

STATIONARY HOT AIR HEATING SYSTEMS

Rapid heat, adapted to your needs

Stationary heaters

- Wall-mounted heaters
- Universal heaters
- Hot water heaters
- Ceiling ventilation units
- Ceiling heating systems
- Ceiling fans
- Exhaust gas systems



Issue 2021



REMKO – THE SYSTEM PROVIDER

About REMKO

REMKO is a globally active company for heating and air-conditioning technology. Our highly efficient product range comprises hot air heating systems, dehumidifiers, air-conditioning systems and air-conditioners, as well as future-looking heat pumps. Since 1976, we have grown consistently with the requirements of our customers as a medium-sized company. Extensive experience, innovative product development and reliable service are our strengths when it comes to needs-based solutions in the areas of heating, air-conditioning and dehumidifying.

Services

With our CheckServ offering and a well-developed network of qualified expert partners, we guarantee competent consultation and reliable support. From planning to installation and subsequent maintenance, we are available to our customers as a reliable contact partner at all times. If a malfunction occurs, our emergency service team is happy to help.

Our quality claim

With our products, we do not orient ourselves on existing solutions, but rather we develop and implement our own innovative technical concepts. In the process, our high quality standards for our products has been the foundation of REMKO's success for over 40 years. In cooperation with recognised testing institutes, all REMKO products are tested on our in-house test stands according to the latest European standards. Certificates confirm our sustainable quality assurance system.

Spare part service

In addition to accessory articles, REMKO offers spare parts for all its products that the customer can order conveniently online. The spare part search can also be used to find spare parts for older models. The quickest possible delivery is naturally part of the service provided by REMKO.

<https://www.remko.de/ersatzteil-suche/>



AIR-CONDITIONING

Air-Conditioners
Cold Water Air-Conditioning Systems



HEAT

Mobile Hot Air Heating Systems
Stationary Hot Air Heating Systems



NEW ENERGIES

Heat pumps
Modular power houses



DEHUMIDIFICATION

Dehumidifiers
High-Performance Fans



AIR CLEANING

Air purifier



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STATIONARY HOT AIR HEATING SYSTEMS

Rapid heat, adapted to your needs

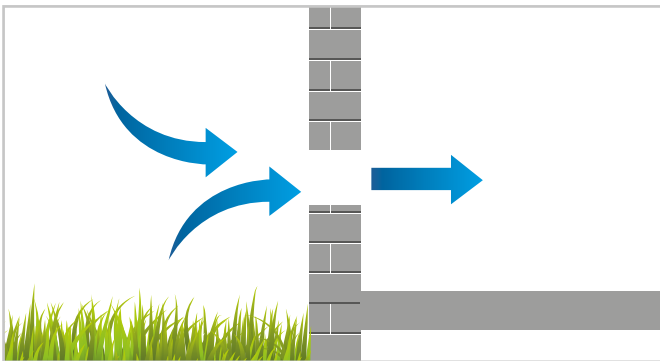
Tailored heating of halls

Stationary hot air heaters are mainly used in industrial halls for continuous operation. They are installed to walls, ceilings or floors and can be adapted to the specific circumstances of the installation site according to the modular principle.

An extensive heating pipe system does not have to be laid first as the oil- or gas-operated heaters operate without a transfer medium. The heat is dissipated immediately to the ambient air. This saves energy, providing pleasant temperatures immediately.

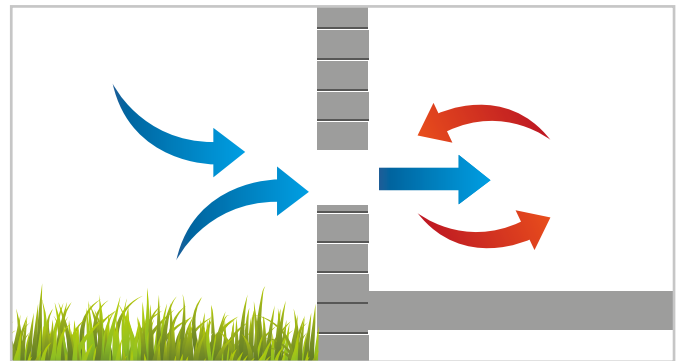
Adaptable and expandable

Hot air heaters, however, can also be connected to an existing hot air heating plant. The heat can be directed wherever needed in a targeted manner using air control fins. Due to the easy assembly of the units, the required heating capacity can be adapted and expanded as needed at any time.



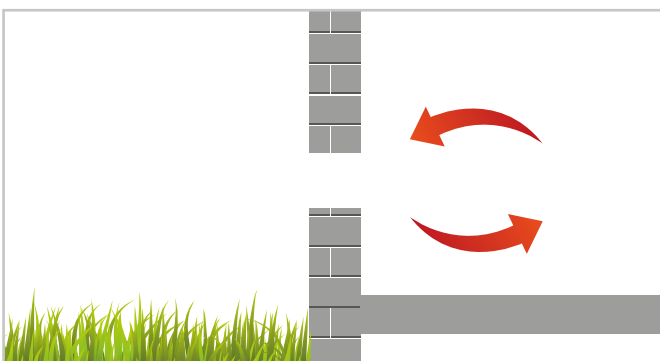
Fresh-air operation

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.



Recirculation 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.



REMKO GPS SERIES

Efficient wall-mounted heating systems with modulating gas burner

NEW



REMKO GPC 80



REMKO GPS SERIES

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 10.1 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. The use of modulating gas burner technology achieves high energy efficiency without producing condensate in the heat exchanger.

- High energy efficiency with an operating efficiency up to 97% due to modulating gas burner technology
- Highly flexible applications
- Space-saving wall or ceiling mounting option
- Quick and inexpensive installation
- Burner chamber of INOX steel
- No condensate formation in the heat exchanger



High energy efficiency using modulating gas burner technology



Microprocessor-controlled unit technology

Areas of application

- Sales and commercial premises
- Warehouses and manufacturing halls
- Retailers and supermarkets
- Sports centres



Technical data

Unit type *		GPS 20	GPS 30	GPS 40	GPS 60	GPS 80
Nominal heat load	kW	10.1 - 16.5	16.0 - 27.0	20.2 - 34.8	29.8 - 52.2	44.4 - 73.5
Nominal thermal output	kW	9.7 - 15.1	15.4 - 24.6	19.6 - 32.4	28.8 - 48.1	42.5 - 67.5
Air flow rate	m³/h	2000	2700	3100	4500	7800
Fuel				Natural gas / propane gas		
Gas flow rate – natural gas H	m³/h	1.07 / 1.75	1.69 / 2.86	2.14 / 3.68	3.15 / 5.52	4.70 / 7.78
Gas flow rate – natural gas L	m³/h	1.24 / 2.03	2.97 / 3.32	2.48 / 4.28	3.67 / 6.42	5.46 / 9.04
Gas flow rate - propane gas	kg/h	0.78 / 1.28	1.24 / 2.10	1.57 / 2.70	2.32 / 4.06	3.45 / 5.71
Horizontal blowing range	m	20	22	22	23	23
Voltage supply	V/Ph/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	58	58	68	78	102
Design		Natural gas H	Natural gas H	Natural gas H	Natural gas H	Natural gas H
Ref. no.		224120	224130	224140	224160	224180
Design		Natural gas L	Natural gas L	Natural gas L	Natural gas L	Natural gas L
Ref. no.		224121	224131	224141	224161	224181
Design		Propane gas	Propane gas	Propane gas	Propane gas	Propane gas
Ref. no.		224122	224132	224142	224162	224182

* The gas connection must be performed by a licensed installer

Calorific value H_i related 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

Switchgear and control units

Cabled remote control KF-35 , surface mounting, type of protection IP20, electrical remote unlocking mechanism, Heat/Ventilate selector switch, including 3.5 m connecting cable	1011381	1011381	1011381	1011381	1011381
Temperature control RR-35 , surface mounting, type of protection IP20, selector switch for Heat/Off/Ventilate, installed thermostat, electrical remote unlocking mechanism, including 3.5 m connecting cable	1011382	1011382	1011382	1011382	1011382
ATR-Smart-Basic , Electronic temperature controller with touch display for 1-32 units (group switch), surface mounting, type of protection IP54, automatic day/night economy, weekly programme, electrical remote unlocking mechanism, error and operation messages	1011376	1011376	1011376	1011376	1011376
ATR-Smart-WEB , Electronic temperature controller with touch display for 1-32 units (group switch), surface mounting, type of protection IP20, automatic day/night economy, weekly programme, electrical remote unlocking mechanism, error and operation messages, Ethernet interface	1011377	1011377	1011377	1011377	1011377
External temperature probe For ATR-Smart-Basic/-Web	1011364	1011364	1011364	1011364	1011364

Accessories

Bracket for wall mounting					
Design: Standard	228780	228780	228780	228780	228780
Bracket for wall mounting					
Design: rotary	228781	228781	228782	228782	228783
Mounting set					
For suspension from ceiling with horizontal air outlet	228785	228785	228785	228785	228785
Mounting set					
For suspension from ceiling with vertical air outlet, installed	228786	228786	228786	228786	228787
Gas connection tube					
Made of stainless steel fabric, length 500 mm	228768	228768	228768	228768	228768

REMKO GPS SERIES

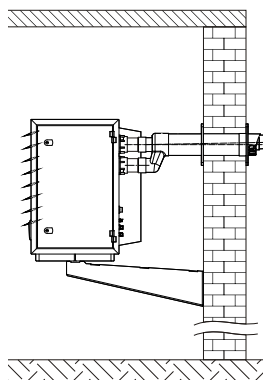
Efficient wall-mounted heating systems with modulating gas burner



REMKO GPC 30

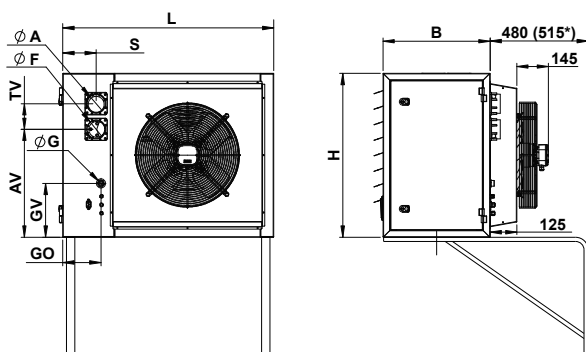
Outside wall installation

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. The gas connection must be performed by a licensed installer. Before the installation of the exhaust gas duct through the outside wall, the district heating inspector must be consulted.

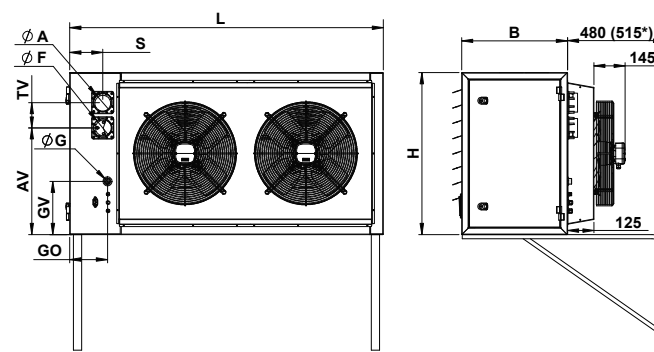


Chimney duct through wall with burner fresh air supply

Dimensions - GPS 20-60



Dimensions of GPS 80

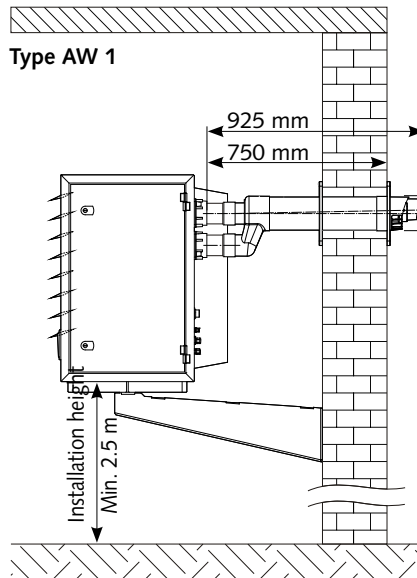


Dimensions - GPS 20-80

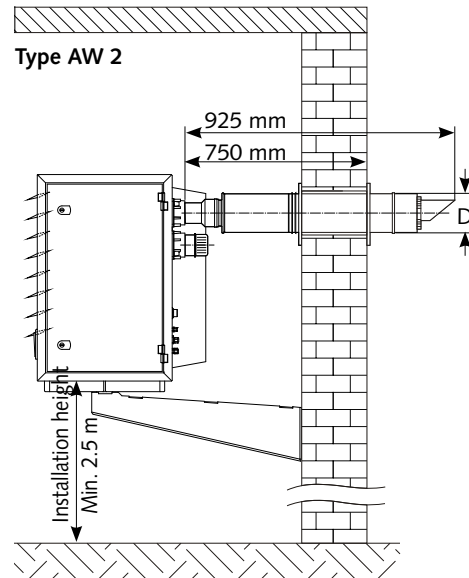
Unit type		L	B	H	Ø A	Ø F	AV	TV	S	GO	GV	Ø G
GPS 20	mm	795	500	690	80	80	430	120	155	180	255	¾"
GPS 30	mm	795	500	690	80	80	430	120	155	180	255	¾"
GPS 40	mm	985	500	690	80	80	430	120	155	180	255	¾"
GPS 60	mm	985	500	765	80	80	505	120	155	180	255	¾"
GPS 80	mm	1310	500	765	80	80	505	120	155	180	255	¾"

* Dimensions with hinged bracket

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.

	AW1 Ø 80	AW1 Ø 100	AW2 Ø 80	AW2 Ø 100
Ø connection	80 mm	100 mm	80 mm	100 mm
Ø of wall opening	125 mm	150 mm	125 mm	150 mm

Plan a wall opening with 5 mm clearance

Maximum additional pipe length¹⁾

	GPS 20	GPS 30	GPS 40	GPS 60	GPS 80
AW1 Ø 80 ²⁾	30+30 m	30+30 m	20+20 m	8+8 m	2+2 m
AW2 Ø 80	30 m	30 m	30 m	25 m	10 m

¹⁾ After the determination of the chimney duct, the pressure loss for the respective unit must be established. When using chimney bends, the pressure losses must especially be taken into account. ²⁾ Specification of the maximum fresh air and exhaust gas length. For GPS 60/80 in design AW1, longer variants are also available on request.

Exhaust gas duct, outside wall

Unit type	GPS 20	GPS 30	GPS 40	GPS 60	GPS 80
AW 1 Ø 80 ³⁾ LAS balanced flue system with integrated burner fresh air supply for exterior wall installation, including wind guard, 925 mm long	228774	228774	228774	228774	228774
AW 2 Ø 80 ³⁾ Exhaust gas pipe for exterior wall installation, including wind guard and protective grid for combustion air intake, 925 mm long	228772	228772	228772	228772	228772

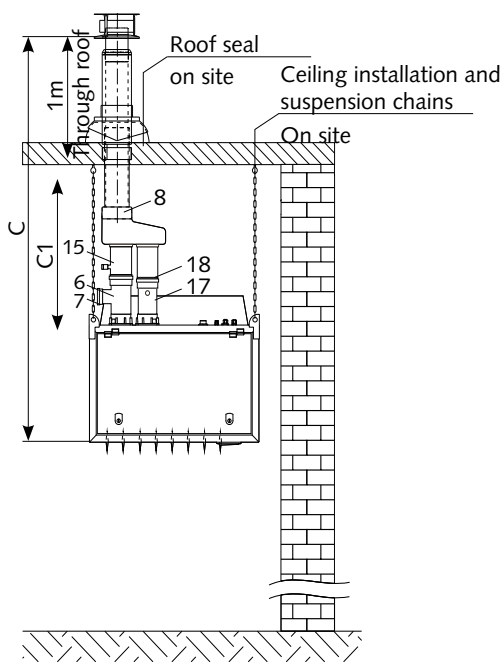
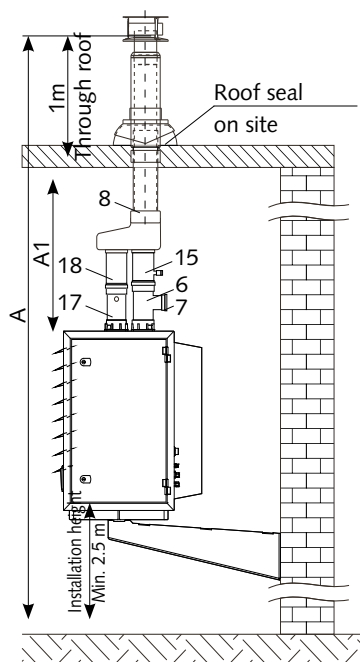
Individual sections					
Exhaust gas or fresh air pipe					
Length 250 mm	228868	228868	228868	228868	228868
Exhaust gas or fresh air pipe					
Length 500 mm	228871	228871	228871	228871	228871
Exhaust gas or fresh air pipe					
Length 1000 mm	228872	228872	228872	228872	228872
Exhaust or fresh air bend					
90°	228910	228910	228910	228910	228910
Exhaust or fresh air bend					
45°	228909	228909	228909	228909	228909
Exhaust gas pipe with condensate drain					
Horizontal, length 185 mm, including adapter Ø 32 mm	228956	228956	228956	228956	228956
Protective grid					
For combustion air intake	228960	228960	228960	228960	228960
Connection ports					
With test nipple	228981	228981	228981	228981	228981

CE certificate no. CE 0432-BPR-119933 ³⁾ Exhaust gas system without test nipple

REMKO GPS SERIES

Efficient wall-mounted heating systems with modulating gas burner

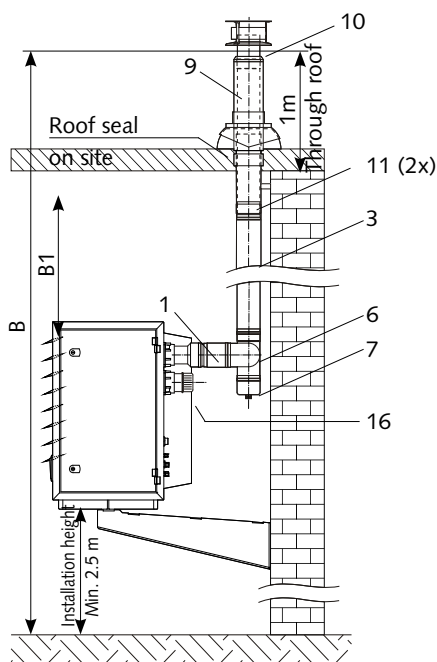
LAS balanced flue system Type WSA 81



LAS balanced flue system through roof with burner fresh air supply, WSA 81 series, single-walled aluminium, complete, comprising: *

- Pos. 6 1 T-connection, 90°
- Pos. 7 1 piece, sealing cover with connection port
- Pos. 8 1 unit roof penetration, LAS system with burner, fresh air supply, including rain hood, overall length 1850 mm
- Pos. 15 1 exhaust gas pipe with condensate drain, vertical, length 185 mm, including adapter Ø32
- Pos. 17 1 connection port with test nipple
- Pos. 18 1 exhaust gas or fresh air pipe, length 300 mm

Exhaust gas duct Type WSA 82



Chimney duct through roof, WSA 82 series, single-walled aluminium chimney, complete, comprising: *

- Pos. 1 1 exhaust gas or fresh air pipe, length 500 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 piece, sealing cover with connection port
- Pos. 9 1 roof penetration
- Pos. 10 1 rain hood
- Pos. 11 2 wall mounts
- Pos. 16 1 protective grid for combustion air intake

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

Exhaust gas duct through roof

Unit type	GPS 20	GPS 30	GPS 40	GPS 60	GPS 80
WSA 81 * LAS balanced flue system with integrated burner fresh air supply, rated diameter 80 mm	228911	228911	228911	228911	228911
WSA 82 * Exhaust system including protective grid, for combustion air extraction from the installation room	228902	228902	228902	228902	228902

* The slanted/flat roof penetration must be ordered as well if required No slanted roof penetration for WSA 82.

Individual sections					
1	Exhaust gas or fresh air pipe Length 250 mm	228868	228868	228868	228868
2	Exhaust gas or fresh air pipe Length 500 mm	228871	228871	228871	228871
3	Exhaust gas or fresh air pipe Length 1000 mm	228872	228872	228872	228872
4	Exhaust or fresh air bend 90°	228910	228910	228910	228910
5	Exhaust or fresh air bend 45°	228909	228909	228909	228909
6	T-connection 90°	228915	228915	228915	228915
7	Sealing cover with connection port	228920	228920	228920	228920
8	LAS system roof penetration With burner fresh air supply, including rain hood, total length 1850 mm	228965	228965	228965	228965
8	Extension of LAS system roof penetration Total length 1000 mm	228990	228990	228990	228990
9	Roof bushing	228930	228930	228930	228930
10	Rain hood	228935	228935	228935	228935
11	Wall mount	228940	228940	228940	228940
12	Flat roof penetration for WSA 82	228950	228950	228950	228950
13	Universal slanted roof penetration For WSA 81	228970	228970	228970	228970
14	Flat roof penetration for WSA 81	228975	228975	228975	228975
15	Exhaust gas pipe with condensate drain Length 185 mm, including adapter Ø 32 mm	228956	228956	228956	228956
16	Protective grid For combustion air intake	228960	228960	228960	228960
17	Connection ports With test nipple	228981	228981	228981	228981
18	Exhaust gas or fresh air pipe Length 215 mm	228969	228969	228969	228969
19	Siphon connecting set Ø 32 mm	228874	228874	228874	228874
20	Siphon Inlet pipe diameter 32 mm, outlet pipe diameter 40 mm	228867	228867	228867	228867

CE certificate no. CE 0432-BPR-119933

Note

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

Unit type	Type	Pipe connection Ø	Pipe Ø
GPS 20	WSA 81	80 mm	125 mm
	WSA 82	80 mm	95 mm
GPS 30	WSA 81	80 mm	125 mm
	WSA 82	80 mm	95 mm
GPS 40	WSA 81	80 mm	125 mm
	WSA 82	80 mm	95 mm
GPS 60	WSA 81	80 mm	125 mm
	WSA 101 ²⁾	100 mm	150 mm
	WSA 82	80 mm	95 mm
GPS 80	WSA 81	80 mm	125 mm
	WSA 101 ²⁾	100 mm	150 mm
	WSA 82	80 mm	95 mm

Chimney height

	GPS 20	GPS 30	GPS 40	GPS 60	GPS 80
A	5,15 m	5,15 m	5,15 m	5,25 m	5,30 m
A1 ³⁾	0,96 m	0,96 m	0,96 m	0,99 m	1,04 m
B	5,65 m	5,65 m	5,65 m	5,75 m	5,80 m
B1 ³⁾	1,46 m	1,46 m	1,46 m	1,49 m	1,54 m
C	2,65 m	2,65 m	2,65 m	2,65 m	2,85 m
C1 ³⁾	1,15 m	1,15 m	1,15 m	1,15 m	1,35 m

Maximum additional pipe length

	GPS 20	GPS 30	GPS 40	GPS 60	GPS 80
WSA 81 ¹⁾	30+30 m	30+30 m	20+20 m	5+5 m	1+1 m
WSA 82	30 m	30 m	30 m	20 m	10 m

¹⁾ Specification of the maximum fresh air and exhaust gas length.

²⁾ GPS 60/80: longer designs of WSA 101 and WSA 102 on request

³⁾ Related to an assembly height of 2.5 m

REMKO GPC SERIES

Wall-mounted calorific value heaters with modulating gas burner in a condensing design



REMKO GPC 80



REMKO GPC SERIES

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

- Maximum energy efficiency with an operating efficiency up to 108% due to modulating gas burner technology and utilisation of the calorific value effect
- Highly flexible applications
- Space-saving wall or ceiling mounting option
- Quick and inexpensive installation
- Sound-optimized through series-standard Ziehl-Abegg fans
- Burner chamber of INOX steel

Areas of application

- Sales and commercial premises
- Warehouses and manufacturing halls
- Retailers and supermarkets
- Sports centres



High efficiency by using modulating gas burner technology



Microprocessor-controlled unit technology



Technical data

Unit type *		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
Max. condensate	l/h	0.4	0.9	2.1	3.3
Air flow rate	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/Ph/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
Design		Natural gas H	Natural gas H	Natural gas H	Natural gas H
Ref. no.		224331	224341	224361	224371
Design		Natural gas L	Natural gas L	Natural gas L	Natural gas L
Ref. no.		224332	224342	224362	224372
Design		Propane gas	Propane gas	Propane gas	Propane gas
Ref. no.		224333	224343	224363	224373

* The gas connection must be implemented by a licensed installer

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

Switchgear and control units

ATR-Smart-Basic , Electronic temperature controller with touch display for 1-32 units (group switch), surface mounting, type of protection IP54, automatic day/night economy, weekly programme, electrical remote unlocking mechanism, error and operation messages	1011376	1011376	1011376	1011376
ATR-Smart-WEB , Electronic temperature controller with touch display for 1-32 units (group switch), surface mounting, type of protection IP20, automatic day/night economy, weekly programme, electrical remote unlocking mechanism, error and operation messages, Ethernet interface	1011377	1011377	1011377	1011377
External temperature probe For ATR-Smart-Basic/-Web	1011364	1011364	1011364	1011364

Accessories

Bracket for wall mounting Design: Standard	228780	228780	228780	228780
Bracket for wall mounting Design: rotary	228781	228782	228783	228783
Mounting set For suspension from ceiling 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, 1.4 kg	260430	260430	260430	260430

REMKO GPC SERIES

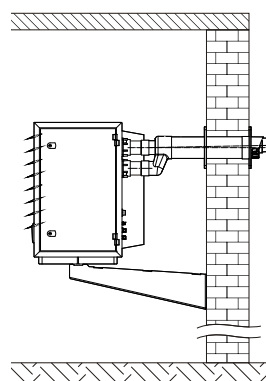
Wall-mounted calorific value heaters with modulating gas burner in a condensing design



REMKO GPC 20

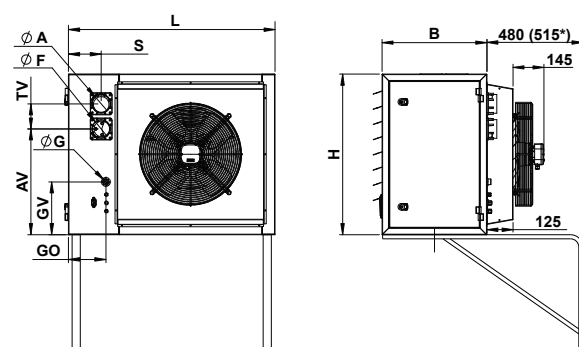
Outside wall installation

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 installer. Before the installation of the exhaust gas duct through the outside wall, the district heating inspector must be consulted.

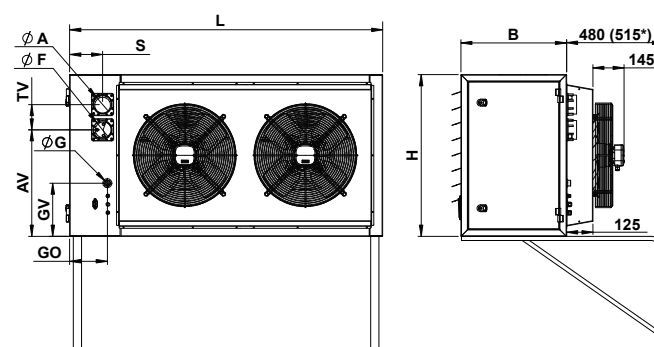


Chimney duct through wall with burner fresh air supply

Dimensions - GPC 20-40



Dimensions - GPC 60-80



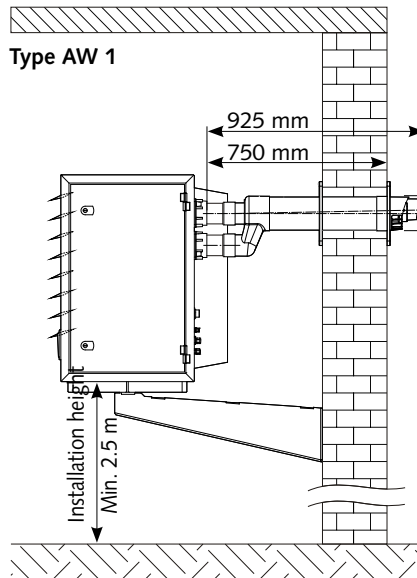
Dimensions - GPC 20-80

Unit type		L	B	H	Ø A	Ø F	AV	TV	S	GØ	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"

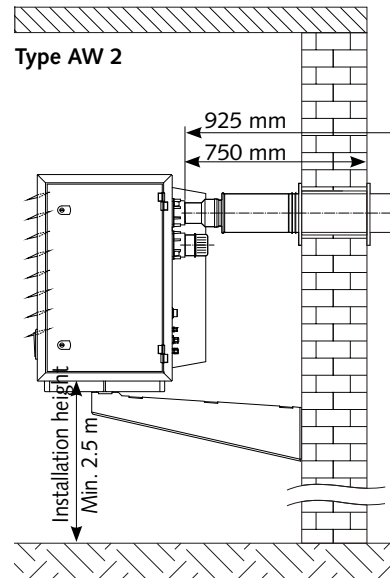
* Dimensions with hinged bracket

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

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.

	AW1 Ø 80	AW1 Ø 100	AW2 Ø 80	AW2 Ø 100
Ø connection	80 mm	100 mm	80 mm	100 mm
Ø of wall opening	125 mm	150 mm	125 mm	150 mm

Plan a wall opening with 5 mm clearance

Maximum additional pipe length¹

	GPC 20	GPC 40	GPC 60	GPC 80
AW1 Ø 80 ²⁾	30+30 m	30+30 m	5+5 m	-
AW1 Ø 100 ²⁾	-	-	-	5+5 m
AW2 Ø 80	30 m	30 m	15 m	-
AW2 Ø 100	-	-	-	30 m

²⁾ After the determination of the chimney duct, the pressure loss for the respective unit must be established. When using chimney bends, the pressure losses must especially be taken into account. ²⁾ Specification of the maximum fresh air and exhaust gas length. For GPS 60/80 in design AW1, longer variants are also available on request.

Exhaust gas duct, outside wall

Unit type	GPC 20	GPC 40	GPC 60	GPC 80
AW 1 Ø 80/100²⁾ LAS balanced flue system with integrated burner fresh air supply for exterior wall installation, including wind guard, 925 mm long	228774	228774	228774	228775
AW 2 Ø 80/100²⁾ Exhaust gas pipe for exterior wall installation, including wind guard and protective grid for combustion air intake, 925 mm long	228772	228772	228772	228773

Individual sections				
Exhaust gas or fresh air pipe Length 250 mm	228868	228868	228868	228869
Exhaust gas or fresh air pipe Length 500 mm	228871	228871	228871	228876
Exhaust gas or fresh air pipe Length 1000 mm	228872	228872	228872	228877
Exhaust or fresh air bend 90°	228910	228910	228910	229010
Exhaust or fresh air bend 45°	228909	228909	228909	229009
Exhaust gas pipe with condensate drain Horizontal, length 185 mm, including adapter Ø 32 mm	228956	228956	228956	229056
Protective grid For combustion air intake	228960	228960	228960	229060
Connection ports With test nipple	228981	228981	228981	229081

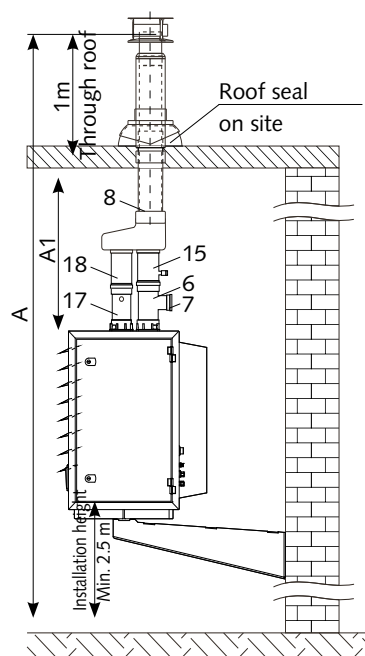
CE certificate no. CE 0432-BPR-119933 ²⁾ Exhaust gas system without test nipple

REMKO GPC SERIES

Wall-mounted calorific value heating systems with modulating gas burner in a condensing design

LAS balanced flue system

Type WSA 81/101



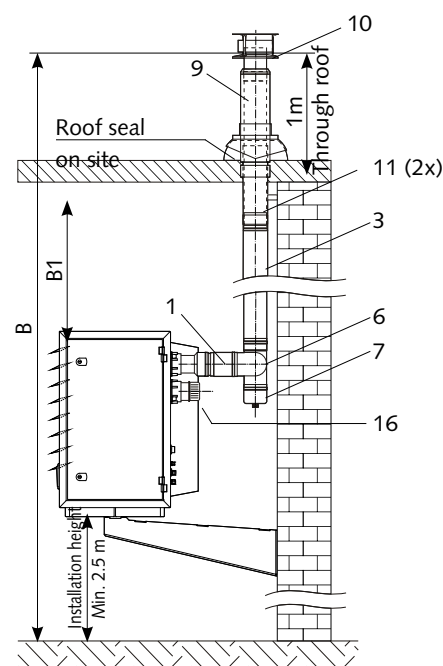
LAS balanced flue system through roof with burner fresh air supply

WSA 81/101 series, single-walled aluminium, complete, comprising: *

- Pos. 6 1 T-connection, 90°
- Pos. 7 1 piece, sealing cover with connection port
- Pos. 8 1 unit roof penetration, LAS system with burner fresh air supply, including rain hood, overall length 1850 mm
- Pos. 15 1 exhaust gas pipe with condensate drain, vertical, length 185 mm, including adapter Ø32
- Pos. 17 1 connection port with test nipple
- Pos. 18 1 exhaust gas or fresh air pipe, length 300 mm

Exhaust gas duct

Type WSA 82/102



Exhaust gas duct through roof,

WSA 82/102 series, single-walled aluminium, complete, comprising: *

- 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 500 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 piece, sealing cover with connection port
- Pos. 9 1 roof penetration
- Pos. 10 1 rain hood
- Pos. 11 2 wall mounts
- Pos. 16 1 protective grid for combustion air intake

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

Exhaust gas duct through roof

Unit type	GPC 20-60 **	GPC 80
WSA 81 * LAS balanced flue system with integrated burner fresh air supply, rated diameter 80 mm	228911	–
WSA 101 * LAS balanced flue system with integrated burner fresh air supply, rated diameter 100 mm	–	229011
WSA 82 Exhaust system including protective grid, for combustion air extraction from the installation room	228902	–
WSA 102 * Exhaust system including protective grid, for combustion air extraction from the installation room	–	229002

* The slanted/flat roof penetration must be ordered as well if required No slanted roof penetration for WSA 82.

** In the case of GPC 60, the appropriate type must be selected depending on the total length of the exhaust system.

Individual sections		
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 bend 90°	228910
5	Exhaust or fresh air bend 45°	228909
6	T-connection 90°	228915
7	Sealing cover with connection port	228920
8	LAS system roof penetration With burner fresh air supply, including rain hood, total length 1850 mm	228965
8	Extension of LAS system roof penetration Total length 1000 mm	228990
9	Roof bushing	
10	Rain hood	228935
11	Wall mount	228940
12	Flat roof penetration for WSA 82/102	228950
13	Universal slanted roof penetration for WSA 81/101	228970
14	Flat roof penetration for WSA 81/101	228975
15	Exhaust gas pipe with condensate drain Length 185 mm, including adapter Ø 32 mm	228956
16	Protective grid For combustion air intake	228960
17	Connection ports With test nipple	228981
18	Exhaust gas or fresh air pipe Length 215 mm	228969
19	Siphon connecting set Ø 32 mm	228874
20	Siphon Inlet pipe diameter 32 mm, outlet pipe diameter 40 mm	228867

CE certificate no. CE 0432-BPR-119933

Note

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

Unit type	Type	Pipe connection Ø	Pipe Ø
GPC 20	WSA 81	80 mm	125 mm
	WSA 82	80 mm	95 mm
GPC 40	WSA 81	80 mm	125 mm
	WSA 82	80 mm	95 mm
GPC 60	WSA 81	80 mm	125 mm
	WSA 101	100 mm	150 mm
	WSA 82	80 mm	95 mm
GPC 80	WSA 101	100 mm	150 mm
	WSA 102	100 mm	115 mm

Chimney height

	GPC 20	GPC 40	GPC 60	GPC 80
A	5,15 m	5,25 m	5,30 m	5,30 m
A1 ³⁾	0,96 m	1,06 m	1,04 m	0,96 m
B	5,65 m	5,75 m	5,80 m	5,80 m
B1 ³⁾	1,46 m	1,56 m	1,54 m	1,46 m

Maximum additional pipe length

	GPC 20	GPC 40	GPC 60	GPC 80
WSA 81 ¹⁾	30+30 m	10+10 m	1+1 m	-
WSA 101 ¹⁾	-	-	On request ²⁾	8+8 m
WSA 82	30 m	30 m	15 m	3 m
WSA 102	-	-	On request ²⁾	30 m

¹⁾ Specification of the maximum fresh air and exhaust gas length.

²⁾ GPC 60 available in the designs WSA 81 and WSA 82 in the standard version.
Designs WSA 101 and WSA 102 on request.

³⁾ Related to an assembly height of 2,5 m

REMKO VRS EN SERIES

Efficient universal heating systems in a planning-oriented modular system for oil and gas combustion

NEW

Available as of May 2021



REMKO VRS EN
Horizontal design



REMKO VRS EN SERIES

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 EN 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 decentralized setup lowers mounting and investment costs in rooms to be heated. The combustion-technical efficiency amounts to 95% maximum.

- 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
- Control cabinet with two-stage burner control system
- For environmentally friendly unit operation, the units should preferably be operated with HVO biofuel.



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



ERT-1
Electronic moisture-proof room thermostat, without connection accessories Ref no. 1011390



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



Tailored solutions for every situation

REMKO VRS EN heating units are manufactured according to the highest technical specifications. The devices are suited not only as individual units, but also as centralized units for channel connection. 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 32 and 543 kW always permits an appropriate device choice.

REMKO VRS EN
Vertical design



Technical data

Unit type		VRS 25 EN	VRS 50 EN	VRS 75 EN	VRS 100 EN	VRS 130 EN	VRS 170 EN	VRS 200 EN	VRS 270 EN	VRS 340 EN	VRS 440 EN	VRS 540 EN
Nominal thermal load ¹⁾	kW	32	54	89	120	160	208	249	276	332	442	543
Nominal thermal output	kW	28	47	78	104	139	181	216	238	287	382	468
Nominal air flow rate ²⁾	m³/h	3920	4870	5890	7290	9850	11800	14.900	18960	22680	30480	37170
Fuel		Heating oil EL, diesel fuel, biodiesel B7/ B10 ³⁾ , HVO biofuel ⁴⁾ , natural gas or LPG										
Oil flow rate (heating oil EL)	l/h	3.0	5.1	8.4	11.3	15.1	19.6	23.5	26.0	31.3	41.6	51.1
Gas flow rate (natural gas H)	m³/h	2.8	4.7	7.8	10.5	14.0	18.2	21.8	24.2	29.1	38.7	47.5
Gas flow rate (natural gas L)	m³/h	3.3	5.5	9.1	12.3	16.4	21.3	25.5	28.3	34.0	45.3	55.6
Gas flow rate (liquid gas)	m³/h	1.2	1.9	3.2	4.3	5.8	7.5	9.0	10.0	12.0	15.9	19.6
Gas flow rate (liquid gas)	kg/h	2.3	3.9	6.4	8.6	11.4	14.9	17.8	19.7	23.7	31.6	38.8
Exhaust flow rate ⁵⁾	kg/h	44.9	75.8	124.9	168.5	224.6	292.0	349.6	387.5	466.1	620.5	762.3
Approx. exhaust gas temp. ⁶⁾	°C	120 - 200										
Max. exhaust gas loss	%	7										
Flue-gas-side resistance	Pa	24	37	22	40	26	39	27	45	109	156	114
Nitrogen oxide emissions (HEL)	mg/kWh	142	138	145	149	135	150	149	144	148	142	150
Nitrogen oxide emissions (EGH)	mg/kWh	67	66	69	67	68	68	70	64	70	63	70
Voltage supply	V/Ph/Hz	230/1~/50			400/3~N/50							
Max. power consumption	kW	0.78	0.84	1.41	1.86	2.05	2.05	2.75	4.83	6.33	8.95	13.05
Min./max. auxiliary power consumption	kW	0.23	0.29	0.31	0.36	0.55	0.55	0.55	0.83	0.83	1.45	2.05
Fan power consumption ⁷⁾	kW	0.55	0.55	1.10	1.50	1.50	1.50	2.20	4.00	5.50	7.50	11.00
Max. nominal current consumption	A	6.80	8.00	2.80	3.70	3.70	3.70	5.20	8.80	11.40	15.50	22.80
Useful efficiency at rated heating capacity ¹⁾	%	87.0	86.8	86.7	86.6	87.0	87.1	86.7	86.3	86.3	86.3	86.1
Useful efficiency at minimum capacity ¹⁾	%	89.3	89.3	89.5	89.3	89.3	89.8	90.5	89.2	89.3	89.3	89.2
Operating efficiency at heat dissipation	%	94.3	93.2	91.9	91.7	98.1	91.0	90.7	92.1	91.9	92.1	92.2
Annual utilisation factor for room heating	%	78.0	78.0	78.1	78.0	78.1	78.0	78.0	78.0	78.0	78.0	78.0
Exhaust connection Ø	mm	150	150	180	180	200	200	200	300	300	350	350
Weight ⁸⁾	kg	150	240	310	360	550	730	820	832	874	1542	1792

¹⁾ Related to calorific value (H_s)

²⁾ Air flow rate at 20°C

³⁾ Maximum biodiesel admixture of 10%

⁴⁾ Hydrogenated vegetable oils that meet the requirements of DIN EN 590

⁵⁾ Approx. amount during oil operation

⁶⁾ Measured temperature minus room temperature

⁷⁾ At standard pressure

⁸⁾ Units without burners and other accessories

Calorific value H_s in normal condition:

Heating oil EL	10.62	kWh/kg
Natural gas H	11.46	kWh/m³
Natural gas L	9.76	kWh/m³
Propane gas	27.72	kWh/m³
Propane gas	14.00	kWh/kg

REMKO VRS EN SERIES

Efficient universal heating systems in a planning-oriented modular system for oil and gas combustion

Technical data

Unit type		VRS 25 EN	VRS 50 EN	VRS 75 EN	VRS 100 EN
Nominal thermal load	kW	32	54	89	120
Nominal thermal output	kW	28	47	78	104
Fuel		Heating oil EL, diesel fuel, biodiesel B7/ B10 ¹⁾ , HVO biofuel ²⁾ , natural gas or LPG			
Fuel consumption, heating oil EL	kg/h	3.0	5.1	8.4	11.3
Air flow rate ³⁾	m³/h	3920	4870	5890	7290
Voltage supply	V/Ph/Hz	230/1~/50	230/1~/50	400/3~N/50	400/3~N/50
Heater without burner					
Without air discharge hood, with switchgear and control units, rear exhaust gas adapter					
Vertical unit	Discharge above	Pressure 170 379020	60 379050	100 379070	80 379100
Horizontal unit	Discharge left	p external 170 379025	60 379055	100 379075	80 379105
Horizontal unit	Discharge right	Pa 170 379026	60 379056	100 379076	80 379106
Surcharge for increased pressure		Pressure 220 379021	140 379051	160 379071	170 379101
		p external 280 379022	200 379052	230 379072	240 379102
		Pa	330 379053	300 379073	350 379103
			370 379054	430 379074	–

Burner accessories version WLE ^{4) 5)}

Oil filter 3/8" 1-line design with automatic bleeding		1002501	1002501	1002501	1002501
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
Air discharge hoods with air outlet grids for direct air discharge					
3-sided	V+R+L / H+R+L	Type HG	290169	291169	292169
3-Sided	F+Ri+Re / F+L+Re	Type HG	290170	291170	292170
4-Sided	F+Ri+L+Re	Type HG	360171	361171	362171
Discharge hood 90°	F/Re	Type HB-90	290172	291172	292172
Air intake accessories and wall brackets					
Metal panel	Pos. IV	Type BB	290105	291105	292105
Protective grid for air intake	Pos. IV	Type S	290109	291109	292109
Flexible pipe	Pos. I-III	Type SG	290110	291110	292110
Flexible pipe	Pos. IV	Type SG	290123	291123	292123
Dust filter , 3-sided (for free air intake)	Pos. I-III	Type F	290111	291111	292111
Replacement filter mat		Type EF	290112	291112	292112
Dust filter for duct connection	Pos. I-III	Type FK	290113	291113	292113
Dust filter for duct connection	Pos. IV	Type FK	290114	291114	292114
Replacement filter mat		Type EFK	290115	291115	292115
Shutter flap combinations	Pos. I-III	Type JK	290119	291119	292119
Shutter flap combinations	Pos. I-III / IV	Type JK	290120	291120	292120
Actuator with surface-mounted switch Open/Stop/Close			320245	320245	320245
Actuator , infinitely variable, with remote potentiometer, surface mounting			320251	320251	320251
Wall bracket for vertical unit			290210	291210	292210
Wall bracket for horizontal unit ⁷⁾			322210	321212	325210
Exhaust gas adapter (ref. no. last digit of 2 = left, ref. no. last digit of 3 = top)			290061	291061	292061

Accessories

Electronic moisture-proof room thermostat ERT-1 with integrated temperature sensor, type of protection IP65, including needs-based setting of hysteresis and averaging, without connection accessories	1011390	1011390	1011390	1011390
Differential temperature controller ATR-3 , fully automatic, including temperature probe, weekly programme, IP 54 protection class	1011290	1011290	1011290	1011290
Electronic temperature controller type ATR-4 , with temperature probe, surface mounting, weekly programme, IP 20 protection class	1011340	1011340	1011340	1011340
Electronic temperature controller type ATR-5 , with temperature probe, surface mounting, weekly programme, IP 54 protection class	1011342	1011342	1011342	1011342
Temperature probe set for 4-point blended temperature ⁸⁾	1011343	1011343	1011343	1011343

¹⁾ Maximum biodiesel admixture of 10% ²⁾ Hydrogenated vegetable oils that meet the requirements of DIN EN 590 ³⁾ At standard pressure

⁴⁾ Further information on page 229 ⁵⁾ **Attention:** For orders without combustion-technical commissioning, we provide the burners separately in the box without pre-adjustment.

VRS 130 EN	VRS 170 EN	VRS 200 EN	VRS 270 EN	VRS 340 EN	VRS 440 EN	VRS 540 EN
160	208	249	276	332	442	543
139	181	216	238	287	382	468
Heating oil EL, diesel fuel, biodiesel B7/ B10 ¹⁾ , HVO biofuel ²⁾ , natural gas or LPG						
15.1	19.6	23.5	26.0	31.3	41.6	51.1
9850	11800	14900	18960	22680	30480	37170
400/3~N/50	400/3~N/50	400/3~N/50	400/3~N/50	400/3~N/50	400/3~N/50	400/3~N/50
100 379130	50 379170	70 379200	50 379270	60 379340	50 379440	50 379540
100 379135	50 379175	70 379205	50 379275	60 379345	50 379445	50 379545
100 379136	50 379176	70 379206	50 379276	60 379346	50 379446	50 379546
170 379131	130 379171	140 379201	90 379271	100 379341	90 379441	90 379541
260 379132	170 379172	220 379202	210 379272	190 379342	200 379442	210 379542
–	260 379173	340 379203	290 379273	280 379343	290 379443	300 379543
–	410 379174	–	400 379274	–	380 379444	390 379544
1002501	1002501	1002501	1002501	1002501	1002501	1002501
294205	295205	296205	330205	331205	332205	333205
1008400	1008400	1008400	1008400	1008400	1008400	1008400
1094209	1094209	1094209	1094209	1094209	1094209	1094209
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	–	–
–	–	–	–	–	–	–
1011390	1011390	1011390	1011390	1011390	1011390	1011390
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

⁶⁾ The gas connection must be implemented by a licensed installer ⁷⁾ In the case of exhaust gas plants for internal mounting, please enter the bracket length in the order

⁸⁾ Only usable in combination with electronic temperature regulation (ETR-1, ATR-3, ATR-4, ATR-5, and MAK-2)

REMKO VRS C SERIES

Universal calorific value heating systems in a planning-oriented modular system for oil and gas combustion

NEW

Available as of May 2021



REMKO VRS C

REMKO VRS C SERIES

Fast heat, low emissions with high energy efficiency

This REMKO series is characterised by a combination of extremely advanced technologies. Due to the newly developed design of the combustion chamber and heat exchanger and the use of state-of-the-art blue flame burner technology and EC fans, the VRS-C automatic heaters set new standards in hall heating. Through consistent use of the condensing effect, operating efficiencies of over 100% can be achieved, offering fuel savings of up to 10% compared to conventional hall heating systems.

Thanks to the perfect coordination of the blue flame burner and combustion chamber, combustion is particularly low in pollutants. The NO_x concentration is thus below the reference values specified in the ErP Directive 2021 for the best devices on the market.

- 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
- Modern, efficient EC fans
- Easy access to all components due to maintenance-friendly design
- Low-emission blue flame burner technology
- For environmentally friendly unit operation, the units should preferably be operated with HVO biofuel.



Radial fan with EC motor



Low-emission blue flame burner



ERT-1
Electronic moisture-proof room thermostat, without connection accessories Ref no. 1011390



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



Technical data

Unit type		VRS 30 C	VRS 50 C	VRS 70 C	VRS 100 C	VRS 120 C	VRS 150 C	VRS 170 C
Nominal thermal load ¹⁾	kW	35	58	77	104	121	153	181
Nominal thermal output	kW	32	55	73	94	111	141	165
Nominal air flow rate ²⁾	m³/h	4000	5600	6800	7500	8500	10500	12500
Fuel		Heating oil EL, diesel fuel, biodiesel B7/ B10 ³⁾ , HVO biofuel ⁴⁾ , natural gas or LPG						
Oil flow rate (heating oil EL)	l/h	3.3	5.5	7.3	9.8	11.4	14.4	17.0
Gas flow rate (natural gas H)	m³/h	3.1	5.1	6.7	9.1	10.6	13.4	15.8
Gas flow rate (natural gas L)	m³/h	3.6	5.9	7.9	10.7	12.4	15.7	18.5
Gas flow rate (liquid gas)	m³/h	1.3	2.1	2.8	3.8	4.4	5.5	6.5
Gas flow rate (liquid gas)	kg/h	2.5	4.1	5.5	7.4	8.6	10.9	12.9
Exhaust flow rate ⁵⁾	kg/h	49.1	81.4	108.1	146.0	169.9	214.8	254.1
Approx. exhaust gas temperature ⁶⁾	°C				60 - 150			
Max. exhaust gas loss	%				5			
Flue-gas-side resistance	Pa	5	16	10	12	18	20	50
Nitrogen oxide emissions (HEL)	mg/kWh	100	93	128	94	111	119	126
Nitrogen oxide emissions (EGH)	mg/kWh	67	66	69	67	68	68	70
Voltage supply	V/Ph/Hz	230/1~/50			400/3~N/50			
Max. power consumption	kW	0.65	1.11	1.30	1.70	2.04	2.40	3.38
Min./max. auxiliary power consumption	kW	0.30	0.36	0.40	0.50	0.54	0.50	0.58
Fan power consumption ⁷⁾	kW	0.35	0.75	0.90	1.20	1.50	1.90	2.80
Max. nominal current consumption	A	1.81	2.66	3.04	3.92	4.50	4.93	6.57
Useful efficiency at rated heating capacity ¹⁾	%	93.0	93.1	93.4	91.3	91.8	91.8	91.3
Useful efficiency at minimum capacity ¹⁾	%	95.0	96.3	96.2	93.5	94.0	95.5	94.3
Operating efficiency at heat dissipation	%	94.0	93.5	92.6	92.8	93.3	92.5	93.4
Annual utilisation factor for room heating	%	83.6	85.2	84.4	82.3	83.5	83.6	83.7
Exhaust connection Ø	mm	150	150	150	180	180	180	180
Weight ⁸⁾	kg	220	249	305	399	405	462	529

¹⁾ Related to calorific value (H_s)

²⁾ Air flow rate at 20°C

³⁾ Maximum biodiesel admixture of 10%

⁴⁾ Hydrogenated vegetable oils that meet the requirements of DIN EN 590

⁵⁾ Approx. amount during oil operation

⁶⁾ Measured temperature minus room temperature

⁷⁾ At standard pressure

⁸⁾ Units without burners and other accessories

Calorific value H_s in normal condition:

Heating oil EL	10.62	kWh/kg
Natural gas H	11.46	kWh/m³
Natural gas L	9.76	kWh/m³
Propane gas	27.72	kWh/m³
Propane gas	14.00	kWh/kg

REMKO VRS C SERIES

Universal calorific value heating systems in a planning-oriented modular system for oil and gas combustion

Technical data

Unit type		VRS 30 C	VRS 50 C
Nominal thermal load	kW	35	58
Nominal thermal output	kW	32	55
Fuel		Heating oil EL, diesel fuel, biodiesel B7/ B10 ¹⁾ , HVO biofuel ²⁾ , natural gas or LPG	
Fuel consumption, heating oil EL	kg/h	3.3	5.5
Air flow rate ³⁾	m³/h	4000	5600
Voltage supply	V/Ph/Hz	230/1~/50	230/1~/50
Heaters with oil burner ⁴⁾			
With air discharge hood, 3-sided, with switching and control units, rear chimney adapter, standard unit		380035	380055
Heaters with oil burner ⁴⁾			
With air discharge hood HB-90, with switching and control units, rear chimney adapter, standard unit		380036	380056
Heaters without burner⁴⁾			
Without air outlet hood, with switches and control units, rear chimney adapter	Pressure p external		
standard unit	Pa 50	380030	380050
Surcharge for increased pressure	Pressure 100	380031	380051
	p external 200	380032	380052
	Pa 300	380033	380053
	400	380034	–

Burner version WLE ^{4) 5)}

Fan oil burner			949103	949105
Oil filter 3/8" 1-line design with automatic bleeder			1002501	1002501
Burner fresh-air box			290300	290300
Burner fresh-air pipe, flexible (delivery length, 5 m jumped)			1090207	1090207
Intake part with protective grid (burner fresh air)			1090209	1090209
Natural gas fan burner ⁶⁾			955050	955045
Propane gas fan burner ⁶⁾			955055	955030
Air discharge hoods with air outlet grids for direct air discharge				
3-sided	V+R+L / H+R+L	Type HG	290311	290311
3-sided	V+R+H / V+L+H	Type HG	290312	290312
4-sided	V+R+L+H	Type HG	290310	290310
Air outlet hood 90°		Type HB-90	290350	290350
Air intake accessories and wall brackets				
Flexible pipe	Pos. I-II	Type SG	290360	290360
Flexible pipe	Pos. III	Type SG	290361	290361
Dust filter, 3-sided (for free air intake)	Pos. I-III	Type F	290370	290370
Replacement filter mat, set	Pos. I-III	Type EF	290374	290374
Dust filter for duct connection	Pos. I-II	Type FK	290380	290380
Dust filter for duct connection	Pos. III	Type FK	290381	290381
Replacement filter mat	Pos. I-II	Type EFK	290410	290410
Replacement filter mat	Pos. III	Type EFK	290411	290411
Shutter flap combinations	Pos. I / II	Type JK	290390	290390
Shutter flap combinations	Pos. I-II / III	Type JK	290391	290391
Actuator with surface-mounted switch Open/Stop/Close			320245	320245
Actuator, infinitely variable, with remote potentiometer, surface mounting			320251	320251
Wall bracket			290400	290400

Accessories

Electronic moisture-proof room thermostat ERT-1	1011390	1011390
With integrated temperature sensor, type of protection IP65, including needs-based setting of hysteresis and averaging, without connection accessories		
Differential temperature controller ATR-3	1011290	1011290
Fully automatic, including temperature probe, weekly programme, IP 54 protection class		
Electronic temperature controller type ATR-4	1011340	1011340
With temperature probe, surface mounting, weekly programme, IP 20 protection class		
Electronic temperature controller type ATR-5	1011342	1011342
With temperature probe, surface mounting, weekly programme, IP 54 protection class		
Temperature probe set for 4-point blended temperature ⁷⁾	1011343	1011343

¹⁾ Maximum biodiesel admixture of 10% ²⁾ Hydrogenated vegetable oils that meet the requirements of DIN EN 590 ³⁾ At standard pressure

⁴⁾ Further information on page 229 ⁵⁾ **Attention:** For orders without combustion-technical commissioning, we provide the burners separately in the box without pre-adjustment.

VRS 70 C	VRS 100 C	VRS 120 C	VRS 150 C	VRS 170 C
77	104	121	153	181
73	94	111	141	165
		Heating oil EL, diesel fuel, biodiesel B7/ B10 ¹⁾ , HVO biofuel ²⁾ , natural gas or LPG		
7.3	9.8	11.4	14.4	17.0
6800	7500	8500	10500	12500
400/3~N/50	400/3~N/50	400/3~N/50	400/3~N/50	400/3~N/50
380075	380105	380125	380155	380175
380076	380106	380126	380156	380176
380070	380100	380120	380150	380170
380071	380101	380121	380151	380171
380072	380102	380122	380152	380172
380073	380103	380123	380153	380173
380074	380104	—	—	380174
949107	949110	949112	949115	949117
1002501	1002501	1002501	1002501	1002501
290301	290301	290301	290301	290301
1090207	1090207	1090207	1090207	1090207
1090209	1090209	1094209	1094209	1094209
955035	955015	955015	955015	954650
955040	955020	955020	955020	954760
290321	290331	290331	290331	290341
290322	290332	290332	290332	290342
290320	290330	290330	290330	290340
290352	290354	290354	290354	290356
290361	290361	290361	290361	290361
290361	290362	290362	290362	290363
290371	290372	290372	290372	290373
290375	290376	290376	290376	290377
290381	290381	290383	290383	290383
290381	290382	290384	290384	290385
290411	290411	290413	290413	290413
290411	290412	290414	290414	290415
290391	290391	290391	290391	290391
290391	290392	290392	290392	290393
320245	320245	320245	320245	320245
320251	320251	320251	320251	320251
290401	290401	290401	290401	290401
1011390	1011390	1011390	1011390	1011390
1011290	1011290	1011290	1011290	1011290
1011340	1011340	1011340	1011340	1011340
1011342	1011342	1011342	1011342	1011342
1011343	1011343	1011343	1011343	1011343

⁶⁾ The gas connection must be implemented by a licensed installer

⁷⁾ Only usable in combination with electronic temperature regulation (ETR-1, ATR-3, ATR-4, ATR-5, and MAK-2)

REMKO PWN H SERIES

Hot water heaters in low-temperature design with EC fan for heating



REMKO PWN H SERIES

The efficient heating system for warehouses and supermarkets

The PWN H hot water heaters are optimally suited for use in commercial applications due to their high-quality, robust plastic housing. Through the universal colouring of the devices, they fit in discreetly in almost every environment.

Thanks to the modern, energy-efficient EC motors, the user obtains not only energy savings in comparison with conventional AC motors, but also a considerably increased regulating comfort as the fan can be adapted variably to the operating conditions as required. Individually adjustable air control fins guarantee a precise adaptation of the air flow and reduce the flow resistance to a minimum. The interaction of housing design, fan selection and heat exchanger dimensioning ensure an even flow-through of the fin heat exchanger and therefore an optimum utilisation of the heat exchanger surface for the transmission of power.

A sophisticated mounting system guarantees that, in addition to the wall or ceiling mounting, a mounting inclined by 30° is also possible. The mounting bar on the device itself can continue to be inclined by up to 70°, therefore enabling an adaptation of the device alignment to the most difficult mounting conditions. The brackets are included in the scope of supply of the standard version. An optionally fittable condensate drip pan enables an operation of the device even in cooling mode in case of wall mounting, therefore forming the ideal addition for securing the comfort zone.

- High-quality plastic housing for industrial applications
- Discreet design
- Modern, efficient EC technology
- Versatile mounting possibilities using series-standard bracket
- Cooling optionally possible in case of wall mounting

Accessories

- Room temperature controller
- Air control fins, vertical
- Condensate drip pan



Precision room temperature controller RR 21.2



Pivotable 3D mounting system for optimum air distribution



Technical data

Unit type		PWN 35-1 H	PWN 45-2 H	PWN 75-3 H	PWN 95-2 H	PWN 105-3 H
Heating capacity ^{1) 2)}	kW	9.7 / 8.1	19.0 / 15.2	33.9 / 27.0	54.9 / 44.1	69.4 / 55.3
Cooling capacity ³⁾	kW	2.53	4.38	7.85	14.81	16.19
Air flow rate	m³/h	300 - 2850	250 - 2550	350 - 3900	1270 - 8560	715 - 7950
Rated flow rate, heating ¹⁾	m³/h	0.43	0.83	1.49	2.41	3.05
Rated flow rate, cooling ³⁾	m³/h	0.46	0.81	1.47	2.69	2.99
Sound pressure level L _{pA} ⁴⁾	dB(A)	29 - 64	29 - 64	32 - 67	37 - 71	35 - 70
Voltage supply	V/Ph/Hz	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50
Power consumption ¹⁾	W	108	111	315	635	635
Current consumption ¹⁾	A	0.77	0.83	2.10	4.24	4.16
Operating limit temperature	°C	105	105	105	105	105
Maximum operating pressure	bar	16	16	16	16	16
Pressure loss, heating ¹⁾	kPa	2.4	5.7	11.8	12.3	9.4
Pressure loss, cooling ³⁾	kPa	2.8	5.5	14.5	19.2	11.5
Maximum blowing range (wall mounting)	m	15.4	13.9	21.2	23.6	22.3
Water volume of registers	l	1.8	2.5	3.2	5.3	6.5
Medium connectors	Inch	R 3/4	R 3/4	R 3/4	R 1	R 1
Dimensions - height	mm	730	730	730	730	730
Dimensions - width	mm	765	765	765	1390	1390
Dimensions - depth with mounting bar	mm	595	595	595	595	595
Weight	kg	20	21	26	38	40
Ref. no.		1684035	1684045	1684075	1684095	1684105

¹⁾ Water inlet temp. 70°C, water outlet temp. 50°C, water inlet temp. 15°C, maximum air volume flow rate

²⁾ Water inlet temp. 55°C, water outlet temp. 45°C, water inlet temp. 15°C, maximum air volume flow rate

³⁾ Water inlet temp. 7°C, water outlet temp. 12°C, water inlet temp. 27°C TK, air volume flow rate at 5V

⁴⁾ Measured in a 100 m³ room with a reverberation period of 0.3 seconds, distance of 1.5m

Accessories

Unit type	PWN 35-1 H	PWN 45-2 H	PWN 75-3 H	PWN 95-2 H	PWN 105-3 H
Condensate drip pan					
For mounting into the unit to use the unit in cooling operation.	1684195	1684195	1684195	1684196	1684196
Air control fins, vertical for mounting into the device for the adjustability of the vertical distribution of air.	1684193	1684193	1684193	1684193	1684193
Precision room temperature controller RR 21.2					
For controlling one or more indoor units (max. 50), programmable, electronic controller with summer/winter operation changeover, external start/stop, infinitely variable control of EC fans across 0-10 V and many other features	1611401	1611401	1611401	1611401	1611401
Room temperature controller RR 21.2,					
Type of protection IP54	1684402	1684402	1684402	1684402	1684402



Planning aids

Extensive planning aids can be found under:
www.remko.de/planung/pwn.pdf

REMKO PWW SERIES

Hot water heaters as supplement to hot water heating plant



REMKO PWW SERIES

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.

The load-bearing, galvanised, solid steel sheet housings are already supplied. The air discharge fins are individually infinitely variable. REMKO PWW units are designed for warm and hot pump water at temperatures up to a maximum of 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
- Low spatial requirements
- Extremely low noise by using optimum coordinated components
- Extremely easy to service
- Painted design, optional

Technical data

Unit type		PWW 30-2	PWW 30-3	PWW 30-4	PWW 30-6	PWW 50-2	PWW 50-3	PWW 50-4	PWW 50-6
Electrical connection	V	400/3~N	400/3~N	400/3~N	400/3~N	400/3~N	400/3~N	400/3~N	400/3~N
Frequency	HZ	50	50	50	50	50	50	50	50
Power consumption	kW	0.19/0.14	0.19/0.14	0.19/0.14	0.19/0.14	0.28/0.19	0.28/0.19	0.28/0.19	0.28/0.19
Nominal current	A	0.40/0.23	0.40/0.23	0.40/0.23	0.40/0.23	0.58/0.31	0.58/0.31	0.58/0.31	0.58/0.31
Speed	rpm	1390/1170	1390/1170	1390/1170	1390/1170	1340/1080	1340/1080	1340/1080	1340/1080
Air capacity	m³/h	2140/1660	1950/1550	1760/1380	1620/1230	3610/2850	3230/2850	2990/2420	2790/2230
Sound pressure level ¹⁾	dB(A)	52/46	53/48	55/49	57/50	55/50	55/51	58/54	58/54
Heating medium connection	Inch	R ¾"	R 1"	R 1 ¼"	R 1 ¼"	R ¾"	R 1"	R 1 ¼"	R 1 ¼"
Heating medium		Warm or hot pump water up to maximum 80 °C							
Max. operating pressure	bar	16	16	16	16	16	16	16	16
Weight	kg	24	25	28	30	31	33	36	39

Unit type		PWW 80-2	PWW 80-3	PWW 80-4	PWW 80-6	PWW 100-2	PWW 100-3	PWW 100-4	PWW 100-6
Electrical connection	V	400/3~N	400/3~N	400/3~N	400/3~N	400/3~N	400/3~N	400/3~N	400/3~N
Frequency	HZ	50	50	50	50	50	50	50	50
Power consumption	kW	0.34/0.21	0.34/0.21	0.34/0.21	0.34/0.21	0.62/0.44	0.62/0.44	0.62/0.44	0.62/0.44
Nominal current	A	0.70/0.38	0.70/0.38	0.70/0.38	0.70/0.38	1.25/0.75	1.25/0.75	1.25/0.75	1.25/0.75
Speed	rpm	870/630	870/630	870/630	870/630	900/720	900/720	900/720	900/720
Air capacity	m³/h	5500/4260	5120/4070	4490/3540	4080/3110	8600/6350	7820/5990	7280/5580	6570/4760
Sound pressure level ¹⁾	dB(A)	55/49	55/49	55/49	55/49	58/54	58/54	59/55	59/55
Heating medium connection	Inch	R 1"	R 1 ¼"	R 1 ¼"	R 1 ¼"	R 1 ¼"	R 1 ¼"	R 1 ½"	R 1 ½"
Heating medium		Warm or hot pump water up to maximum 110°C							
Max. operating pressure	bar	16	16	16	16	16	16	16	16
Weight	kg	42	46	48	54	55	59	64	71

¹⁾ Measurement at a distance of 5m, volume of measurable space 800 m³, average reverberation time 1.4 s

Technical data

Unit type	PWW 30-2	PWW 50-2	PWW 80-2	PWW 100-2
Heat exchanger package with 2 register rows	1686010	1686040	1686070	1686100
Unit type	PWW 30-3	PWW 50-3	PWW 80-3	PWW 100-3
Heat exchanger package with 3 register rows	1686020	1686050	1686080	1686110
Unit type	PWW 30-4	PWW 50-4	PWW 80-4	PWW 100-4
Heat exchanger package with 4 register rows	1686030	1686060	1686090	1686120
Unit type	PWW 30-6	PWW 50-6	PWW 80-6	PWW 100-6
Heat exchanger package with 6 register rows	1686033	1686063	1686093	1686123

Special design

Unit type	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-speed, 400 V	1686200	1686200	1686200	1686200
Switchgear MSRD-K, 2-speed, 400 V, including 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	385220
Wall bracket For filter and blended air cover combination	WFM	385370	385371	385372	385373
Fresh-air intake hood	ALH	385375	385376	385377	385378
Rain collar with duct section, 1000 mm	RK	385380	385381	385382	385383
Duct adapter, 500 mm	KA 5	385385	385386	385387	385388
Duct adapter, 1000 mm	KA 10	385390	385391	385392	385393
Flexible pipe	SG	385395	385396	385397	385398
Filter box	FK	385400	385401	385402	385403
Replacement filter mat	EF	385405	385406	385407	385408
Mixed-air box without actuator	MLK	385410	385411	385412	385413
Recirculation air intake fitting	UA	385415	385416	385417	385418
Fresh-air intake grid	Customer	385420	385421	385422	385423
Air discharge shutter (vertical fins)	B	385193	385194	385195	385196
Ceiling air discharge nozzle	AD	385213	385214	385215	385216
Air discharge hood, 4-sided	HG	385197	385198	385199	385212
Flap actuator, Off/Pause/On	KSH	385290	385290	385290	385290
Flap actuator, infinitely variable	KSP	385289	385289	385289	385289
3-position switch, surface mounting	SK	290246	290246	290246	290246
Remote potentiometer, surface mounting	FP	385288	385288	385288	385288
Frost protection thermostat	FS	385305	385305	385305	385305
Circular exhaust for foil tube connector 450 Ø	RF	1085310	1085320	—	—
Circular exhaust for foil tube connector 600 Ø	RF	—	—	1085330	1085340
Injection vent, fitted to the wall	IJ	385350	385351	385352	385353
Injection vent, fitted to the ceiling	IJ	385360	385361	385362	385363

Accessories

Unit type	PWW 30	PWW 50	PWW 80	PWW 100
Electronic moisture-proof room thermostat ERT-1 With integrated temperature sensor, type of protection IP65, including needs-based setting of hysteresis and averaging, without connection accessories	1011390	1011390	1011390	1011390
Differential temperature controller ATR-3 Fully automatic, including temperature probe, weekly programme, IP 54 protection class	1011290	1011290	1011290	1011290
Electronic temperature controller ATR-4 With temperature probe weekly, surface mounting, type of protection IP20	1011340	1011340	1011340	1011340
Electronic temperature controller ATR-5 Including temperature probe, weekly programme, surface mounting, type of protection IP54	1011342	1011342	1011342	1011342
Temperature probe set for 4-point blended temperature recording	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)



■ REMKO PWW SERIES

Hot water heaters | Planning aids



REMKO injection shutter



REMKO PWW with mounted injection shutter

Injection shutter

An economical expansion to your REMKO PWW unit.

The supply air is blown in optimally through the injection shutter, while the position of the air control fins influences the air speed and the air discharge temperature of the entire air stream. With this technology, REMKO PWW units achieve greater blowing ranges and a quick heating of the areas subject to temperature control. Intake of the already heated room air prevents the occurrence of layers with varying air temperatures. The heat is distributed evenly throughout the room. The injection shutter can be mounted to your REMKO PWW unit at a later point in time without a problem and without great effort. The position of the fins can also be electrically regulated via an optional controller.

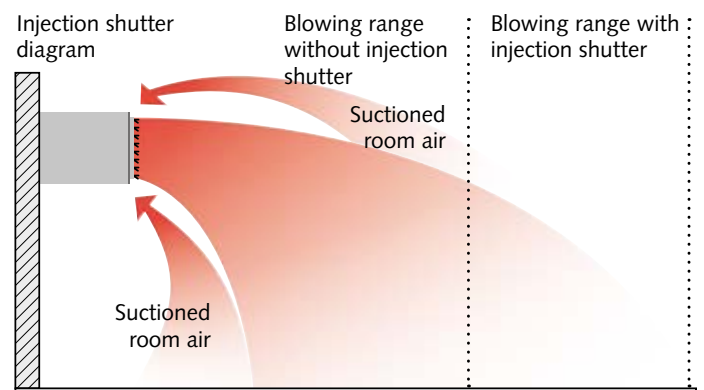
- Further blowing range due to addition of room air
- Faster and more even heating at same unit output
- Suited for wall and ceiling operation
- Problem-free mounting (even later)
- Electrical adjustment and regulation of the fin position possible

Installation

Unclip the existing fins and fix the injection shutter with four screws. The position of the fins can also be electrically regulated via an optional controller.

Nozzle-shaped air outlet opening

The air outlet speed is increased by the nozzle-shaped air outlet opening and, at the same time, secondary air is laterally inducted by the profile. The air jet penetrates more deeply into the room. The desired room temperature is thus achieved more quickly.



REMKO PWL H SERIES

Ceiling ventilation units for heating



REMKO PWL H SERIES

Modern technology in an attractive 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 optimum air distribution and thus provide a comfortable room climate. 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. The units are fitted as standard with a high-performance condensate pump.

Areas of application

- Sales and commercial premises
- Exhibition and lobby areas
- Industrial and trade fair halls
- Shopping centres, retailers and supermarkets

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

Technical data

Unit type		PWL 101 H		PWL 102 H		PWL 103 H	
Max. thermal output at 90/70 and air intake temperature of 0 °C	kW	16.5		26.7		34.4	
PWW heating medium	°C	90/70	70/50	90/70	70/50	90/70	70/50
Thermal output	kW	16.5/14.7	12.0/10.7	26.7/24.1	19.5/17.8	34.4/29.7	25.4/22.0
At air intake temperature	tLE °C	0	0	0	0	0	0
At air outlet temperature	tLA °C	23/24	16/18	38/41	28/31	51/54	37/40
Air capacity	m³/h	2030/1685	2030/1685	1960/1610	1960/1610	1885/1530	1885/1530
Sound pressure level	dB(A)	56/47	56/47	56/47	56/47	56/47	56/47
Heating medium connection	Inch	R1 "	R1 "	R1 "	R1 "	R1 "	R1 "
Voltage supply	V/Ph/Hz	400/3~N/50		400/3~N/50		400/3~N/50	
Weight	kg	31		35		38	
Ref. no.		1687101		1687102		1687103	

Switchgear

Switchgear MSRD 4.0, 2-speed, 400 V	1686200	1686200	1686200
Switchgear MSRD-K, 2-speed, 400 V	1686201	1686201	1686201
Switchgear MAK-2, 2-speed, 400 V, fully electronic for automatic operation, including 24-hour temperature regulation	385330	385330	385330
Switchgear 3 EG, 5-stage, 3.0 A, 400 V	385300	385300	385300
Switchgear 5 EG, 5-stage, 5.2 A, 400 V	385301	385301	385301
Motor terminal box AKG-5, for a parallel group control of max. 5 units	385303	385303	385303
Frequency converter	1687405	1687405	1687405

Accessories

Unit brackets, fixed length 90 mm	Series	Series	Series
Unit brackets, adjustable, 90-145 mm	1687400	1687400	1687400

Miscellaneous Accessories

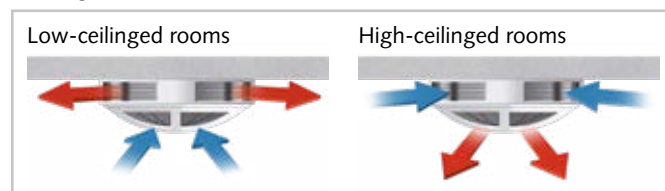
Electronic moisture-proof room thermostat ERT-1 With integrated temperature sensor, type of protection IP65, including needs-based setting of hysteresis and averaging, without connection accessories	1011390	1011390	1011390
Electronic temperature controller ATR-4 With temperature probe, surface mounting, IP 20 protection class	1011340	1011340	1011340
Electronic temperature controller ATR-7 With temperature probe, surface mounting, IP 54 protection class	1011292	1011292	1011292
Temperature probe set for 4-point blended temperature recording	1011343	1011343	1011343



Versatile

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

Heating



PWL 201 H		PWL 202 H		PWL 203 H		PWL 301 H		PWL 302 H		PWL 303 H	
20.8		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	90/70	70/50
20.8/18.7	14.5/13.0	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	0	0
19/20	13/14	35/37	25/27	46/49	34/36	17/21	12/15	29/36	21/26	43/56	32/41
3110/2580	3110/2580	2900/2400	2900/2400	2850/2350	2850/2350	4300/2650	4300/2650	4150/2400	4150/2400	3900/1710	3900/1710
61/53	61/53	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"	R1"	R1"
400/3~N/50		400/3~N/50		400/3~N/50		400/3~N/50		400/3~N/50		400/3~N/50	
32		35		38		43		46		48	
1687201		1687202		1687203		1687301		1687302		1687303	
1686200		1686200		1686200		1686200		1686200		1686200	
1686201		1686201		1686201		1686201		1686201		1686201	
385330		385330		385330		385330		385330		385330	
385300		385300		385300		385300		385300		385300	
385301		385301		385301		385301		385301		385301	
385303		385303		385303		385303		385303		385303	
1687405		1687405		1687405		1687405		1687405		1687405	
Series		Series		Series		Series		Series		Series	
1687400		1687400		1687400		1687400		1687400		1687400	
1011390		1011390		1011390		1011390		1011390		1011390	
1011340		1011340		1011340		1011340		1011340		1011340	
1011292		1011292		1011292		1011292		1011292		1011292	
1011343		1011343		1011343		1011343		1011343		1011343	

REMKO WPS SERIES

Ceiling heating systems



REMKO WPS SERIES

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

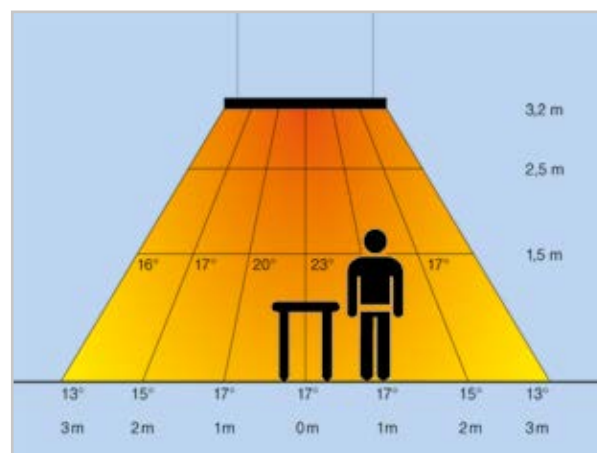
REMKO ceiling heating systems generate soft waves of heating in accordance with the principle of solar heating. Not the air is heated, but rather only the radiated surface. There are only slight temperature differences between the floor and the hall ceiling. The cosy heating of the floor area prevents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



Electronic temperature controller, type ATR-7

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.



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



Technical data

Unit type		WPS 2000	WPS 3000
Area of application	approx. m	6 x 4	6 x 4
Heat range		See temperature profile	See temperature profile
Voltage supply	V/Ph/Hz	230/1~/50	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
Accessories			
Suspension bracket , 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
Electronic temperature controller ATR-7			
With temperature probe, surface mounting, IP 54 protection class		1011292	1011292
Switchgear with on/off switch and room thermostat connection, can be used for 2-6 heating systems		412200	412200

REMKO DVL AND ATR SERIES

Ceiling fans as supplement for hot air heating systems



REMKO DVL SERIES

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

Thermal dynamic pushes heat upward.

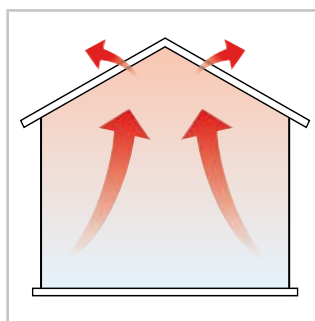
Result: Unused quantities of heat dam up near the ceiling. With the REMKO DVL 140 ceiling fan, this lost heat potential can be retrieved from the ceiling and returned to the work area. Valuable thermal energy is saved by this type of "heat recovery."

- High ventilation capacity
- Long service life
- Quiet operation
- Low energy costs
- Single-phase a.c. motor, maintenance-free and malfunction-free for continuous operation
- White housing, stove enamelled
- Vibration-damping pendulum pipe suspension for low-vibration operation
- Easy to assemble
- Adjustable rotation speed, optional

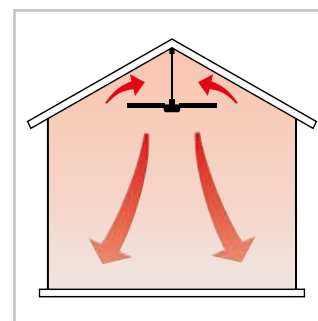
REMKO ATR-3 SERIES

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 warm air will be pushed downwards, constantly.



Design

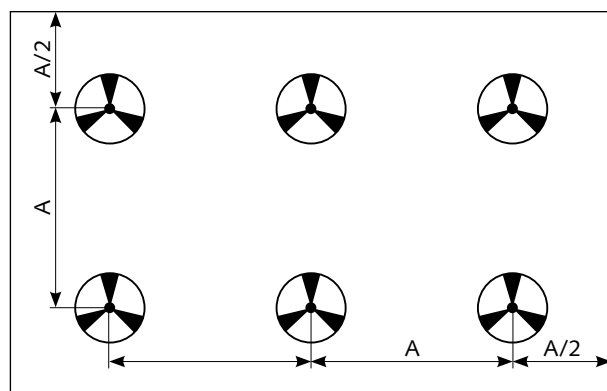
$$\text{Number of DVLs} = \frac{\text{Hall floor area}}{\text{Hall height} \times 20}$$

$$\text{Distance of DVLs} = \sqrt{\text{Hall height} \times 20}$$

Energy savings calculation

$$\frac{\Delta t \text{ with DVL}}{\Delta t \text{ without DVL}} = \frac{\Delta t + 1.5}{\Delta t + (H \times 1.5)}$$

Δt = inside ambient temperature – standard outside temperature
 H = hall height



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

Technical data

Unit type		DVL 140	DVL140 K*
Air circulation	m³/h	15000	15000
Max. speed	rpm	300	300
Voltage supply	V/Ph/Hz	230/1~/50	230/1~/50
Power consumption	Watt	75	75
Blade diameter	mm	1,420	1420
Construction height	mm	690	440
Weight	kg	9.5	9.0
Ref. no.		570400	570401

*Short design

Temperature controllers

Differential temperature controller TR-2

With display, including temperature probe, type of protection IP54, max. 10 units

1011291

1011291

Differential temperature controller ATR-3, fully automatic, including

temperature probe, weekly programme, IP54 protection class, max. 14 units

1011290

1011290

Other accessories

Thermal probe

For fully-automatic operation through ceiling temperature monitoring

1011230

1011230

Speed controller DR-1

Infinitely variable, max. 4 units

1011294

1011294

Speed controller DR-3

Infinitely variable, max. 8 units

1011296

1011296

REMKO ASE AND ASD SERIES

Exhaust gas plants



REMKO ASE and ASD SERIES

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
- Testing by authorities, among other things for the following: corrosion resistance, pressure resistance, mounting safety, and temperature resistance

Technical data

Single-walled stainless steel	Unit type	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

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

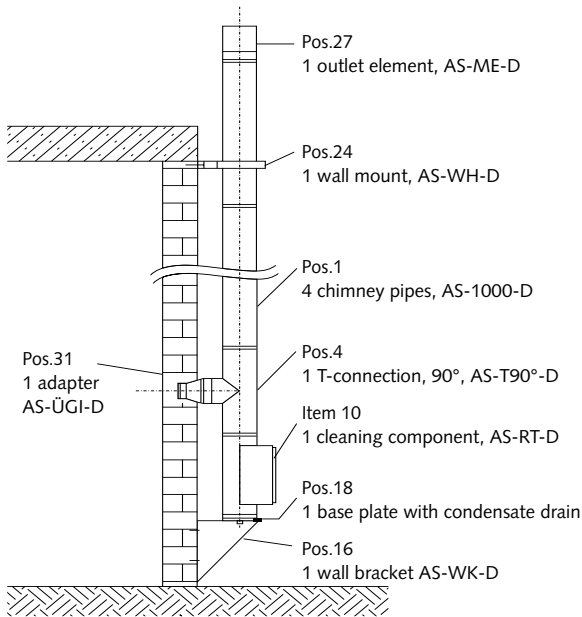


Planning aids

Extensive planning aids can be found under:
www.remko.de/planung/ase-asd.pdf

REMKO ASD

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



Technical data

Double-walled stainless steel	Unit type	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		1000 °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

Unit type	ASD 130	ASD 150	ASD 180	ASD 200	ASD 300	ASD 350
Exhaust gas system, complete	130 Ø	150 Ø	180 Ø	200 Ø	300 Ø	350 Ø
For outside mounting						
Application possibility of series**	GPS 20-60, GPC 20-60	VRS 25-50, VRS 30-70 C GPS 80, GPC 80	VRS 75-100, VRS 100-170 C	VRS 130-200	VRS 270-340	VRS 440-540
Ref. no.	1085354	1085355	1085360	1085375	1085390	1086395

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 AS-BS-D, adjustable	1085076	1085078	1085079	1085080	1085082	1086083
13	Intermediate bracket AS-ZK-D	1085090	1085092	1085093	1085094	1085096	1086097
14	Roof support AS-DS-D, adjustable	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 penetration AS-D15-D, 1-15°	1085149	1085151	1085152	1085153	1085155	1086156
21	Roof penetration, AS-D30-D, 15-30°	1085139	1085141	1085142	1085143	1085145	1086146
22	Roof penetration, 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 AS-WHV-D, adjustable	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, AS-WHV 300-D	1085680	1085681	1085682	1085683	1085685	1086686
	Adjustable up to 300 mm						
38	Wall mount, AS-WHV 600-D	1085690	1085691	1085692	1085693	1085695	1086696
	Adjustable up to 600 mm						
39	Wall bracket, AS-WHV 300-D	1085720	1085720	1085720	1085720	1085721	1086722
	Adjustable up to 300 mm						
40	Wall bracket, AS-WHV 600-D	1085721	1085721	1085721	1085721	1085723	1086724
	Adjustable up to 600 mm						
41	Chimney connector component AS-KA-D	1085730	1085735	—	—	—	—
	GPS, 2-part						

* 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.

ACCESSORIES

Switchgear



NEW

Electronic room thermostat ERT-1

With integrated temperature sensor, type of protection IP65, without connection cable

	Ref. no.
ERT-1	1011390



NEW

Electronic room thermostat ERT-5

With integrated temperature probe, type of protection IP65, including 5 m moisture-proof room cable, connecting plug, suspension device, operating hour counter

	Ref. no.
ERT-5	1011392



NEW

Electronic room thermostat ERT-10

With integrated temperature probe, type of protection IP65, including 10 m moisture-proof room cable, connecting plug, protective and suspension devices, operating hour counter

	Ref. no.
ERT-10	1011394



External temperature sensor

For ATR-Smart Basic and ATR-Smart Web, without connection cable

	Ref. no.
External temperature sensor	1011364



NEW

Cabled remote control KF-35

Surface mounting, type of protection IP20, electrical remote unlocking mechanism, Heat/Ventilate selector switch, including 3.5 m connecting cable

	Ref. no.
KF-35	1011381



NEW

Room temperature controller RR-35

Heating/ventilation selector switch, electric remote unlocking mechanism, adjustable room thermostat (integrated), 3.5 m connection cable without plug

	Ref. no.
RR-35	1011382



Electronic temperature controller ATR-Smart-Basic

With touch display for 1-32 units, type of protection IP54, automatic day/night economy, weekly programme, electrical remote unlocking mechanism, error and operation display, parameterisation option, without connection cable

	Ref. no.
ATR-Smart Basic	1011376



Electronic temperature controller ATR-SmartWeb

With touch display for 1-32 units, type of protection IP20, automatic day/night economy, weekly programme, electrical remote unlocking mechanism, error and operation display, parameterisation option, Ethernet interface, without connection cable

	Ref. no.
ATR-SmartWeb	1011377



Precision room temperature controller RR 21.2

For controlling up to 50 units, programmable, switchover function summer/winter operation, external start/stop, infinitely variable control of EC fans via 0-10 V and much more, without connection cable

	Ref. no.
RR 21.2 (IP20)	1611401
RR 21.2 (IP54)	1684402



Electronic room thermostat TR-2 Type of protection IP65, including suspension device, operating hour counter, 5 m connection cable with plug, high temperature probe

	Ref. no.
TR-2	1011291



Differential temperature controller ATR-3 Type of protection IP54, including temperature probe, automatic day/night economy, weekly programme, differential control of ceiling fans, 0-10 V output, without connection cable.

	Ref. no.
ATR-3	1011290



Speed controller Infinitely variable, for all units with RT
DR-1: max. 4 units
DR-3: max. 8 units

	Ref. no.
DR-1	1011294
DR-3	1011296



Electronic temperature controller ATR-4 Protection class IP 20, including temperature sensor, automatic day/night economy, weekly programme, without connection cable

	Ref. no.
ATR-4	1011340



Electronic temperature controller ATR-5 Type of protection IP54, including temperature probe, automatic day/night economy, weekly programme, without connection cable

	Ref. no.
ATR-5	1011342



Electronic temperature controller ATR-7 Type of protection IP 54, including temperature probe, automatic heating/cooling switchover function, without connection cable

	Ref. no.
ATR-7	1011292



Bar thermostat Duct attachment, including connection cable with plug

	Ref. no.
Bar thermostat	1011270



Temperature probe set For 4-point blended temperature, without connection cable

	Ref. no.
Temperature probe set	1011343



REMKO BURNER

Oil and gas burners



Oil yellow flame burner



Oil blue flame burner



Natural gas/propane gas burner

Oil yellow flame burner

Unit type	SLV 100	SLV 110	SL 44/2	SL 55/2	SL 66/2	SL 420/2
Performance range kW	16-55	55-85	93-169	128-232	209-350	395-763
Fuel	Heating oil EL, diesel fuel, biodiesel B7/ B10, HVO biofuel					
Units	VRS 25	VRS 50-75	VRS 100-130	VRS 170	VRS 200-340	VRS 440-540
Ref. no.	949025	949030	949005	948510	949010	950015

Oil blue flame burner

Unit type	RE 1.32	RE 1.50	RE 1.70	RZ 2.8	RZ 2.9	RZ 2.10	RZ 2.11
Performance range kW	26-32	44-50	60-70	95-115	115-130	130-165	175-185
Fuel	Heating oil EL, diesel fuel, biodiesel B7/ B10, HVO biofuel						
Units	VRS 30 C	VRS 50 C	VRS 70 C	VRS 100 C	VRS 120 C	VRS 150 C	VRS 170 C
Ref. no.	949103	949105	949107	949110	949112	949115	949117

Natural gas burner

Unit type	SGN 100 H	SGN 110 H	SGN 120 H	SGN 44/2 1"	SGN 55/2	SGN 66/2	SGN 410/2	SGN 420/2
Performance range kW	15-45	45-70	65-100	93-163	128-232	209-350	320-550	460-710
Fuel	Natural gas							
Units	VRS 25 VRS 30 C	VRS 50 VRS 50 C	VRS 75 VRS 70 C	VRS 100-130 VRS 100-120 C	VRS 170 VRS 150-170 C	VRS 200-340	VRS 440	VRS 540
Ref. no.	955050	955045	955035	955015	954650	954660	954685	954695

Propane gas burner

Unit type	SGNF 100 H	SGNF 110 H	SGNF 120 H	SGNF 44/2 1"	SGNF 55/2	SGNF 66/2
Performance range kW	15-45	45-70	65-100	93-163	128-232	209-350
Fuel	LPG / propane					
Units	VRS 25 VRS 30 C	VRS 50 VRS 50 C	VRS 75 VRS 70 C	VRS 100-130 VRS 100-120 C	VRS 170 VRS 150-170 C	VRS 200-340
Ref. no.	955055	955030	955040	955020	954750	954760

REMKO QUALITY WITH SYSTEMS

Climate | Heating | New energies

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Air-Conditioning and Heating Technology

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