour RAL 3000; with 2 stand consoles SK 14 for use on finished floors; operating pressure 8 bar (high pressure design).

### Example of an order form:

Pos./ Room	Num- ber	Model	Overall height [mm]	Overall length	Colour	Connections	Connections VHV and VSV-S	Positive opera- ting pressure	Brackets without = 0 with = 1		neral ssories
						S VR RV S	RVIS SIVR			Model	Number
-	1	VHV-S 34	286	2000	RAL 3000	botto	m left	н	0	SK 14	2

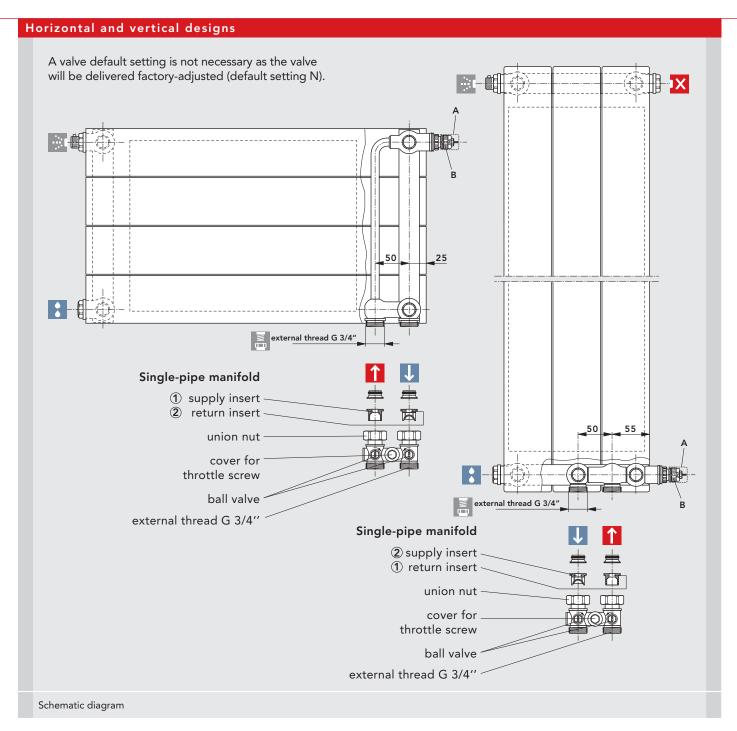


The radiator will be delivered with a fitted protective cap. After removing the protective cap (item A), the following thermostat heads can be installed directly onto the built-in valve (item B): "RA 2000", or "RAW" from Danfoss, "VK" from Heimeier, "D" from Herz, "thera DA" from MNG, and "UNI XD" from Oventrop.

#### Adjustment tips:

- Remove protective cap and sensor
- Lift the adjusting ring and turn it anti-clockwise, to the setting required the set value (1, 2, ...7, N) needs to be directly in line with the marker.
- Presetting is possible in steps of 0.5 between 1 and 7. The "N"setting, cancels all presetting.

Note: Settings in the hatched areas must be avoided.



The radiator will be delivered with a fitted protective cap. After removing the protective cap (item A), the following thermostat heads can be installed directly onto the built-in valve (item B): "RA 2000", or "RAW" from Danfoss, "VK" from Heimeier, "D" from Herz, "thera DA" from MNG, and "UNI XD" from Oventrop.

#### Please note!

### Horizontal design:

During the installation of the single-pipe manifold ensure that the return insert (2) is installed in the water return, and the supply insert (1) in the water supply.

#### Vertical design:

Prior to the installation of the one-pipe manifold it is essential to swap over the supply insert and the return insert so that the supply insert 1 is installed in the water supply, and the return insert 2 in the water return.

# VHV 20 and VHV 22 models, in horizontal design

#### The new heat reflector

- is available for the VHV 20 model (OH 358 - 573 mm) and the VHV 22 model (OH 358 – 646 mm), in horizontal design
- returns a major part of the otherwise lost heat to the room, by means of convection between the VONARIS solitary finished radiator and the heat reflector.

#### Design:

Electrophoretically coated and finish in RAL 9016 (on request and at an extra charge, available in a range of RAL and Sanitary Ware colours); delivered with 8 push-in brackets, 8 stabilising brackets, 4 Z-brackets, an installation sheet, and packaging

#### Note:

When ordering a horizontal design with heat reflector, it is essential to use the SK 22(VHV 20) or SK 23 (VHV 22) stand consoles.

VONARIS solitary finished radiators with a fitted heat reflector (see diagram right)

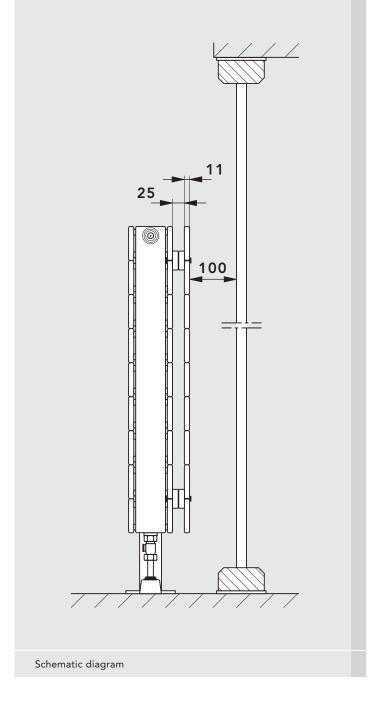
Depth: 11 mm heat reflector

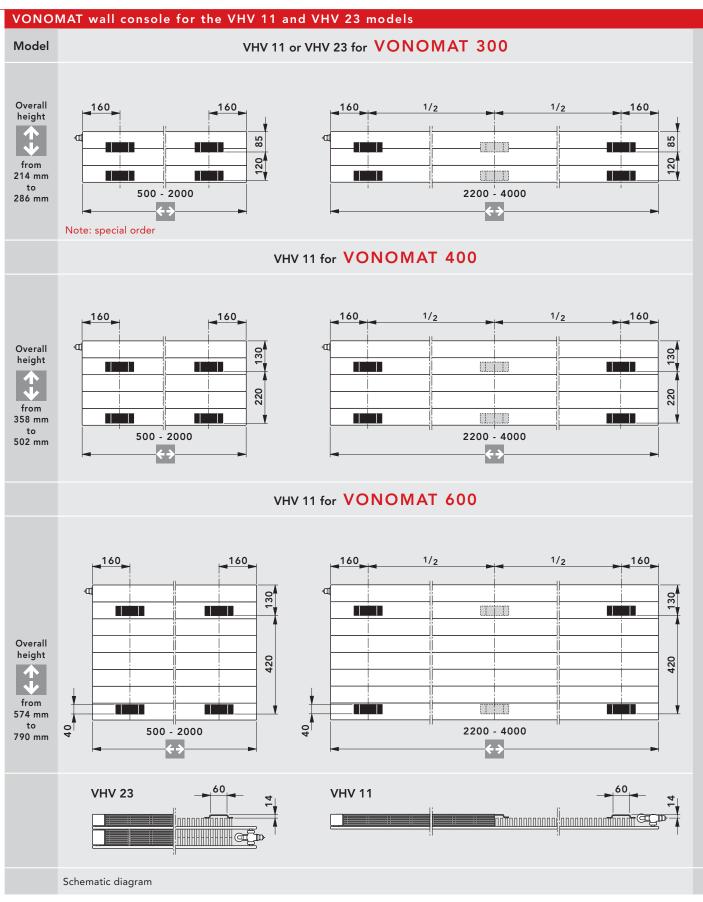
Internal depth: 25 mm between heating pipe and

heat reflector

Minimum clearance\*:100 mm between window surface and heat reflector

neat reflector





**Note:** for the horizontal design, brackets will be delivered as standard only with the VHV 11 (OH 358 – 790 mm) model. If a **VONOMAT** wall console is used with the VHV 11 (OH 214 – 286 mm) and the VHV 23 (214 – 286) models, they must be ordered as a special design with brackets.

# VONOMAT wall console for the VHV 11 and VHV 23 models

The **VONARIS** solitary finished radiator can be installed easily, quickly and securely, whilst it is still in its wrapper. This is made possible by the **VONOMAT** wall console for the horizontal designs of VHV 11 (OH 214 – 790 mm) and VHV 23 (OH 214 and 286 mm) with fitted brackets.

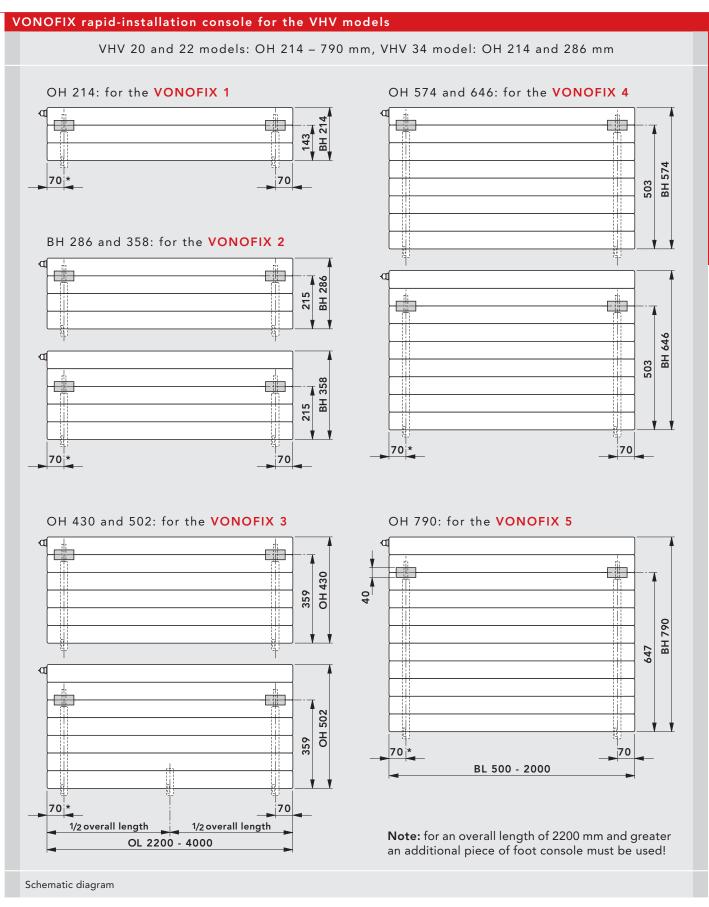
Wall rails for OH 214	- 790 mm				
	Drilling measureme	ents for the	VONOMAT 30	00 – 600	
Wall rail for OH 214 / 286 mm	Overall radiator height [mm]	Value X [mm]	Value <b>Y</b> [mm]	Value <b>Z</b> [mm]	Wall rail for OH 358 - 790 mm
	214	34	114	100	radiator top edge
	286		141	145	N N
radiator top edge	358	58	209	149	
N	430	130	281	149	
	502	202	353	149	
	574	74	425	149	<b>&gt;</b>
> ×	646	146	497	149	×
radiator lower edge	790	290	641	149	radiator lower edge
Schematic diagram					

The VONOMAT wall console with integrated connection and displacement locking features consists of:

- 2 or \*3 consoles with sound-proofing,
- 2 or \*3 snap-on elements,
- 2 or \*3 mounting screws with dowels and safety washers

<sup>\*</sup>For overall lengths of 2200 mm and greater

Connection - wall clear	rance					
W	Horizontal design model	Overall height [mm]	Measurement <b>W</b> [mm]			
	VHV 11	214 - 790	43			
	VHV 23	214 - 286	121,5			
	The VONOMAT wall console complies with the requirements of the TÜV Rheinland (for physical load-bearing purposes).					
Schematic diagram						



**Important**: the installation of VHV models with insertion (push-in) brackets is only feasible when using the **VONOFIX** rapid-installation console!

<sup>\*</sup>If you are using a right-angled valve block to connect your VHV models, please leave clearance of 110 mm, instead of 70 mm, from the radiator's outside edge for the installation of VONOFIX.

# VONOFIX rapid-installation console for the VHV models

The **VONARIS** solitary finished radiator can be installed easily, quickly and securely. This is made possible by the **VONOFIX** rapid-installation console for the horizontal designs of the VHV 20, VHV 22 (OH 214 – 790 mm) and VHV 34 (OH 214 and 286 mm) models.

Wall rails for OH 214 - 790	mm							
Drilling measurements for the VONOFIX 1 - 5								
	Overall radiator height [mm]	Value <b>X</b> [mm]	Value <b>Y</b> [mm]	Value <b>Z</b> [mm]				
radiator top edge	214	-	125	89				
å z	286	100	197	89				
	358	100	197	161				
	430	100	341	161				
<b>&gt;</b>	502	100	341	161				
	574	100	485	89				
radiator lower edge	646	100	485	89				
	790	100	629	161				
Schematic diagram								

The **VONOFIX** rapid-installation console consists of:

- 2 wall consoles (zinc-plated), with sound-proofing filters, screws and dowels
- 2 stabilising brackets
- 2 insertion (push-in) brackets

(For an overall length of 2200 mm and greater, 1 additional piece of foot console)

Connection – wall clear	Horizontal design model	Overall height [mm]	Measurement <b>W</b> [mm]				
W	VHV 20	358 – 790	91				
	VHV 22	214 – 790	91				
	VHV 34	214 – 286	91*				
	*Note: if the VHV 34 is turned round and used as a left-hand design model, the measurement W is 172 mm.						
Schematic diagram							

