Technical sheet

VARMAX
CONDENSING GAS BOILER

Varmax

8 models from 120 kW to 450 kW

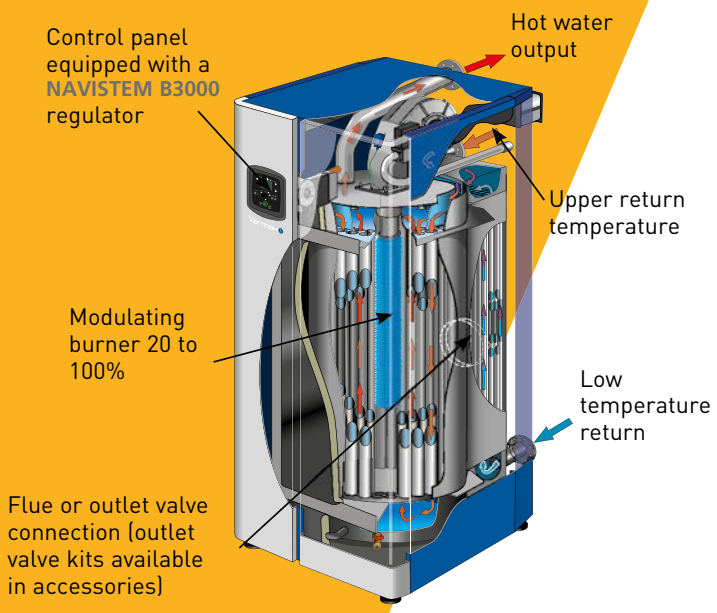
- Concept OptiMax: optimized installation, maximized performance in 2, 3 or 4 taps
- Easy to install: small footprint, removable covers for getting through doors
- Rapid burner dismantling with Easy Extract for time savings during maintenance
- Help Software with a choice of 2, 3, 4 taps

CONDENSING BOILER

ENVIRONMENTALLY Low NOx FRIENDLY

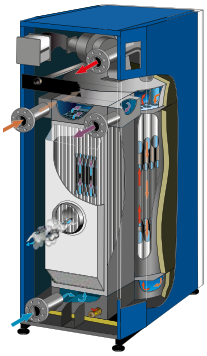
ygnis
The expert reference

VARMAX



VARMAX 2/3 TAPS

VARMAX 4 TAPS



SUPPLIED AS STANDARD WITH

- Stainless steel firebox with 2, 3 or 4 connection taps
- Modulating gas burner with total premix (G20/G25), modulation rate of 20 to 100%
- Ergonomic interface in clear text
- Navistem B3000 regulator
- Anti-return valve on the exhaust circuit
- Air filter (for connection to B23 or B23p flue)
- Start and return boiler temperature sensors, exhaust sensor
- Multiblock gas with air/gas ratio with regulator, filter, minimum gas pressure sensor
- Active control of flame ionization
- Levelling feet
- Natural gas supply 20 mbar to 300 mbar
- Runs onpropane in B23/B23p up to 320 kW (order the 20 mbar version)
- Solution for slinging

ACCESSORIES

- Outlet valve connection kit C13/C33 (up to VARMAX 225), C53
- Casters for installation (up to VARMAX 225)
- Plinth kit
- Counter-flanges kit
- Set of shock-absorbing feet
- Condensates neutralization Kit
- Magnetic sludge filter Mag'net

DETAILS

- Power supply 230 V 50 Hz
- Maximum flow setpoint temperature 85° C

WARRANTY

- Heating element: 3 years warranty can be extended to 10 years
- Electrical equipment + burner: 2 years

TECHNICAL CHARACTERISTICS AND PERFORMANCE

CHARACTERISTICS	Unit	Models							
		120	140	180	225	275	320	390	450
Rated effective power at 80/60°C (Pn)	kW	117	136	175	219	268	312	381	439
Rated effective power at 50/30°C	kW	127	148	191	238	290	338	415	478
Useful intermediary power at 30% charge	kW	39	46	59	74	89	104	127	147
Effective certified efficiency on PCI at 100% load (80/60°C)	%	97.7	97.7	97.6	97.6	97.9	97.9	97.8	97.8
Effective certified efficiency on PCI at 30% load (30°C return)	%	108.8	108.8	109.1	109.1	108	108	108.9	108.9
Power consumption of auxiliaries at Pn	W	204	311	179	320	238	352	480	660
Power consumption of auxiliaries at no-load	W	5	5	5	5	5	5	5	5
Loss at stop (T = 30K)	W	182	182	213	213	259	259	311	311
Min operating temperature	°C	22	22	24	24	20	20	23	23
Max flow setpoint temperature	°C	85							
Nox emissions (according to EN 656 and EN 13836)	mg/kWh	30 (Class 5)				40 (Class 5)		35 (Class 5)	
Load losses at flow rate P/20 (exchanger + condenser)	daPa	600	750	570	810	820	1185	770	970
Load losses at flow rate P/20 (main exchanger)	daPa	500	650	440	660	790	1060	660	840
Load losses at flow rate P/20 (condenser)	daPa	110	120	55	75	50	65	190	230
Operating pressure	bar	6							
Water volume	L	116	116	151	151	239	239	287	287
Net weight (without packaging and fume kit)	kg	340		393		502		592	

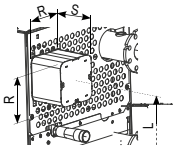
DIMENSIONAL CHARACTERISTICS

VARMAX DIMENSIONS (H x W x D)	Unit	Models							
		120	140	180	225	275	320	390	450
Dimensions of the product installed (feet adjusted to 60 mm max)	mm	1590 x 734 x 1189		1840 x 734 x 1218		1937 x 812 x 1341		2083 x 912 x 1392	
Product dimensions stripped* (without adjustable feet)	mm	1530 x 696 x 1151		1780 x 696 x 1180		1877 x 737** x 1295		2023 x 787 x 1348	
Minimum dimensions achievable using the VARMAX disassembly/assembly assistance service p.12	mm	1271 x 540 x 1085		1620 x 556 x 1114		1677 x 675 x 1237		1944 x 726 x 1290	

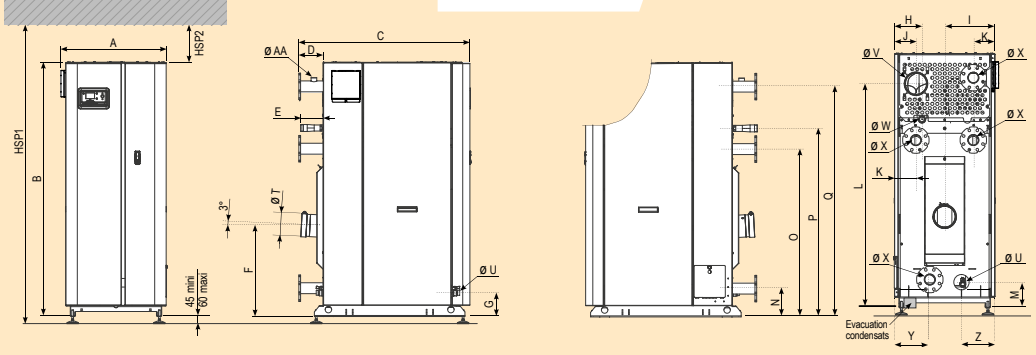
*Dimensions indicated correspond to minimum overall dimensions obtained after removal of certain elements: contact us.
**For the 275 kW and 320 kW models, the removal of additional elements makes it possible to achieve a minimum width of 692 mm: contact us

VARMAX DIMENSIONS (in mm, inch)	Reference	Unit	Models							
			120	140	180	225	275	320	390	450
Overall Width	A	mm	734		734		812		912	
Height (without feet)	B	mm	1530		1780		1877		2023	
Overall depth	C	mm	1189		1218		1341		1392	
Hot water outlet	D	mm	148		169		169		168	
Gas inlet	E	mm	103		150		109		92	
Exhaust evacuation	F	mm	510		630		680		750	
Front drain	G	mm	138.5		138.5		138.5		138.5	
Gas inlet	H	mm	115		192		241		274.5	
Min under ceiling height (from the floor)	Under ceiling height 1	mm	1740		2160		2200		2500	
Min under ceiling height (from the top of the boiler)	Under ceiling height 2*	mm	150		320		263		427	
Exhaust evacuation	I	mm	350.5		350.5		399.5		449.5	
Combustion air inlet	J	mm	150.5		150.5		200		209.5	
Hot water outlet or condenser outlet 4 taps or High temperature return 3 taps or Low temperature return 4 taps	K	mm	166.5		150.5		179		192	
Combustion air inlet	L	mm	1256		1564		1672		1874	
Rear drain	M	mm	165		165		165		165	
Low temperature return 2/3 taps or Condenser return 4 taps (low temperature return 4 taps)	N	mm	182		197.5		196.5		206.5	
High temperature return 3 taps or Low temperature return 4 taps or Condenser outlet 4 taps	0	mm	926		1171		1265		1402	
Gas inlet	P	mm	1062		1315		1413		1577.5	
Hot water outlet	Q	mm	1298		1606		1661		1933	
Air filter (not mounted)	R	mm	212		212		244		244	
Air filter (not mounted)	S	mm	163		163		163		183	
Exhaust evacuation	ØT**	mm	150		150		180		200	
Drains	ØU		1"		1"		1"		1"	
Air intake:	ØV**	mm	150		150		180		180	
Gas inlet	ØW	20 mbar	1"1/4		1"1/2		2"		2"	
		300 mbar	1"1/4		1"1/4		1"1/4		1"1/4	
Taps	ØX		2"		DN65		DN80		DN80	
Low temperature return 2/3 taps or Condenser return 4 taps	Y	mm	250.5		247		276		289.5	
Rear drain	Z	mm	237		224.5		270.5		283.5	
Safety valve tap	ØAA		1"		1"		1"1/4		1"1/4	

* dimension between cover and ceiling ** The specified diameter is the inside diameter (only for the dimensions ØT and ØV)



dimensions of the air filter (B23 - B23p)



Front view | Left side view | Right side view | Back view

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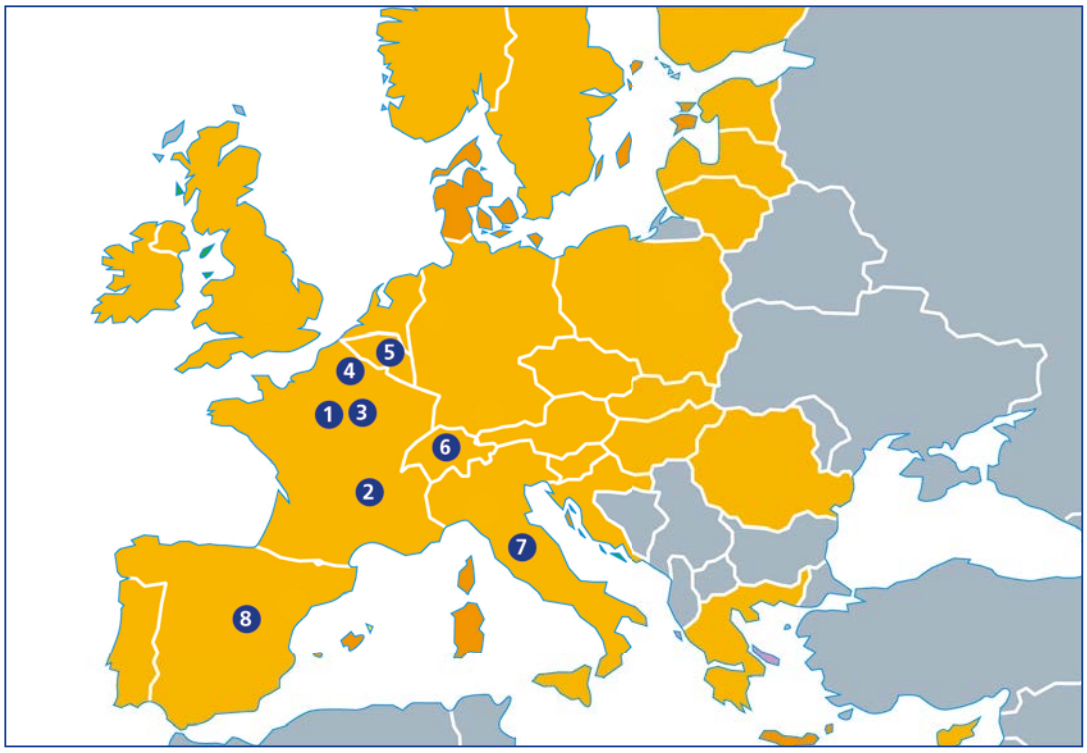
The expert reference

Presence in Europe



1. Ygnis head office – Bourg-la-Reine, France
2. Ygnis boiler factory – Pont-de-Vaux, France
3. Ygnis plate heat exchanger and heating equipment factory - Aulnay-sous-Bois, France
4. Ygnis boiler and DHW tank factory – Cauroir, France
5. Ygnis Belgium
6. Ygnis Switzerland
7. Ygnis Italy
8. Ygnis Spain

58, avenue du Général Leclerc
92340 BOURG LA REINE - FRANCE
Tel: +(33)1 46 83 60 00
Fax: +(33)1 46 83 60 01
www.ygnis.com

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