



Presentation of the new MPX range (Export)



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Objectives of this new range



- Present a competitive offer for the new and renovation business market
- Replace our current MCR-P range
- Offer a comprehensive range including:
 - Compact heating-only versions and combination solutions with micro accumulation (width 400 mm)
 - A version with an integrated tank (width 600 mm)



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Advantages

A comprehensive offer

- 3 combination versions with micro accumulation:
 - MPX 20/24 MI Compact
 - MPX 24/28 MI Compact
 - MPX 28/33 MI Compact
- 1 heating-only version:
 - MPX 24 Compact
- 1 version with an integrated tank:
 - MPX 28/33 BIC



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Advantages

- Compact dimensions for Solo and MI versions:
700 x 400 x 299 mm
- Stainless steel exchanger
- Large LCD display
- Brass hydroblock
- GCO combustion control system
- Power modulation from 1 to 7
- 7-litre expansion vessel on the heating-only version and MI, 10-litre expansion vessel on the BIC version
- Class-A modulating pump
- Integrated filling cock



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Advantages



DHW SOLUTION OFFERING A HIGH LEVEL OF COMFORT TO MEET ALL REQUIREMENTS:

- Instant solutions:
 - . Specific flow rate of **12 l/min, 13.4 l/min or 15.8 l/min** at $\Delta T = 30 K$ according to EN 13203-1
 - . ★★★ DHW comfort according to EN 13203-1
 - . Control system with boost mode to maintain the plate heat exchanger temperature
- The compact MPX 24 can be connected to **independent tanks**:
 - . the 80-litre BMR 80 (wall-mounted) and the 130-litre SR 130 (floor-standing)
 - . Compatible with an optional DHW sensor (HX96)



Advantages

BIC version

- 40-litre stainless steel tank with coil
- New tank insulation, made from graphite, which reduces heat loss by 15%
- Magnesium anode can be replaced via the top with no need to drain the tank
- Dimensions (L x H x D): 600 x 900 x 466
- Specific flow rate 18.3 l/min



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Stainless steel heating body



OPTIMUM PERFORMANCE

- The exchanger delivers:
 - **efficiency at part load > 109%**
 - **A rating** (Seasonal Energy Efficiency of 93%)
- Performance is optimal across the entire modulation range thanks to the **dual flue**, a market exclusive
- The low volume of water makes the system **very responsive** and delivers a high level of DHW comfort: ★★ ★ DHW according to EN 13203-1
- With its **very wide range of power modulations (1:7)**, the burner can adapt to heating and DHW requirements (from 2 to 33 kW)



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Control panel

Very user-friendly interface

- Large backlit LCD display
- Dedicated keys for setting the heating and DHW temperature make it very easy to use
- Operating statuses are permanently displayed
- Easy access to set all parameters
- Error code display with log



Control panel

Electronic control system regulated by activating the modulating burner

- **DHW and one direct circuit** controlled as standard

(Optional DHW sensor for connection to a DHW tank)

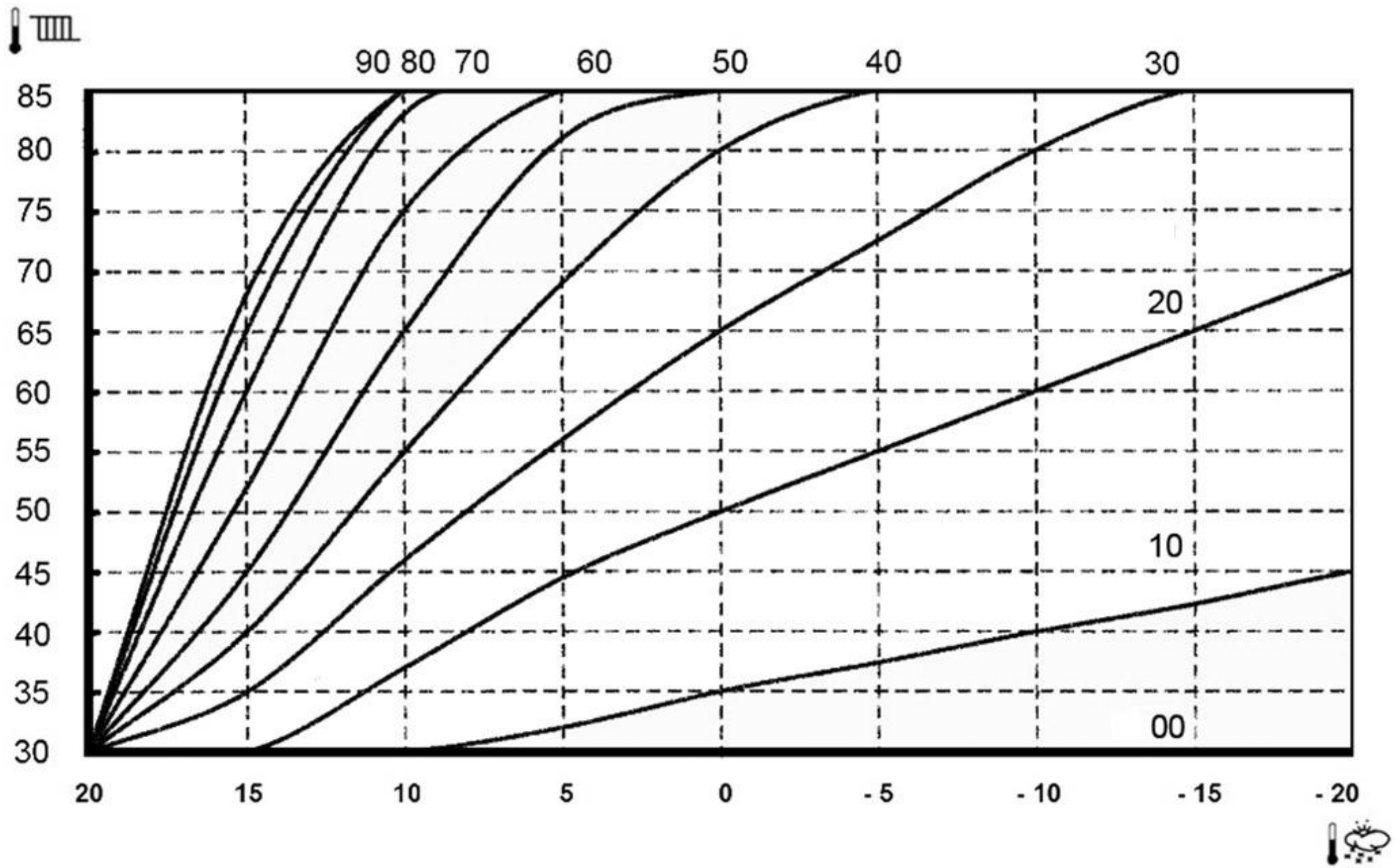
- Optional **water setpoint control** according to the outside temperature (optional outside sensor)





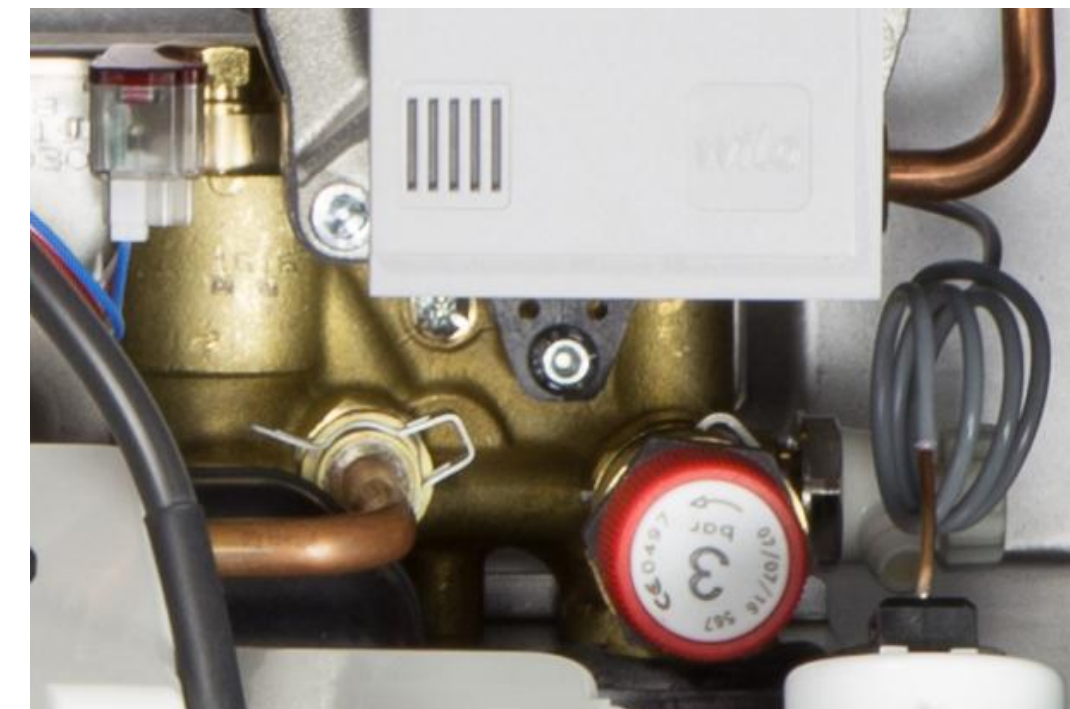
Control panel

- **Water setpoint controlled** directly by Heating +/- keys if connected to an outside sensor



Hydroblock

- Hydraulic body made entirely from **brass**
-> Proven **reliability**
- **Electronic pressure gauge** built in, enabling:
 - . Accurate pressure readings
 - . Low pressure warning information for the customer
- Safety valve AND **drain valve** used to drain the boiler before operations
- **Built-in hydraulic by-pass** in the valve body to avoid noise problems in the installation
- DHW flow rate detector (activated at 2 l/min)



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Combustion control system

BENEFIT OF THE **GCO (Gas Combustion Optimiser) SYSTEM**

- **Electronically controlled** gas valve system enabling automatic control of combustion
- **SAFETY**
 - Control the level of CO (**Carbon monoxide**)
- **SAVE TIME**
 - **No gas valve adjustment** required for start-up, for any installation configuration
 - **No diaphragm change**, for any type of gas (natural or propane)
 - Adapts to the length of the flue system

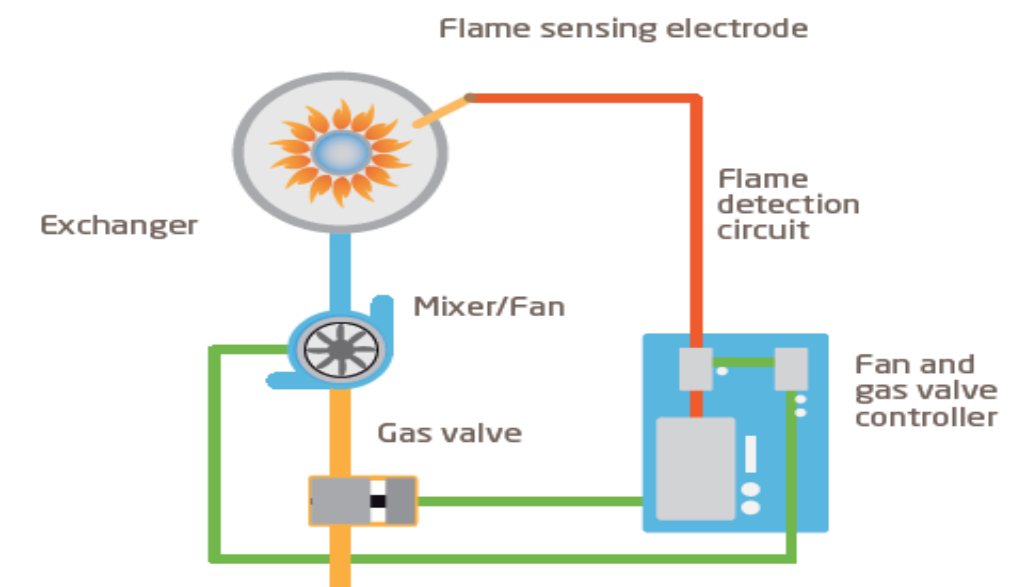


Combustion control system



BENEFIT OF THE GCO (Gas Combustion Optimiser) SYSTEM

- PERFORMANCE
 - Precision of combustion is maintained over time, guaranteeing optimal boiler performance at all times
 - 1:7 modulation
 - Power optimised to requirements
- ENVIRONMENTALLY-FRIENDLY
 - Low pollutant emissions over time thanks to continuous control of combustion quality

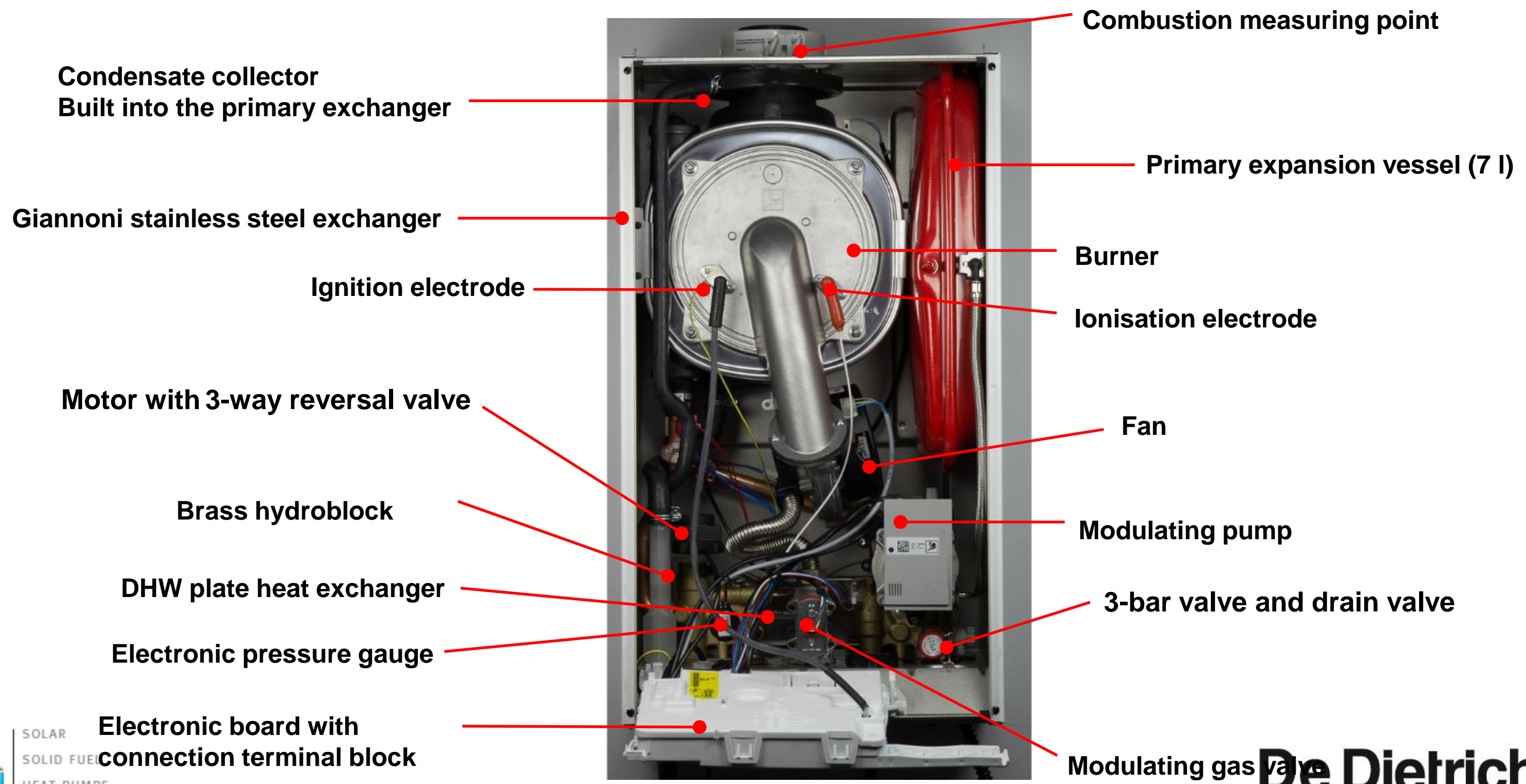


Technical specifications in detail



Model	MPX..	24/28 MI Compact	28/33 MI Compact
Useful output { - nominal determined at Qnom (Pn_gen) - intermediate at 30% Qnom (Pint)	kW	24	28
	kW	4,2	4,9
Useful output at 50/30°C (heating mode)	kW	4,1 - 26,1	5,1 - 30,6
Nominal output at 80/60° C (DHW mode)	kW	28	33
Performance in % LHV at load ...% Pn_gen and water temp... { - 100% Pn at av. temp. 70° C (RPn) - 30% Pn at ret. temp 30° C (RPint)	%	97,6	97,8
	%	108,8	108,9
Useful Seasonal Energy Efficiency: SEE (without control system)	%	93	93
Standby losses at Δt = 30 K (Qpo3o)	W	35	40
Electrical output of auxiliaries (exc. circulating pump) at Pn_gen (Qaux)	W	42	41
Circulating pump output (Pa'rc_ch)	W	23	23
Electrical output of auxiliaries in standby (Qveille)	W	3	3
Useful output at 80/60°C (heating mode) min./max.	kW	3,8 - 24	4,7 - 28
Available total dynamic head of heating circuit	mbar
Pressure available at the boiler outlet	Pa
Water content	L
Power exchanged	kW	28	33
Specific flow rate at Δt = 30 K (according to EN 13203-1)	L/min	13,4	15,8
Net weight	kg	34	35

Main components



Gas line



- **Electronic gas valve**
- Air/gas mixer for **homogeneous mix**
- **Modulating fan** controlled in PWM
- Cylindrical **stainless steel burner** enabling **low-NOx combustion: < 20 mg/kWh**
(**Class 6** according to EN 15502-1)
-> **compliance with future requirement**
of 2018 **ErP** directive

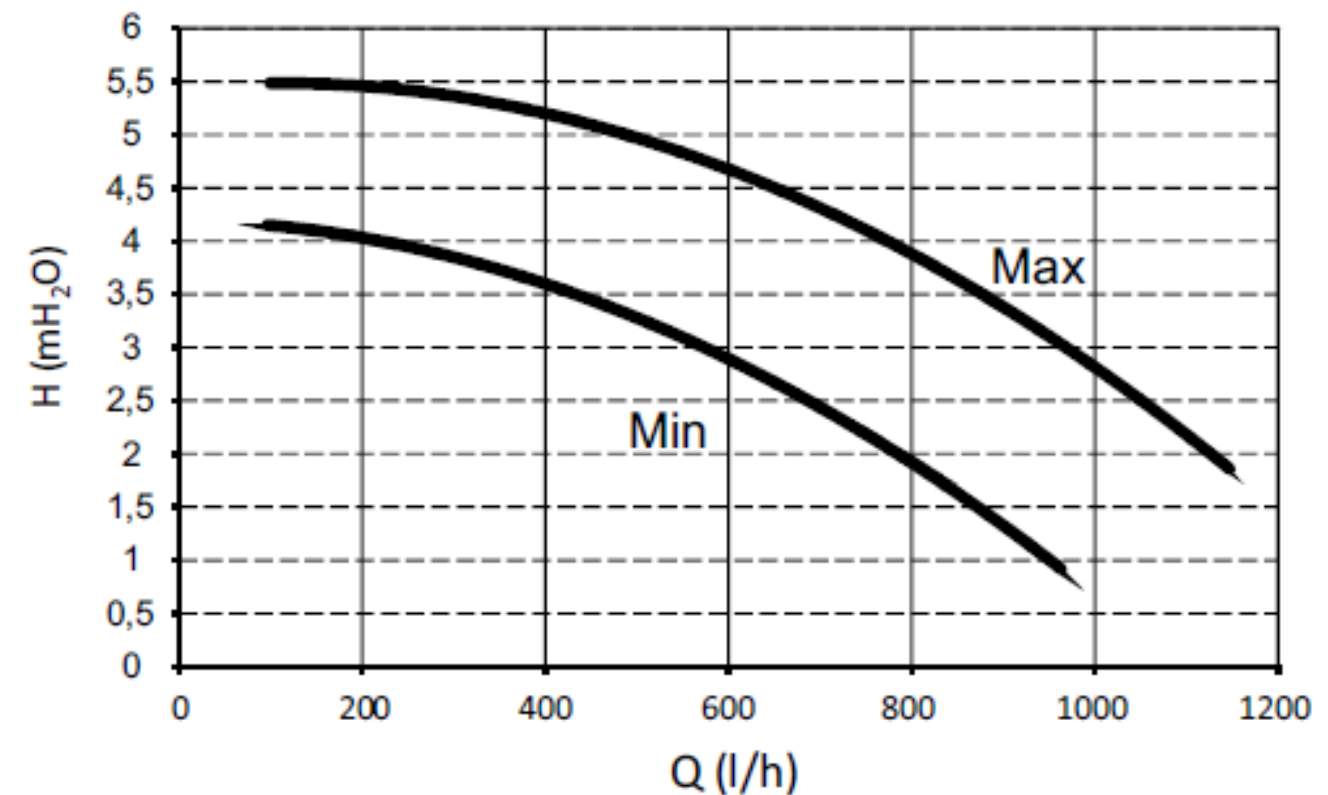


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Circulating pump

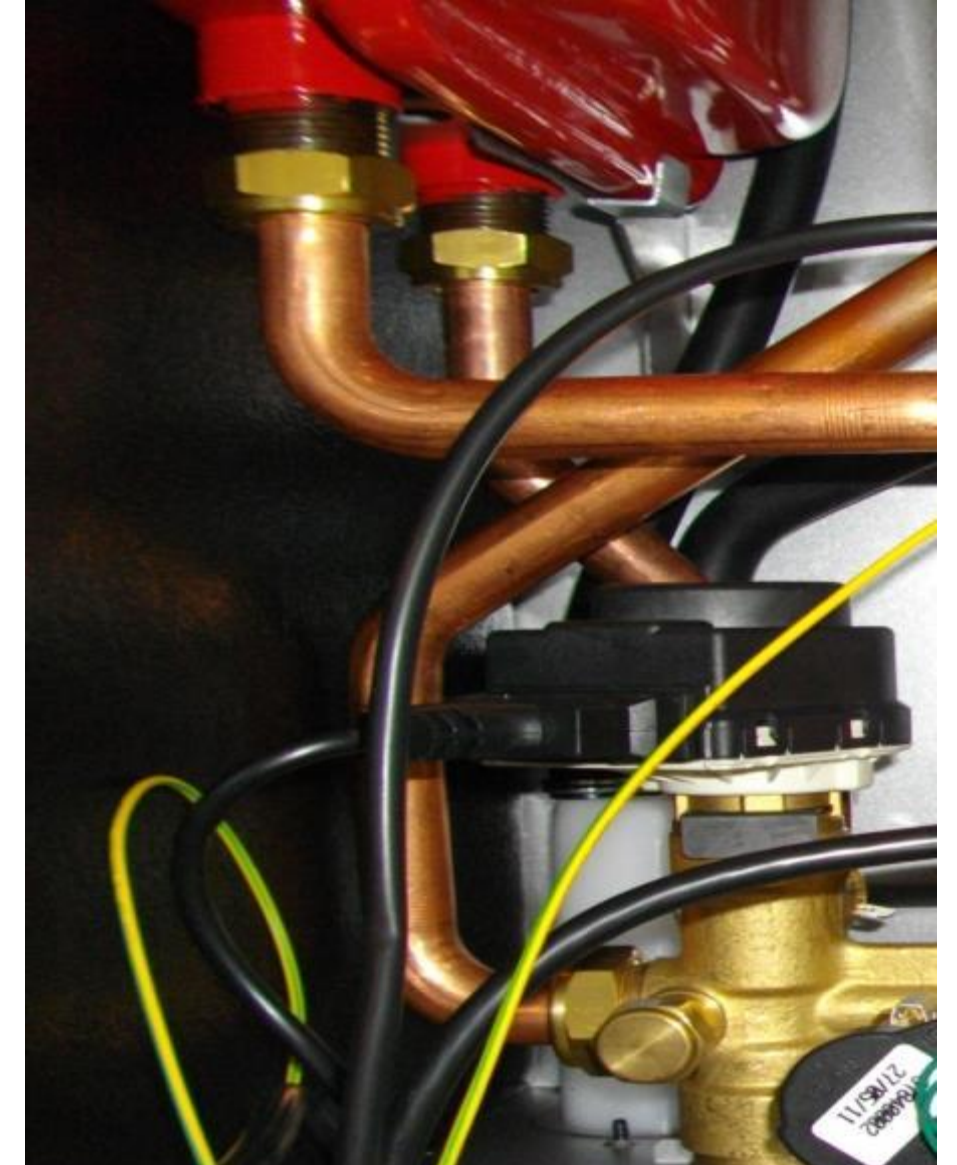
- WILLO Yonos Para **modulating pump** which automatically adapts according to the specifications of the installation
- Modulation according to Delta T (outlet/return)
-> **Maintains a DT of 20° C**
- **Low consumption :**
Power modulation from 3 W to 41 W
- **Automatic degasser** built in to quickly vent the heating circuit





EXTRA little details

- **Soundproof boiler casing**
Sound power level <50 dB(A) at Pnom
- **Mechanical pressure gauge** under the boiler to fill the installation without power to the boiler



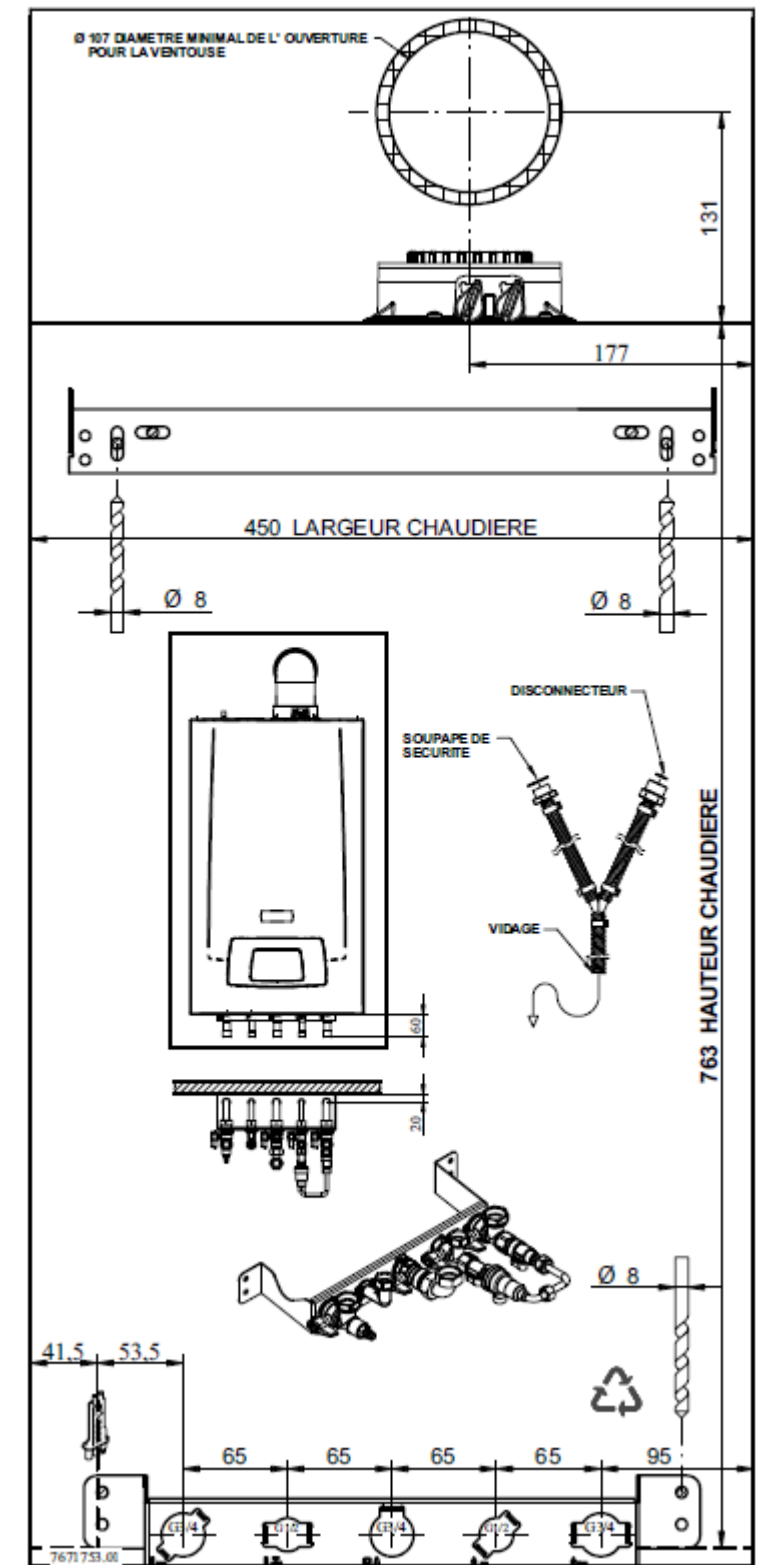
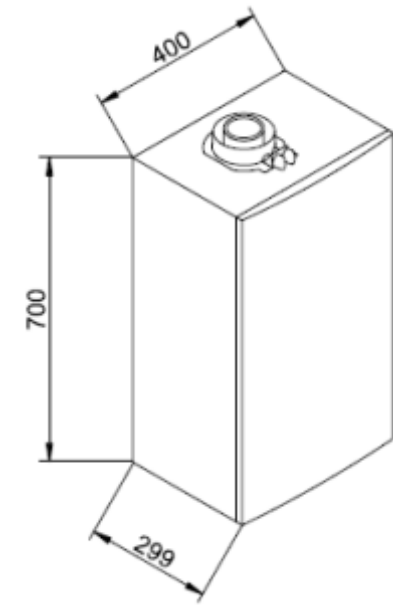
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Installation



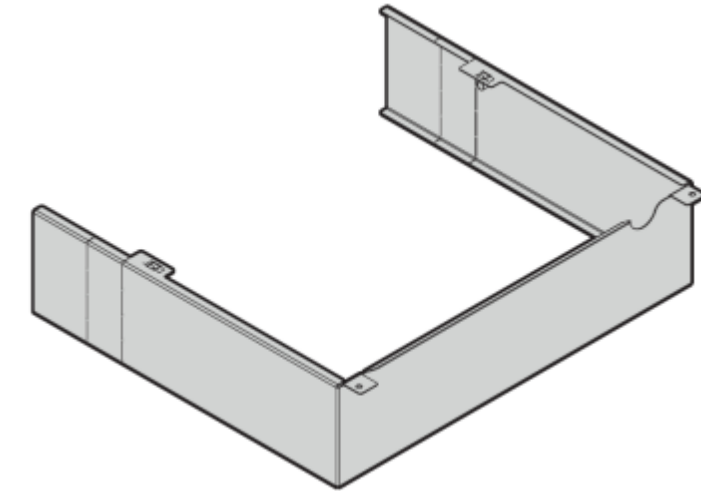
- **Mounting templates** provided, including:
 - Drilling holes for the mounting rail and terminal strip
 - Positioning of hydraulic unions and flue system
- Hydraulic connection kit (optional)
 - Complete kit for pre-installation
 - Simplified connection kit



Installation



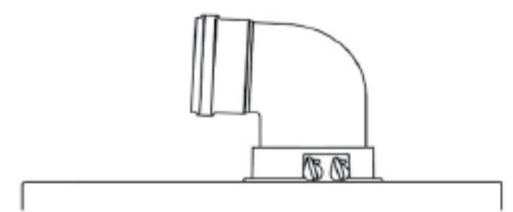
- **The terminal strip is neatly integrated under the boiler:**
 - piping can be boxed in as an option
- Optional offset wrench to **simplify hydraulic connection of the terminal strip**
HX95 kit



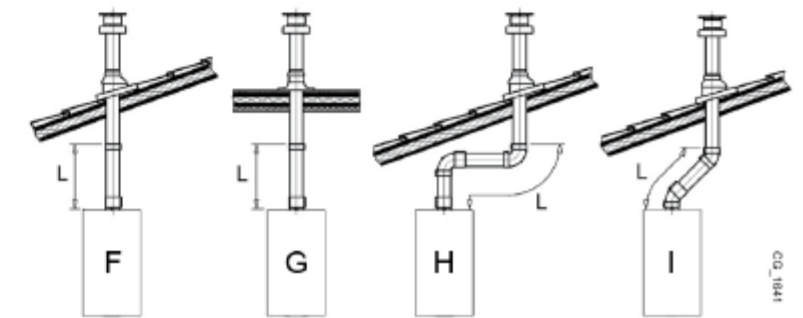
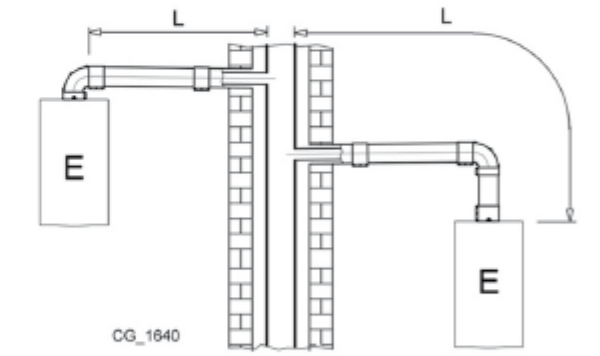
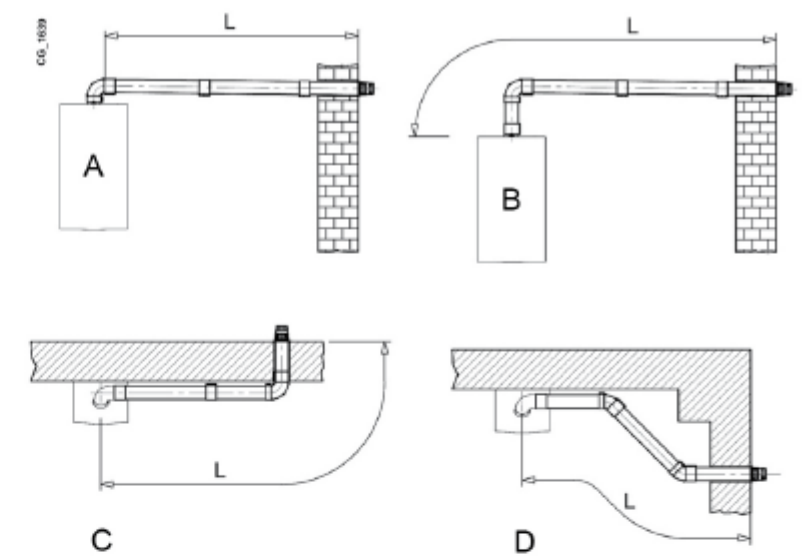
Installation



- Flue gas system
 - MPX flue system homologations:
 - . B23/C13/C33/C43/C53/C83/C93
 - . B23p/B33/C43p -> in progress, deadline to be confirmed
 - Lengths:
 - . Cf table opposite



A B	L _{max} = 10 m - Ø 60/100 mm
	L _{max} = 25 m - Ø 80/125 mm
C D	L _{max} = 9 m - Ø 60/100 mm
	L _{max} = 24 m - Ø 80/125 mm
E	L _{max} = 10 m - Ø 60/100 mm
	L _{max} = 25 m - Ø 80/125 mm
F G	L _{max} = 10 m - Ø 60/100 mm
	L _{max} = 25 m - Ø 80/125 mm
H	L _{max} = 8 m - Ø 60/100 mm
	L _{max} = 23 m - Ø 80/125 mm
I	L _{max} = 9 m - Ø 60/100 mm
	L _{max} = 24 m - Ø 80/125 mm

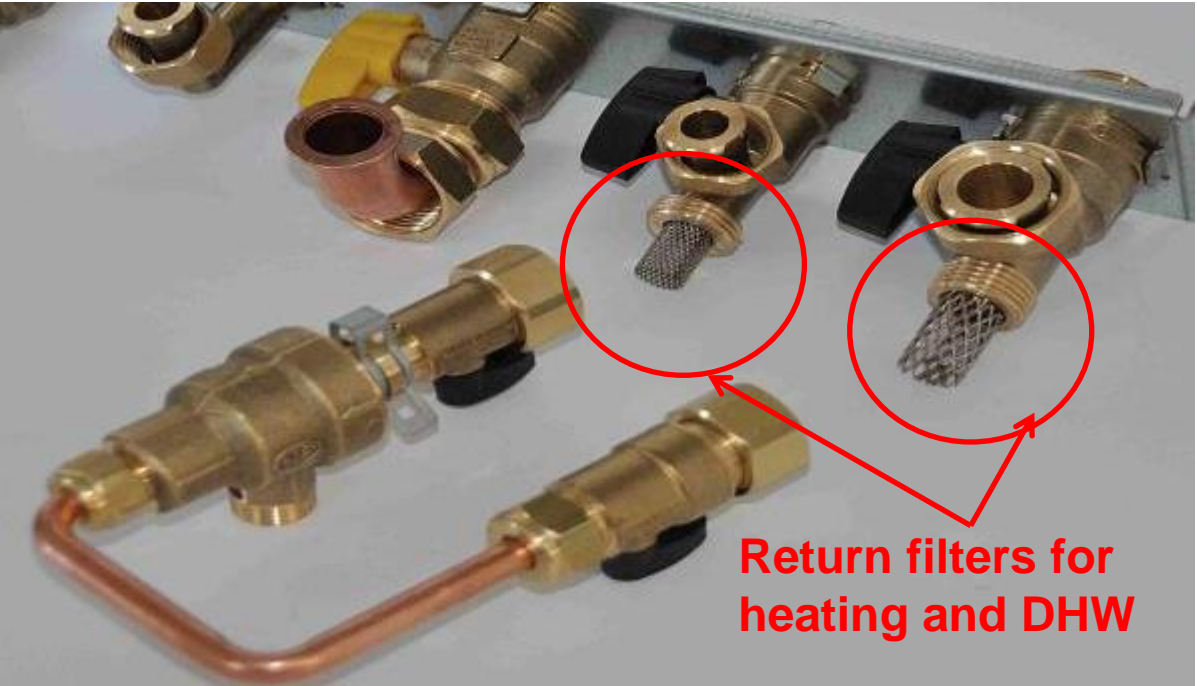
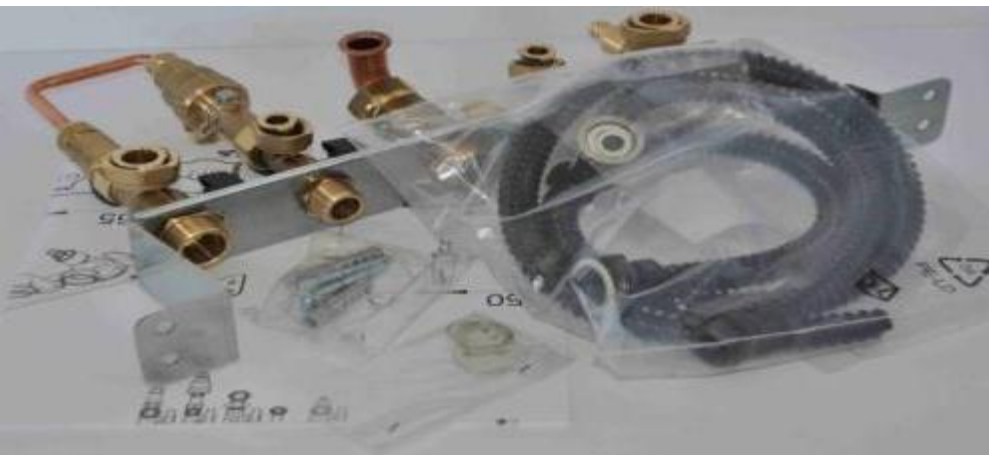


Connection accessories

- Valve block
- Optional to enable pre-installation
 - **Brass** valves which are **easy to use**, particularly those for filling the installation
 - **Built-in, accessible filters**
 - **Supplied with drain kit** to connect condensate run-off/valve/disconnector



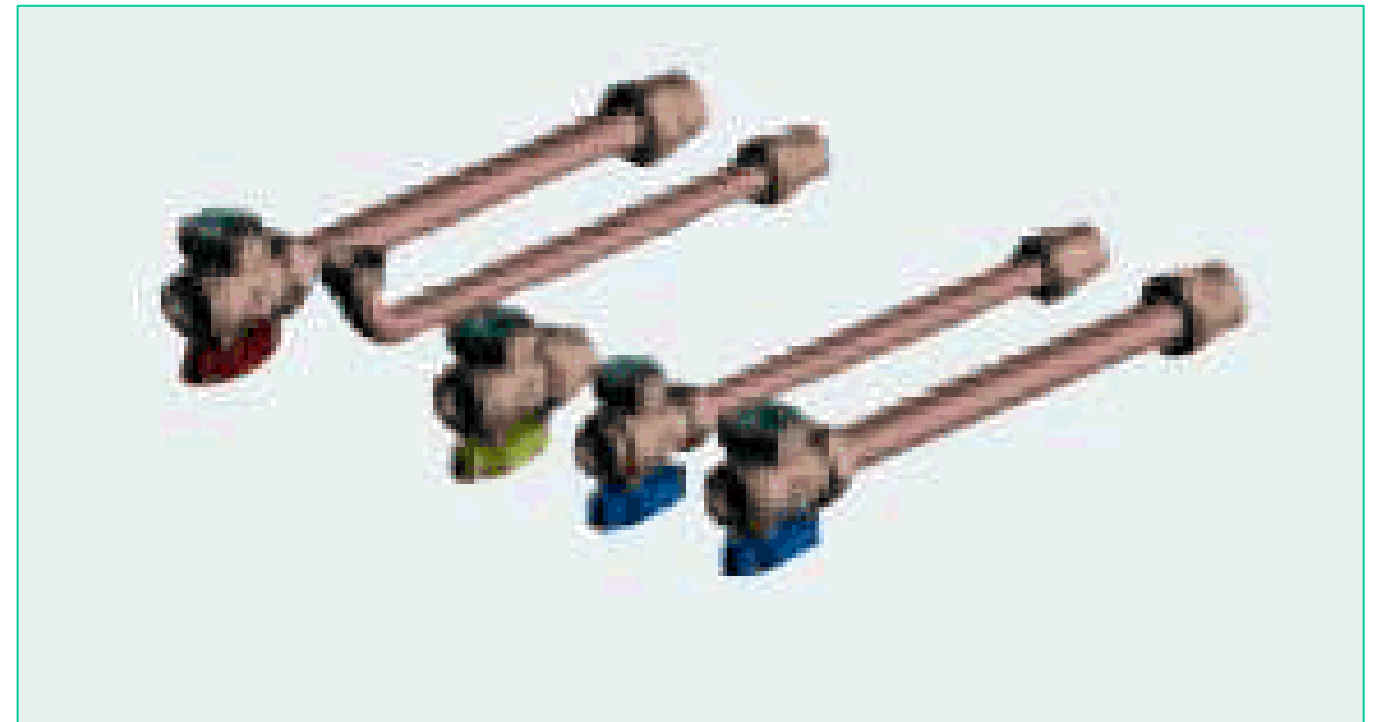
Disconnecter



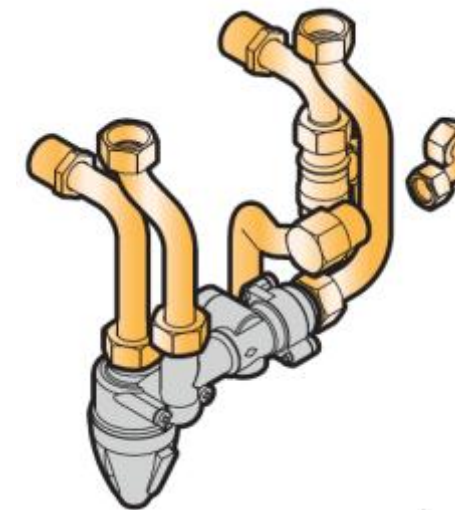
Return filters for heating and DHW

Connection accessories

- Simplified valve kit comprising:
 - 4 copper pipes which can be cut to size
 - 4 **brass** valves
 - Outlet/return
 - DHW
 - Gas



- Solar kit with mixing valve for hot water system pre-heated by solar power (for MI boilers)



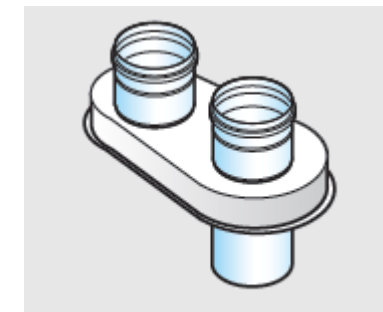
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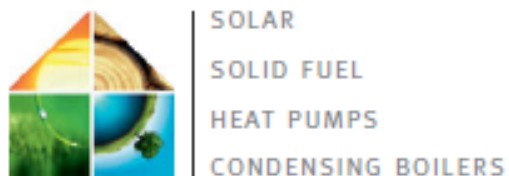


Flue system accessories

- Elbow integrating valve for 3CEp and adapter for 60/100 mm to 80/125 mm
 - HX103
- 60/100 bi-flow adapter on 2x80
 - DY723
- 60/110 adapter on 80/125
 - DY708

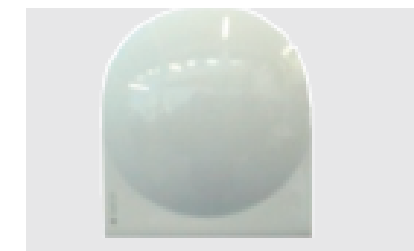


NB: same flue system as for our other boilers



Accessories for regulation

- Smart TC room thermostat connected with OpenTherm gateway
 - AD 311
- Modulating room thermostat
 - AD 301
 - AD 303
 - AD304
- Volt-free room thermostat
 - AD 247
 - AD 248
 - AD140
- Outside sensor
 - HX94

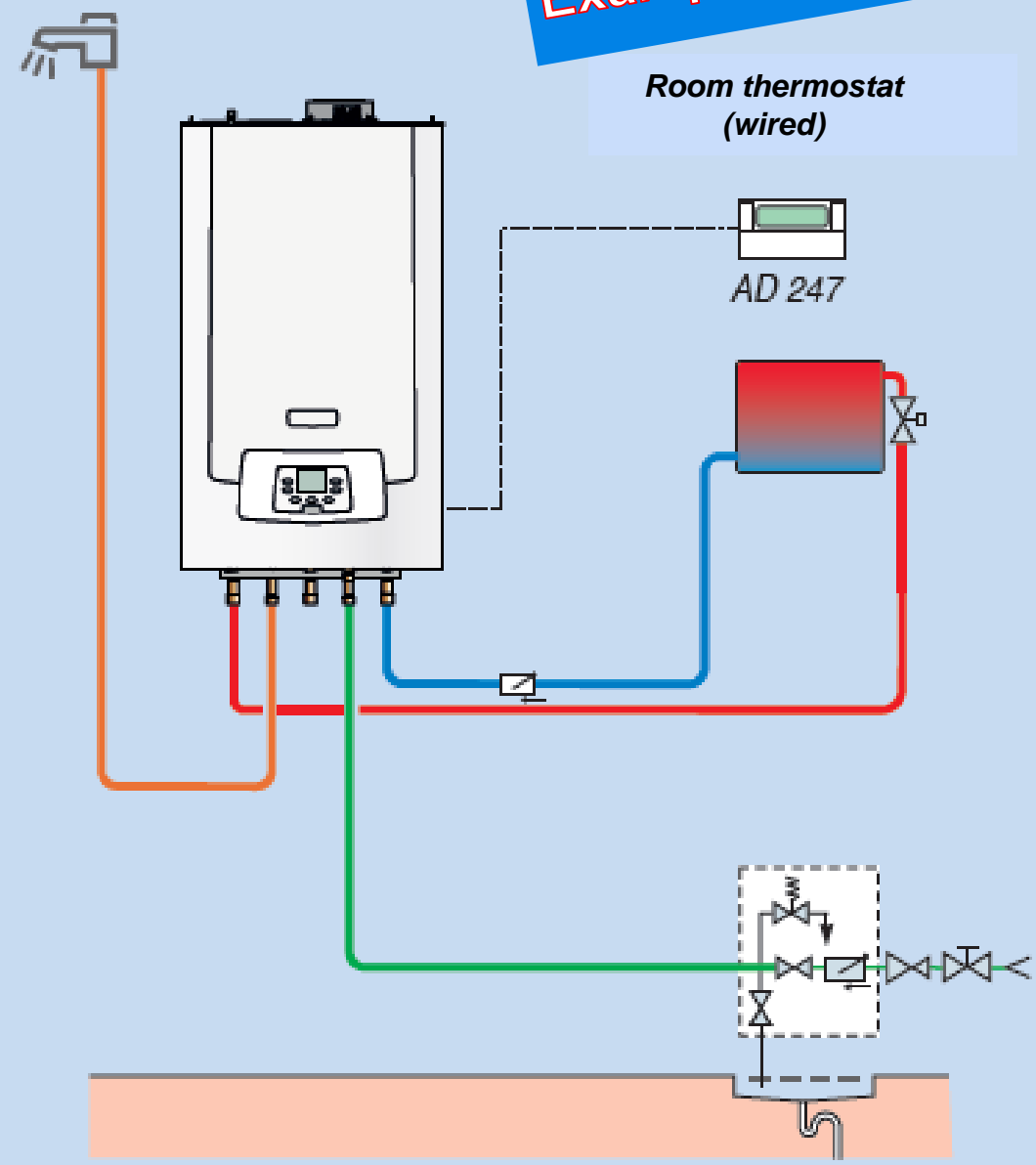


Example of an installation

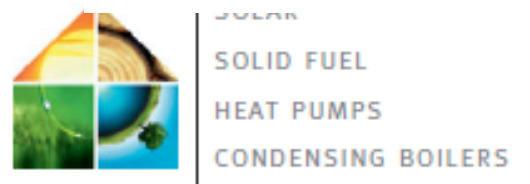


MPX.. MI (Compact)
- 1 direct "radiator" circuit

Examples of installation



MPX_F0004





Thank you for your attention



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