



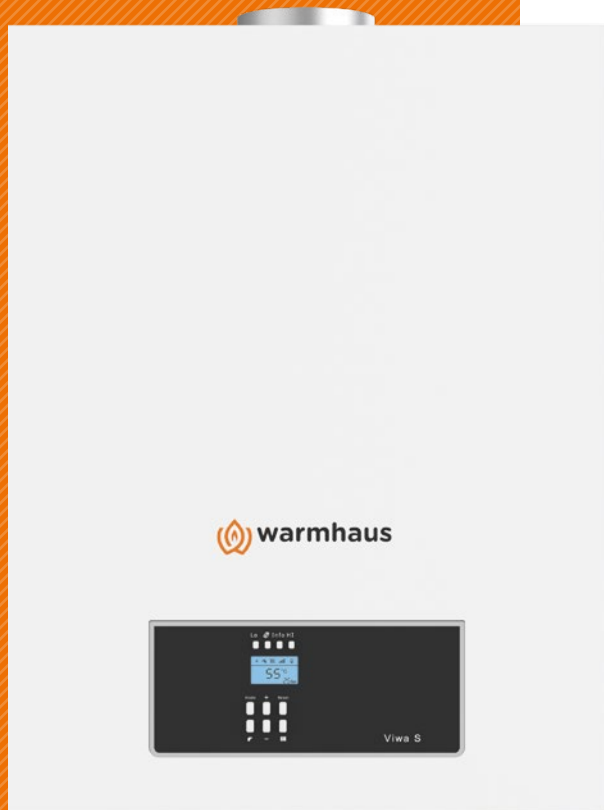
Product Brochure

Wall-Hung Type Condensing
Boilers with Stainless Steel Heat
Exchanger and Premix System

Viwa S 90
Viwa S 100
Viwa S 125
Viwa S 150

Viwa S

90-100-125-150



12 Reasons to Choose Viwa S Boilers



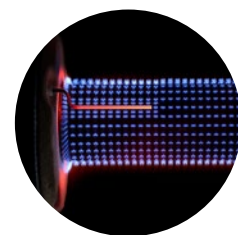
Innovative Premix Design that Increases Thermal Performance Cold Burner Door®

The specially developed Cold Burner Door® design significantly improves the performance of the DUO heat exchanger by reducing heat loss and the temperature of the burner cover surface.



Strong, Efficient and Long Lasting Stainless Steel DUO Heat Exchangers

The double chamber design, separating the combustion chamber and condensing chamber, ensures the highest efficiency level and a compact structure with a small footprint.



Perfect Combustion Provided by BLUEJET® Burner

The Bluejet® burner operating principle is based on a full air gas premix burners. Its specific design allows a high flame retention. The stainless steel grade used has a high reliability already proven on the field and responds to the maximal operating thermal stress for this application.



Cascade Installation up to 14 x 150 = 2100 kW

Without the need for a control panel, central heating power can be reached from 1260 kW to 2100 kW according to device capacities with the possibility of cascade installation up to 14 boilers.



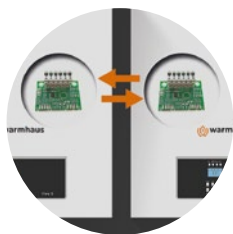
Full Control for Heating Zones

The RC21, which has a full remote control feature, provides maximum comfort for the heating zone with its weekly programming and modulating control features. It can be used separately for each heating zone.



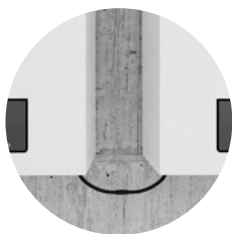
Multiple Part Management

With an optional MLC 30 module 4 direct heating circuit and hot water tank or 1 low temperature zone, one high temperature zone and one tank circuit can be controlled.



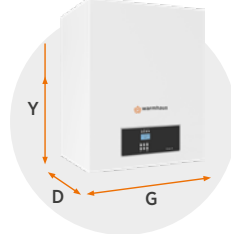
Cascade Panelless Operation Through Internal Module

The internal Cascade module in the boiler control panel provides easy connection and communication between boilers without the need for additional device. Thus, each boiler can be used as either a master or slave.



Convenient Installation with Smart Socket System

Simple and fast cascade setup for up to 14 boilers with the internal cascade module and smart plug system. The 'Bus bar' system allows for cascade setup to be completed without having to open the covers of slave boilers.



Installation to Limited Spaces With Compact Dimensions

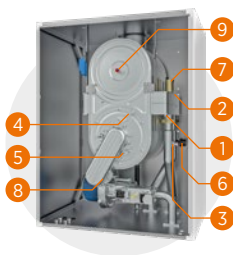
(W: 612 x D: 495/530/605/676 x H: 800 mm)

Thanks to their compact sizes, they can be mounted without leaving any space in between and provide an easy installation application with smaller volumes.



Internal Flue Check Valve System

The Internal Flue Check Valve System eliminates the need for an external Flue Check Valve in the cascading system, leading to an easy installation and low cost.



Superior Safety and Control System

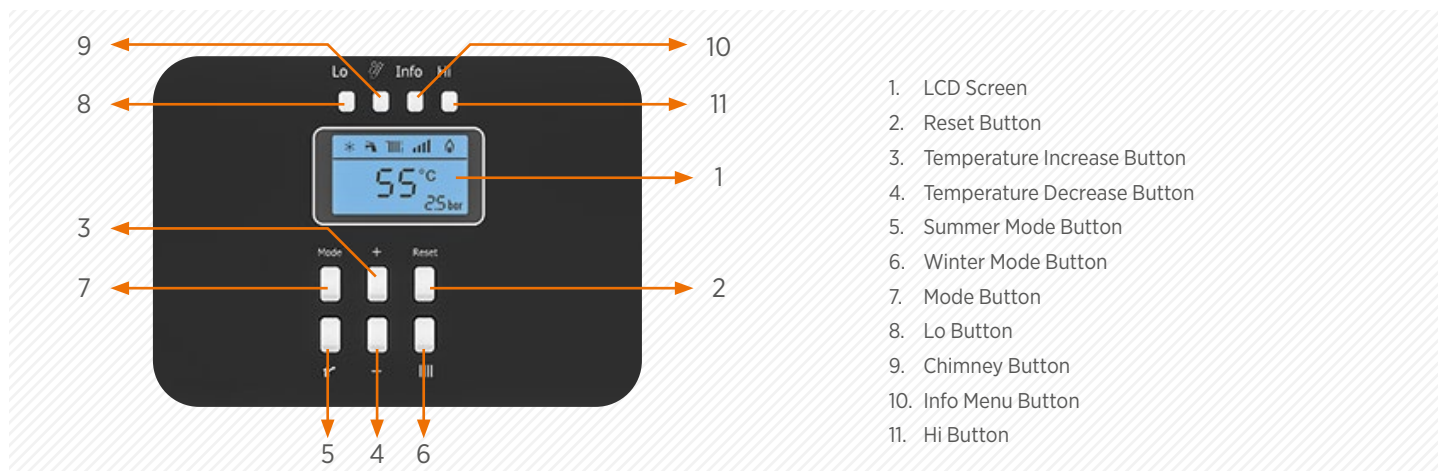
1. CH Flow NTC Sensor
2. CH Return NTC Sensor
3. Limit Thermostat
4. Heat Exchanger Cover Surface Type Limit Thermostat
5. Ionization Electrode
6. CH Water Pressure Sensor
7. Automatic Venting Purge Valve
8. Internal Flue Check Valve
9. Flue Gas Temperature Sensor



Hermetic Flue Connection

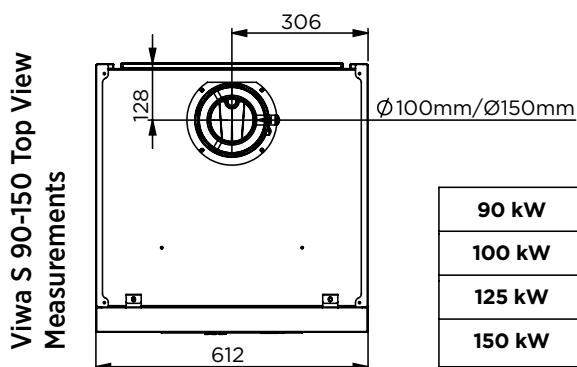
Warmhaus Viwa boilers have room sealed hermetic boiler design and compatible with Ø100/150 mm concentric flue connection. Each boiler can be used with its own flue sets independent from each other which makes cascade systems easy to install in roof spaces without a stainless steel flue.

Control Panel

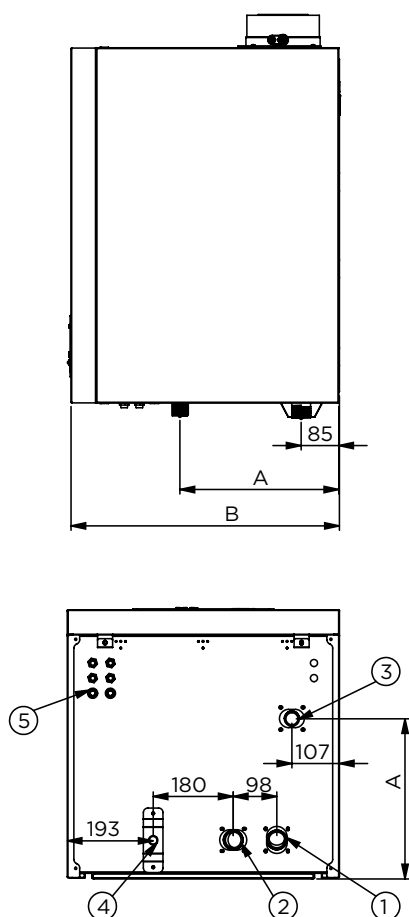


Dimensions & Connections

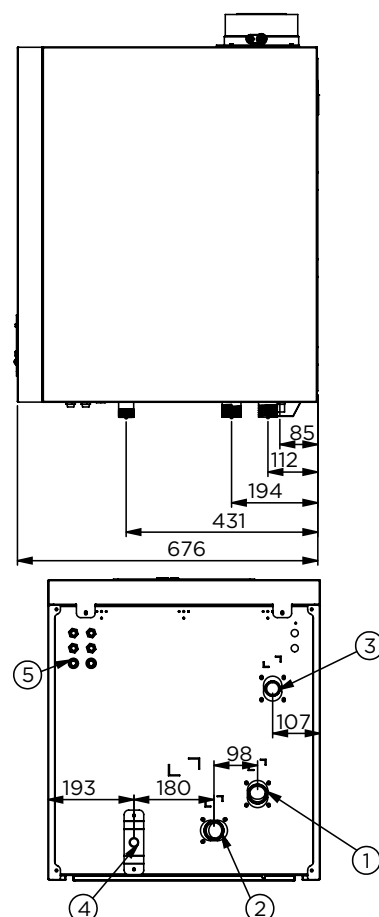
Thanks to its compact dimensions, it can be installed side by side without leaving any space. It provides easy installation application with smaller volumes.



Viwa S 90-125 Bottom and Side View Measurements

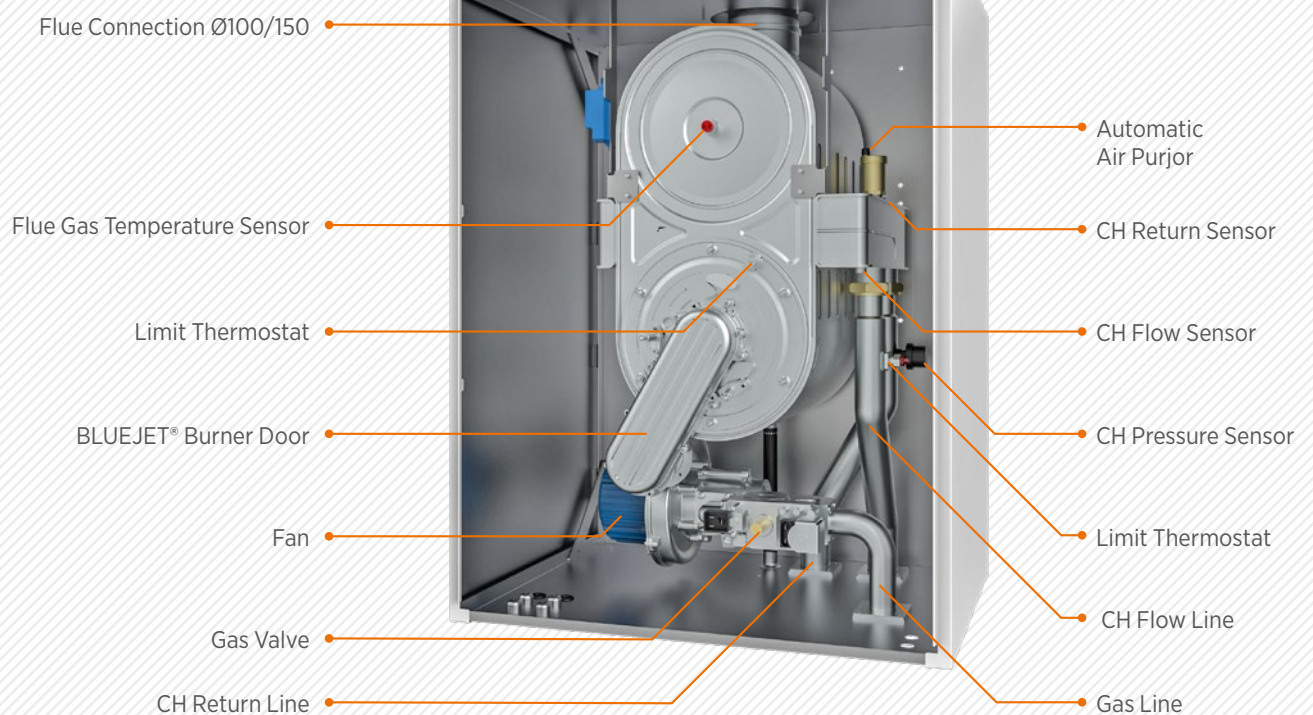
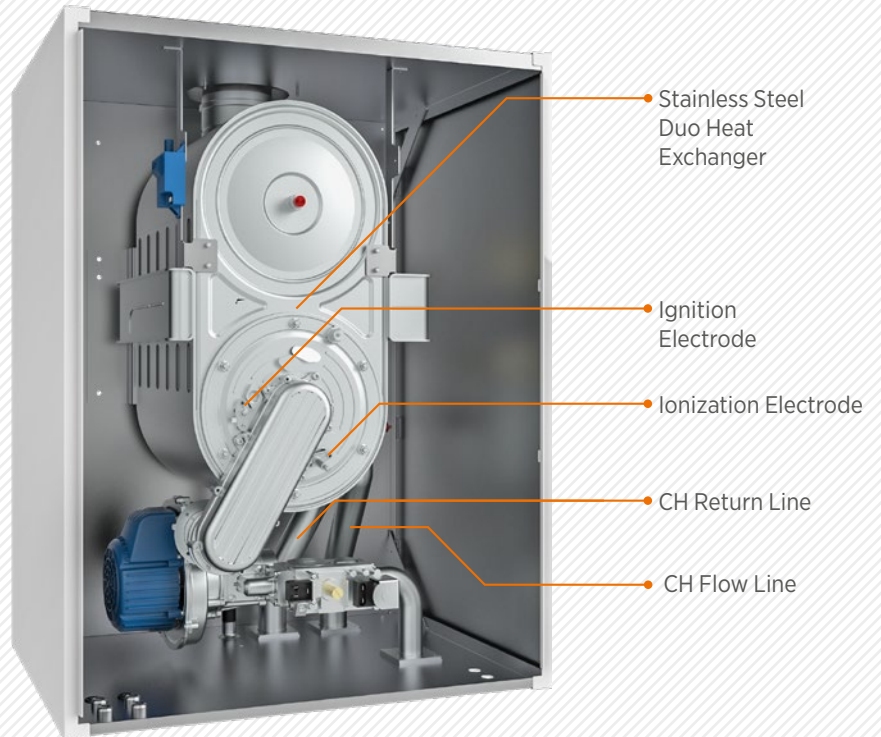


Viwa S 150 Bottom and Side View Measurements



Components

Long Life and High Efficient Use with Monoblock Stainless Steel Heat Exchanger

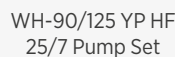
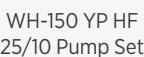


Control Accessories for Cascade System

Accessory Code	Accessory Name	Explanation	Matching Product	Product View
15311660600001	WDHS-01 Outside Sensor	Sensor which regulates boiler according to outside air temperature.	Viwa S 90 - 150 Viwa 50 - 150	
15311660600045	RC 21.11 Timer Room Thermostat	Thermostat which sets to apply weekly/ daily program to heater and boiler unit or a unite which can only be used as program clock.	Viwa S 90 - 150 Viwa 50 - 150	
15311660600049	QAZ 36 Immersion Boiler / Hydraulic Separator Sensor	Immersion Sensor which is used to measure DHW storage tanks or Hydraulic Separator Temperature and transfers information to boiler.	Viwa S 90 - 150 Viwa 50 - 150	
15311660600050	QAD 36 Strap-on Temperature Sensor	Strap-on Temperature Sensor for connection on pipe at the output of hydraulic separator. It is used to measure flow water temperature of second zone at the double heating zone.	Viwa S 90 - 150 Viwa 50 - 150	
15311660600053	MST80 Calibrated Surface Thermostat	Pipe clamp type adjustable for heating zone thermostat	Viwa S 90 - 150 Viwa 50 - 150	
15311660600047	MLC 30 Multiple Zone Module	Unit which controls the low temperature of Viwa 90, Viwa 115, Viwa 125 and Viwa 150 boilers / underfloor heating zone (blend valve circuit).	Viwa S 90 - 150 Viwa 50 - 150	

Pump Set (Optional)

High pressure and flow rate pump for Warmhaus Viwa wall hung boilers.

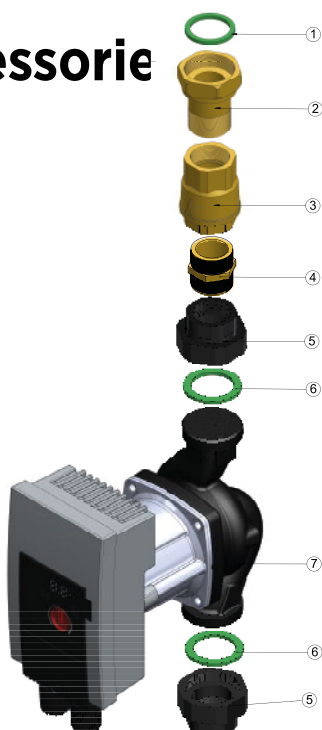
Accessory Code	Accessory Name	Explanation	Matching Product
15211003000002	WH-90/125 YP HF 25/7 Pump Set with frequency invertors	WH-90/125 YP HF 25/7 pump set with modulation, 2 connectors, check valve and seal set for Viwa S 90, Viwa S 100, Viwa S 125, Viwa 90, Viwa 115 and Viwa 125. It is installed just below the boilers.	  
15211003000003	WH-150 YP HF 25/10 Pump Set with frequency Invertors	WH-150 YP HF 25/10 pump set with modulation, 2 connectors, check valve and seal set for Viwa S 150 and Viwa 150. It is installed just below the boilers.	 

Pump Set Accessorie

High pressure and flow rate pump for Warmhaus Viwa wall hung boilers.

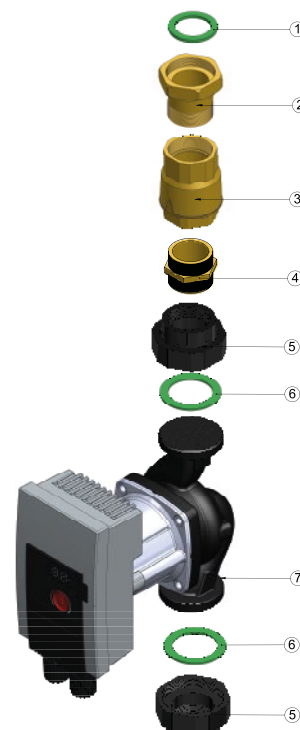
WH-90/125 YP HF 25/7 Pump Set with frequency inverter for Viwa 90, 115 and 125.

- 1 1/2" TESNIT® Seal
- Pump Union 1 1/2" - 1 1/4"
- 1 1/4" Check Valve
- 1"-11-4" Pump Reduction
- 1"-11-4" Nipple
- Pump Union 1 1/2"
- Pump

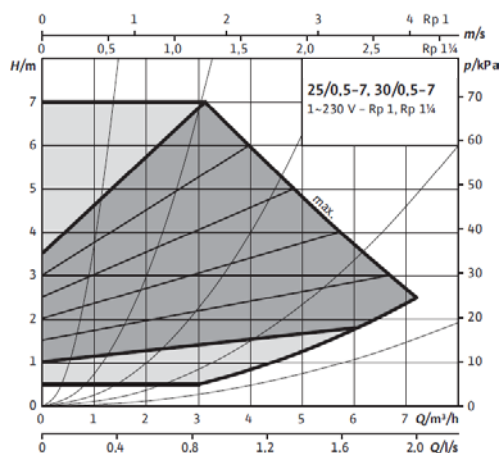


Pump set with frequency Inverter for Viwa 150.

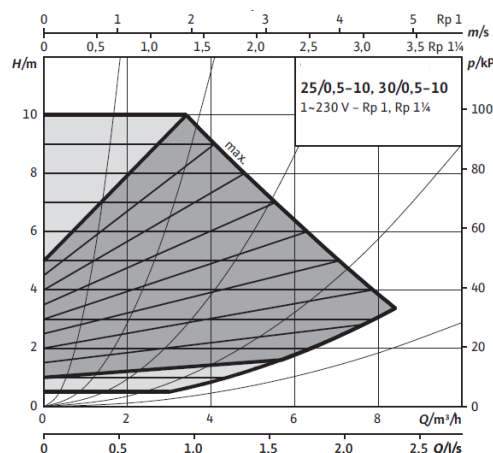
- 1 1/2" TESNIT® Seal
- Pump Union 1 1/2" - 1 1/4"
- 1 1/4" Check Valve
- 1 1/4" Nipple
- Pump Union 1 1/4" - 2"
- 2" TESNIT® Seal
- Pump



Pump Flow/Pressure Graph



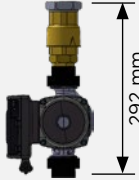
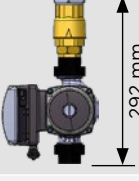
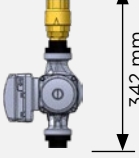
The Flow Rate/Pressure graph of the WH-90/125 YP HF 25/7 pump which is to be used as the boiler pump in the return line for the boiler models Viwa S 90, Viwa S 100, Viwa S 125, Viwa 90, Viwa 115 and Viwa 125.



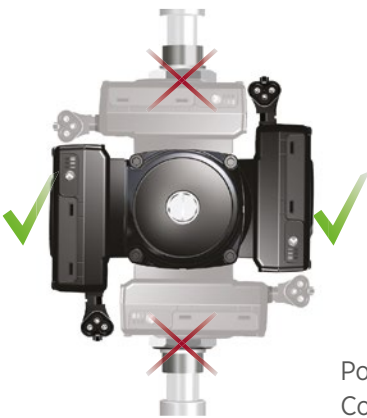
The Flow Rate/Pressure graph of the WH-150 YP HF 25/10 pump which is to be used as the boiler pump in the return line for the boiler models Viwa S 150 and Viwa 150.

Pump Sets (Optional)

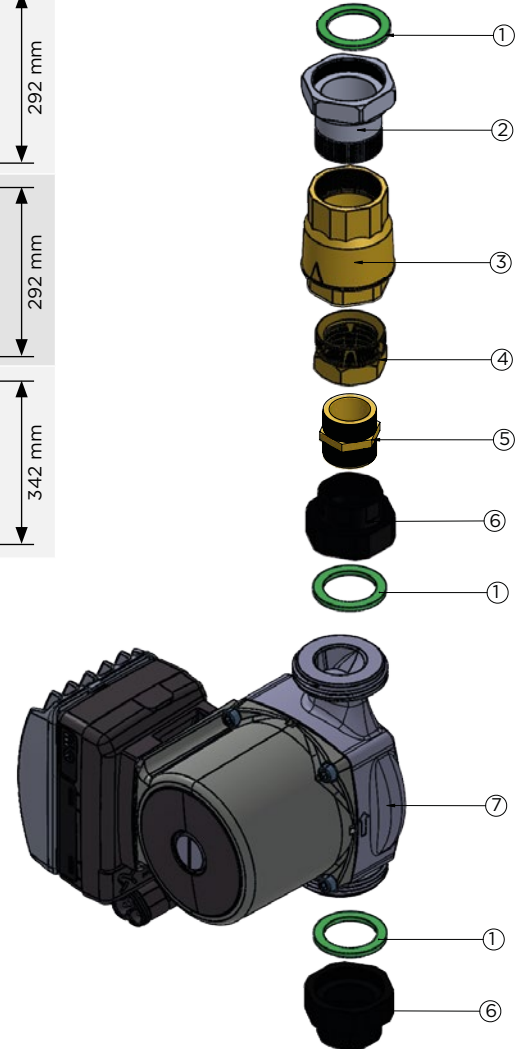
Kazan Pompası Seçim Tablosu

Ürün Kodu	Ürün Adı	Açıklama	Pompa Seti
15211003000012	WH-90/115 UPML 25-105Auto130 Pump Set with frequency inventors	WH-90/115 UPML 25-105Auto130 pump set that should be used as boiler pump in the return line for Viwa S 90, Viwa S 100, Viwa 90 and Viwa 115 boiler models, consists of modulating pump, 2 fittings, check valve and gasket set.	 292 mm
15211003000013	WH-125 UPMXL 25-125 Auto130 Pump Set with frequency inventors	WH-125 UPMXL 25-125 Auto130 Pump Set, which should be used as boiler pump in the return line for Viwa S 125 and Viwa 125 boiler models, consists of modulating pump, 2 unions, check valve and gasket set	 292 mm
15211003000014	WH-150 UPMXXL 25-120 Auto180 Pump Set with frequency inventors	WH-150 UPMXXL 25-120 Auto180 Pump Set, which should be used as boiler pump in the return line for Viwa S 150 and Viwa 150 boiler models, consists of modulating pump, 2 unions, check valve and gasket set.	 342 mm

Part No	Drawing No	Part Name	Piece	Material
1	15011019000076	1 1/2" Fixing Gasket	3	Fixing BA 203
2	15011019000081	1 1/2" 1/4" Pump Sleeve	1	Brass
3	15011007000002	1 1/4" Check Valve	1	Brass
4	15011019000128	1"- 1 1/4" Pump Reduction	1	Brass
5	15011019000079	1" Nipple	1	Brass
6	15011019000077	1" 1 1/2 Pump Sleeve	2	GG25 Cast
7	15011010000024	Viwa 150 Pump	1	UPMXXL 25-120 Auto 180
7	15011010000023	Viwa 125 Pump	1	UPMXL 25-125 Auto 130
7	15011010000022	Viwa 90-115 Pump	1	UPML 25-105 Auto 130



Position of Control Box

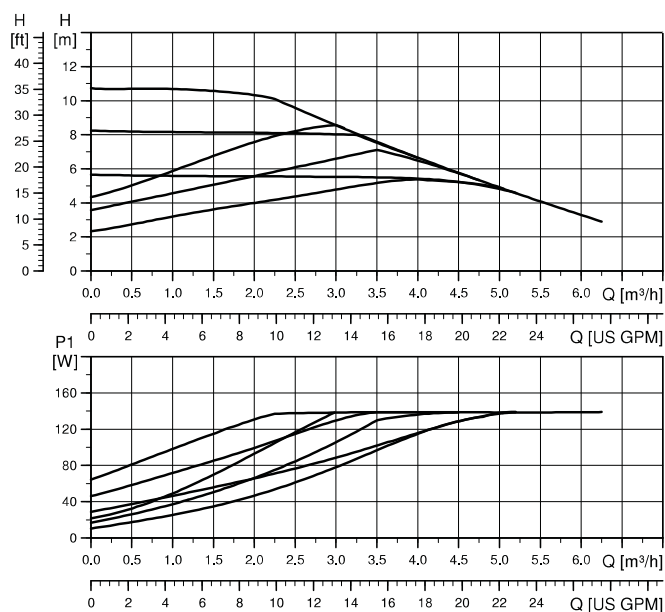


Technical Data

System pressure	Max. 1.0 MPa (10 bar)	Protection class	IPX2D
Minimum input pressure	0.01 MPa (0.10 bar) at 95 °C temperature of fluid	Insulation Class	H
temperature of fluid	-10 °C to +95 °C (TF 95)	Equipment class	I
Motor protection	Overload protection	Approval and marking	VDE. CE

Viwa S 90, Viwa S 100, Viwa 90 and Viwa 115 Boiler Pump Set

WH-90/115 UPML 25-105 Auto130

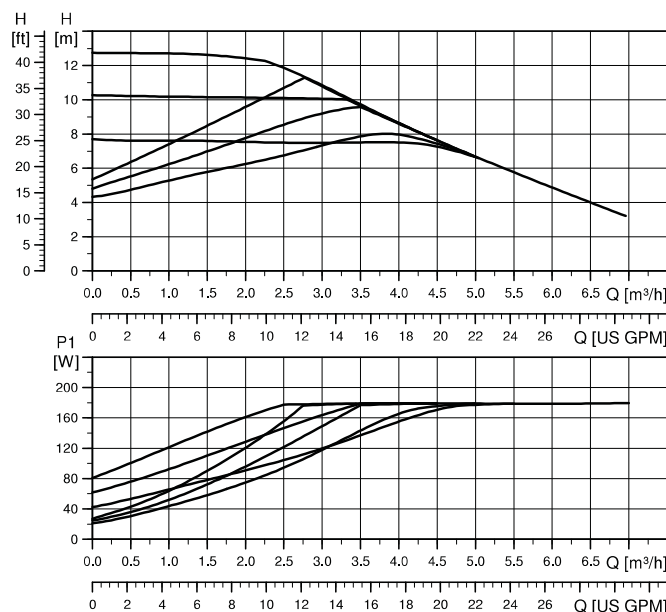


Electrical Data, 1 x 230 V, 50/60 Hz

Speed	P ₁ [W]	I _{1/1} [A]
Min.	12	0.1
Max.	140	1.1

Viwa S 125 and Viwa 125 Boiler Pump Set

WH-125 UPMXL 25-125 Auto130

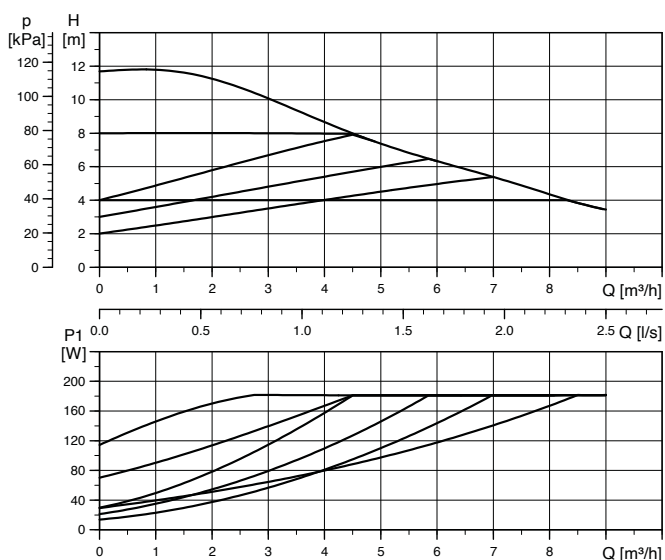


Electrical Data, 1 x 230 V, 50/60 Hz

Speed	P ₁ [W]	I _{1/1} [A]
Min.	20	0.2
Max.	180	1.4

Viwa S 150 and Viwa 150 Boiler Pump Set

WH-150 UPMXXL 25-120 Auto 180

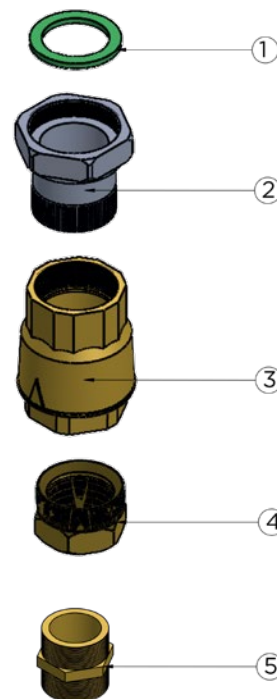


Electrical Data, 1 x 230 V, 50/60 Hz

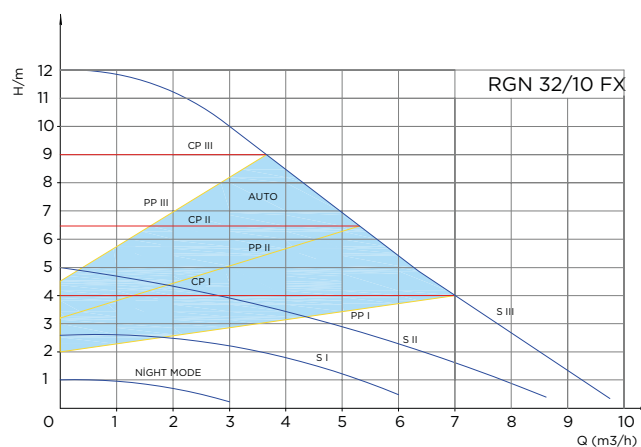
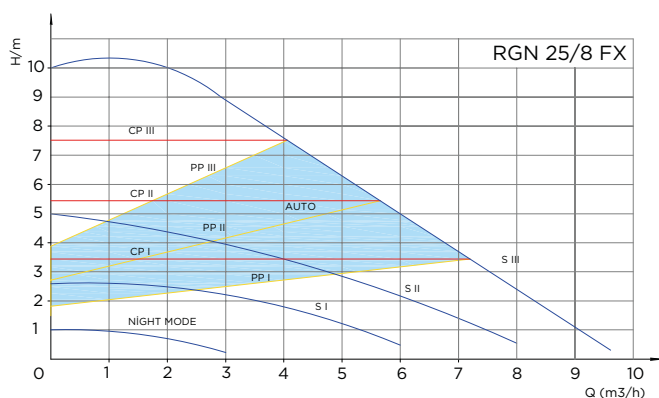
Speed	P ₁ [W]	I _{1/1} [A]
Min.	18	0.1
Max.	180	0.4

Pump Sets (Optional)

Boiler Pump Selection Table			
Accessory Code	Accessory Name	Explanation	Pump Set
15211003000015	WH-50/115 RGN 25/8 FX Pump Set	WH-50/115 RGN 25/8 FX Pump to be used as boiler pump in the return line for Viwa S 90, Viwa S 100, Viwa 50, Viwa 65, Viwa 90, Viwa 115 boiler models. It is a set and consists of modulating pump, 2 unions, check valve and gasket set.	
15211003000016	WH-125/150 RGN 32/10 FX Pump Set	WH-125/150 RGN 32/10 FX Pump Set, which should be used as boiler pump in the return line for Viwa S 125, Viwa 125, Viwa 150 boiler models. It consists of modulating pump, 2 unions, check valve and gasket set.	



Part No	Drawing No	Part Name	Piece	Material
1	15011019000076	1 1/2" TESNIT® Seal	3	Tesnit BA 203
2	15011019000081	1 1/2" 1/4" Pump Union	1	Brass
3	15011007000002	1 1/4" Check Valve	1	Brass
4	15011019000128	1"- 1 1/4" Pump Reduction	1	Brass
5	15011019000079	1" Nipple	1	Brass
6	15011010000026	Viwa 125-150 Pump	1	RGN 32/10 FX
6	15011010000025	Viwa 50-65-90-100-115 Pump	1	RGN 25/8 FX



Electrical Data, 1 x 230 V, 50/60 Hz

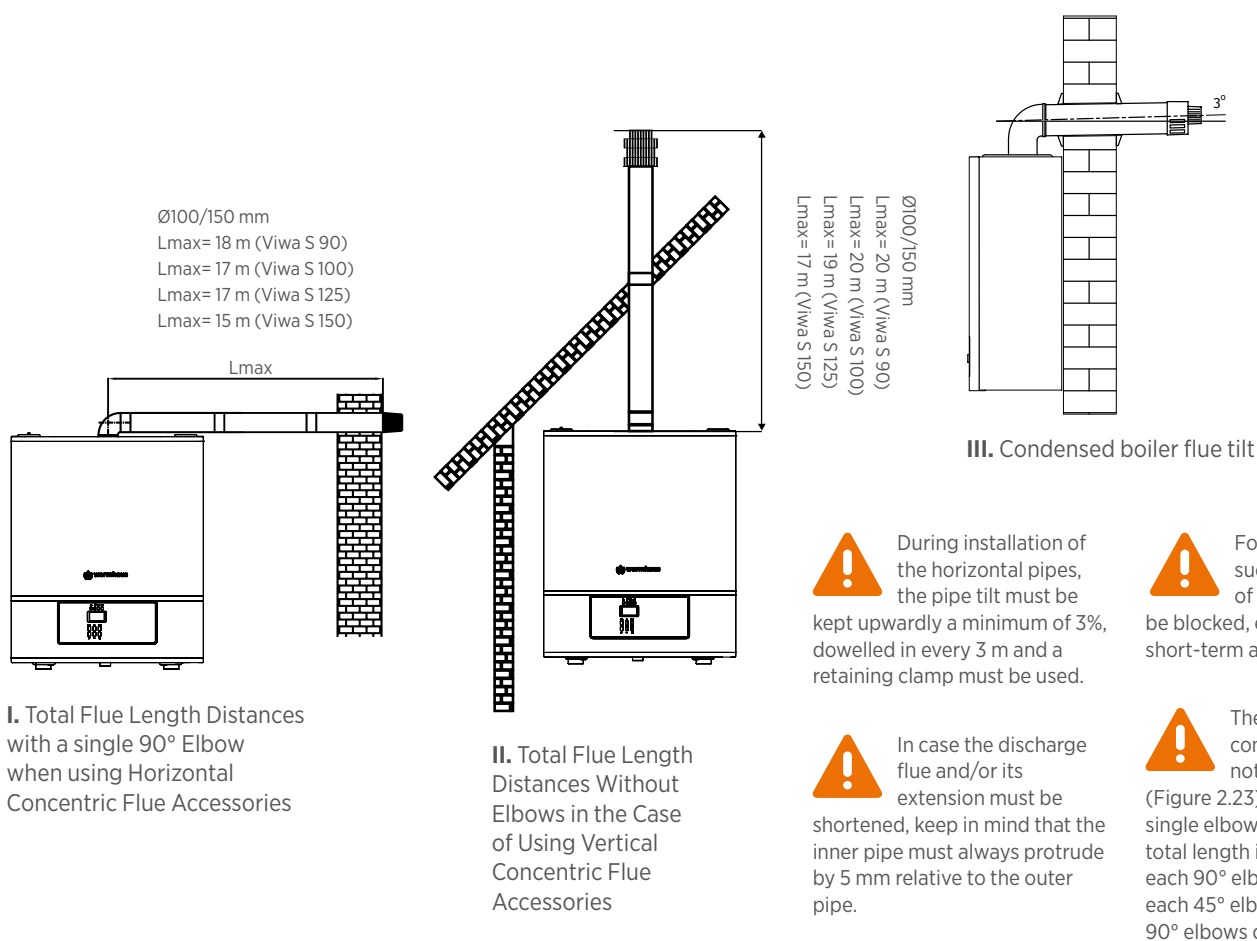
Pump Model	[W]	Connection
RNG 25 / 8FX.	120	1 1/2"
RGN 32 / 10FX	180	2"

Flue Accessories

Flue Accessories can be installed each other by meshing method so any additional part is not required to connection.

Accessory Code	Accessory Name	Explanation	Matching Product
15311014000007	Ø 100/150 Horizontal Flue Set	Maximum Flue Distance $L_{max} = 18 \text{ m}$ (Viwa S 90) $L_{max} = 17 \text{ m}$ (Viwa S 115) $L_{max} = 17 \text{ m}$ (Viwa S 125) $L_{max} = 15 \text{ m}$ (Viwa S 150)	
15311660600042	Ø 100/150 Flue Extension L=500 mm	It can be used with Horizontal Flue Set and Vertical Funnel Set.	
15311660600043	Ø 100/150 Flue Extension L=1000 mm	It can be used with Horizontal Flue Set and Vertical Flue Set.	
15311660600044	Ø 100/150 Bend (90°)	It can be used with Horizontal Flue Set and Vertical Flue Set. Each 90° bend usage requires 340 cm decreasing from maximum horizontal / vertical distance.	
15311660600138	Ø 100/150 Bend 45°	It can be used with Horizontal Flue Set and Vertical Flue Set. Each 45° bend usage requires 200 cm decreasing from maximum horizontal / vertical distance.	
15311660600041	Ø 100/150 Vertical Flue Set	Maximum Flue Distance $L_{max} = 20 \text{ m}$ (Viwa 90) $L_{max} = 20 \text{ m}$ (Viwa 115) $L_{max} = 19 \text{ m}$ (Viwa 125) $L_{max} = 17 \text{ m}$ (Viwa 150)	
15311660600124	Flat Roof Outlet Part	It is the apparatus that allows the Vertical Flue Set to pass through flat roofs in a sealed manner.	
15311660600125	Pitched Roof Outlet Tile	It is the apparatus that allows the Vertical Flue Set to pass through inclined roofs in a leak-proof manner.	

Concentric (100/150 mm) Flue Accessories (Optional)

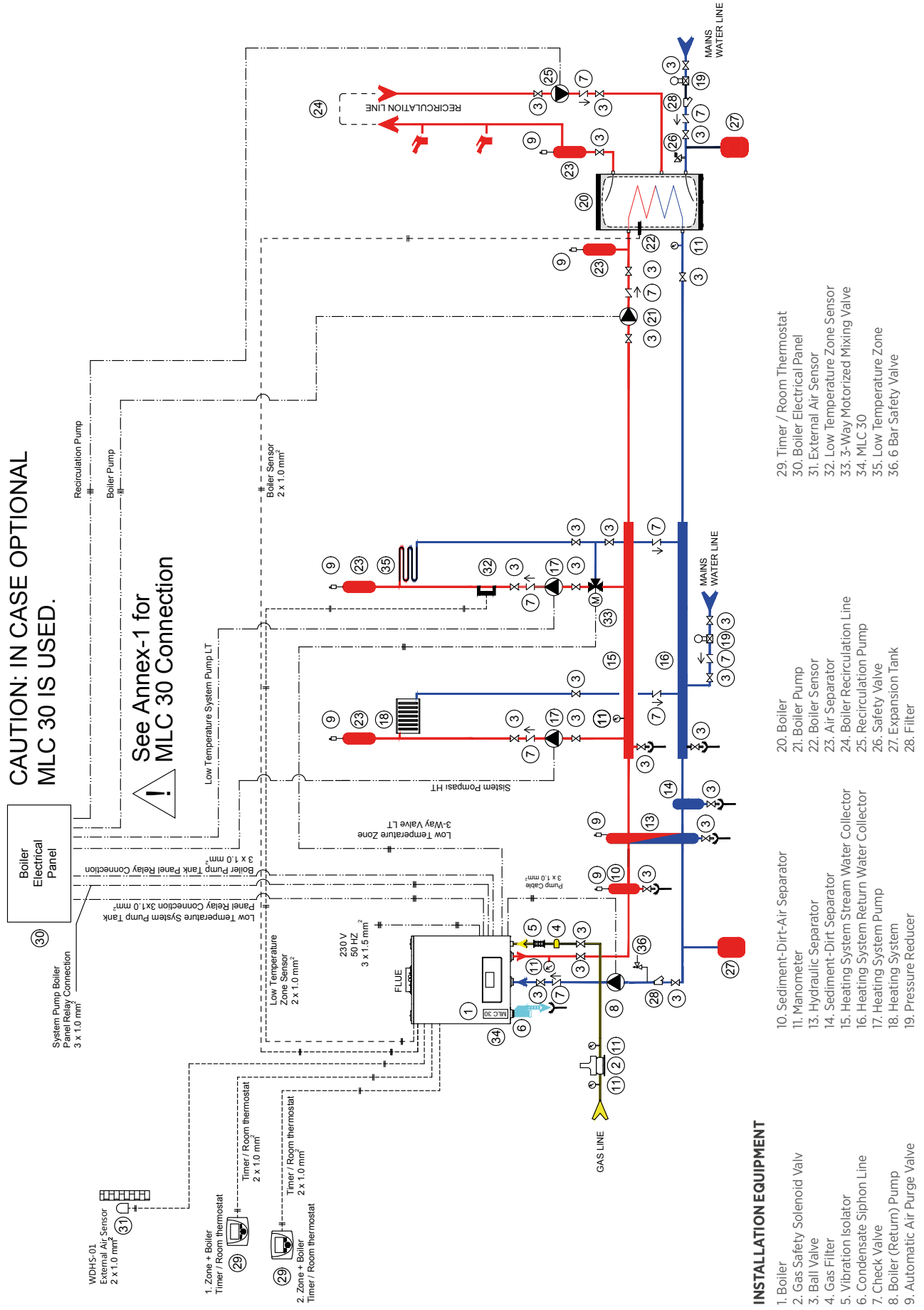


Neutralization Kits (Optional)

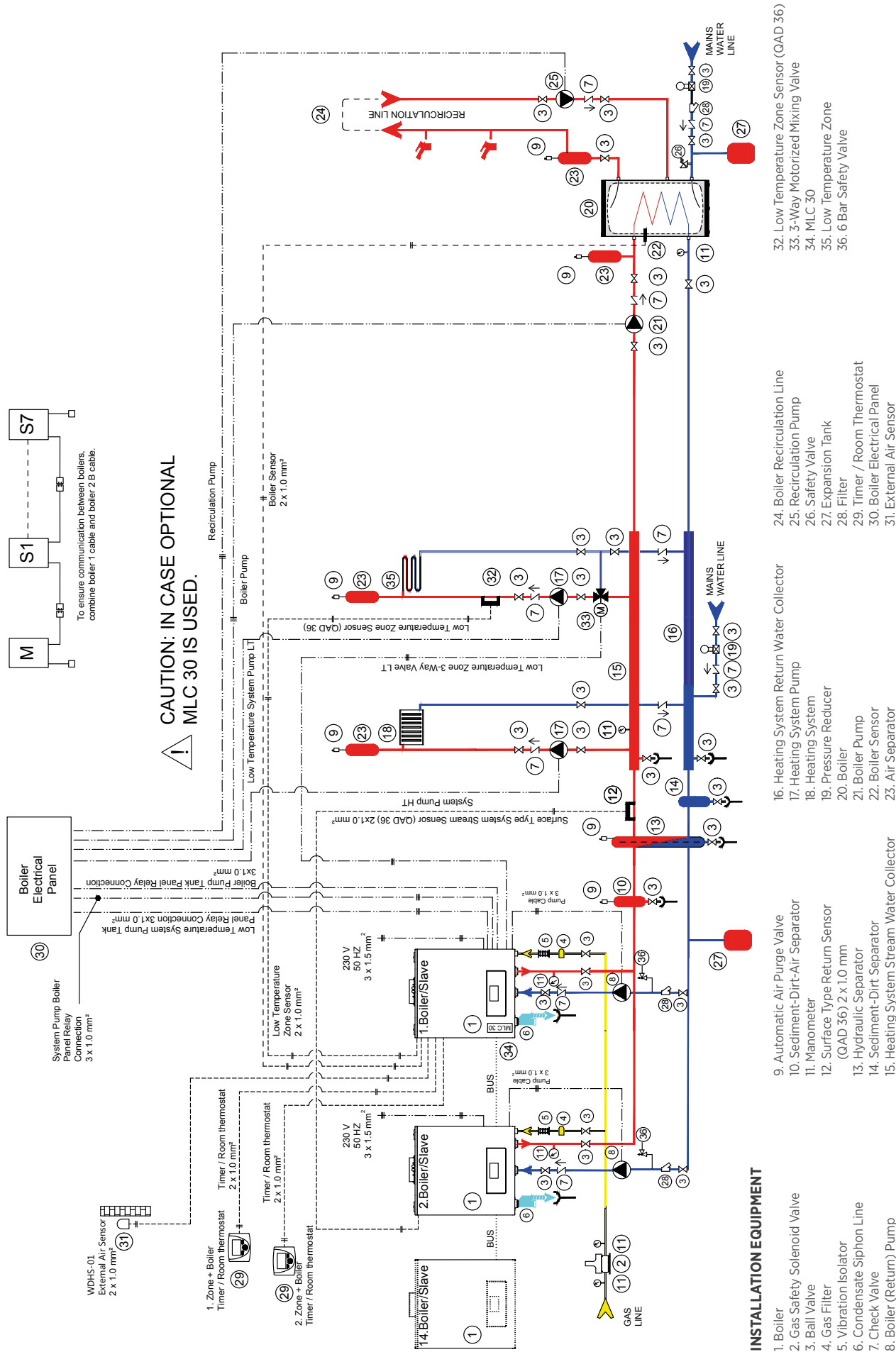
Neutralization tanks are used to neutralize the acidic condensate formed in condensing boilers by raising the pH to a more neutral value of 5.5-8.5, without damaging the environment and the sewer system. Then, the neutralized liquid can be sent to the sewer system.

Accessory Code	Accessory Name	Explanation	Product View
15311660600079	Neutralization Tank, 250 kW, 30 L/h, 1"	It can be used for systems with a heat capacity of up to 250 kW.	
15311660600080	Neutralization Tank, 450 kW, 55 L/h, 1"	It can be used for systems with a heat capacity of up to 450 kW.	
15311660600081	Neutralization Tank, 850 kW, 100 L/h, 1"	It can be used for systems with a heat capacity of up to 850 kW.	
15311660600082	Neutralization Tank, 1500 kW, 180 L/h, 1"	It can be used for systems with a heat capacity of up to 1500 kW.	

Sample of Viwa S and Viwa Single Boiler System Scheme with 1 High + 1 Low Temperature Zone + Optional MLC 30



1. Boiler
2. Gas Safety Solenoid Valve
3. Ball Valve
4. Gas Filter
5. Vibration Isolator
6. Condensate Siphon Line
7. Check Valve
8. Boiler (Return) Pump



Example of Viwa S Boilers with Cascade System and 1 High + 1 Low Temperature Zone + Boiler System / Optional MLC30

Technical Data

TECHNICAL DATA	UNIT	Viwa S 90		Viwa S 100		Viwa S 125		Viwa S 150	
Gas Line		NATURAL GAS	LPG	NATURAL GAS	LPG	NATURAL GAS	LPG	NATURAL GAS	LPG
Type of Gas		G20	G30	G20	G30	G20	G30	G20	G30
Gas Supply Pressure	mbar	20	37	20	37	20	37	20	37
Maximum Gas Consumption (NG/LPG)	m³/h	8.86	3.32	10.36	4.07	12.54	4.82	14.5	5.55
Minimum Gas Consumption (NG/LPG)	m³/h	1.39	0.49	1.73	0.69	2.19	0.87	2.56	0.85
Premix System		Pneumatic							
Modulation Range		1/6							
Heat Exchanger Material		Stainless Steel Exchanger							
Efficiency		G20	G30	G20	G30	G20	G30	G20	G30
(80/60 °C) Efficiency at Maximum Heat Output	%	97.8	97.6	98.1	97.6	97.2	97.7	96.1	95.3
(50/30 °C) Efficiency at Maximum Heat Output	%	107.1	107.0	106.0	105.2	107.1	106.2	105.1	104.6
Seasonal Heating Energy Efficiency	%	Class A							
Radiator Circuit		G20	G30	G20	G30	G20	G30	G20	G30
Rated Heat Load (Qn) (Max./Min.)	kW	84/14		96/16		120/20		145 / 26	
Maximum Heat Power (Pn) (80/60 °C)	kW	82.1	82.0	94.2	93.7	116.7	117.2	136.5	135.8
Minimum Heat Power (Pn) (80/60 °C)	kW	13.5	13.7	15.6	15.6	19.4	19.5	24.8	24.6
Maximum Heat Power (Pn) (50/30 °C)	kW	90.0	89.8	101.8	101.0	128.6	127.5	148.3	146.7
Minimum Heat Power (Pn) (50/30 °C)	kW	15.0	15.5	17.0	17.7	21.5	22.1	26.8	26.2
Temperature Setting Range for High Temperature Circuit (Minimum / Maximum)	°C	25÷80							
Temperature Setting Range for Low Temperature Circuit (Minimum / Maximum)	°C	25÷47							
Operating Pressure (Maximum)	bar	6							
Operating Pressure (Minimum)	bar	0.8							
Domestic Hot Water Circuit									
Temperature Setting Range (min/max)	°C	20/65							
Electric Circuit									
Power Feed	V AC-50 Hz	230 V + %10; -%15							
Electricity Consumption (Max./Min.)	Watt	96 / 22		122 / 25		159 / 22		310 / 33	
Protection Index	IP	IPX5D							
Exhaust Gas Circuit		G20	G30	G20	G30	G20	G30	G20	G30
Exhaust Gas Temperature (Max. / Min.) (80/60 °C)	°C	80.3/65.5	81.8/67.2	76.5/66.5	82.6/67.9	75.7/62.8	82.8/68.0	76.7 / 65.5	76.2 / 64.5
Exhaust Gas Temperature (Max. / Min.) (50/30 °C)	°C	63/33.6	65.2/36.1	62.3/35.4	67.2/38.4	59.3/33.0	67.4/38.7	58.5 / 34.5	57 / 33.8
CO (Max. / Min.) (80/60 °C)	ppm	146.1/10.3	217/12.2	134.21/9.9	256.0/91.1	217.0/10.6	258.6/114.6	281.0 / 11.51	265.0 / 14.2
CO₂ (Max. / Min.) (80/60 °C)	%	9.1/8.6	10.4/9.8	9.5/9.1	10.6/10.2	9.5/9.1	10.5/10.3	9.75/9.33	10.45/10.23
NOx	Class	6							
NOx Weight (GCV)	mg/kWh	24.75/13.1		23.8/11.6		24.4/11.7		35.26/12.26	
Exhaust Gas Mass Flow (60/80°C - Qn) Nominal/Min	g/s	38.9/6.5	40.2/6.8	45.3/7.2	48.3/7.5	53.2/8.2	56.8/8.6	53.5/11.5	53.8/10.7
General									
Dimensions (Height x Weight x Depth)	mm	800 x 612 x 495		800 x 612 x 530		800 x 612 x 605		800 x 612 x 680	
Sound Level	dB (A)	53		53		53		55	
Net Weight	kg	50		60		72		85	
Packaged Weight	kg	65		75		90		103	
Flue Connection Types		B ₂₃ · B _{23P} · C ₁₃ · C ₃₃ · C ₄₃ · C ₅₃ · C ₆₃ · C ₈₃ · C ₉₃							
Category		$\frac{I_{2H}}{I_{2E}} \cdot \frac{I_{3P}}{I_{2B3P}}$ (G20=20 mbar. G30=37 mbar)							



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