



CAST IRON ATMOSPHERIC BOILERS



DOMUS

gas fired, central heating only,
electronic ignition

DOMUS IN	open flue
DOMUS ISN	room sealed

High efficiency cast iron boilers designed for central heating, with low running costs and reduced emissions. Available in a natural open flue version and room sealed version. The open flue version is supplied with a brand new high performance combustion unit. Automatic ignition system supplied with atmospheric burner. LPG conversion kit supplied as standard.

PRODUCT ADVANTAGES

Innovative stylish design, for installation even in domestic rooms like kitchens, washrooms and utility rooms. New, stylish, and user friendly control panel.

Optional RIELLO ESATTO digital temperature control system to be fitted on the control panel with pressure gauge.

Multi-zone central heating kit (up to a maximum of three zones) available as optional.

Boilers can be connected to a Riello ATRB 120 DHW calorifier (or equivalent) and to a temperature control system using the relevant kits.

INSTALLATION/MAINTENANCE ADVANTAGES

Easy inspection of the flue and of the air box in room sealed versions.

In room sealed versions, the air box is fitted with combustion control sockets as standard.

Front access to the control panel with removable electrical terminal block.

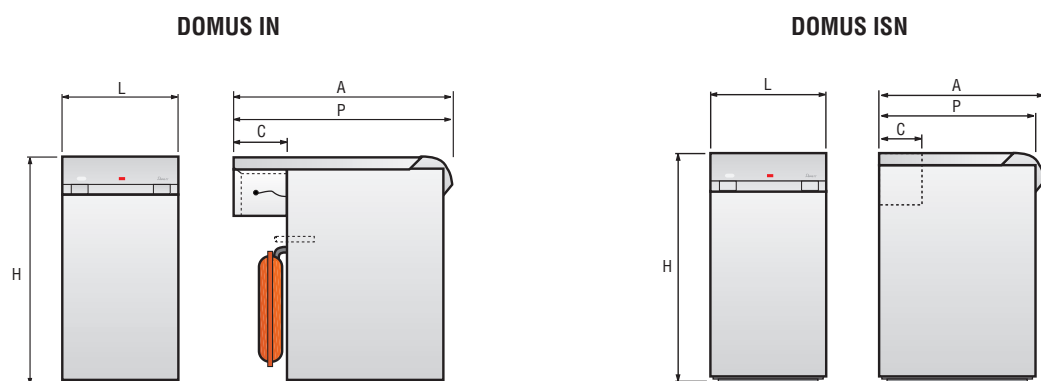
Index of protection of control panel IP X0D (IP 40).



CHARACTERISTICS		DOMUS 24 IN	DOMUS 31 IN	DOMUS 31 ISN
Input	kW	26,6	34,4	34,86
	Mcal/h	22,9	29,6	29,9
Output	kW	24	31,0	31,7
	Mcal/h	20,6	26,7	27,25
Efficiency at max output	%	90,23	90,12	90,9
Efficiency at 30% Load	%	87,8	89,0	93
Heat losses through flue gas	burner lock-out	%	0,36	0,37
	100 % load	%	7	7,1
Heat losses through Insulation	burner lock-out	%	1,29	1,0
	100 % load	%	2,77	2,78
Flue Gas temperature	°C	~110	~120	~130
CO2	%	5,6	5,7	8,4
CO less than	ppm	21	21	43
NOx	mg/kWh	< 260	< 260	< 260
Water-side pressure drop @(Δt 10°C)	mbar	66	110	115
	Pa	6600	11000	11500
Water-side pressure drop @(Δt 15°C)	mbar	29	49	51
	Pa	2900	4900	5100
Water-side pressure drop @ (Δt 20°C)	mbar	16	28	29
	Pa	1600	2800	2900
Maximum flow temperature	°C	100	100	100
Boiler capacity	l	9	10,6	17
Expansion vessel capacity	l	-	-	-
Boiler maximum working pressure	bar	3	3	3
	kPa	300	300	300
Power supply	V/50Hz	230	230	230
Power input	W	15	15	65
Index of protection	IP	XOD (40)	XOD (40)	XOD (40)
Net weight	kg	100	118	143

* EN 297.

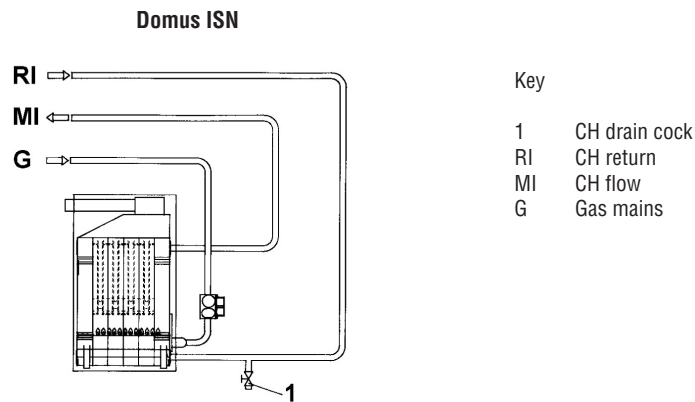
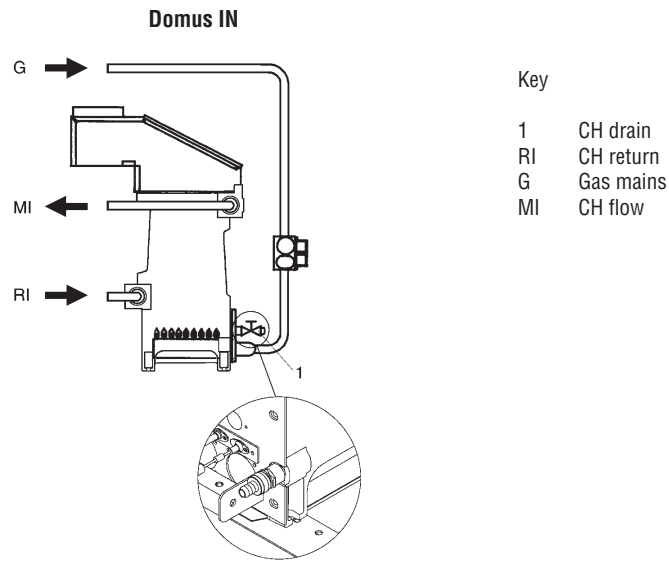
DIMENSIONS (mm)



Models		24 IN	31 IN	31 ISN
L - Width	mm	450	450	450
A - Overall Length	mm	697	697	632
P - Length	mm	665	665	600
H - Boiler height	mm	850	850	850
C	mm	144	154	167

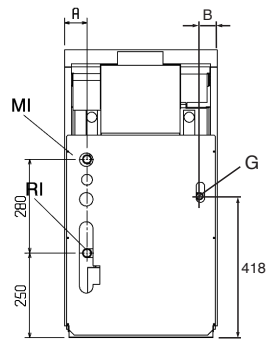


HYDRAULIC CIRCUIT

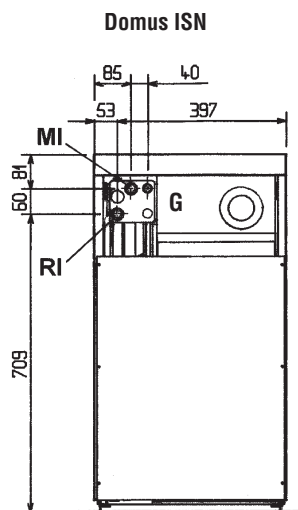


WATER CONNECTIONS

Domus IN



Description		24 IN	31 IN
A	mm	64	28
MI	CH flow	Ø 3/4" (M)	3/4" (M)
RI	CH return	Ø 3/4" (M)	3/4" (M)
CI	CH system filling loop	-	-
AB	Calorifier connection	-	-
G	Gas mains	Ø 1/2" (M)	1/2" (M)
B	mm	50	28

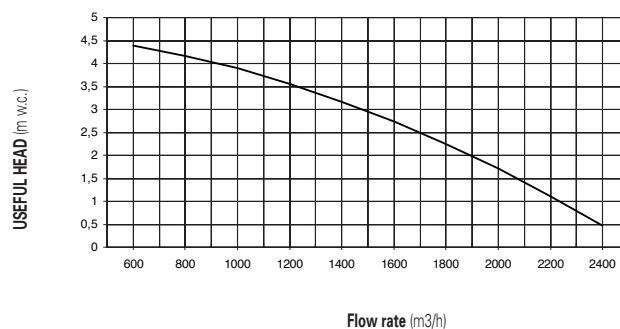


Description		31 ISN
MI CH flow	Ø	3/4" M
RI CH return	Ø	3/4" M
CI CH system filling loop	Ø	-
AB Storage cylinder connection	Ø	-
G Gas mains	Ø	1/2" M

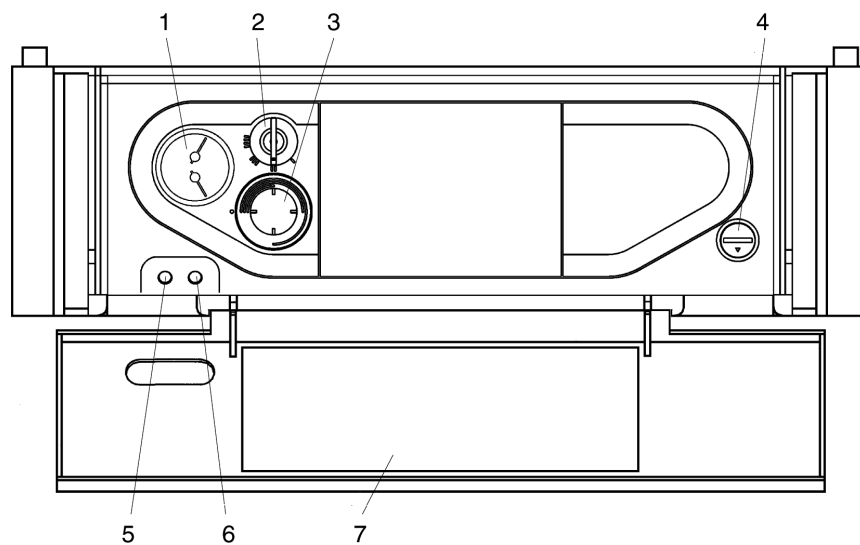
Pump/water-side pressure drop

Domus IN

Domus IN - ISN boilers are supplied without a pump. A pump must therefore be provided as part of the installation.



CONTROL PANELS



Key

- 1 System temperature gauge (IN-ISN)
 - 2 Function selector
 - I Boiler off
 - II Boiler on
 - III Reset (electronic flame control system reset)
 - IIII Automatic mode selector (*)
 - 3 Boiler thermostat
 - 4 Manual reset for high limit thermostat
 - 5 Electrical power indicator (green)
 - 6 Burner lockout (red)
 - 7 Function indicators
- (*) For use only if a temperature control kit is installed.



RIELLO DOMUS IN

DESCRIPTION FOR SUMMARY SPECIFICATIONS

High efficiency, floor standing hot water boiler, manufactured from cast iron elements. Natural open flue combustion chamber with stainless steel, stabilised flame atmospheric natural gas burner with automatic ignition. Maximum working pressure is 3 bar.

DESCRIPTION FOR SPECIFICATIONS

These B11BS type, class II 2H3+ hot water boiler includes:

- Light grey steel external casing panels, assembled with quick fit couplings, removable for servicing
- high density fibre-glass wool lagging, protected by aluminium sheet
- boiler body manufactured from sectional cast iron elements
- low pressure drop combustion chamber designed to generate a highly turbulent motion to generate an efficient gas to water heat transfer and high efficiency
- stainless steel, stabilised flame, multijet atmospheric burner
- electronic ignition system with ionisation flame detection
- instrument panel protected by a hinged cover to prevent accidental tampering, housing all control devices, including main switch, electrical power, flue and burner lockout indicators and the socket
- control thermostat and boiler high limit thermostat with manual reset, connected to separate lines
- boiler water temperature gauge
- gas valve group including the safety valve, control valve, gas pressure regulator and filter
- rear draught diverter with vertical exhaust outlet
- manual reset exhaust thermostat
- system reset on control panel
- main on-off switch
- instrumentation fitting
- maximum working pressure 3 bar
- compliant with CEI standards
- index of protection IP40
- compliant with 90/396/EEC directive (gas - CE marking)
- compliant with 89/336/EEC directive (electromagnetic compatibility)
- compliant with 72/23/EEC directive (low voltage)
- compliant with 92/42/EEC directive (efficiency)

MATERIAL SUPPLIED

- L.P.G. kit
- gas mains cock
- installation, operation and maintenance manual
- hydraulic certificate
- product identification plate



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RIELLO DOMUS ISN

DESCRIPTION FOR SUMMARY SPECIFICATIONS

High efficiency, floor standing hot water boiler, manufactured from cast iron elements. Room Sealed Combustion Chamber with stainless steel, stabilised flame atmospheric natural gas burner with automatic ignition.
Maximum working pressure is 3 bar.

DESCRIPTION FOR SPECIFICATIONS

These C12 - C32 - C42 - C52 type, class II 2H3+ hot water generators comprise:

- Light grey steel external casing panels, assembled with quick fit couplings, removable for servicing .
- high density fibre-glass wool lagging , protected by aluminium sheet
- boiler body manufactured from sectional cast iron elements
- low pressure drop combustion chamber designed to generate a highly turbulent motion to generate an efficient gas to water heat transfer for higher efficiency
- stainless steel, stabilised flame, multijet atmospheric burner
- electronic ignition system with ionisation flame detection
- instrument panel protected by a hinged cover to prevent accidental tampering, housing all control devices, including main switch, electrical power and burner lockout indicators and socket
- control thermostat and boiler high limit thermostat with manual reset, connected to separate lines
- boiler temperature gauge
- gas valve group including the safety valve, control valve, gas pressure regulator and filter
- flue gas air pressure switch
- air box with two pressure switch fittings, one for air inlet test and one for flue gases analyzer
- CH drain cock
- main on-off switch
- instrumentation fittings
- maximum working pressure 3 bar
- compliant with CEI standards
- index of protection IP40
- compliant with 90/396/EEC directive (gas - CE marking)
- compliant with 89/336/EEC directive (electromagnetic compatibility)
- compliant with 72/23/EEC directive (low voltage)
- compliant with 92/42/EEC directive (efficiency)



MATERIAL SUPPLIED

- L.P.G. nozzle pack
- gas mains cock
- installation, operation and maintenance manual
- hydraulic test certificate
- product identification plate