



Ferrolli

ECONCEPT TECH

Wall-hung gas-fired condensing boiler
for central heating and instant hot water
production ready for solar panel systems





ECONCEPT TECH is the product that FERROLI has developed with the aim of satisfying the latest and strictest limits on energy consumption laid down by recent standards.

The heat generator has been designed to ensure maximum efficiency energy and performance both in central heating mode and in the delivery of domestic hot water, putting it at the top of its category.

Despite being a technologically advanced heat generator, **ECONCEPT TECH** maintains all the characteristics of simplicity and rational construction that distinguish Ferrolì products.

ECONCEPT TECH is a room-sealed and forced draught boiler for central heating and the instant production of domestic hot water.

By using a premix air/gas supply system and a ceramic burner with reverse micro-flame, the appliance comes into class 5 as regards NOx emissions.

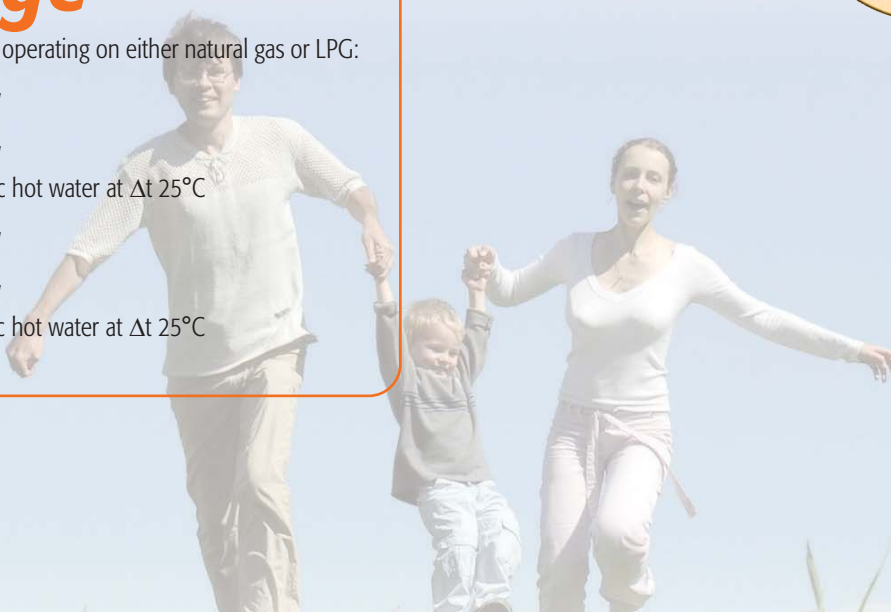
The **ECONCEPT TECH** features the maximum efficiency in its category. It in fact has a 4 star rating according to Directive 92/42 EEC on energy classification.



The range

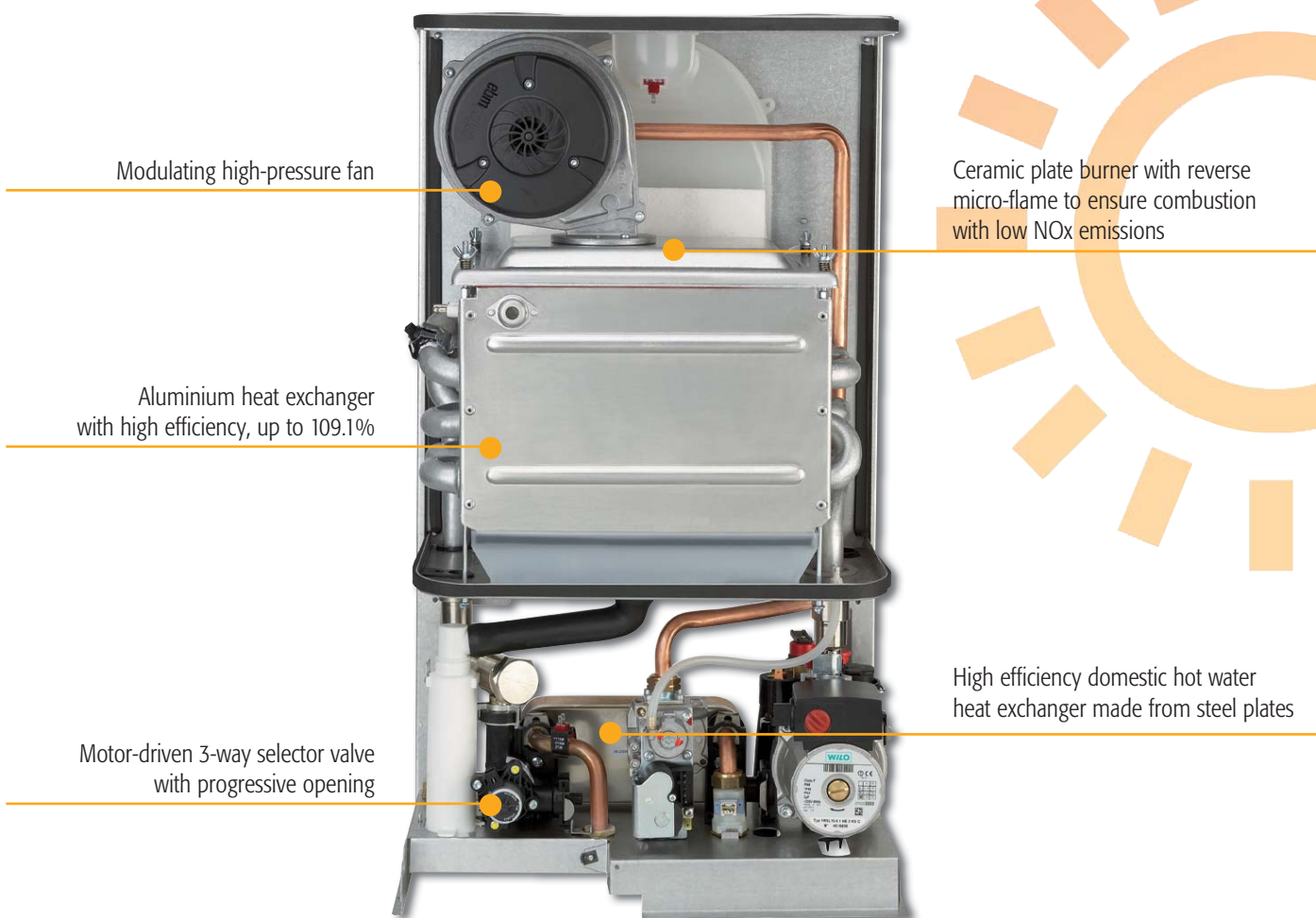
is made up of 4 models, both operating on either natural gas or LPG:

- 25A** Heat input 25,2 kW
- 25C** Heat input 25,2 kW
15,2 l/min domestic hot water at Δt 25°C
- 35A** Heat input 34,8 kW
- 35C** Heat input 34,8 kW
19,6 l/min domestic hot water at Δt 25°C



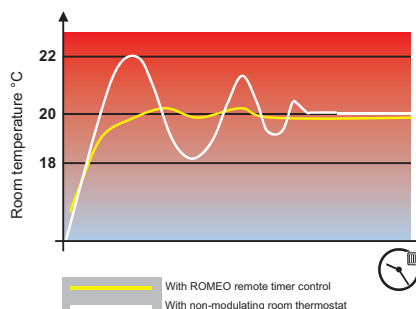
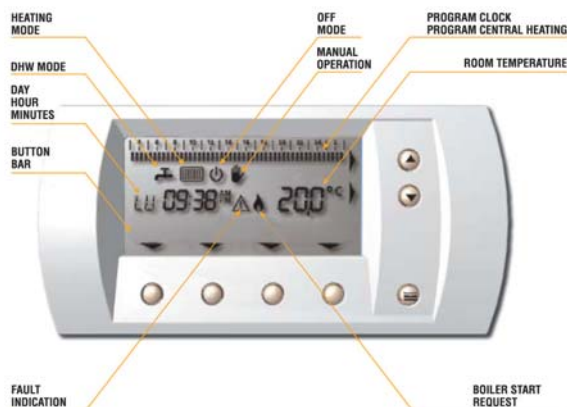
Designed using advanced technology and exploiting the FERROLI history and tradition in the heating sector, the appliances are built in ultra-modern facilities that apply a certified quality management system in compliance with the UNI EN ISO 9001:2000 standards. The **ECONCEPT TECH** boilers are CE approved, which for the user is a synonym of safety and reliability.

Components



REMOTE TIMER CONTROL

The **"ROMEO" REMOTE TIMER CONTROL** available as an accessory can be used to start and control the boiler from a distance, with the convenience of not having to go outside and open the door on the cabinet. ROMEO can be used to set the room temperature and the weekly program for both the ambient comfort conditions and domestic hot water delivery.



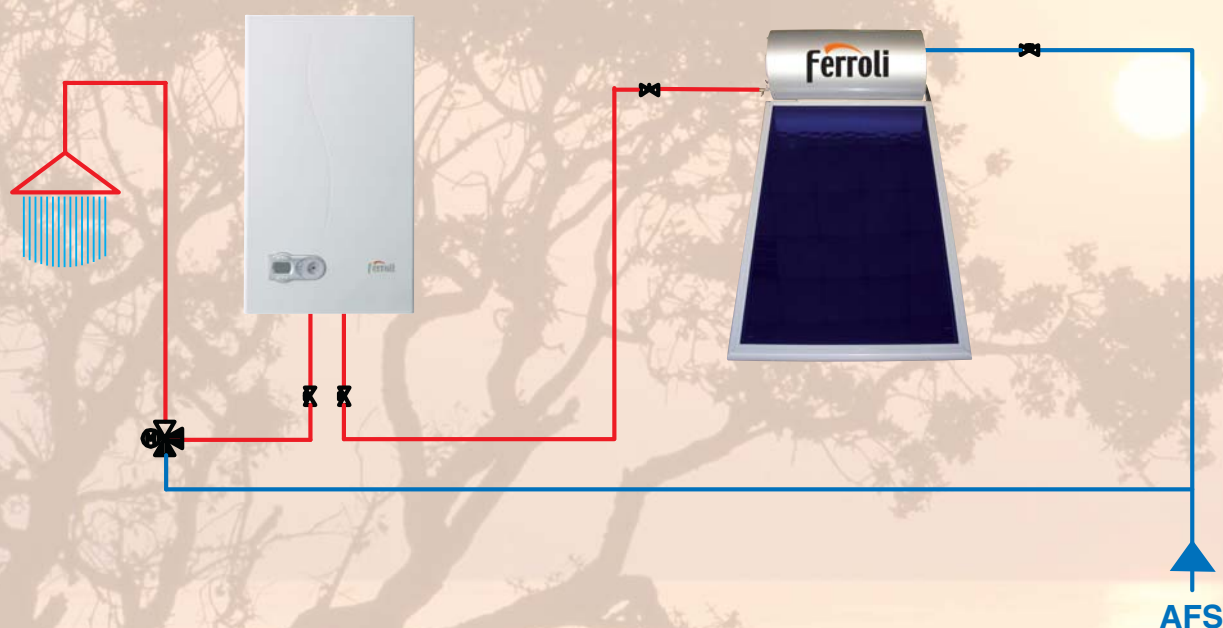
- Weekly CENTRAL HEATING timer with: 3 daily room temperature levels; minimum programming interval 30 minutes; 5 pre-defined programs; possibility of MANUAL operation; ambient frost protection always active.
- Weekly DOMESTIC HOT WATER timer with 2 types of operation: ECO/COMFORT; minimum programming interval 30 minutes; 2 predefined programs.

With solar heating systems...

ECONCEPT TECH has been designed to be easily integrated into systems developed using the latest technology.

The boiler in fact features electronics that simplify the combined use with solar panels, with both natural and forced circulation.

A sensor installed in the domestic hot water circuit continuously monitors the temperature of the water coming from the solar panels, igniting the burner only when the water temperature falls below the level required to guarantee optimum comfort for the user.



Functions...



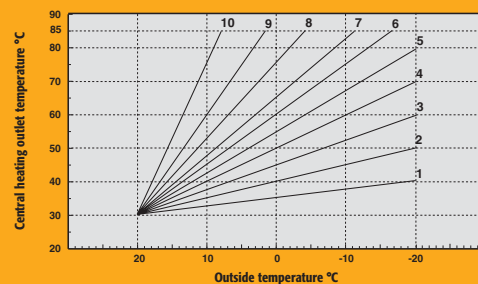
ECO-COMFORT function

Activating the comfort function ensures the temperature is maintained in the domestic hot water exchanger and consequently significantly decreases the waiting time for domestic hot water.

Operation with TEMPERATURE COMPENSATION

The "Outside probe" kit can be installed to operate the boiler with temperature compensation. This means that without using the buttons on the system's temperature controller, the boiler automatically adapts to the variations in the outside temperature.

As a result this brings energy savings while still guaranteeing maximum comfort for the user.



FROST PROTECTION function

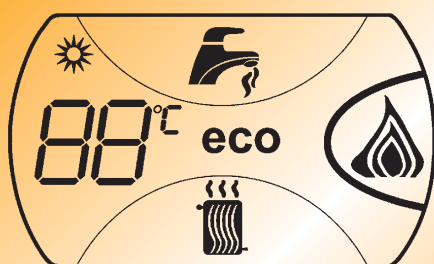
If the temperature in the boiler falls to 5°C, the burner automatically ignites, the three-way valve moves to half-way between the domestic hot water and central heating positions and the pump is started, so as to protect the appliance against any damage caused by frost. This function is active when the boiler is supplied by the gas mains and powered.

Comfort my way...

The control electronics on the **ECONCEPT TECH** allow users to customise the operation of the appliance and **manage ambient comfort based on their own needs.**



LCD DISPLAY



Domestic hot water request



Central heating request



Operating temperature - Fault codes



Economy mode activated (Comfort deactivated)



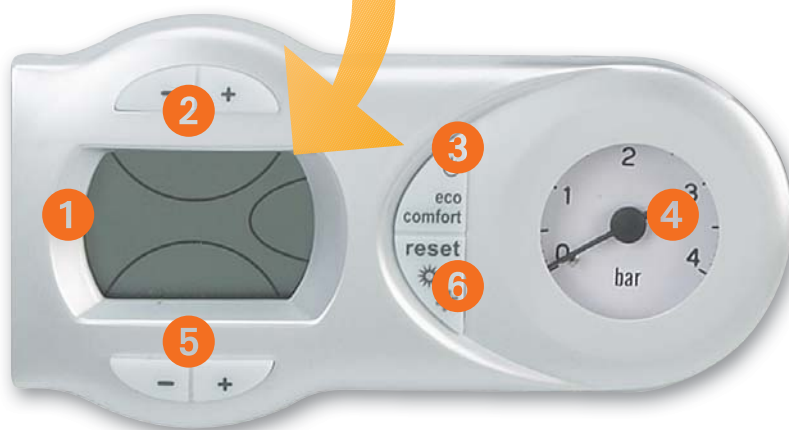
Burner on - Output modulation indication



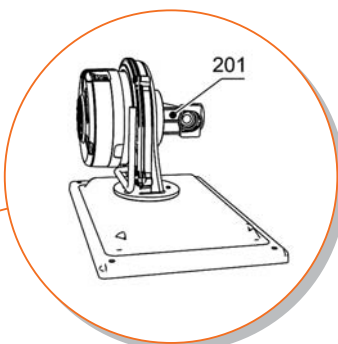
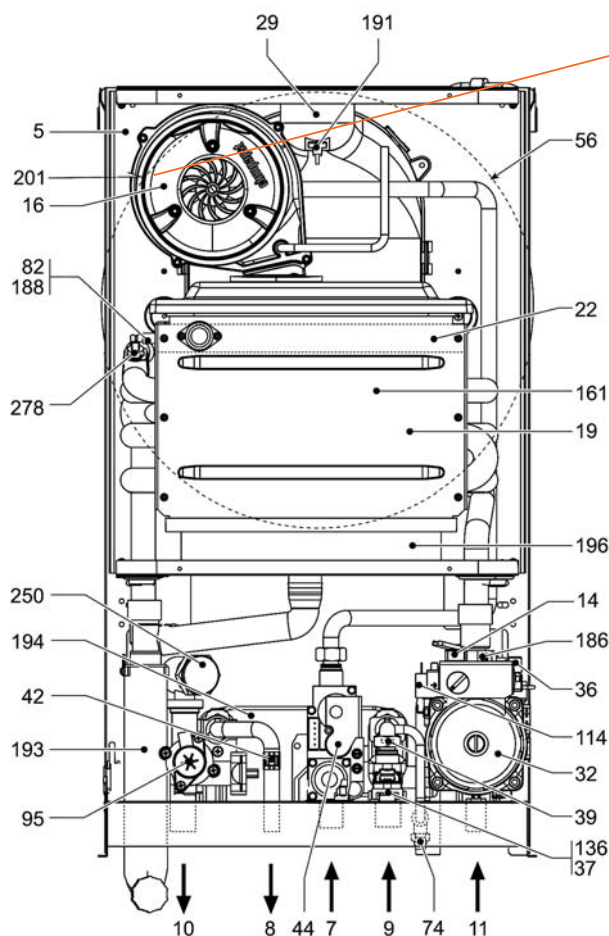
Summer mode activated (Winter deactivated)

The **control panel** on the unit has been designed with an easy-to-ready and straightforward display, with control buttons for setting the central heating outlet temperature, the domestic hot water temperature, to start the appliance and to activate the Economy function. The "dashboard" is completed by the hydrometer that controls the pressure in the boiler.

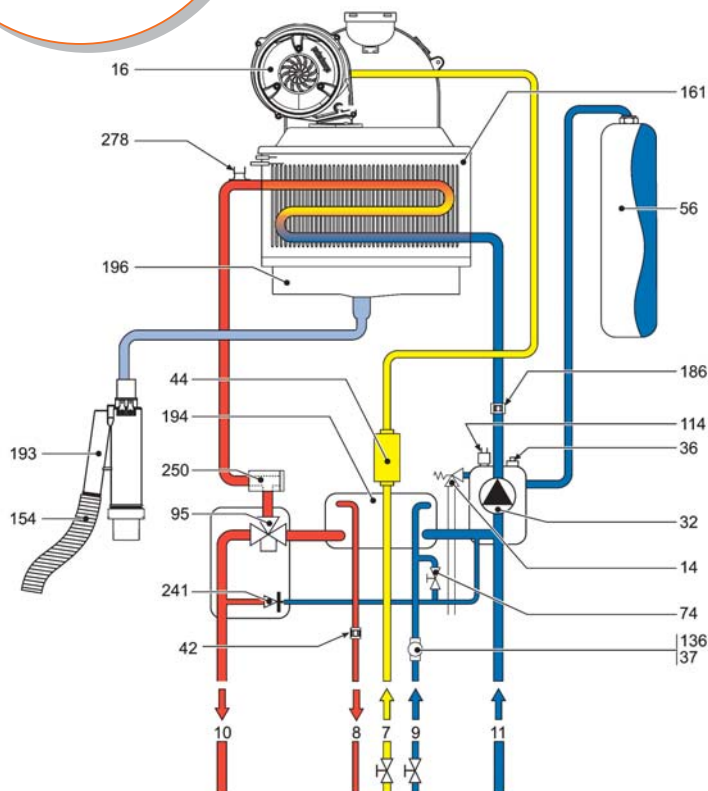
- 1 LCD display
- 2 Buttons for setting the DHW temperature
- 3 ON-OFF and comfort mode button
- 4 Hydrometer
- 5 Buttons for setting the CH temperature
- 6 Reset, summer/winter selection, fill system and climate mode button



VIEW OF THE COMPONENTS



WATER CIRCUIT

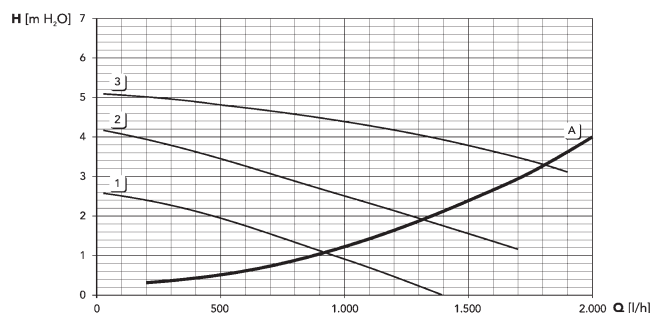


KEY

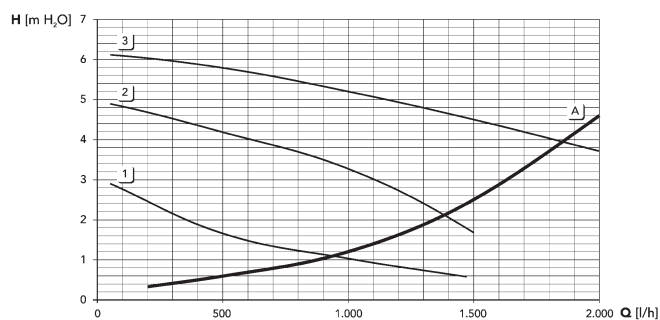
- | | | |
|---------------------------------|----------------------------|--|
| 5 Room-sealed chamber | 32 Central heating pump | 136 Flow meter |
| 7 Gas inlet | 36 Automatic air vent | 161 Condensing heat exchanger |
| 8 Domestic hot water outlet | 37 Cold water inlet filter | 186 Return sensor |
| 9 Domestic hot water inlet | 39 Flow regulator | 191 Flue gas temperature sensor |
| 10 Central heating flow outlet | 42 DHW temperature probe | 193 Drain trap |
| 11 Central heating return inlet | 44 Gas valve | 194 DHW heat exchanger |
| 14 Safety valve | 56 Expansion vessel | 196 Condensate basin |
| 16 Fan | 74 Filling cock | 250 Central heating flow outlet filter |
| 19 Combustion chamber | 82 Detection electrode | 278 Dual sensor (Safety + Central heating) |
| 22 Main burner | 95 Selector valve | |
| 29 Flue gas outlet manifold | 114 Water pressure switch | |

PRESSURE DROP - PUMP DISCHARGE HEAD

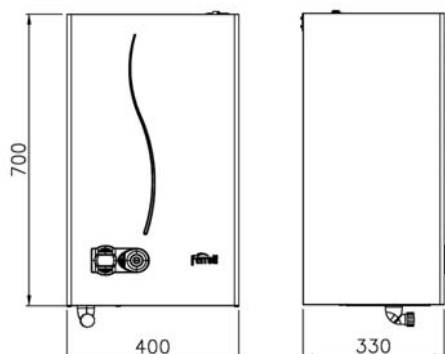
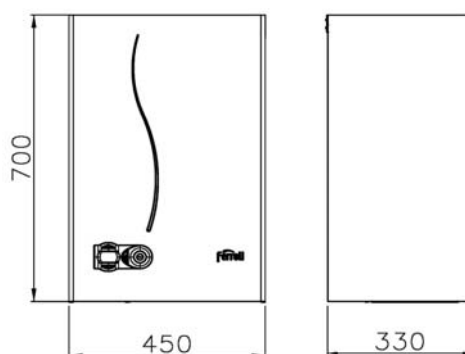
ECONCEPT TECH 25C



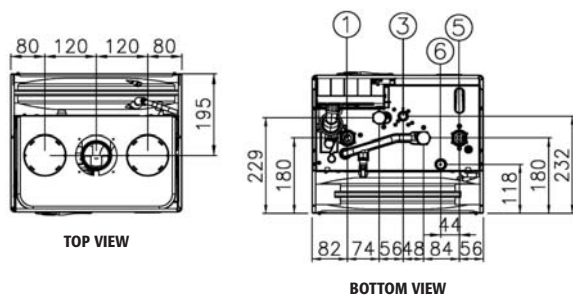
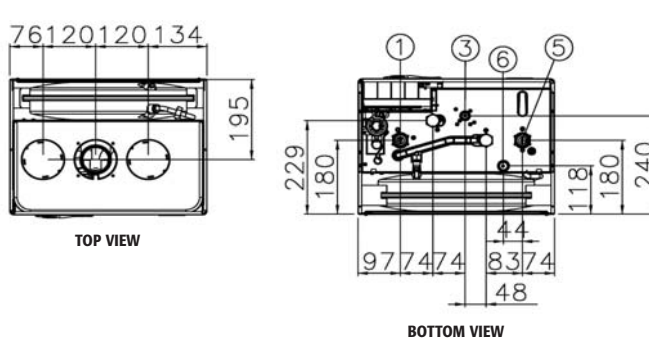
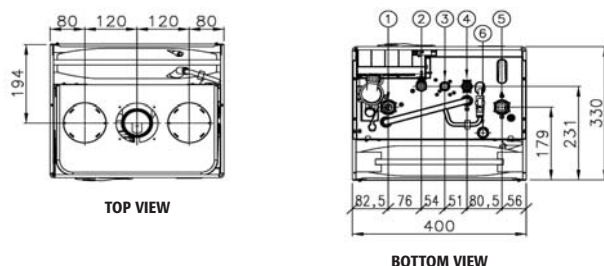
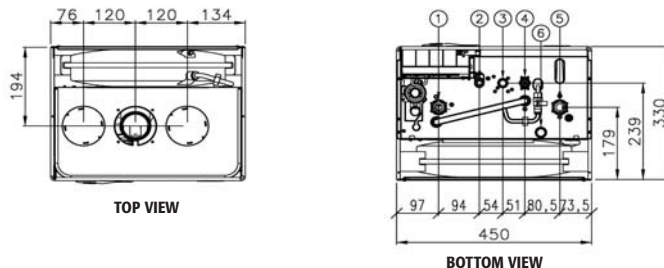
ECONCEPT TECH 35C



1 - 2 - 3 = Pump speed
A = Boiler pressure drop

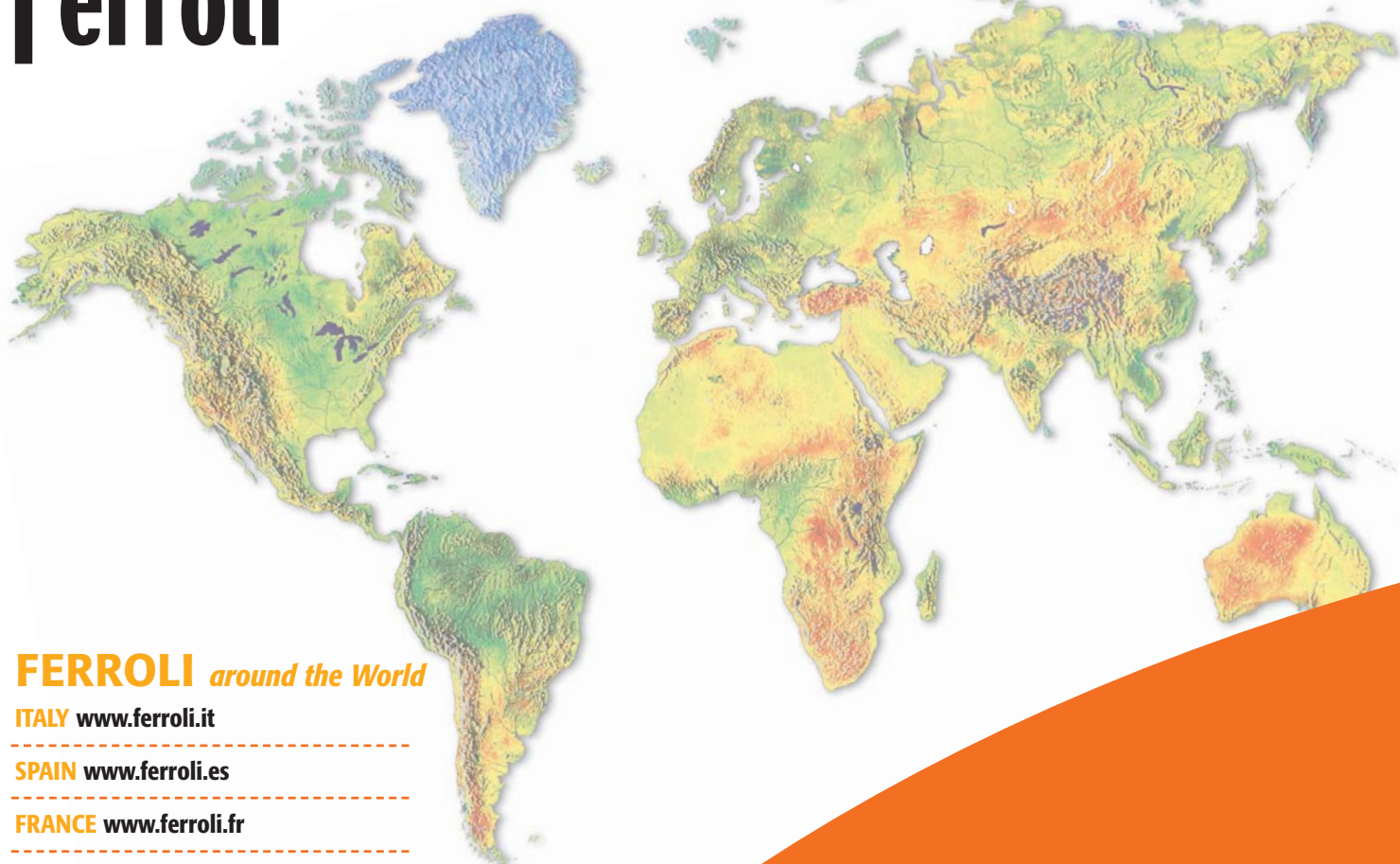
ECONCEPT TECH 25A / 25C

ECONCEPT TECH 35A / 35C

KEY

- 1 central heating flow outlet
- 2 DHW water outlet
- 3 gas inlet
- 4 DHW water inlet
- 5 central heating return inlet
- 6 safety valve discharge

ECONCEPT TECH 25A

ECONCEPT TECH 35A

ECONCEPT TECH 25C

ECONCEPT TECH 35C


ECONCEPT TECH			25A	25C	35A	35C
Heat input (Hi)	P max	kW	25,2	25,2	34,8	34,8
	P min	kW	5,3	5,3	6,5	6,5
Useful heat output 80°C - 60°C	P max	kW	24,6	24,6	34,2	34,2
	P min	kW	5,2	5,2	6,3	6,3
Useful heat output 50°C - 30°C	P max	kW	26,6	26,6	36,7	36,7
	P min	kW	5,7	5,7	6,9	6,9
Useful efficiency 80°C - 60°C	P max	%	98,3	98,3	98,5	98,5
	P min	%	97,3	97,3	97,0	97,0
Useful efficiency 50°C - 30°C	P max	%	105,4	105,4	105,5	105,5
	P min	%	107,2	107,2	106,9	106,9
Useful efficiency at reduced load	30% P max	%	109,1	109,1	109,1	109,1
Energy marking (EC directive 92/42)			★★★★	★★★★	★★★★	★★★★
NOx emission class (UNI EN 297)			5	5	5	5
Maximum central heating temperature			°C	95	95	95
Operating pressure min-max			bar	0,8-3	0,8-3	0,8-3
Total boiler water content			litres	1,5	1,5	2
Expansion vessel capacity			litres	8	8	10
Expansion vessel pre-charge pressure			bar	1,0	1,0	1,0
DHW circuit operating pressure min-max			bar	—	0,25-9	—
Delivery domestic hot water	Δt 25°C	litres/min	—	15,2	—	19,6
	Δt 30°C	litres/min	—	12,7	—	16,3
Max DHW power input			W	120	120	140
Power supply /Frequency			V / Hz	230/50	230/50	230/50
Boiler empty weight			kg	36	37	41
Gas fitting			inches	1/2"	1/2"	1/2"
Central heating system fittings			inches	3/4"	3/4"	3/4"
Domestic hot water circuit fittings			inches	—	1/2"	1/2"

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