

## **STATIONARY HOT AIR HEATING SYSTEMS**



### ***Stationary hot air heating systems***

***Wall-mounted heating systems***

***Universal heating systems***

***Hot water heating systems***

***Ceiling ventilation units***

***Ceiling heating systems***

***Ceiling fans***

***Exhaust gas systems***

# RAPID HEAT ADAPTED TO YOUR NEEDS

**Hot air heating systems for air to feel good, surprisingly easy, but highly effective**

No matter whether they are used for workshops, production halls, showrooms, exhibition halls, sport centers, greenhouses: REMKO stationary hot air heating systems make sure people feel good. We can guarantee the following:

- Immediate heat without pre-heating
- Fully automatic controls optional
- High operating safety in constant operation

**Immediate heat with hot air heating systems can be generated in fresh-air, mixed-air, and recirculating air operation.**

## **Fresh-air operation**

- The air to be heated is taken directly from the outside. In case of corresponding outside conditions, this method guarantees clean, unused air.
- Fresh air is brought into the room from outside (only ventilation, no heating) during fresh-air operation in the summer.

## **Mixed-air operation**

- According to the setting, more or less fresh air is suctioned in together with the room air. This method reduces heating costs because previously heated air from the heated room is used on the one hand and covers the necessary fresh-air requirement on the other.

## **Re-circulating air operation**

- The air is taken from the room being heated and blown into the same room again after heating. This method cases the lowest operating costs because only the previously heated room air is reheated and circulated.

**Low-noise REMKO hot water heaters for when hot water is the heating medium.**

Hot water as a heating medium is no problem with REMKO hot-water heating systems. Without great expense, the units can be quickly mounted to the wall or ceiling.

## **Extensive accessory programme**

We offer tailor-made, complete solutions. For this purpose, we provide a specific needs-based assortment of accessory parts such as control units, exhaust gas systems, air discharge accessories, air intake accessories, ceiling fans, and many other products.

## **Quality with systems**

### **CLIMATE**

#### **Air-conditioners**

Local air-conditioners  
Comfort air-conditioners

#### **Chilled water systems**

Chillers

#### **Dehumidifiers**

Mobile dehumidifiers  
Swimming pool dehumidifier

### **HEATING**

#### **Hot air heating systems**

Mobile hot air heating systems  
Stationary hot air heating systems

### **NEW ENERGIES**

#### **Heat pump systems**

Heat pumps  
Heat pump packages

**The REMKO product line offers the right unit for every demand.**

For rooms in which the comfort of the people in it determines the solution

- Showrooms
- Exhibition halls
- Sports arenas

**For workrooms and storage areas**

- Production halls
- Warehouses
- Assembly systems
- Greenhouses

## **Product overview** **Stationary** **hot air heating systems**

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	Exhaust gas systems Stainless steel, single-wall	ASE
	Exhaust gas systems Stainless steel, double-wall	ASD

# WALL-MOUNTED HEATERS

## *GPS series with two-stage gas burner*



REMKO GPC 25



### **REMKO GPS**

#### **Hall heating with high energy efficiency.**

The REMKO series is characterised by their compact dimensions, flexible application possibilities, and particularly by their microprocessor controlled gas burner technology. A total of five unit sizes with a heating capacity from 13.0 to 73.5 kW is available. The units are suitable for both wall and ceiling mounting. A variety of exhaust gas and fresh air versions rounds out the flexible installation possibility of this series of units. Through the use of the two-stage gas burner technology, a high energy efficiency is achieved with simple technology.



REMKO GPC 75

- High energy efficiency with two-stage gas burner technology
- Highly flexible applications
- Space-saving mounting on the wall or ceiling
- Rapid, cost-effective installation
- Wide range of accessories available
- Very compact and noiseless unit design
- Combustion chamber in INOX steel



*High energy efficiency with two-stage gas burner technology*

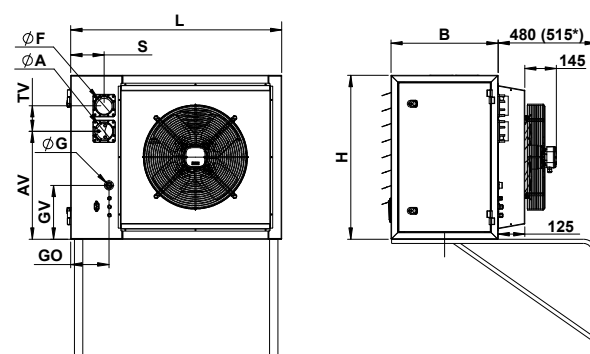


*Microprocessor controlled technology*

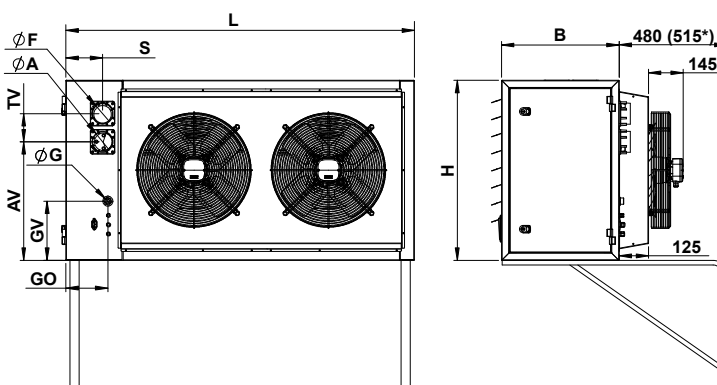




Dimensions – GPS 15/25/35/55

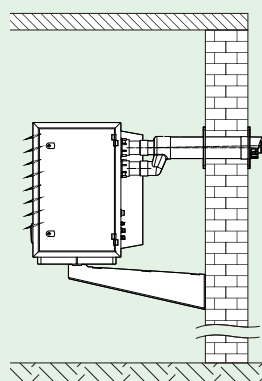


Dimensions – GPS 75



## Outside wall installation

Unit installation, including the exhaust gas and fresh air versions, takes place according to classifications C13, C33, C43, C53, C63, and B23 of DVGW-TRGI 2008. The gas connection must be performed by a licensed fitter. Before the installation of the exhaust gas duct through the outside wall, the district heating inspector must be consulted.



Exhaust gas duct through wall with burner fresh air supply

Dimensions - GPS 15-75

Series		L	B	H	A	F	AV	TV	S	GO	GV	ØG
GPS 15	mm	795	500	690	80	80	430	120	155	180	255	¾ "
GPS 25	mm	795	500	690	80	80	430	120	155	180	255	¾ "
GPS 35	mm	985	500	690	80	80	430	120	155	180	255	¾ "
GPS 55	mm	985	500	765	80	80	505	120	155	180	255	¾ "
GPS 75	mm	1310	500	765	80	80	505	120	155	180	255	¾ "

## Technical data

Series		GPS 15	GPS 25	GPS 35	GPS 55	GPS 75
Nominal heat load	kW	13.0 / 16.5	21.8 / 27.0	27.5 / 34.8	42.4 / 52.2	60.0 / 73.5
Nominal thermal output	kW	12.1 / 15.0	20.4 / 24.6	25.8 / 31.9	39.6 / 47.9	56.2 / 67.5
Air capacity	m³/h	2000	2700	2700	4500	7800
Fuel		Natural gas / propane gas				
Gas flow rate – natural gas H	m³/h	1.38 / 1.75	2.31 / 2.86	2.91 / 3.68	4.20 / 5.52	6.35 / 7.78
Gas flow rate – natural gas L	m³/h	1.60 / 2.03	2.68 / 3.32	3.38 / 4.28	4.80 / 6.42	7.38 / 9.04
Gas flow rate – propane gas	kg/h	1.06 / 1.35	1.78 / 2.21	2.25 / 2.85	3.22 / 4.27	4.91 / 6.01
Horizontal blowing range	m	20	22	22	23	23
Voltage supply	V/Hz	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50
Exhaust connection Ø	mm	80	80	80	80	80
Fresh air connection Ø	mm	80	80	80	80	80
Weight	kg	57	57	67	78	102

Calorific value H<sub>related</sub> to dry standard test gas at 15°C and 1,013.25 mbar  
 Natural gas H G 20 = 9.45 kWh/m³ Liquid gas G 30 = 12.68 kWh/kg  
 Natural gas L G 25 = 8.13 kWh/m³ Liquid gas G 31 = 12.87 kWh/kg

\* Dimensions in case of the hinged wall bracket

# WALL-MOUNTED HEATING SYSTEMS

## GPS series with two-stage gas burner

### Areas of application

- Sales rooms
- Warehouses
- Production halls
- Retailers and supermarkets
- Trade areas
- Sports arenas



### Technical data

Series *		GPS 15	GPS 25	GPS 35	GPS 55	GPS 75
Nominal heat load	kW	13.0 / 16.5	21.8 / 27.0	27.5 / 34.8	42.4 / 52.2	60.0 / 73.5
Nominal thermal output	kW	12.1 / 15.0	20.4 / 24.6	25.8 / 31.9	39.6 / 47.9	56.2 / 67.5
Air capacity	m <sup>3</sup> /h	2000	2700	2700	4500	7800
Design Ref. no.		Natural gas H 224001	Natural gas H 224021	Natural gas H 224041	Natural gas H 224081	Natural gas H 224101
Design Ref. no.		Natural gas L 224002	Natural gas L 224022	Natural gas L 224042	Natural gas L 224082	Natural gas L 224102
Design Ref. no.		Propane gas 224003	Propane gas 224023	Propane gas 224043	Propane gas 224083	Propane gas 224103

\* The gas connection must be performed by a licensed installer.

### Switchgear and control units

Cabled remote control for one unit, **Type KF-30**, surface mounting, type of protection IP20, On/Off switch, electrical remote unlocking mechanism, selector switch for heating or ventilating, including 3.5 m connecting cable

Temperature control for one unit, **Type RR-30**, surface mounting, type of protection IP20, selector switch for heating, Off or ventilating, installed thermostat, electrical remote unlocking mechanism, including 3.5 m connecting cable

Electronic temperature controller for one unit, **Type ATR-10**, surface mounting, type of protection IP 54, automatic day/night economy, weekly programme, electrical remote unlocking mechanism, external thermostat connection for mixed temperature, error and operation messages, including external temperature sensor

Temperature sensor set for 4-point mixed temperature recording for the **ATR-10**

Relay board, **Type RP-10** for group switching of 1-32 GPS units with the **ATR-10**, 1 x **RP-10** per GPS unit

### Accessories

Wall bracket  
Design: Standard

Wall bracket  
Design: Rotary

Ceiling mounting set with horizontal air outlet

Ceiling mounting set with vertical air outlet, installed

Gas connection tube made of stainless steel fabric, length 500 mm

	1011371	1011371	1011371	1011371	1011371
	1011372	1011372	1011372	1011372	1011372
	1011373	1011373	1011373	1011373	1011373
	1011343	1011343	1011343	1011343	1011343
	1011368	1011368	1011368	1011368	1011368
	228780	228780	228780	228780	228780
	228781	228781	228782	228782	228783
	228785	228785	228785	228785	228785
	228786	228786	228786	228786	228787
	228768	228768	228768	228768	228768

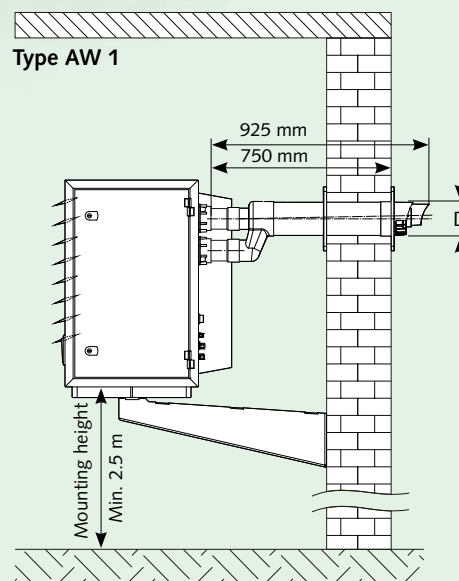


Temperature regulation,  
**Type RR-30**  
Ref. no. 1011372

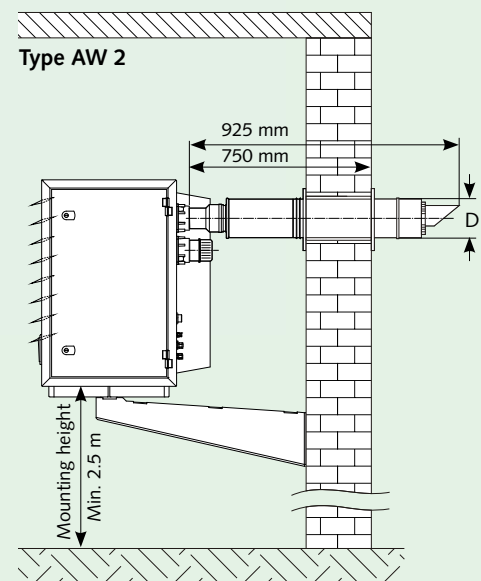


Electronic temperature  
regulation,  
**Type ATR-10**, Ref. no. 1011373

#### LAS balanced flue system through the wall with burner fresh air supply



#### Chimney duct through wall



#### Note

Please observe the following pipe diameters during planning:

Series	Pipe Ø D
GPS 15	125 mm
GPS 25	125 mm
GPS 35	125 mm
GPS 55	125 mm
GPS 75	125 mm

For sample installations, see  
Type AW 1 and AW 2

#### Exhaust gas duct, outside wall

Series	GPS 15	GPS 25	GPS 35	GPS 55	GPS 75
LAS balanced flue system with integrated burner fresh air supply for exterior wall installation, including wind guard, 925 mm long, <b>Type AW 1</b>	228774	228774	228774	228774	228774
Exhaust gas pipe for exterior wall installation, including wind guard and protective grid for combustion air intake, 925 mm long, <b>Type AW 2</b>	228772	228772	228772	228772	228772
<b>Individual sections</b>					
Exhaust gas or fresh air pipe, length 250 mm	228868	228868	228868	228868	228868
Exhaust gas and fresh air pipes, length 500 mm	228871	228871	228871	228871	228871
Exhaust gas and fresh air pipes, length 1000 mm	228872	228872	228872	228872	228872
Exhaust or fresh air joint, 90°	228910	228910	228910	228910	229010
Exhaust or fresh air joint, 45°	228909	228909	228909	228909	228909
Exhaust gas pipe with condensate drain, horizontal, length 185 mm	228955	228955	228955	228955	228955
Protective grid for combustion air intake	228960	228960	228960	228960	228960

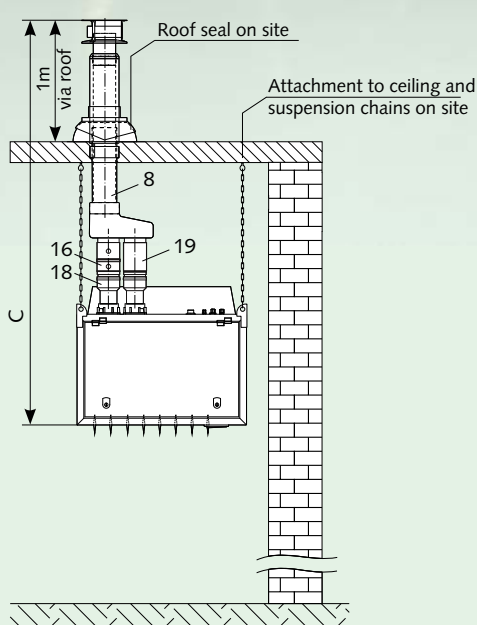
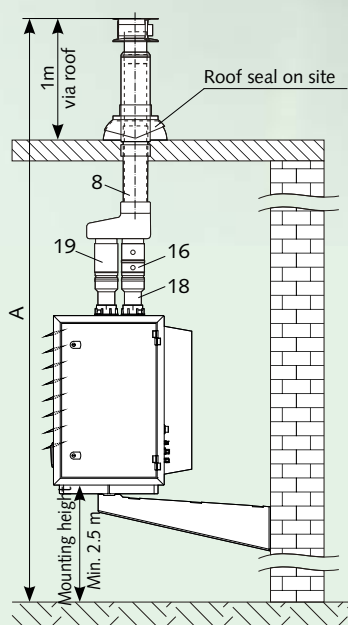
CE certificate no. CE 0432-BPR-119933



# WALL-MOUNTED HEATING SYSTEMS

## GPS series with two-stage gas burner

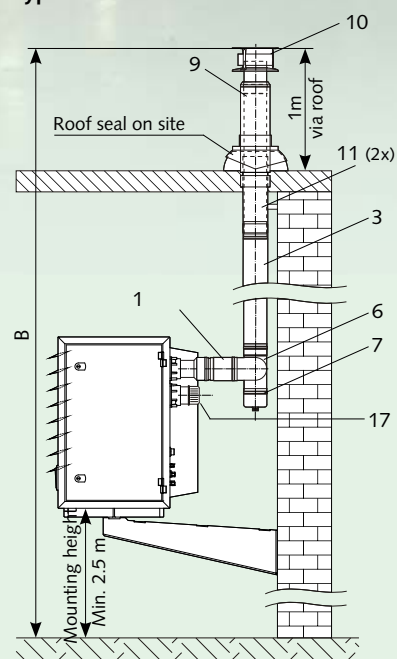
LAS balanced flue system  
Type WSA 81



**LAS balanced flue system via roof  
with burner fresh air supply  
WSA 81 series,  
single-walled aluminium, complete\*,  
consisting of:**

- Pos. 8 1 unit roof penetration  
LAS system with burner, fresh  
air supply, including rain hood,  
overall length 1850 mm
- Pos. 16 1 chimney pipe with condensate  
drain, vertical,  
length 185 mm
- Pos. 18 1 connection port with test nipple
- Pos. 19 1 exhaust gas or fresh air pipe,  
length 300 mm

Exhaust gas duct  
Type WSA 82



**Chimney duct via roof,  
WSA 82 series,  
single-walled aluminium chimney, com-  
plete\*, consisting of:**

- Pos. 1 1 exhaust gas or fresh air pipe,  
length 250 mm (with WSA 82)
- Pos. 3 1 exhaust gas or fresh air pipe,  
length 1000 mm
- Pos. 6 1 T-connection, 90°
- Pos. 7 1 cleaning component with con-  
densate drain
- Pos. 9 1 roof penetration
- Pos. 10 1 rain hood
- Pos. 11 2 wall mounts
- Pos. 17 1 protective grid for combustion  
air intake

\* A slanted/flat roof penetration must be ordered as well if required.

\*\* Order mounting set, Type MDV 1, for vertical air dis-  
charge as well.



### Chimney height

Series	A	B	C
GPS 15	5.15	5.65	2.65
GPS 25	5.15	5.65	2.65
GPS 35	5.15	5.65	2.65
GPS 55	5.25	5.75	2.65
GPS 75	5.30	5.80	2.80

Dimensions in meters

### Note

Please observe the following pipe diameters when planning the necessary roof penetrations.

Series	Type	Pipe Ø
GPS 15	WSA 81	125 mm
GPS 15	WSA 82	95 mm
GPS 25	WSA 81	125 mm
GPS 25	WSA 82	95 mm
GPS 35	WSA 81	125 mm
GPS 35	WSA 82	95 mm
GPS 55	WSA 81	125 mm
GPS 55	WSA 82	95 mm
GPS 75	WSA 81	125 mm
GPS 75	WSA 82	95 mm

### Exhaust gas duct via roof

Appropriate for unit series		GPS 15-75
Type		WSA 81
LAS air exhaust system with integrated burner fresh air supply		
Ref. no.		228911
Type		WSA 82
Exhaust system incl. protective grid, for combustion air extraction from the installation room		
Ref. no.		228902
* Pitched/flat roof penetration should also be ordered where required		
Individual sections		Ref. no.
1	Exhaust gas or fresh air pipe, length 250 mm	228868
2	Exhaust gas or fresh air pipe, length 500 mm	228871
3	Exhaust gas or fresh air pipe, length 1000 mm	228872
4	Exhaust or fresh air joint, 90°	228910
5	Exhaust or fresh air joint, 45°	228909
6	T-connection, 90°	228915
7	Cleaning component with condensate drain	228920
8	LAS system roof penetration with burner fresh air supply, including rain hood, total length 1850 mm	228965
9	Roof penetration, total length 1500 mm	228930
10	Rain hood	228935
11	Wall mount	228940
12	Universal slanted roof penetration for WSA 82	228945
13	Flat roof penetration for WSA 82	228950
14	Universal slanted roof penetration for WSA 81	228970
15	Flat roof penetration for WSA 81	228975
16	Exhaust gas pipe with condensate drain, length 185 mm	228955
17	Protective grid for combustion air intake	228960
18	Connection ports with test nipple	228981
19	Exhaust gas and fresh air pipes, length 300 mm	228968

CE certificate no. CE 0432-BPR-119933

# WALL-MOUNTED CALORIC HEAT HEATING SYSTEMS

## *GPC series with modulating gas burner in condensing design*



REMKO GPC 80

Up to **108%**  
Efficiency

### **REMKO GPC**

#### **Hall heating with the highest energy efficiency**

The REMKO series is characterised by their compact dimensions, flexible application possibilities, and particularly by their microprocessor controlled gas burner technology. A total of four unit sizes with a heating capacity from 4.7 to 82.0 kW is available. The units are suitable for both wall and ceiling mounting. A variety of exhaust gas and fresh air versions rounds out the flexible installation possibility of this series of units.

#### **Achieve maximum output**

With the gross caloric value technology, additional energy is removed from the exhaust gas through condensation. In the process, the efficiency is optimized to a maximum.



REMKO GPC 20

- High energy efficiency with condensing design and modulating gas burner technology
- Highly flexible applications
- Space-saving mounting on the wall or ceiling
- Rapid, cost-effective installation
- Wide range of accessories available
- Sound-optimized through series-standard Ziehl-Abegg fans
- Combustion chamber in INOX steel



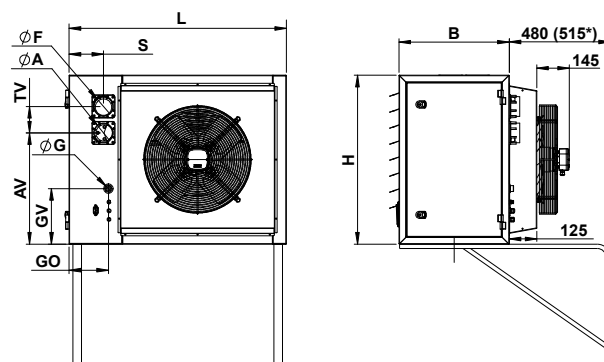
High energy efficiency using modulating gas burner technology



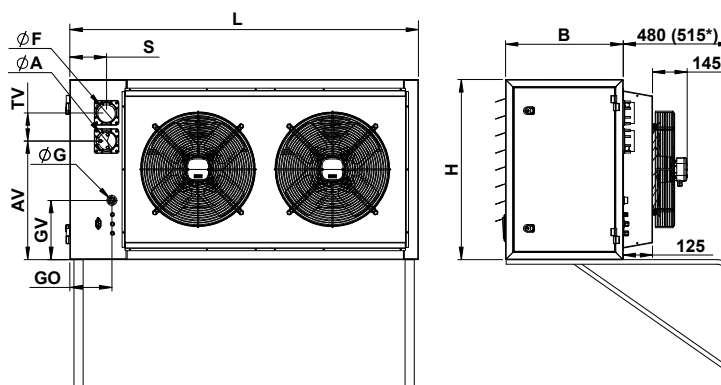
Microprocessor controlled technology



Dimensions – GPC 20/40

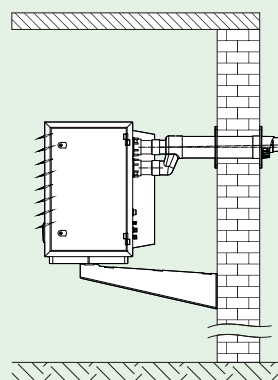


Dimensions – GPC 60/80



### Outside wall installation

Unit installation, including the exhaust gas and fresh air versions, takes place according to classifications C13, C33, C43, C53, C63, and B23 of DVGW-TRGI 2008. The gas connection must be performed by a licensed fitter. Before the installation of the exhaust gas duct through the outside wall, the district heating inspector must be consulted.



Exhaust gas duct through wall with burner fresh air supply

### Dimensions of GPC 20/-80

Series		L	B	H	A	F	AV	TV	S	G0	GV	ØG
GPC 20	mm	795	500	690	80	80	430	120	155	180	255	¾ "
GPC 40	mm	985	500	690	80	80	430	120	155	180	255	¾ "
GPC 60	mm	1310	500	765	80	80	505	120	155	180	255	¾ "
GPC 80	mm	1515	500	845	100 **	100 **	560	140	185	210	275	¾ "

### Technical data

Series		GPC 20	GPC 40	GPC 60	GPC 80
Nominal heat load	kW	4.7 - 19.0	7.6 - 34.8	12.4 - 65.0	16.4 - 82.0
Nominal thermal output	kW	5.0 - 18.2	8.1 - 33.6	13.4 - 62.9	17.8 - 80.0
Condensate	l/h	0.4	0.9	2.1	3.3
Air capacity	m³/h	2700	4300	7800	9000
Fuel		Natural gas / propane gas			
Gas flow rate - natural gas H	m³/h	0.51 - 2.01	0.80 - 3.69	1.31 - 6.88	1.74 - 8.68
Gas flow rate - natural gas L	m³/h	0.59 - 2.34	0.93 - 4.29	1.53 - 8.00	2.02 - 10.1
Gas flow rate - propane gas	kg/h	0.40 - 1.58	0.63 - 2.90	1.03 - 5.39	1.49 - 6.80
Max. length of gas jet	m	24	26	28	28
Voltage supply	V/Hz	230/1~/50	230/1~/50	230/1~/50	230/1~/50
Exhaust connection Ø	mm	80	80	80	100 **
Fresh air connection Ø	mm	80	80	80	100 **
Weight	kg	58	72	98	129

\* Dimensions in case of the hinged wall bracket

\*\* The exhaust gas and fresh air diameter is achieved by an adapter that is included with the standard version.



# WALL-MOUNTED CALORIC HEAT HEATING SYSTEMS

## GPC series with modulating gas burner in condensing design

### Areas of application

- Sales rooms
- Warehouses
- Production halls
- Retailers and supermarkets
- Trade areas
- Sports arenas



### Technical data

Series *		GPC 20	GPC 40	GPC 60	GPC 80
Nominal heat load	kW	4.7 - 19.0	7.6 - 34.8	12.4 - 65.0	16.4 - 82.0
Nominal thermal output	kW	5.0 - 18.2	8.1 - 33.6	13.4 - 62.4	17.8 - 80.0
Air capacity	m <sup>3</sup> /h	2700	4300	7800	9000
Design Ref. no.		Natural gas H 224331	Natural gas H 224341	Natural gas H 224361	Natural gas H 224371
Design Ref. no.		Natural gas L 224332	Natural gas L 224342	Natural gas L 224362	Natural gas L 224372
Design Ref. no.		Propane gas 224333	Propane gas 224343	Propane gas 224363	Propane gas 224373

\* The gas connection must be performed by a licensed plumber

### Switching and control units

Electronic temperature controller with touch display for 1-32 units (group switch),  
**Type ATR-Smart-Basic**, surface installation, type of protection IP 54, automatic day/night economy, weekly programme, electrical remote unlocking mechanism, external thermostat connection for mixed temperature, error and operation messages

1011376      1011376      1011376      1011376

Electronic temperature controller with touch display for 1-32 units (group switch),  
**Type ATR-Smart-Basic**, surface installation, type of protection IP 20, automatic day/night economy, weekly programme, electrical remote unlocking mechanism, external thermostat connection for mixed temperature, error and operation messages, Ethernet interface, can be monitored remotely by Internet browser

1011377      1011377      1011377      1011377

External temperature sensor for **ATR-Smart-Basic/-Web**

1011364      1011364      1011364      1011364

### Accessories

Wall bracket  
Design: Standard

228780      228780      228780      228780

Wall bracket  
Design: Rotary

228781      228782      228783      228783

Ceiling mounting set with horizontal air outlet

228785      228785      228785      228785

Gas connection tube made of stainless steel fabric,  
length 500 mm

228768      228768      228768      228768

Neutralisation box

260400      260400      260400      260400

Condensate pump for neutralisation box

260410      260410      260410      260410

Condensate tube for neutralisation box, running metre

260420      260420      260420      260420

Refill granulate for neutralisation box

260430      260430      260430      260430



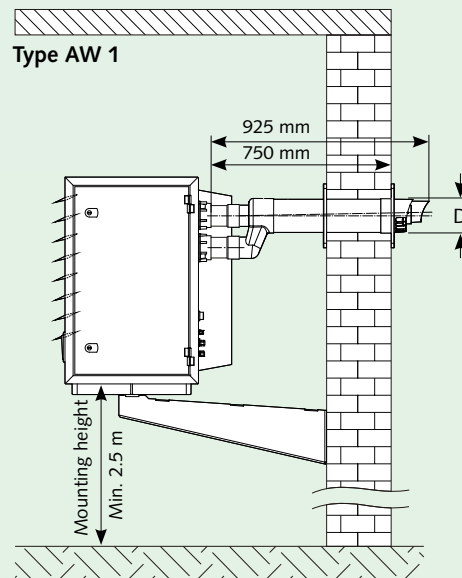


Electronic temperature regulation,  
**Type ATR-Smart-Basic,**  
Ref. no. 1011376

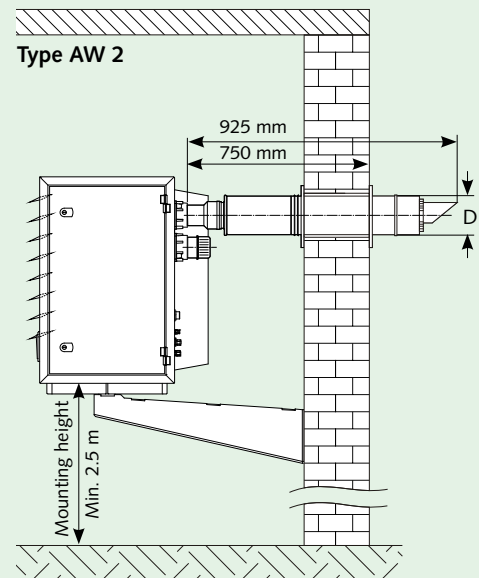


Electronic temperature regulation,  
**Type ATR-Smart-Web,**  
Ref. no. 1011377

### Balanced flue system through wall with burner fresh air supply



### Chimney duct through wall



#### Note

Please observe the following pipe diameters during planning:

Series	Pipe Ø D
GPC 20	125 mm
GPC 40	125 mm
GPC 60	125 mm
GPC 80	150 mm

For sample installations, see  
Type AW 1 and AW 2

### Exhaust gas duct, outside wall

Series	GPC 20	GPC 40	GPC 60	GPC 80
LAS balanced flue system with integrated burner fresh air supply for exterior wall installation, including wind guard, 925 mm long, <b>Type AW 1</b>	228774	228774	228774	228775
Exhaust gas pipe for exterior wall installation, including wind guard and protective grid for combustion air intake, 925 mm long, <b>Type AW 2</b>	228772	228772	228772	228773
<b>Individual sections</b>				
Exhaust gas or fresh air pipe, length 250 mm	228868	228868	228868	228869
Exhaust gas and fresh air pipes, length 500 mm	228871	228871	228871	228876
Exhaust gas and fresh air pipes, length 1000 mm	228872	228872	228872	228877
Exhaust or fresh air joint, 90°	228910	228910	228910	229010
Exhaust or fresh air joint, 45°	228909	228909	228909	229009
Exhaust gas pipe with condensate drain, length 185 mm	228955	228955	228955	229055
Protective grid for combustion air intake	228960	228960	228960	229060

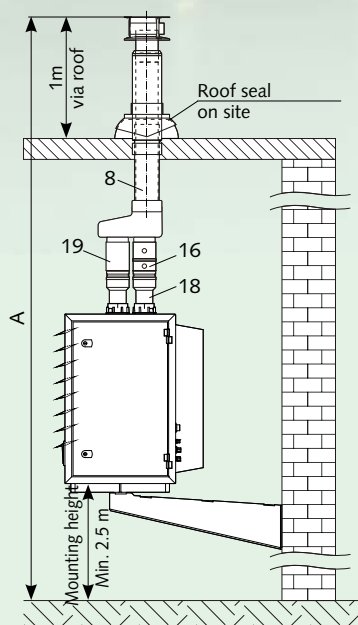
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# WALL-MOUNTED CALORIC HEAT HEATING SYSTEMS

## GPC series

with modulating gas burner in condensing design

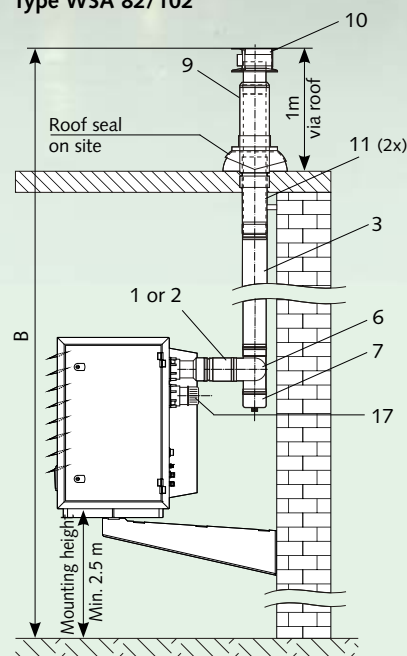
**LAS balanced flue system  
Type WSA 81/101**



**LAS balanced flue system via roof with  
burner fresh air supply  
WSA 81/101 series,  
single-walled aluminium, complete\*,  
consisting of:**

- Pos. 8 1 unit roof penetration, LAS system with burner fresh air supply, including rain hood, overall length 1850 mm
- Pos. 16 1 chimney pipe with condensate drain, vertical, length 185 mm
- Pos. 18 1 connection port with test nipple
- Pos. 19 1 exhaust gas or fresh air pipe, length 300 mm

**Exhaust gas duct  
Type WSA 82/102**



**Exhaust gas duct via roof  
WSA 82/102 series,  
single-walled aluminium, complete,  
\*Consisting of:**

- Pos. 1 1 exhaust gas or fresh air pipe, length 250 mm (with WSA 102)
- Pos. 2 1 exhaust gas or fresh air pipe, length 250 mm (with WSA 82)
- Pos. 3 1 exhaust gas or fresh air pipe, length 1000 mm
- Pos. 6 1 T-connection, 90°
- Pos. 7 1 cleaning component with condensate drain
- Pos. 9 1 roof penetration
- Pos. 10 1 rain hood
- Pos. 11 2 wall mounts
- Pos. 17 1 protective grid for combustion air intake

\* The slanted/flat roof penetration must be ordered as well if required.

### Chimney height

Series	A	B
GPC 20	5.15	5.65
GPC 40	5.25	5.75
GPC 60	5.30	5.80
GPC 80	5.30	5.80

Dimensions in meters

### Note

Please observe the following pipe diameters when planning the necessary roof penetrations.

Series	Type	Pipe Ø
GPC 20	WSA 81	125 mm
GPC 20	WSA 82	95 mm
GPC 40	WSA 81	125 mm
GPC 40	WSA 82	95 mm
GPC 60	WSA 81	125 mm
GPC 60	WSA 82	95 mm
GPC 80	WSA 101	150 mm
GPC 80	WSA 102	115 mm

### Exhaust gas duct via roof

Appropriate for unit series		GPC 20-60	GPC 80
Type		WSA 81	WSA 101
LAS air exhaust system with integrated burner fresh air supply			
Ref. no.		228911	229011
Type		WSA 82	WSA 102
Exhaust system incl. protective grid, for combustion air extraction from the installation room			
Ref. no.		228902	229002
* Pitched/flat roof penetration should also be ordered where required			
Individual sections		Ref. no.	Ref. no.
1	Exhaust gas or fresh air pipe, length 250 mm	228868	228869
2	Exhaust gas or fresh air pipe, length 500 mm	228871	228876
3	Exhaust gas or fresh air pipe, length 1000 mm	228872	228877
4	Exhaust or fresh air joint, 90°	228910	229010
5	Exhaust or fresh air joint, 45°	228909	229009
6	T-connection, 90°	228915	229015
7	Cleaning component with condensate drain	228920	229020
8	LAS system roof penetration with burner fresh air supply, including rain hood, total length 1850 mm	228965	229065
9	Roof penetration, total length 1500 mm	228930	229030
10	Rain hood	228935	229035
11	Wall mount	228940	229040
12	Universal slanted roof penetration for WSA 82/102	228945	229045
13	Flat roof penetration for WSA 82/102	228950	229050
14	Universal slanted roof penetration for WSA 81/101	228970	229070
15	Flat roof penetration for WSA 81/101	228975	229075
16	Exhaust gas pipe with condensate drain, length 185 mm	228955	229055
17	Protective grid for combustion air intake	228960	229060
18	Connection ports with test nipple	228981	229081
19	Exhaust gas and fresh air pipes, length 300 mm	228968	229068

CE certificate no. CE 0432-BPR-119933



# UNIVERSAL HEATING SYSTEMS

## *VRS universal heaters*

*In a modular system adapted for planning needs*

*For oil and gas combustion*



REMKO VRS  
Vertical design

### REMKO VRS

#### Rapid heat, adapted to your needs

For economical heating in industrial halls and warehouses, workshops, sports centres and exhibition halls, or glass and plastic film greenhouses, these REMKO heaters are incomparable. Whether you use EL heating oil, propane or natural gas, VRS heaters always generate the heat you need: quickly, safely, and economically. In contrast with conventional hot water heating systems, these heaters function without a preheating time. In addition, the decentralised setup lowers mounting and investment costs in rooms to be heated. The combustion-technical efficiency amounts to up to 93%.



REMKO VRS  
Horizontal design

- Space-saving installation with low mounting effort
- Combustion chamber with stainless steel heat exchanger
- Individual equipping with air filters and louvre dampers possible in the air intake
- Air duct connection possibilities
- Flexible usage possibilities
- High quality and long service life
- Noiseless radial fans
- Easy access to all components due to maintenance-friendly design



Electronic moisture-proof room thermostat,  
Type ETR-1, no connection accessories, Ref. no. 1011241

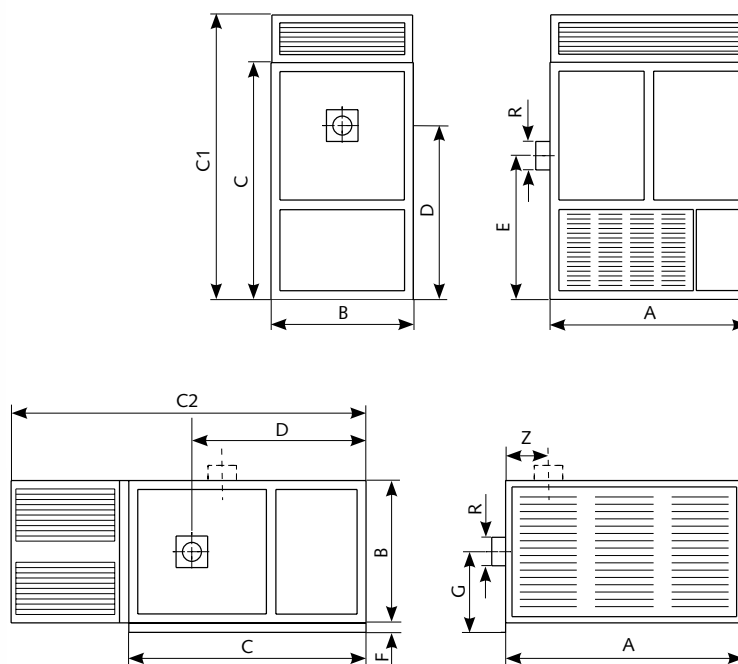


Electronic temperature regulation, Type ATR-5, surface mounting Ref. no. 1011342





## Dimensions



## VRS dimensions

Series		VRS 25	VRS 50	VRS 75	VRS 100	VRS 130	VRS 170	VRS 200	VRS 270	VRS 340	VRS 440	VRS 540
A	mm	850	1,000	1,250	1,250	1,530	1,650	1,650	1,690	1,690	2,305	2,305
B	mm	600	800	800	900	1,010	1,200	1,200	1,290	1,290	1,770	1,770
C	mm	1,200	1,400	1,400	1,500	1,735	1,900	1,900	2,400	2,400	3,270	3,270
C1	mm	1,500	1,700	1,700	1,800	2,095	2,260	2,260	2,960	2,960	4,030	4,030
C2	mm	1,570	1,870	2,070	2,270	2,510	2,675	2,775	3,535	3,535	4,770	4,770
D	mm	955	1,050	1,050	1,100	1,230	1,330	1,330	1,090	1,090	1,535	1,535
E	mm	815	900	900	910	1,075	1,160	1,160	2,055	2,055	2,865	2,865
F	mm	35	35	35	35	35	35	35	40	40	40	40
G	mm	335	435	435	485	540	635	635	685	685	925	925
R ø*	mm	150	150	180	180	200	200	200	300	300	350	350
Z	mm	190	190	190	190	-	-	-	-	-	-	-
Weight	kg	150	240	310	360	550	730	820	832	874	1,542	1,792

C1 = Dimensions with air discharge hood HG

C2 = Dimensions with air discharge hood HB 90

\* Changes are allowed without prior notice and are based on cross-section calculation according to DIN 4705

## Technical data

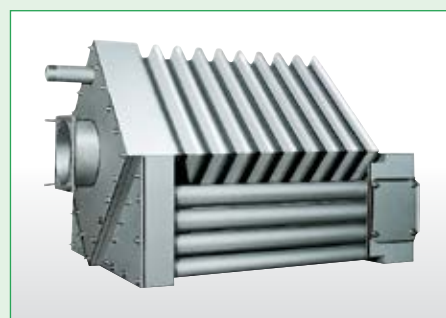
Series		VRS 25	VRS 50	VRS 75	VRS 100	VRS 130	VRS 170	VRS 200	VRS 270	VRS 340	VRS 440	VRS 540
Max. nominal heat load	kW	33	62	89	125	160	208	249	278	332	442	543
Rated thermal capacity	kW	29	57	83	116	149	193	232	254	305	405	499
Air capacity	m <sup>3</sup> /h	1,760	3,950	5,270	7,950	9,800	12,000	13,900	18,960	22,690	30,480	37,170
Fuel		EL heating oil, natural gas, or liquid gas										
Max. fuel consumption *	kg/h	2.8	5.2	7.5	10.6	13.5	17.5	21.0	23.4	28.0	37.3	45.8
Voltage supply	V/Hz	**	**	400/3~N/50								

\* When using EL heating oil

\*\* 400/3~N/50 or 230/1~/50

## Tailored solutions for every situation

REMKO VRS heating units are manufactured according to the highest technical specifications. Without a time-consuming installation as conventional warm water heating systems. The devices are suited not only as individual units, but also as centralised units for channel connection. Extensive special accessories on the air intake and discharge sides are available. The intake air is heated using a heat exchanger with an oil or gas burner and is then distributed evenly throughout the room using a silent radial fan. In summer, this fan provides pleasant fresh air. The program selection with heat outputs between 33 and 543 kW always permits an appropriate device choice.



Ready-to-install combustion chamber with stainless steel heat exchanger

# UNIVERSAL HEATING SYSTEMS

**VRS series – In a modular system adapted for planning needs**  
**For oil and gas combustion**

## Technical data

Series			VRS 25	VRS 50	VRS 75	VRS 100
Max. nominal heat load	kW		33	62	89	125
Rated thermal capacity	kW		29	57	83	116
Air capacity	m³/h		1,760	3,950	5,270	7,950
<b>Heaters with oil burner *</b> , with air discharge hood, 4-sided, with switching and control units, rear chimney adapter Vertical unit <b>Discharge above</b>			360110	361110	362110	363110
<b>Heaters with oil burner *</b> , with air discharge hood HB-90, with switching and control units, rear chimney adapter Horizontal unit <b>Discharge left</b>			360210	361210	362210	363210
<b>Heaters with oil burner *</b> , with air discharge hood HB-90, with switching and control units, rear chimney adapter Horizontal unit <b>Discharge right</b>			360310	361310	362310	363310
<b>Heater without burner</b> Without air discharge hood, with switchgear and control units, rear exhaust pipe adapter						
Vertical unit <b>Discharge above</b>	Pressure	1.1 360001	0.6 361001	1.0 362001	0.8 363001	
Horizontal unit <b>Discharge left</b>	p external	1.1 360050	0.6 361050	1.0 362050	0.8 363050	
Horizontal unit <b>Discharge right</b>	mbar	1.1 360060	0.6 361060	1.0 362060	0.8 363060	
<b>Surcharge for increased pressure</b>						
	Pressure	1.7 360006	1.4 361006	1.6 362006	1.7 363006	
	p external	2.2 360007	2.0 361007	2.3 362007	2.4 363007	
	mbar	2.8 360008	3.3 361008	3.0 362008	3.5 363008	
			4.7 361009	4.3 362009		
<b>Burner, WLE design * **</b>						
Fan oil burner			945010	946010	948010	948010
Oil filter 3/8", 2-line design			1002526	1002526	1002526	1002526
Oil connection set, 1-line design, including automatic bleeder (flow control)			1002531	1002531	1002531	1002531
Burner fresh-air box			290205	291205	292205	293205
Burner fresh-air pipe, flexible (delivery length, 5 m jumped)			1090207	1090207	1090207	1090207
Intake part with protective grid (burner fresh air)			1090209	1090209	1090209	1090209
Natural gas fan burner ***			954605	954610	954620	954640
Propane gas fan burner ***			954705	954710	954720	954740
<b>Air discharge hoods with air outlet grids for direct air discharge</b>						
3-sided	F+Ri+L / Re+Ri+L	Type HG	290169	291169	292169	293169
3-sided	F+Ri+Re / F+L+Re	Type HG	290170	291170	292170	293170
4-sided	F+Ri+L+Re	Type HG	360171	361171	362171	363171
Discharge hood 90°	F/Re	Type HB-90	290172	291172	292172	293172
<b>Air intake accessories and wall brackets</b>						
Metal panel	Pos. IV	Type BB	290105	291105	292105	293105
Protective grid for air intake	Pos. IV	Type S	290109	291109	292109	293109
Flexible pipe	Pos. I-III	Type SG	290110	291110	292110	293110
Flexible pipe	Pos. IV	Type SG	290123	291123	292123	293123
Dust filter, 3-sided (for free air intake)	Pos. I-III	Type F	290111	291111	292111	293111
Replacement filter mat		Type EF	290112	291112	292112	293112
Dust filter for duct connection	Pos. I-III	Type FK	290113	291113	292113	293113
Dust filter for duct connection	Pos. IV	Type FK	290114	291114	292114	293114
Replacement filter mat		Type EFK	290115	291115	292115	293115
Shutter flap combinations	I-III	Type JK	290119	291119	292119	293119
Shutter flap combinations	Pos. I-III / IV	Type JK	290120	291120	292120	293120
Actuator with surface-mounted switch Open/Stop/Close			320245	320245	320245	320245
Actuator, infinitely variable, with remote potentiometer, surface mounting			320251	320251	320251	320251
Wall bracket for vertical unit			290210	291210	292210	293210
Wall bracket for horizontal device ****			322210	321212	325210	325210
<b>Special designs</b>						
Exhaust gas adapter, right (Ref. no. last digit of 2 = left, Ref. no. last digit of 3 = top)			290061	291061	292061	293061
<b>Other accessories</b>						
Moisture-proof room thermostat, <b>Type RT-1</b> , IP 54 protection class, without connection accessories			1011240	1011240	1011240	1011240
Moisture-proof room thermostat, <b>Type RT-5</b> , IP 54 protection class, ready for plug assembly			1011250	1011250		
Electronic moisture-proof room thermostat, <b>Type ETR-1</b> , with display, IP 54 protection class, without connection accessories, including separate temperature probe			1011241	1011241	1011241	1011241
Fully automatic, differential temperature controller, <b>Type ATR-3</b> , including temperature probe, weekly programme, IP 54 protection class			1011290	1011290	1011290	1011290
Electronic temperature controller, <b>Type ATR-4</b> , with temperature probe, surface mounting, weekly programme, IP 20 protection class			1011340	1011340	1011340	1011340
Electronic temperature controller, <b>Type ATR-5</b> , with temperature probe, surface mounting, weekly programme, IP 54 protection class			1011342	1011342	1011342	1011342
Temperature probe set for 4-point mixed temperature recording*****			1011343	1011343	1011343	1011343

\* Brand product of our choice  
 \*\* Attention: When ordering devices without combustion-technical com-

missioning, we provide the burners separately in the box without pre-adjustment.

\*\*\* The gas connection must be performed by a licensed installer.

\*\*\*\* In the case of exhaust gas systems for internal mounting, please enter the bracket length in the order.



### With switch box in the standard design

All components which control the fan and burner are organised in a clear manner in the switch cabinet. For external control, various thermostats and controls are included in the accessories range.



VRS 130	VRS 170	VRS 200	VRS 270	VRS 340	VRS 440	VRS 540
160	208	249	277	332	442	543
149	193	232	254	305	405	499
9,800	12,000	13,900	18,960	22,680	30,480	37,170
364110	365110	366110	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
.0 364001 .0 364050 .0 364060	0.5 365001 0.5 365050 0.5 365060	0.7 366001 0.7 366050 0.7 366060	0.5 330000 0.5 330010 0.5 330020	0.6 331000 0.6 331010 0.6 331020	0.5 332000 0.5 332010 0.5 332020	0.5 333000 0.5 333010 0.5 333020
.7 364006 .6 364007	1.3 365006 1.7 365007 2.6 365008 4.1 365009	1.4 366006 2.2 366007 3.4 366008	0.9 330006 2.1 330007 2.9 330008 4.0 330009	1.0 331006 1.9 331007 2.8 331008	0.9 332006 2.0 332007 2.9 332008 3.8 332009	0.9 333006 2.1 333007 3.0 333008 3.9 333009
948010 1002526 1002531	948510 1002526 1002531	949010 1002526 1002531	949010 1002526 1002531	949010 1002526 1002531	950015 1002526 1002531	950015 1002526 1002531
294205	295205	296205	330205	331205	332205	333205
1008400	1008400	1008400	1008400	1008395	1008395	1008395
1094209	1094209	1094209	1094209	1094210	1094210	1094210
954640	954650	954660	954660	954660	954685	954695
954740	954750	954760	954760	954760		
294169	295169	296169	330169	331169	332169	333169
294170	295170	296170	330170	331170	332170	333170
364171	365171	366171	330171	331171	332171	333171
294172	295172	296172	330172	331172	332172	333172
294105	295105	296105	330105	331105	332105	333105
294109	295109	296109	330109	331109	332109	333109
294110	295110	296110	330110	331110	332110	333110
294123	295123	296123	330123	331123	332123	333123
294111	295111	296111	330111	331111	332111	333111
294112	295112	296112	330112	331112	332112	333112
294113	295113	296113	330113	331113	332113	333113
294114	295114	296114	330114	331114	332114	333114
294115	295115	296115	330115	331115	332115	333115
294119	295119	296119	330119	331119	332119	333119
294120	295120	296120	330120	331120	332120	333120
320245	320245	320245	320245	320245	320245	320245
320251	320251	320251	320251	320251	320251	320251
294210	295210	296210	325210	325210	–	–
328210	327212	327212	327212	327212	–	–
–	–	–	–	–	–	–
1011240	1011240	1011240	1011240	1011240	1011240	1011240
1011241	1011241	1011241	1011241	1011241	1011241	1011241
1011290	1011290	1011290	1011290	1011290	1011290	1011290
1011340	1011340	1011340	1011340	1011340	1011340	1011340
1011342	1011342	1011342	1011342	1011342	1011342	1011342
1011343	1011343	1011343	1011343	1011343	1011343	1011343

\*\*\*\*\* Can only be set in combination with electronic temperature regulation (ETR-1, ATR-3, ATR-4, ATR-5 and MAK-2)

# HOT WATER HEATING SYSTEMS

## PWW series

*The intelligent supplement to warm water heating plants*



### REMKO PWW

#### Best suited for warehouses and supermarkets

The sophisticated design is suitable for both wall and ceiling installation. With a heat output of 4 to 135 kW, an optimum expansion of existing or planned hot water heating systems is possible at any time. Easily attachable mounting brackets permit a fast installation of the devices.

The load-bearing, galvanised, solid steel sheet housings are already supplied. The air discharge fins are individually infinitely variable. The heat exchangers are delivered with a copper-aluminium finish. REMKO PWW units are designed for warm and hot pump water at temperatures up to 110°C and a max. permissible operating pressure of 16 bar.

An aerodynamically shaped, silent Ziehl-Abegg sickle-shaped axial fan with a maintenance-free three-phase two-speed external rotor motor is installed as standard.

- Fitted as standard with a Ziehl-Abegg sickle-shaped axial fan
- Speed range regulation, 2-way and 5-way optional
- High-quality design and construction
- Low spatial requirements
- Extremely low noise by using optimum coordinated components
- Extremely easy to service
- Painted design, optional

#### Performance data excerpt

Series		PWW 30-4		PWW 50-4		PWW 80-4		PWW 100-4	
Max. thermal output at 80/60 and air intake temperature of -15°C	kW	30		53		85		126	
PWW heating medium	°C	90/70	75/65	90/70	75/65	90/70	75/65	90/70	75/65
Thermal capacity	kW	27.8/24.1	17.8/15.0	45.1/39.8	29.1/26.3	75.6/64.3	47.3/40.9	110.9/96.3	72.8/64.7
at air intake temperature	tLE °C	± 0	+ 20	± 0	+ 20	± 0	+ 20	± 0	+ 20
at air outlet temperature	tLA °C	42/46	52/55	39/41	49/52	44/48	52/55	40/43	51/53
Nominal air flow rate	m³/h	1760/1380	1760/1380	2990/2420	2990/2420	4490/3540	4490/3540	7280/5580	7280/5580
Sound pressure level	dB(A)	55/49	55/49	58/54	58/54	55/49	55/49	59/55	59/55
Heating medium connection	Inch	R1 ¼	R1 ¼	R1 ¼	R1 ¼	R1 ¼	R1 ¼	R1 ½	R1 ½
Voltage supply	V/Hz	400/3~/50							
Weight	kg	27	27	36	36	51	51	68	68



## Technical data

Series	PWW 30-2	PWW 50-2	PWW 80-2	PWW 100-2
Heat exchanger package with 2 register rows	1686010	1686040	1686070	1686100
Series	PWW 30-3	PWW 50-3	PWW 80-3	PWW 100-3
Heat exchanger package with 3 register rows	1686020	1686050	1686080	1686110
Series	PWW 30-4	PWW 50-4	PWW 80-4	PWW 100-4
Heat exchanger package with 4 register rows	1686030	1686060	1686090	1686120

Special formats				
Series	PWW 30	PWW 50	PWW 80	PWW 100
Extra cost for unit lacquer coating in RAL colours as required	1686001	1686002	1686003	1686004

Switchgear				
Switchgear MSRD 4.0, 2-stage, 400 V	1686200	1686200	1686200	1686200
Switchgear MSRD-K, 2-speed, 400 V, incl. frost-protection and mixed-air flap control (open/close)	1686201	1686201	1686201	1686201
MAK-2, 2-speed, 400 V, fully electronic design for automatic operation, including frost-protection and mixed-air flap control (infinitely variable), day/night temperature regulation	385330	385330	385330	385330
Switchgear 3 EG, 5-stage, 3.0 A, 400 V	385300	385300	385300	385300
Switchgear 5 EG, 5-stage, 5.2 A, 400 V	385301	385301	385301	385301
Repair switch RS 3, separate	513100	513100	513100	513100
Motor terminal box AKG-5, for a parallel group control of max. 5 units	385303	385303	385303	385303

Accessories				
Brackets for wall and ceiling mounting	KO	385217	385218	385219
Wall brackets for filter and mixed air box combination	WFM	385370	385371	385372
Fresh-air intake hood	ALH	385375	385376	385377
Rain collar with duct section, 1000 mm	RK	385380	385381	385382
Duct adapter, 500 mm	KA 5	385385	385386	385387
Duct adapter, 1000 mm	KA 10	385390	385391	385392
Flexible pipe	SG	385395	385396	385397
Filter box	FK	385400	385401	385402
Replacement filter mat	EF	385405	385406	385407
Mixed-air box without actuator	MLK	385410	385411	385412
Recirculation-air intake fitting	UA	385415	385416	385417
Fresh-air intake grid	AG	385420	385421	385422
Air discharge shutter (vertical fins)	B	385193	385194	385195
Ceiling air discharge nozzle	AD	385213	385214	385215
Air discharge hood, 4-sided	HG	385197	385198	385199
Flap actuator, Off/Pause/On	KSH	385290	385290	385290
Flap actuator, infinitely variable	KSP	385289	385289	385289
3-position switch, surface mounting	SK	290246	290246	290246
Remote potentiometer, surface mounting	FP	385288	385288	385288
Frost protection thermostat	FS	385305	385305	385305
Circular exhaust for foil tube connector 450 Ø	RF	1085310	1085320	
Circular exhaust for foil tube connector 600 Ø	RF			1085330
Injection vent, fitted to the wall	IJ	385350	385351	385352
Injection vent, fitted to the ceiling	IJ	385360	385361	385362

Other accessories				
Moisture-proof room thermostat, <b>Type RT-1</b> , IP 54 protection class, without connection accessories	1011240	1011240	1011240	1011240
Electronic moisture-proof room thermostat, <b>Type ETR-1</b> , with display, IP 54 protection class, without connection accessories, including separate temperature probe	1011241	1011241	1011241	1011241
Fully automatic, differential temperature controller, <b>Type ATR-3</b> , including temperature probe, weekly programme, IP 54 protection class	1011290	1011290	1011290	1011290
Electronic temperature controller, <b>Type ATR-4</b> , with temperature probe, weekly programme, surface mounting, IP 20 protection class	1011340	1011340	1011340	1011340
Electronic temperature controller, <b>Type ATR-5</b> , including temperature probe, weekly programme, surface mounting, IP 54 protection class	1011342	1011342	1011342	1011342
Temperature probe set for 4-point blended temperature*	1011343	1011343	1011343	1011343

\* Can only be set in combination with electronic temperature regulation (ETR-1, ATR-3, ATR-4, ATR-5, and MAK-2)



Switchgear  
MSRD 4.0  
2-speed



MSRD-K  
switchgear  
2-speed



Electronic temperature  
control, ATR-5



MAK-2, 400 V,  
fully automatic  
2-speed control



Electronic temperature  
control ATR-4

# HOT WATER HEATERS

## PWW Series



REMKO PWW  
galvanised in the standard design

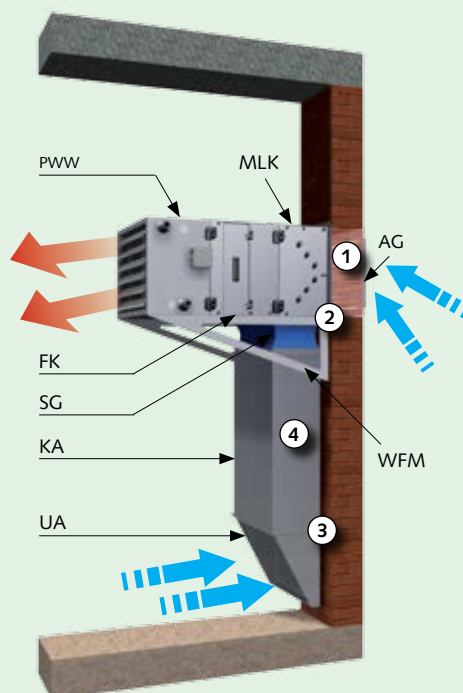
### Application examples:

- ① Wall opening appropriate to air inlet grid size.
- ② The mixed-air box is fastened to a load-bearing outside wall using the wall bracket WFM.
- ③ The recirculation air intake duct and the air intake adapter are attached to the outside wall on site.
- ④ The vertical section of this system arrangement is to be attached to the wall on site using brackets in such a way that the flexible pipes do not have to take up the load.

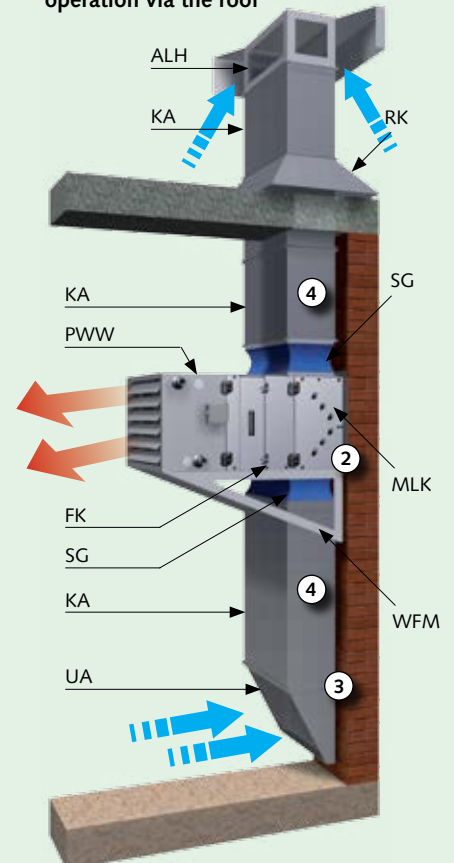
#### Legend:

- AG = Fresh-air intake grid  
ALH = Fresh-air intake hood  
FK = Filter box  
KA = Duct adapter  
KO = Brackets  
MLK = Mixed-air box  
RK = Rain collar  
SG = Flexible pipe  
WFM = Wall bracket  
IJ = Injection shutter

### Recirculating air/fresh air operation via the outside wall.



### Recirculating air/fresh air operation via the roof.

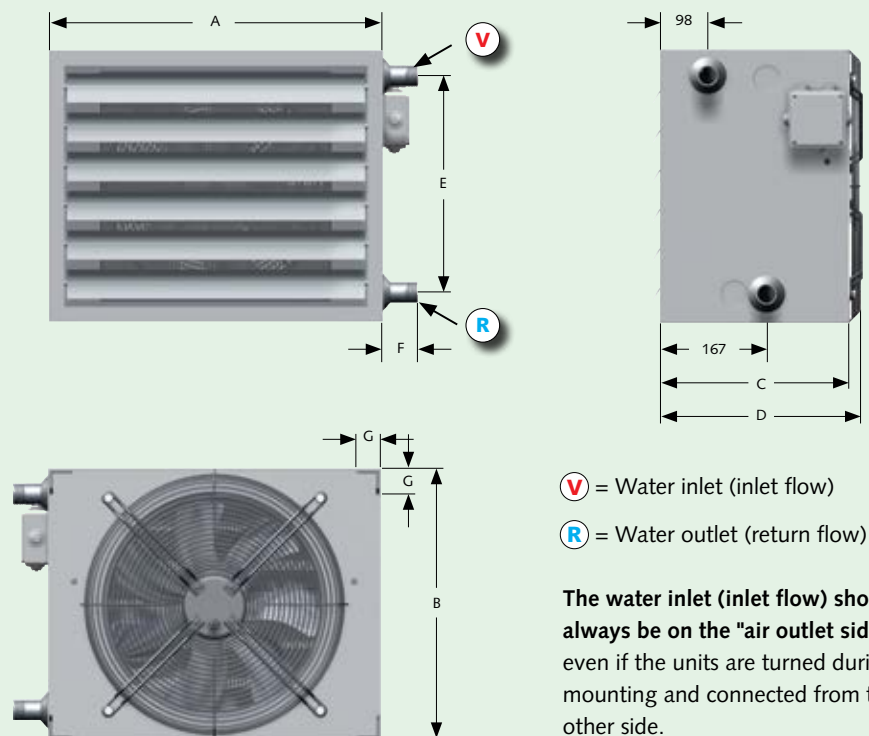


We reserve the right to make changes to dimensions and the design in the interest of technical advances.



## Unit dimensions

Diagram of PWW series



## Dimensions

Dimensions in mm	PWW 30			PWW 50			PWW 80			PWW 100		
A	560			640			800			880		
B	440			515			630			740		
C	360			360			360			390		
D	403			406			412			452		
E	344			419			534			644		
F	80			80			80			80		
G	45			45			45			45		
Dimensions in inches	30-2	30-3	30-4	50-2	50-3	50-4	80-2	80-3	80-4	100-2	100-3	100-4
V	R ¾"	R 1"	R 1¼"	R ¾"	R 1"	R 1¼"	R 1"	R 1¼"	R 1¼"	R 1¼"	R 1½"	R 1½"
R	R ¾"	R 1"	R 1¼"	R ¾"	R 1"	R 1¼"	R 1"	R 1¼"	R 1¼"	R 1¼"	R 1¼"	R 1½"



# CEILING VENTILATION UNITS

## PWL...H series

*The elegant solution for heating and cooling*



### Technical data

Series	PWL 101 H			PWL 102 H		PWL 103 H		PWL 201 H	
Max. thermal output at 90/70 and air intake temperature of 0 °C	kW			26.7		34.4		20.8	
PWW heating medium	°C			90/70 70/50		90/70 70/50		90/70 70/50	
Thermal capacity	kW			16.5/14.7 12.0/10.7		34.4/29.7 25.4/22.0		20.8/18.7 14.5/13.0	
at air intake temperature	tLE °C			0 0		0 0		0 0	
at air outlet temperature	tLA °C			23/24 16/18		51/54 37/40		19/20 13/14	
Air capacity	m³/h			2030/1685 2030/1685		1885/1530 1885/1530		3110/2580 3110/2580	
Sound pressure level	dB(A)			56/47 56/47		56/47 56/47		61/53 61/53	
Heating medium connection	Inch			R1 " R1 "		R1 " R1 "		R1 "	
Voltage supply	V/Hz			400/3~N/50					
Weight	kg			31		35		38	
	32								
Ref. no.	1687101			1687102		1687103		1687201	
Switchgear									
Switchgear MSRD 4.0, 2-stage, 400 V	1686200			1686200		1686200		1686200	
MSRD-K switchgear, 2-speed, 400 V	1686201			1686201		1686201		1686201	
MAK-2 switchgear, 2-speed, 400 V, completely electronic fittings for automatic operation including 24-hour temperature regulation	385330			385330		385330		385330	
Switchgear 3 EG, 5-stage, 3.0 A, 400 V	385300			385300		385300		385300	
Switchgear 5 EG, 5-stage, 5.2 A, 400 V	385301			385301		385301		385301	
Motor terminal box AKG-5, for parallel control of max. 5 units	385303			385303		385303		385303	
Accessories									
Unit brackets, fixed length 90 mm	Series			Series		Series		Series	
Unit brackets, adjustable, 90-145 mm	1687400			1687400		1687400		1687400	
Other accessories									
Moisture-proof room thermostat, <b>Type RT-1</b> , IP 54, without connection accessories	1011240			1011240		1011240		1011240	
Electronic moisture-proof room thermostat, <b>Type ETR-1</b> , with display, IP 54 protection class, without connection accessories, including separate temperature probe	1011241			1011241		1011241		1011241	
Electronic temperature controller, <b>Type ATR-4</b> , with temperature probe, surface mounting, IP 20 protection class	1011340			1011340		1011340		1011340	
Electronic temperature controller, <b>Type ATR-7</b> , with temperature probe, surface mounting, IP 54 protection class	1011292			1011292		1011292		1011292	
Temperature probe set for 4-point blended temperature	1011343			1011343		1011343		1011343	



## REMKO PWL

### Modern technology in an attractive design

REMKO's PWL series ceiling-mounted air units combine the latest technology with a suitable design. Their flat design and variable technology allows their subtle application, both in low-ceilinged and high-ceilinged rooms. The individually adjustable fins in the upper and lower parts of the housing allow optimal air distribution and thus provide a comfortable room climate. Their use in showrooms or other customer areas is possible thanks to their low sound pressure levels and their fine design. Ease of service and a simple, uncomplicated assembly are the characteristic features of these units. The media connections and the mains cabling can be installed out of sight in the false ceiling. The elegant plastic housing can easily be removed from its bearing elements thanks to the rapid release couplings. PWL..HK series units are fitted as standard with a high-performance condensate pump.

- Attractive design
- Quiet operation
- Installation-friendly construction
- Service-friendly
- Universal use
- Self-extinguishing plastic housing, fire class V-0

### Areas of application

- Sales rooms
- Car dealerships
- Exhibition and reception rooms
- Exhibition halls
- Shopping centers
- Retail shops and supermarkets
- Large entry areas
- Trade areas
- Industrial halls



*Pleasant coolness with PWL... HK units used in combination with REMKO chillers. See the REMKO catalogue "Chillers."*



*Electronic temperature control, ATR-7*



*Switchgear MSRDR 4.0 2-speed*

PWL 202 H		PWL 203 H		PWL 301 H		PWL 302 H		PWL 303 H	
36.3		47.2		26.9		44.0		61.1	
90/70	70/50	90/70	70/50	90/70	70/50	90/70	70/50	90/70	70/50
36.3/32.3	26.6/23.7	47.2/41.4	34.5/30.4	26.9/20.3	18.8/14.3	44.0/31.5	31.0/22.3	61.1/34.7	44.8/25.6
0	0	0	0	0	0	0	0	0	0
35/37	25/27	46/49	34/36	17/21	12/15	29/36	21/26	43/56	32/41
2900/2400	2900/2400	2850/2350	2850/2350	4300/2650	4300/2650	4150/2400	4150/2400	3900/1710	3900/1710
61/56	61/56	61/56	61/56	66/59	66/59	66/59	66/59	68/61	68/61
R1"	R1"	R1"	R1"	R1"	R1"	R1"	R1"	R1"	R1"
400/3~N/50									
35		38		43		46		48	
1687202		1687203		1687301		1687302		1687303	
1686200		1686200		1686200		1686200		1686200	
1686201		1686201		1686201		1686201		1686201	
385330		385330		385330		385330		385330	
385300		385300		385300		385300		385300	
385301		385301		385301		385301		385301	
385303		385303		385303		385303		385303	
Series		Series		Series		Series		Series	
1687400		1687400		1687400		1687400		1687400	
1011240		1011240		1011240		1011240		1011240	
1011241		1011241		1011241		1011241		1011241	
1011340		1011340		1011340		1011340		1011340	
1011292		1011292		1011292		1011292		1011292	
1011343		1011343		1011343		1011343		1011343	

# CEILING VENTILATION UNIT

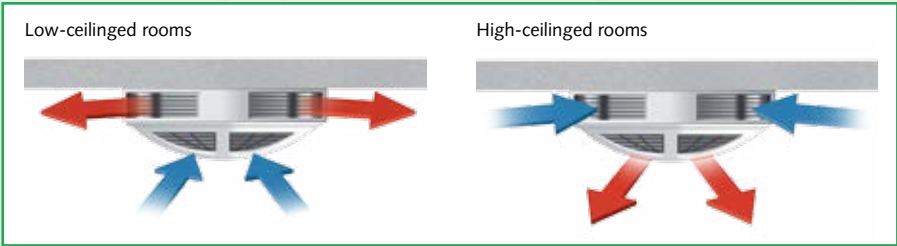
## PWL series – planning aids

### Mounting examples

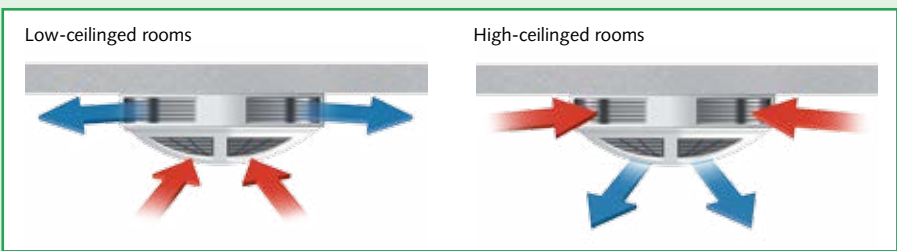
#### Versatile

With the possibility of altering the rotation of the fans allows optimal air distribution in low-ceilinged as well as high-ceilinged rooms. In addition, this technology is ideal for always achieving the perfect outlet layout for heating and cooling operations.

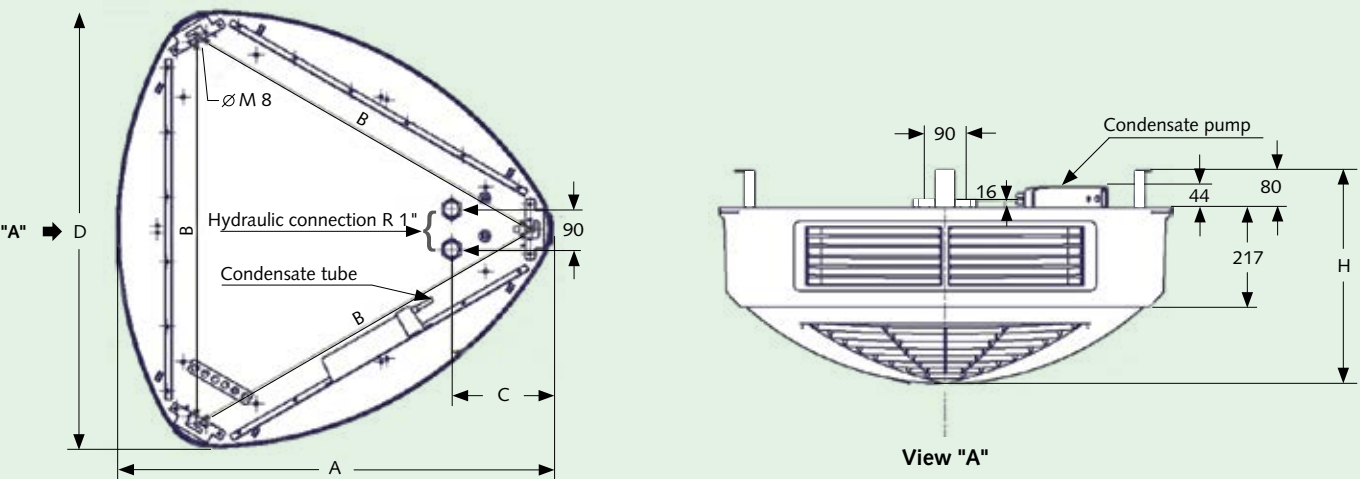
### Heating



### Cooling



### Unit dimensions



**NOTE**  
*The inlet and return flows can be connected as required.*

Mounting distance between unit and ceiling of at least 80 mm!

Dimensions	PWL 101-103 HK	PWL 201-203 HK	PWL 301-303 HK
A	985 mm	1084 mm	1178 mm
B	632 mm	963 mm	1043 mm
C	229 mm	229 mm	229 mm
D	989 mm	1073 mm	1160 mm
H	400 mm	485 mm	504 mm

We reserve the right to make changes to dimensions and the design in the interest of technical advances.

# CEILING HEATING SYSTEMS



## WPS Series – the sun above your workstation



### REMKO WPS

#### The "heating island principle": Heat where it is needed

REMKO ceiling heating systems create new dimensions in the heating of production lines, warehouses, sports halls, sports stands, sales rooms, exhibition halls, etc.

In accordance with the "heating island principle," REMKO ceiling-mounted heating systems can be used to heat areas such as workplaces, cash till areas, individual components, materials, audience seats, sales areas, and so on.

#### The sun above your workstation

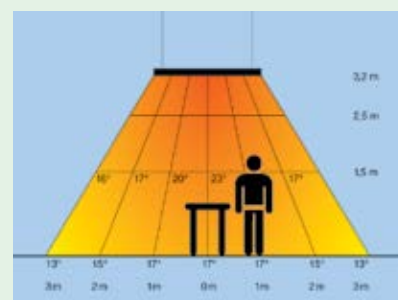
REMKO ceiling heating systems generate soft waves of heating in accordance with the principle of solar heating. Not the air is heated, but rather only the radiated surface. There are only slight temperature differences between the floor and the hall ceiling. The cosy heating of the floor area prevents cold feet and increases motivation.

#### REMKO ceiling heating systems for mounting directly above the useful or working area

The installation above the working area should ideally be at a suspended height of 3.20 m, using a suspension bracket. Integrated installation into a false ceiling is also possible, as is mounting under a cable duct. An additional advantage of the REMKO ceiling heating systems are their universal application possibilities. When large useful or working areas are heated, it is possible to install several heating systems in series in a modular manner. The time-consuming and expensive installation of an exhaust gas plant is not necessary. REMKO ceiling heating systems are maintenance-free.



Switchgear for remote control,  
ref. no. 412100



Temperature data based on a room  
temperature of 12°C (WPS 3000)

### Technical data

Series		WPS 2000	WPS 3000
Area of application	approx. m	6 x 4	6 x 4
Heat range		See temperature profile	
Voltage supply	V/Hz	230/1~/50	
Power consumption	kW	2.2	2.4
Nominal current	A	9.8	10.9
Minimum mounting height	m	2.50	2.50
Length	mm	2000	2000
Width	mm	300	300
Height	mm	80	80
Weight	kg	22	22
Serial colour		white	white
Ref. no.		1640200	410100
<b>Accessories</b>			
Suspension assembly consisting of: 2 mounting brackets for ceiling mounting or mounting under a cable duct, 2 suspension chains at 3.5 m each, 2 ceiling hooks with dowels		Included in price	Included in price
Switchgear for remote control with on/off switch and built-in room thermostat, for 1 heating system	412100		412100
Switchgear with on/off switch and room thermostat connection, can be used for 2-6 heating systems	412200		412200
<b>Other accessories</b>			
Moisture-proof room thermostat, <b>Type RT-1</b> , IP 54 protection class, without connection accessories	1011240		1011240
Electronic moisture-proof thermostat, <b>Type ETR-1</b> , with display, IP 54 protection class, without connection accessories	1011241		1011241



# CEILING FANS

## DVL and ATR series

*The ideal supplement to hot air heating systems*



### REMKO DVL

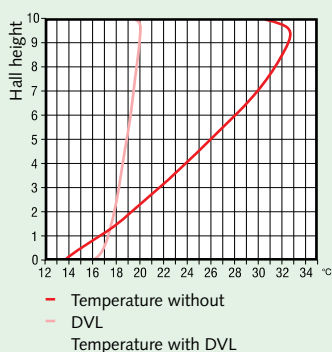
**Ceiling fans for reducing energy costs by activating lost ceiling heat in high-ceilinged halls**

Thermal dynamic pushes heat upward. Result: Unused quantities of heat dam up near the ceiling. With the REMKO DVL 140 ceiling fan, this lost heat potential can be retrieved from the ceiling and returned to the work area. Valuable thermal energy is saved by this type of "heat recovery."

- High ventilation capacity
- Long service life
- Quiet operation
- Low energy costs
- Single-phase a.c. motor, maintenance-free and mal-function-free for continuous operation
- White housing, stove enamelled
- Vibration-damping pendulum pipe suspension for low-vibration operation

- Easy to assemble
- Adjustable rotation speed, optional

**Energy savings up to 30%**



### Design of the ceiling fans

The design of the ceiling fans needs to take the structural conditions into consideration. The following formulas are approximation formulas. The maximum hall height of 14 m must not be exceeded.

#### Design

- Number of DVL =  $\frac{\text{Hall floor area}}{\text{Hall height} \times 20}$
- Distance A of the DVL =  $\sqrt{\text{Hall height} \times 20}$

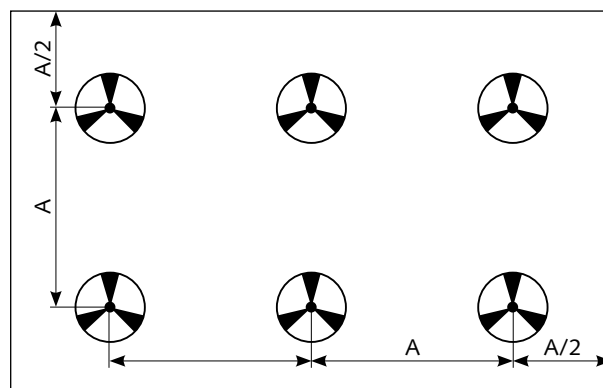
#### Example

- Hall 40 x 30 m, 10 m high
- Number of DVLs =  $\frac{40 \times 30}{10 \times 20}$   
= **6 fans**
- Distance A of the DVL =  $\sqrt{10 \times 20}$   
= **14.14 meters**



## ATR-3 series

### Fully automatic temperature controller

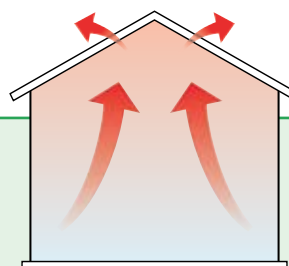


**Important mounting instructions:** The Unfallverhütungsvorschriften (German Accident Prevention Regulations (UVV)) proscribe a mandatory minimum distance of 2.5 m from the floor to the bottom edge of the blade.

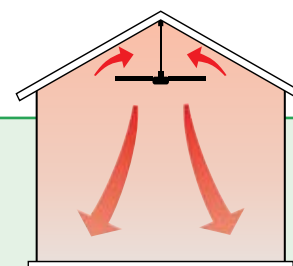
#### REMKO ATR-3

Fully automatic differential temperature controller, the ideal complement to a ceiling fan

With the fully automatic differential temperature controller, hot air that rises to the ceiling is made usable again in connection with the REMKO ceiling fan. The controller works with two probes: a room probe attached at working height and a ceiling probe. If the temperature falls below a previously set value, the ceiling fans are switched on to transport the hot air near the ceiling back down.



Based on the natural lift of hot air, most of the energy remains under the ceiling.



Through the use of a DVL ceiling fan, the hot air will be pushed downwards evenly.

- Optimally tuned
- Simple to operate
- Exact regulation range
- Digitally programmable

#### Energy savings calculation

$$\frac{\Delta t \text{ mit DVL}}{\Delta t \text{ ohne DVL}} = \frac{18 - (-12) + 1.5}{18 - (-12) + (10 \times 1.5)}$$

$$\frac{\Delta t + 1.5}{\Delta t + (H \times 1.5)} = \frac{31.5}{45}$$

$\Delta t$  = Rauminnentemperatur – Normaußentemperatur

#### Example

- 18°C indoor temperature
- -12°C standard outdoor temperature
- 10 m high hall

#### Technical data

Ceiling fans	DVL 140	DVL140 K*
Air circulation	m <sup>3</sup> /h	15,000
Max. speed	rpm	300
Voltage supply	V/Hz	230/1~/50
Power consumption	Watt	75
Blade diameter	mm	1,420
Construction height	mm	690
Weight	kg	9.5
Ref. no.	570400	570401
Differential temperature controller with display, Type TR-2, including temperature probe, IP 54 protection class, max. 10 units	TR-2	TR-2
Ref. no.	1011291	1011291
Fully automatic differential temperature controller, Type ATR-3, including temperature probe, weekly program, IP 54 protection class, max. 14 units	ATR-3	ATR-3
Ref. no.	1011290	1011290
Other accessories		
Thermal probe for fully-automatic operation through ceiling temperature monitoring	1011230	
Speed controller, infinitely variable, Type DR-1, max. 4 units	1011294	
Speed controller, infinitely variable, Type DR-3, max. 8 units	1011296	

\*Short design

# EXHAUST GAS SYSTEMS

## ASE and ASD series Universally usable stainless steel exhaust gas systems

### REMKO ASE and ASD

#### The ideal exhaust gas solution

The REMKO ASE and ASD exhaust gas systems are especially designed for connection to modern hot air heating systems. The modular ASD systems with their three-shell design are delivered ready for assembly with continuous ceramic rock wool insulation. For reasons of corrosion protection, all components are basically manufactured from stainless steel. The exhaust gas system parts are simply connected by plugging and secured using clamps.

- Easy planning
- Optimum heat insulation
- High security
- Modular design
- Easy and economical mounting and design
- Condensate-proof implementation with seam plasma welding
- Simple double-casing plug-in technology
- Outer casing made of stainless steel 1.4301
- Official tests, including: Corrosion resistance, pressure resistance, mounting safety, and temperature resistance



#### Technical data

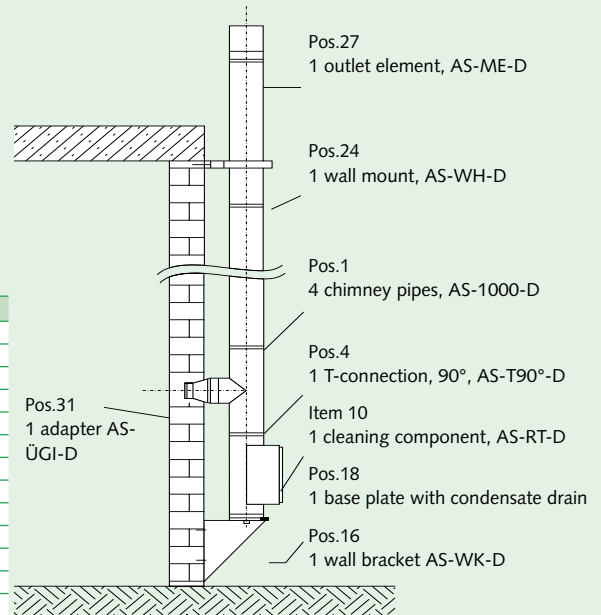
Single-walled stainless steel	Series	ASE
Material:	Inner wall	1.4404
	Wall thickness	0,6 mm
Insulation		possible
Thickness		25 mm
Internal rated diameter range		Ø 130 - 200 mm
Temperature range	Continuous mode	400 °C
Max. testing temperature		1000 °C ± 50 K
Function		Dry, vacuum
Fuels		Oil/gas/solid fuels
Approval		CE 0432-BPR-119988
Quality/external monitoring		Yes

Series	ASE 130	ASE 150	ASE 180	ASE 200
Interior rated length range	130 Ø	150 Ø	180 Ø	200 Ø
Pos. Individual sections	Ref. no.	Ref. no.	Ref. no.	Ref. no.
1 Chimney pipe AS-1000-E	1085325	1085326	1085327	1085328
2 Chimney pipe AS-500-E	1085336	1085337	1085338	1085339
3 Chimney pipe AS-250-E	1085740	1085741	1085742	1085743
4 T-connection AS-T90-E	1085347	1085348	1085349	1085350
5 T-connection AS-T45-E	1085370	1085371	1085372	1085373
6 Pipe bend AS-B45-E	1085490	1085491	1085492	1085493
7 Cleaning bend, adjustable 0-90° AS-RB90-E	1085436	1085437	1085438	1085439
8 Cleaning component with condensate drain AS-RT-E	1085424	1085425	1085426	1085427
9 Rain hood AS-RH-E	1085479	1085480	1085481	1085482
10 Wall mount, adjustable AS-WH-E	1085567	1085568	1085569	1085570
11 Roof bushing 1-15° including weather collar AS-D15-E	1085750	1085751	1085752	1085753
12 Roof bushing 15-30° including weather collar AS-D30-E	1085760	1085761	1085762	1085763
13 Adjusting length AS-JL-E	1085739	1085770	1085771	1085772
14 Reduction piece 130/150 mm	1085290			



## REMKO ASD

Exhaust gas system, complete, for exterior assembly, consisting of:



### Technical data

Double-walled stainless steel	Series	ASD
Material:	Inner wall	1.4404
	Wall thickness	0,4 mm
	Outside wall	1.4301
	Wall thickness	0,4 mm
Insulation		Mineral wool
Thickness		35 mm
Internal rated diameter range		Ø 130 - 350 mm
Temperature range	Continuous mode	600 °C
Max. testing temperature		1,000°C ± 50 K
Function		Moist and dry, vacuum
Fuels		Oil/gas, solid fuels
CE Certificate No.		CE 0432-BPR-119900
Quality/external monitoring		Constant monitoring

Series	ASD 130	ASD 150	ASD 180	ASD 200	ASD 300	ASD 350
Exhaust gas plant, complete, for outside mounting	130 Ø	150 Ø	180 Ø	200 Ø	300 Ø	350 Ø
Ref. no.	1085354	1085355	1085360	1085375	1085390	1086395
Application possibility of series **	GPS 15-75, GPC 20-60	VRS 25-50, GPS 75, GPC 80	VRS 75-100	VRS 130-200	VRS 270-340	VRS 440-540

Pos.	Individual sections	Ref. no.	Ref. no.	Ref. no.	Ref. no.	Ref. no.	Ref. no.
1	Chimney pipe, AS-1000-D	1085000	1085001	1085002	1085003	1085005	1086006
2	Chimney pipe, AS-500-D	1085007	1085008	1085009	1085010	1085012	1086013
3	Chimney pipe, AS-250-D	1085013	1085015	1085016	1085017	1085019	1086020
4	T-connection AS-T90°-D	1085020	1085022	1085023	1085024	1085026	1086027
5	T-connection AS-T45°-D	1085028	1085029	1085030	1085031	1085033	1086034
6	Pipe bend AS-B45°-D	1085034	1085036	1085037	1085038	1085040	1086041
7	Pipe bend AS-B30°-D	1085041	1085043	1085044	1085045	1085047	1086048
8	Pipe bend AS-B15°-D	1085048	1085050	1085051	1085052	1085054	1086055
9	Cleaning bend AS-RB90°-D	1085722	1085724	1085725	1085726	1085728	1086729
10	Cleaning component AS-RT-D	1085055	1085057	1085058	1085059	1085061	1086062
11	Adjusting length AS-JL-D	1085069	1085071	1085072	1085073	1085075	1086076
12	Floor support, adjustable AS-BS-D	1085076	1085078	1085079	1085080	1085082	1086083
13	Intermediate bracket AS-ZK-D	1085090	1085092	1085093	1085094	1085096	1086097
14	Roof support, adjustable AS-DS-D	1085111	1085113	1085114	1085115	1085117	1086118
15	Ceiling guide sleeve AS-DF-D	1085314	1085316	1085317	1085318	1085321	1086322
16	Wall bracket AS-WK-D	1085104	1085106	1085107	1085108	1085110	1086111
18	Base plate AS-GI-D	1085125	1085127	1085128	1085129	1085131	1086132
19	Sealing cover AS-VD-D	1085174	1085176	1085177	1085178	1085180	1086181
20	Roof bushing AS-D15-D, 1-15°	1085149	1085151	1085152	1085153	1085155	1086156
21	Roof bushing AS-D30-D, 15-30°	1085139	1085141	1085142	1085143	1085145	1086146
22	Roof bushing AS-D45-D, 30-45°	1085160	1085162	1085163	1085164	1085166	1086167
24	Wall mount AS-WH-D	1085209	1085211	1085212	1085213	1085215	1086216
25	Wall mount, adjustable AS-WHV-D	1085673	1085675	1085676	1085677	1085679	1086680
27	Outlet element AS-ME-D	1085251	1085253	1085254	1085255	1085257	1086258
28	Rain hood AS-RH-D	1085258	1085260	1085261	1085262	1085264	1086265
29	Guy clamp AS-AS-D	1085279	1085281	1085282	1085283	1085285	1086286
31*	Adapter AS-ÜGI-D	1085640	1085642	1085643	1085644	1085646	1086647
32	Adapter AS-ÜE-D	1085132	1085134	1085135	1085136	1085138	1086139
33	Testing element AS-PE-D	1085701	1085703	1085704	1085705	1085707	1086708
34	Drain pipe AS-EW-D	1085710	1085712	1085713	1085714	1085716	1086717
35	Replacement securing tape AS-SB-D	1085196	1085197	1085198	1085199	1085201	1086202
36	Replacement weather collar AS-WK-D	1085237	1085239	1085240	1085241	1085243	1086244
37	Wall mount, adjustable up to 300 mm, AS-WHV 300-D	1085680	1085681	1085682	1085683	1085685	1086686
38	Wall mount, adjustable up to 600 mm, AS-WHV 600-D	1085690	1085691	1085692	1085693	1085695	1086696
39	Wall bracket, adjustable up to 300 mm, AS-WKV 300-D	1085720	1085720	1085720	1085720	1085721	1086722
40	Wall bracket, adjustable up to 600 mm, AS-WKV 600-D	1085721	1085721	1085721	1085721	1085723	1086724
41	Chimney connector component GPS, 2-piece, AS-KA-D	1085730	1085735				

\* AS-ÜGI-D is used as a boiler connector component. All construction components are delivered with their securing straps.

\*\* A cross-section calculation according to DIN 4705 is fundamentally recommended.



*...and somewhere near you!*  
*Take advantage of our experience and advice*



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