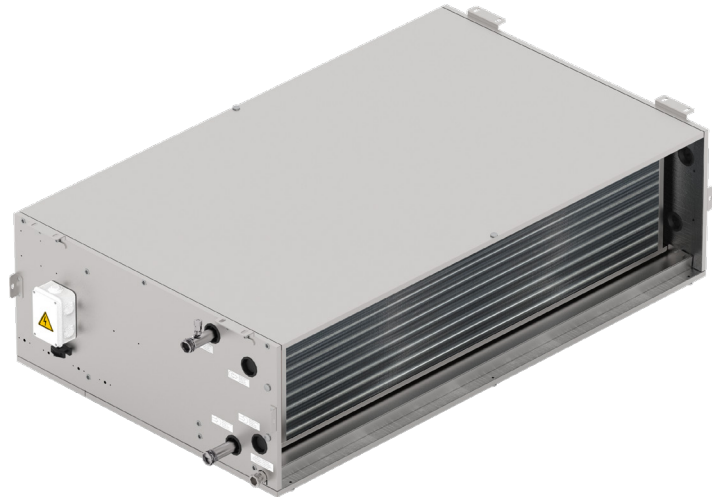


# TVH

# Air handling unit



- Plug fan with EC motor
- Horizontal installation only
- Available units with heat exchanger with 4-6 rows
- Large range of available static pressure
- Ductable unit
- 15 mm thick sandwich panelling



## DESCRIPTION

TVH is a thermoventilation unit designed to guarantee high heads in small to medium-sized rooms with nominal air flow rates from 800 to 5200 m<sup>3</sup>/h. As standard, it is suitable for 2-pipe systems, however the availability (as an accessory) of the secondary water coil, which can be installed inside the unit downstream of the main coil, makes it also suitable for 4-pipe systems. **The unit is suitable for horizontal installation.**

## FEATURES

### Structure

The load-bearing structure is made of sandwich-type panels made of galvanised steel sheet with 15 mm thick polyurethane insulation (density 45 kg/m<sup>3</sup>).

**The particular formulation of the polyurethane foam provides the sandwich panels with reaction to fire class M1 according to NFP standard 92-501. The polyurethane foam was developed with precise specifications to achieve the exceptional value of GWP = 0 (Global Warming Potential), not contributing to the greenhouse effect.**

**The presence of sandwich type panels enables to significantly reduce the noise outside the unit in typical horizontal suspended ceiling installations.**

Specific brackets supplied with the unit make it easier to secure it to the wall.

### Heat exchanger coil

Heat exchanger made with copper pipes and aluminium louvers blocked by the mechanical expansion of the pipes.

The main heat exchanger can be 4 or 6-row.

The secondary heat exchanger, available as an accessory, is 2-row.

### Hydraulic connections

The hydraulic connections are on the right and are made with female threaded connections, however male-male threaded sleeves, with air release valves, are supplied to facilitate hydraulic connections.

**The side of the hydraulic connections can be reversed on site by turning the coil.**

*The definition of "RH connections side" or "LH connections side" refers to the position of the coil connections in relation to the air flow direction (convection: air flow from behind a hypothetical operator inserted in the flow).*

### Condensate drip

The galvanised steel condensate drip tray is thermally insulated and has a double drain on the right and left. The unused condensate drain must be sealed.

### Ventilation group

The ventilation unit consists of plug fans with reversed blades. The use of plug fans allows a reduction in input power compared to fans with forward-facing blades.

**The electric motor, directly coupled to the impeller, is of the EC type.**

The use of the EC motor allows significant energy savings when compared to traditional AC motors and a continuous control of the rotation speed, simplifying air flow rate calibration operations on site.

### Air filtration

**Air filtration is provided, as standard, by 48 mm thick corrugated synthetic filters with Coarse 55% efficiency according to EN ISO 16890 (G4 according to EN 779) positioned in the intake.**

The filters are easily accessible for servicing and cleaning. Extraction is carried out by pulling them out from below by removing the respective panel.

### Electrical wiring

On the side of the hydraulic connections there is an electric box, with IP55 protection rating, for connecting power and the 0-10V control signal or a potentiometer of the ventilation unit.

**In the case of reversing the side of the hydraulic connections, there is no need to reverse the position of the electrical connections.**

### VENTILATION EFFICIENCY

All fans in the range TVH use an EC motor, which, due to the special efficiency of the system, consumes less energy than conventional AC motors.

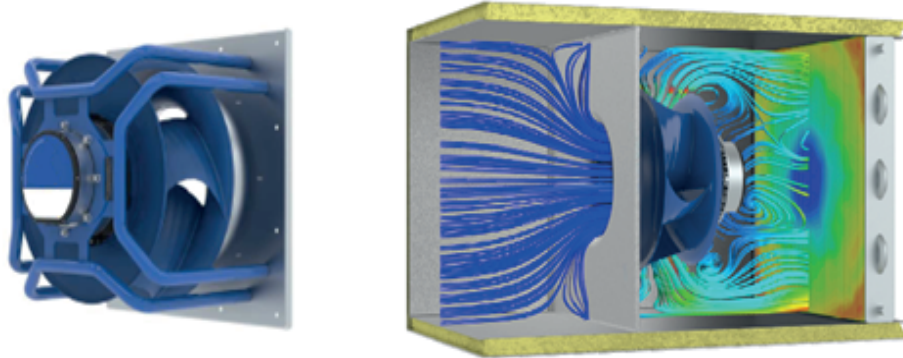
This applies to all speeds, i.e. also to partial load operation.

In addition, continuous speed control via the 0-10V signal allows the air flow rate to be varied, and the static pressure can be adapted to the system's pressure drop, allowing a perfect machine - system match.

The innovative mixed-flow geometry of the composite impeller allows a particularly homogenous aerodynamic distribution over the next component. The positive effect of homogeneous aerodynamic distribution is reflected in a decrease in pressure drops and an increase in the cooling efficiency of the heat exchange coil located downstream of the fan.

For the same processed air flow rate there is therefore less electric input power and a higher cooling efficiency.

In addition, by means of the pressure probe (relying on an external controller) or the flow rate/pressure regulator, which are supplied as accessories, it is possible to carry out ventilation control in constant flow rate or constant pressure on the flow channel.



## CONFIGURATOR

Field	Description
1,2,3	TVH
4,5	Size 08, 15, 20, 27, 34, 40, 52
6	Version
4	4-row finned pack main heat exchanger with right-hand connections
6	6-row finned pack main heat exchanger with right-hand connections

## ACCESSORIES

**BS2x: 2 row water coil:** 2-row water coil for 4-pipe system, located internally, downstream of the main coil. The threaded sleeves for the hydraulic connections and the air vent valve are supplied.

**F7x: filter with ePM1 50% efficiency:** Filter with ePM1 50% efficiency according to EN ISO 16890 (F7 according to EN 779) to be placed inside the unit in place of the standard filter.

**F7x: filter with ePM1 80% efficiency:** Filter with ePM1 80% efficiency according to EN ISO 16890 (F9 according to EN 779) to be placed inside the unit in place of the standard filter.

**SERx:** Galvanised steel damper to be installed on the intake or flow side of the unit. The damper pin is equipped with an easily removable hand control.

**GRAx:** Natural anodised aluminium intake grid with fixed louvers inclined at 45°. To be installed at the intake of the unit via the supplied flange.

**GRMx:** Natural anodised aluminium flow grille with two rows of adjustable louvers. To be installed on the unit's flow side via the flange supplied.

**V2Vx for main and secondary coil:** 2-way valve for main and secondary coil.

**V3Vx for main and secondary heat exchanger:** 3-way valve for main and secondary coil.

**AV24F - 24V / ON-OFF actuator for main and secondary coil:** 24V / ON-OFF actuator for main and secondary coil.

**AV24FM - 24V / ON-OFF - 0-10V actuator for main and secondary coil:** Actuator with 24V power supply for ON-OFF or modulating 0-10V control of 2-way and 3-way main and secondary coil valves.

**AV24M - 24V / 0-10V actuator for main and secondary coil:** Actuator with 24V power supply for modulating 0-10V control of 2-way and 3-way main and secondary coil valves.

**GT2x - 2-way valve tube assembly for main coil:** Hose assembly and hydraulic fittings for connecting the 2-way valve to the main coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).

**GT2Px - 2-way valve hose assembly for secondary coil:** Hose assembly and hydraulic fittings for connecting the 2-way valve to the secondary coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).

**GT3x - 3-way valve hose assembly for main coil:** Hose assembly and hydraulic fittings for connecting the 3-way valve to the main coil. The hose

assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).

**GT3Px - 3-way valve hose assembly for secondary coil:** Hose assembly and hydraulic fittings for connecting the 3-way valve to the secondary coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).

**PVV:** Potentiometer for fan speed control. The +10V signal is available directly on the electrical connection box located outside the unit.

**HMBEx:** Electric coil module with double safety thermostat (manual and automatic) to be installed on the unit's flow side.

**HMF7x:** Filter module with ePM1 50% efficiency according to EN ISO 16890 (F7 according to EN 779) to be positioned at the unit's flow or intake in order to carry out a two-stage filtration. Filter extraction from below.

**HMF9x:** Filter module with ePM1 80% efficiency according to EN ISO 16890 (F9 according to EN 779) to be positioned at the unit's flow or intake in order to carry out a two-stage filtration. Filter extraction from below.

**HMLFx:** Module consisting of state-of-the-art devices with UV germicidal lamp with photocatalytic effect for active disinfection. To be placed at the discharge of the unit. The complete elimination of germs, bacteria and viruses cannot be achieved by using SMLFx modules alone, but a reduction in microbial load means less exposure to infection.

**HM2Sx:** Mixing chamber module complete with two galvanised steel calibration dampers to be positioned at the intake of the unit. The damper pins are equipped with an easily removable hand control.

**HMS5x - Silencer baffles module:** Module consisting of rock wool silencing baffles covered with polyethylene film and protective mesh to prevent flaking. To be installed on the flow and/or intake side of the unit.

**RPx:** Regulator to control ventilation in constant flow rate or constant pressure on the flow duct. An external regulator must be provided for thermoregulation.

**SPD:** Pressure probe for constant flow rate or constant pressure control on the flow duct. In order to carry out the control, the pressure probe must be controlled by an external regulator.

**SPF:** Differential pressure switch to signal filter fouling status.

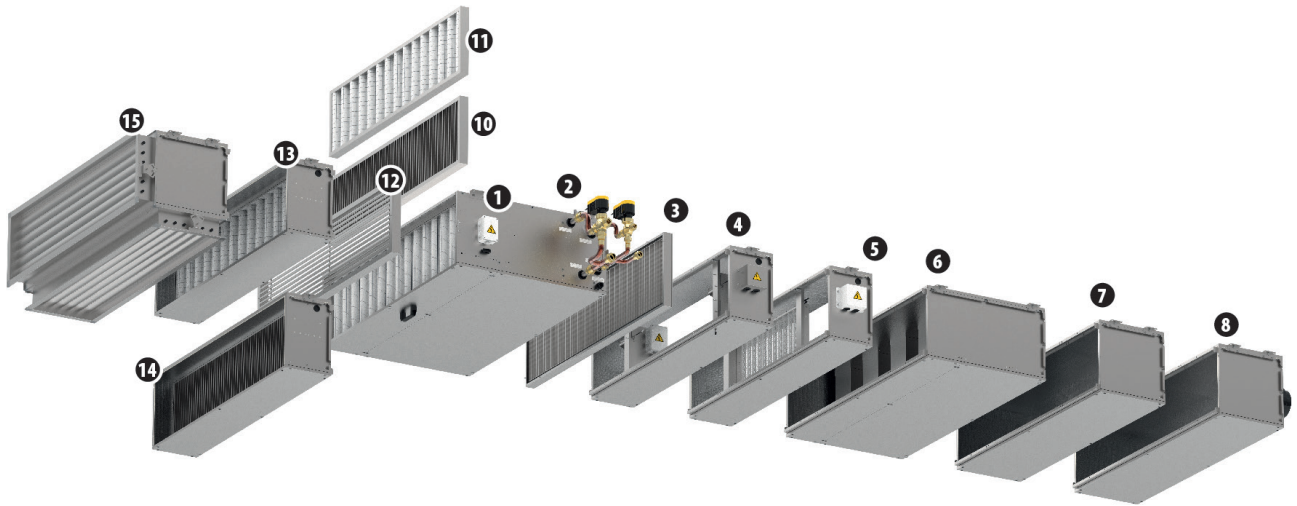
**HPCx:** Closed plenum to be positioned at the flow or intake of the unit. Depending on the opening of the flow/intake hole, the accessory allows

flow/intake in both longitudinal and perpendicular directions to the air flow through the unit.

**HPMx:** Plenum with circular flows to be positioned at the flow and/or intake of the unit. The multi-diameter (200mm, 180mm, 150mm) circular plastic

couplings allow the connection of circular ducts. Flow/intake is allowed in the longitudinal direction of the air flow through the unit.

**SCS:** Servocontrol with 24V power supply for 0-10V modulating control of the SER damper or the HM2S mixing chamber dampers.



Key:

- 1 TVH
- 2 Valvola (V3V, AV24,GT3, GT3P)
- 3 GRM
- 4 HMLF
- 5 HMBE

- 6 HMSS
- 7 HPC
- 8 HPM
- 9 FAI
- 10 F7
- 11 F9

- 12 GRA
- 13 HMF9
- 14 HMF7
- 15 HM2S

## ACCESSORIES COMPATIBILITY

### Control

#### Potentiometer for fan speed control

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
PVV	.	.	.	.	.	.	.	.	.	.	.	.	.	.

### Water valves

#### 2 way valve kit

	TVH084	TVH154	TVH204	TVH274	TVH344	TVH404	TVH524
<b>Main coil</b>							
2 way valve	V2V2	V2V3	V2V4	V2V5	V2V5	V2V6	V2V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT21	GT21	GT22	GT23	GT23	GT24	GT24
<b>Secondary coil</b>							
2 way valve	V2V1	V2V1	V2V4	V2V4	V2V4	V2V5	V2V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT2P1	GT2P1	GT2P2	GT2P2	GT2P2	GT2P3	GT2P3

	TVH086	TVH156	TVH206	TVH276	TVH346	TVH406	TVH526
<b>Main coil</b>							
2 way valve	V2V2	V2V3	V2V4	V2V5	V2V5	V2V6	V2V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT21	GT21	GT22	GT23	GT23	GT24	GT24
<b>Secondary coil</b>							
2 way valve	V2V1	V2V1	V2V4	V2V4	V2V4	V2V5	V2V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT2P1	GT2P1	GT2P2	GT2P2	GT2P2	GT2P3	GT2P3

#### Tabella 3 way valve kit

	TVH084	TVH154	TVH204	TVH274	TVH344	TVH404	TVH524
<b>Main coil</b>							
Three-way valve	V3V2	V3V3	V3V4	V3V5	V3V5	V3V6	V3V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT31	GT31	GT32	GT33	GT33	GT34	GT34
<b>Secondary coil</b>							
Three-way valve	V3V1	V3V1	V3V4	V3V4	V3V4	V3V5	V3V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT3P1	GT3P1	GT3P2	GT3P2	GT3P2	GT3P3	GT3P3

	TVH086	TVH156	TVH206	TVH276	TVH346	TVH406	TVH526
<b>Main coil</b>							
Three-way valve	V3V2	V3V3	V3V4	V3V5	V3V5	V3V6	V3V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT31	GT31	GT32	GT33	GT33	GT34	GT34
<b>Secondary coil</b>							
Three-way valve	V3V1	V3V1	V3V4	V3V4	V3V4	V3V5	V3V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT3P1	GT3P1	GT3P2	GT3P2	GT3P2	GT3P3	GT3P3

### Heating only additional coil

#### 2 row water coil

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
BS21	.	.												
BS22			.	.										
BS23					.	.								
BS24							.	.	.	.				
BS25											.	.	.	.

### Electric coil module

#### 2-stage electric coil module

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
HMBE1	.	.												
HMBE2			.	.										
HMBE3					.	.								
HMBE4							.	.	.	.				
HMBE5											.	.	.	.

## Installation accessories

### Filter module with ePM1 50% efficiency

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
HMF71	.	.												
HMF72			.	.										
HMF73					.	.								
HMF74							.	.	.	.				
HMF75											.	.	.	.

### Filter module with ePM1 80% efficiency

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
HMF91	.	.												
HMF92			.	.										
HMF93					.	.								
HMF94							.	.	.	.				
HMF95											.	.	.	.

### Silencer baffles module

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
HMS51	.	.												
HMS52			.	.										
HMS53					.	.								
HMS54							.	.	.	.				
HMS55											.	.	.	.

### Photocatalytic device module

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
HMLF1	.	.												
HMLF2			.	.										
HMLF3					.	.								
HMLF4							.	.	.	.				
HMLF5											.	.	.	.

### Mixing chamber module complete with two calibration dampers

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
HM251	.	.												
HM252			.	.										
HM253					.	.								
HM254							.	.	.	.				
HM255											.	.	.	.

### Closed plenum

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
HPC1	.	.												
HPC2			.	.										
HPC3					.	.								
HPC4							.	.	.	.				
HPC5											.	.	.	.

### Plenum with circular deliveries

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
HPM1	.	.												
HPM2			.	.										
HPM3					.	.								
HPM4							.	.	.	.				
HPM5											.	.	.	.

### Galvanised steel dampers

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
SER1	.	.												
SER2			.	.										
SER3					.	.								
SER4							.	.	.	.				
SER5											.	.	.	.

### Alluminium Intake grids

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
GRA1	.	.												
GRA2			.	.										
GRA3					.	.								
GRA4							.	.	.	.				
GRA5											.	.	.	.

**Alluminium delivery grille**

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
GRM1	.	.												
GRM2			.	.										
GRM3					.	.								
GRM4							.	.	.	.				
GRM5											.	.	.	.

**Filter with ePM1 50% efficiency**

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
F71	.	.												
F72			.	.										
F73					.	.								
F74							.	.	.	.				
F75											.	.	.	.

**Filter with ePM1 80% efficiency**

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
F91	.	.												
F92			.	.										
F93					.	.								
F94							.	.	.	.				
F95											.	.	.	.

**Flow rate adjuster**

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
RP1	.	.	.	.										
RP2					.	.	.	.	.	.	.	.	.	.

**Differential pressure probe**

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
SPD	.	.	.	.	.	.	.	.	.	.	.	.	.	.

**Filter fouling pressure switch**

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
SPF	.	.	.	.	.	.	.	.	.	.	.	.	.	.

**Servocontrol**

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
SCS	.	.	.	.	.	.	.	.	.	.	.	.	.	.

## 4-ROW COIL UNIT PERFORMANCE DATA

Units designed to operate with all recirculating air or maximum 10% of external air.

		TVH084	TVH154	TVH204	TVH274	TVH344	TVH404	TVH524
<b>Performance in heating mode 70 °C / 60 °C - Main coil 2-pipe system (1)</b>								
Heating capacity	kW	11,60	20,80	28,50	36,60	47,10	60,30	73,90
Water flow rate	l/h	994	1787	2454	3150	4054	5189	6353
Pressure drop	kPa	31	31	48	31	53	42	60
<b>Performance in heating mode 45 °C / 40 °C - Main coil for 2-pipe systems (2)</b>								
Heating capacity	kW	5,70	10,30	14,10	18,20	23,40	29,80	36,50
Water flow rate	l/h	985	1769	2431	3123	4017	5125	6270
Pressure drop	kPa	33	32	51	33	56	45	64
<b>Heating performance 65 °C / 55 °C - Secondary coil 4-pipe system (3)</b>								
Heating capacity	kW	4,40	8,10	14,40	18,40	23,60	28,30	32,90
Water flow rate	l/h	380	697	1235	1579	2031	2433	2828
Pressure drop	kPa	6	26	18	20	32	19	25
<b>Cooling performances 7 °C / 12 °C - Main coil 2 pipe system (4)</b>								
Cooling capacity	kW	4,70	8,30	11,90	14,30	19,30	24,90	29,30
Sensible cooling capacity	kW	3,50	6,20	8,50	10,80	14,10	17,60	21,40
Water flow rate	l/h	815	1422	2038	2447	3316	4267	5032
Pressure drop	kPa	27	25	41	23	44	38	51
<b>Fan</b>								
Type	type	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan
Fan motor	type	EC	EC	EC	EC	EC	EC	EC
Number	no.	1	2	1	1	2	2	2
Nominal air flow rate	m <sup>3</sup> /h	800	1500	2000	2600	3400	4000	5200
Nominal useful head	Pa	150	150	200	200	200	200	200
Maximum useful head (2-pipes) (5)	Pa	202	232	438	536	540	443	521
Maximum useful head (4-pipes) (5)	Pa	183	207	408	512	502	417	482
Input power (2-pipes) (6)	W	151	287	313	491	533	620	1006
Input power (4 pipes) (6)	W	159	305	335	511	581	656	1074
<b>Sound data (7)</b>								
Sound power level (inlet + radiated)	dB(A)	74,0	74,0	70,0	76,0	72,0	73,0	79,0
Sound power level (outlet)	dB(A)	72,0	75,0	72,0	78,0	73,0	75,0	81,0
<b>Diameter hydraulic fittings</b>								
Main heat exchanger	∅	3/4" F	3/4" F	1" F	1" F	1" F	1" F	1" F
Secondary heat exchanger	∅	1/2" F	1/2" F	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F
Condensate discharge diameter	mm	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M
<b>Power supply</b>								
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz
<b>Air filter</b>								
Type	type	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)
<b>Electric coil</b>								
Electric coil capacity	kW	1,5 + 1,5	2,5 + 2,5	4 + 4	6 + 6	6 + 6	7,5 + 7,5	7,5 + 7,5
Stages	no.	2	2	2	2	2	2	2
Power supply		400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz

(1) Room air temperature 20°C d.b.; Water (in/out) 70 °C / 60 °C

(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C / 40 °C

(3) Room air temperature 20 °C d.b.; Water (in/out) 65 °C / 55 °C

(4) Room air 27 °C b.s.47% U.R.; Water (in/out) 7 °C/12 °C

(5) Maximum high static pressure at nominal air flow rate, in heating mode

(6) Input power at nominal air flow rate, at nominal high static pressure, in heating mode

(7) Sound data in 2-pipe configuration, at nominal air flow rate, at nominal high static pressure, in heating mode

## 6-ROW COIL UNIT PERFORMANCE DATA

	TVH086	TVH156	TVH206	TVH276	TVH346	TVH406	TVH526	
<b>Performance in heating mode 70 °C / 60 °C - Main coil 2-pipe system (1)</b>								
Heating capacity	kW	12,40	22,60	30,80	39,40	51,30	64,90	80,10
Water flow rate	l/h	1070	1941	2652	3391	4407	5578	6889
Pressure drop	kPa	54	32	37	31	53	34	50
<b>Performance in heating mode 45 °C / 40 °C - Main coil for 2-pipe systems (2)</b>								
Heating capacity	kW	6,20	11,20	15,30	19,60	25,50	32,20	39,90
Water flow rate	l/h	1063	1923	2630	3369	4377	5537	6855
Pressure drop	kPa	58	34	40	33	57	37	53
<b>Heating performance 65 °C / 55 °C - Secondary coil 4-pipe system (3)</b>								
Heating capacity	kW	4,40	8,10	14,40	18,40	23,60	28,30	32,90
Water flow rate	l/h	380	697	1235	1579	2031	2433	2828
Pressure drop	kPa	6	26	18	20	32	19	25
<b>Cooling performances 7 °C / 12 °C - Main coil 2 pipe system (4)</b>								
Cooling capacity	kW	5,60	9,70	13,60	16,70	22,30	28,10	33,70
Sensible cooling capacity	kW	4,00	6,90	9,50	12,10	15,80	19,60	24,00
Water flow rate	l/h	965	1666	2329	2862	3827	4819	5789
Pressure drop	kPa	46	30	36	26	49	34	47
<b>Fan</b>								
Type	type	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan
Fan motor	type	EC	EC	EC	EC	EC	EC	EC
Number	no.	1	2	1	1	2	2	2
Nominal air flow rate	m <sup>3</sup> /h	800	1500	2000	2600	3400	4000	5200
Nominal useful head	Pa	150	150	200	200	200	200	200
Maximum useful head (2-pipes) (5)	Pa	193	219	425	525	524	432	505
Maximum useful head (4-pipes) (5)	Pa	174	194	395	501	486	406	466
Input power (2-pipes) (6)	W	155	297	322	500	555	635	1036
Input power (4 pipes) (6)	W	163	315	344	520	601	671	1102
<b>Sound data (7)</b>								
Sound power level (inlet + radiated)	dB(A)	74,0	75,0	70,0	76,0	73,0	73,0	79,0
Sound power level (outlet)	dB(A)	73,0	75,0	72,0	78,0	73,0	75,0	82,0
<b>Diameter hydraulic fittings</b>								
Main heat exchanger	Ø	3/4" F	3/4" F	1" F	1" F	1" F	1" F	1" F
Secondary heat exchanger	Ø	1/2" F	1/2" F	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F
Condensate discharge diameter	mm	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M
<b>Power supply</b>								
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz
<b>Air filter</b>								
Type	type	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)
<b>Electric coil</b>								
Electric coil capacity	kW	1,5 + 1,5	2,5 + 2,5	4 + 4	6 + 6	6 + 6	7,5 + 7,5	7,5 + 7,5
Stages	no.	2	2	2	2	2	2	2
Power supply		400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz

(1) Room air temperature 20°C d.b.; Water (in/out) 70 °C / 60 °C

(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C / 40 °C

(3) Room air temperature 20 °C d.b.; Water (in/out) 65 °C / 55 °C

(4) Room air 27 °C b.s.47% U.R.; Water (in/out) 7 °C / 12 °C

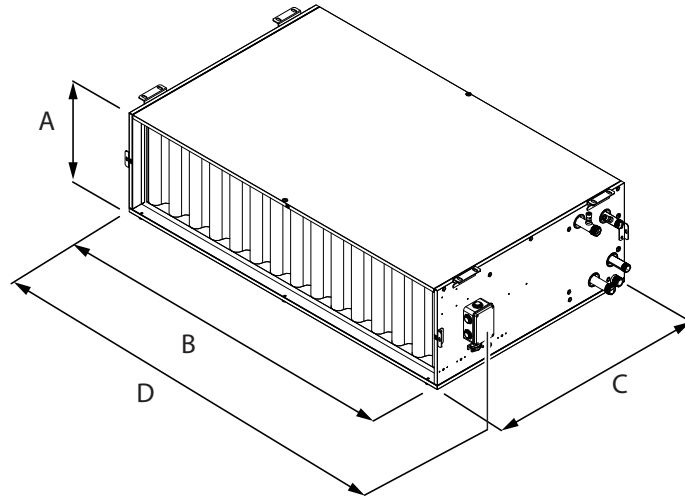
(5) Maximum high static pressure at nominal air flow rate, in heating mode

(6) Input power at nominal air flow rate, at nominal high static pressure, in heating mode

(7) Sound data in 2-pipe configuration, at nominal air flow rate, at nominal high static pressure, in heating mode



## DIMENSIONS



### Unit for horizontal installation

		TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
<b>Dimensions and weights</b>															
A	mm	300	300	300	300	390	390	390	390	390	390	390	390	390	390
B	mm	700	700	1000	1000	1000	1000	1400	1400	1400	1400	2000	2000	2000	2000
C	mm	700	700	700	700	850	850	850	850	850	850	850	850	850	850
D	mm	758	758	1058	1058	1058	1058	1458	1458	1458	1458	2058	2058	2058	2058
Net weight	kg	30,0	31,0	43,0	45,0	55,0	58,0	69,0	73,0	80,0	85,0	110,0	116,0	110,0	116,0

Aermec reserves the right to make any modifications deemed necessary.  
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