

TYPE J - INDEPENDENT BOILERS

Special Note The rated output of independent boilers indicates the heat released to water and may or may not take account of the additional useful heat released as direct space heating to the room in which the appliance is installed depending on the standard to which the appliance has been tested. In addition to heating water, the boiler itself may provide space heating to the room by up to 6% of the published water heating rating. Boilers in this Part may be Tested to a number of accepted standards. The choice depends on the fuels they burn, its method of feeding and the siting and use to which the appliance is to be put. For each appliance the icons identify the specific standard used for testing. Where the standard requires a direct space heating output to the living area to be measured this will also be quoted and will be included in the gross efficiency figure.

The actual amount of direct space heating provided at any time will vary with the rate at which a boiler is run. In cold weather a generally faster burning rate results in more direct space heating. For the selection of suitable chimneys see the preface to *Part 2 - Factory Made Chimneys and Chimney Lining Systems*

J2

Boilers - Wood Logs

MCS APPROVED PRODUCT











































Domestic independent boilers under this category have developed significantly over recent years and compare favourably with oil boilers. These biomass boilers are classed as being able to provide renewable energy and are incentivised under Government initiatives to contribute to carbon reduction from heating appliances. Boilers identified with the HETAS MCS product logo have been approved under the MCS product standard and are eligible to receive RHI funding. See www.hetas.co.uk/professionals/installers/mcs-installer for details.

Approved Fuels

Fuels regarded as suitable for the appliances in this section are listed, as approved closed appliance fuels, in *Part 3 - Wood, Biomass & Solid Mineral Fuels* of this Guide. Refer to the **Appliance Feature Icon** area for variations including wood log burning and appliances that are designed to burn only specialized wood pellets. **It should be noted that bituminous coal and wood in any of its forms including pellets is not by law permitted to be burned on appliances in Smoke Control Areas, except where the appliance has been exempted under Part II (4) of the Clean Air Act, 1993. These exempted appliances are**

designated thus  in this list.

TYPE J2 - BATCH FED INDEPENDENT BOILERS - WOOD LOGS

APPLIANCE NAME	HETAS ID	ICONS	FUEL TYPE	RATED OUTPUT kW WATER	EFFICIENCY % GROSS / NET	PRODUCT IMAGE
Central Boiler Inc. 20502 160th Street, Greenbush, Minnesota 56726, U.S.A				+1 218-782-2575 Karl@CentralBoiler.com www.centralboiler.com		
Classic Edge 300	J22185	       	Wood	30.0	82.9 / 91.2	
<i>Direct fired complete with build in buffer store. Adjust automatically to regulate output to heat demand using 3 stage combustion system. Tested to EN 303-5. Integral hot water store. Controls to regulate output to demand.</i>						
CRANP-KOVO, Spol. S r.o. (Distr. By Eco Angus Ltd) Unit 3G, Burnett Industrial Estate, Coxs Green, Wrington, North Somerset, BS40 5QR				01934 862 642 info@ecoangus.co.uk www.ecoangus.co.uk		
Angus Super 25kW	J20562	       	Wood	25.0	82.5 / 90.7	
Angus Orligno 200 25kW	J20613	       	Wood	25.0	82.5 / 90.7	
<i>Combustion is controlled via the boiler water temperature and a flue gas sensor ensures automatic shut down of combustion air fan after combustion has finished. Tested to EN 303-5.</i>						
Windhager UK Tormarton Road, Marshfield, South Gloucestershire, SN14 8SR				01225 892 211 admindesk@windhager.co.uk www.windhager.co.uk		
LogWIN Premium 180	J20466	        	Wood	17.8	83.3 / 91.5	
<i>Tested to BS EN 303-5.</i>						

APPLIANCE NAME	HETAS ID	ICONS	FUEL TYPE	RATED OUTPUT KW WATER	EFFICIENCY % GROSS / NET	PRODUCT IMAGE
Windhager UK Tormarton Road, Marshfield, South Gloucestershire, SN14 8SR				01225 892 211 admindesk@windhager.co.uk www.windhager.co.uk		
LogWIN Premium 250	J20467		Wood	25.0	83.5 / 91.8	
<i>Tested to BS EN 303-5.</i>						
LogWIN Premium 300	J20468		Wood	31.1	83.7 / 92.0	
<i>Tested to BS EN 303-5.</i>						
LogWIN Premium 360	J20469		Wood	35.6	82.7 / 90.9	
<i>Tested to BS EN 303-5.</i>						
LogWIN Premium 500	J20470		Wood	49.7	82.0 / 90.1	
<i>Tested to BS EN 303-5.</i>						
LogWIN Klassik 180	J21287		Wood	18.0	82.6 / 90.8	
<i>Tested to BS EN 303-5.</i>						
LogWIN Klassik 250	J21288		Wood	25.0	82.5 / 90.7	
<i>Tested to BS EN 303-5.</i>						
LogWIN Klassik 300	J21289		Wood	30.0	82.5 / 90.7	
<i>Tested to BS EN 303-5.</i>						
Zero Ridge Ltd. Much Marcle, Herefordshire, UK				+44 (0)1531 584 000 info@zeroridge.co.uk www.zerobiomass.co.uk		
Euro 45 kW	J22123		Wood	45.0	82.2 / 90.3	
<i>Tested to BS EN 303-5</i>						
Thermodual TDA 25	J22124		Wood	30.0	85.1 / 93.5	
<i>Dual Fuel source. The performance data given here is for burning wood logs by manual filling. The pellet burner is used to ignite the manual loaded logs and will also automatically fire, once the logs have been consumed, to meet any additional demands for heat from the system.</i>						
Thermodual TDA 40	J22125		Wood	38.0	81.4 / 89.5	
<i>Dual Fuel source. The performance data given here is for burning wood logs by manual filling. The pellet burner is used to ignite the manual loaded logs and will also automatically fire, once the logs have been consumed, to meet any additional demands for heat from the system.</i>						
R 20	J22126		Wood	20.0	83.1 / 91.3	
<i>Tested to BS EN 303-5</i>						
F 30	J22351		Wood	30.4	84.7 / 93.1	
<i>Tested to BS EN 303-5</i>						
F 40	J22352		Wood	40.0	84.7 / 93.1	
<i>Tested to BS EN 303-5</i>						

J2

Boilers - Wood Logs

TYPE J5 - AUTOMATIC FEED INDEPENDENT BOILERS - WOOD PELLETS OR CHIPS


















The boilers listed in this section are designed to burn only specialised manufactured pelletised wood fuels (wood pellets) or carefully dried and sized wood chips. Automatic fuel feeding is usually effected by means of a motorized auger from a manually filled storage hopper. The method of feeding the fire may be from underneath (sometimes called an underfeed stoker) or fuel may "drop in" from above the firebed or be fed in from the side.

The boilers will have electronic control of the output via the fuel feeding rate which will be regulated by the demand for heat placed upon the system. They are designed for providing both central heating and hot water services through the heating controls in a fully pumped system. Domestic hot water must always be heated via an indirect cylinder. Rated outputs are based on the heat given to water and the efficiency values are direct water heating efficiency except when a Direct Room Heating output is quoted as in the case when testing to BS EN 14785 (see also special note at the beginning of Part J). The Standard for testing used is quoted for each appliance. All boilers will be fitted with thermostats for control of water temperatures and overheating of the system will be protected by safety temperature limiters.

Larger boilers are often designed for installation in their own boiler room and sometimes they will require an additional separate building to house a large hopper and fuel-feed system. With these larger boilers the installation of the hot water system will usually require a heat storage buffer (accumulator and energy management controls. Manufacturer's will provide all the necessary technical information regarding this in their installation and operating instructions. As a result of the high efficiencies at which these boilers can operate the flue temperatures may be much lower than is conventional for solid fuel appliances. The manufacturer is required to provide the necessary technical information regarding the designation of the flue liner or chimney flue that should be installed with the boiler. These will where necessary require special systems to tolerate condensate attack and will be soot fire resistance.

J5

























Boilers - Pellet or Chip

APPLIANCE NAME	HETAS ID	ICONS	OUTPUT MODE	RATED OUTPUT kW WATER	EFFICIENCY % GROSS / NET	PRODUCT IMAGE
CRANP-KOVO, Spol. S r.o. (Distr. By Eco Angus Ltd) Unit 3G, Burnett Industrial Estate, Coxs Green, Wrington, North Somerset, BS40 5QR				01934 862 642 info@ecoangus.co.uk www.ecoangus.co.uk		
Angus Orligno 400 16kW	J51328		Full Load	16.0	82.2 / 89.4	
Tested to BS EN 303-5.			Part Load	4.0	81.6 / 88.7	
Angus Orligno 400 30kW	J51329		Full Load	30.0	84.5 / 91.8	
Tested to BS EN 303-5.			Part Load	7.8	85.6 / 93.0	
Firebird Heating Ltd Langage Industrial Estate, Plymton, Plymouth, PL75ET				01752 691 177 sales@firebird.uk.com www.firebird.uk.com		
Tavistock 12	J51942		Full Load	11.4	84.7 / 92.0	
Tested to BS EN 303-5.			Part Load	3.1	84.7 / 92.1	
Tavistock 18	J51943		Full Load	16.5	84.0 / 91.3	
Tested to BS EN 303-5.			Part Load	3.1	84.7 / 92.1	
Tavistock 24	J51944		Full Load	22.0	82.8 / 90.3	
Tested to BS EN 303-5.			Part Load	6.1	82.8 / 90.3	
Tavistock 35	J51945		Full Load	30.8	83.0 / 90.2	
Tested to BS EN 303-5.			Part Load	6.1	83.0 / 90.3	
Nordica Extraflame Via Summano 104, 36030, Montecchio Precalino (VI), Italy				+39 0445 804000 info@lanordica.com www.lanordica-extraflame.com		
PK 15	J52348		Full Load	15.0	85.5 / 93.0	
			Part Load	4.1	80.7 / 87.7	

APPLIANCE NAME	HETAS ID	ICONS	OUTPUT MODE	RATED OUTPUT KW WATER	EFFICIENCY % GROSS / NET	PRODUCT IMAGE
Nordica Extraflame Via Summano 104, 36030, Montecchio Precalino (VI), Italy		 Riscaldala la vita.		+39 0445 804000 info@lanordica.com www.lanordica-extraflame.com		
PK 20	J52349		Full Load	20.0	85.0 / 92.4	
			Part Load	5.7	81.3 / 88.4	
PK 30	J52350		Full Load	30.0	85.0 / 92.4	
			Part Load	8.9	85.3 / 92.7	
Warmflow Engineering Ltd Lissue Industrial Estate, Moira Road, Lisburn, Northern Ireland, BT28 2RF				028 9262 1515 info@warmflow.co.uk www.warmflow.co.uk		
WS18	J51305		Full Load	18.0	85.7 / 92.9	
WP18	J51306		Part Load	4.0	83.1 / 90.1	
Tested to EN 303-5.						
Windhager UK Tormarton Road, Marshfield, South Gloucestershire, SN14 8SR		 SINCE 1921 HEAT WITH VISION		01225 892 211 admindesk@windhager.co.uk www.windhager.co.uk		
BioWIN 102 Klassik	J51238		Full Load	9.9	86.8 / 94.4	
BioWIN 102 Premium	J51239		Part Load	3.0	82.4 / 89.6	
BioWIN 102 Exklusiv	J51240					
Tested to EN 303-5.						
BioWIN 152 Klassik	J51241		Full Load	15.0	86.3 / 93.8	
BioWIN 152 Premium	J51242		Part Load	4.3	84.6 / 92.0	
BioWIN 152 Exklusiv	J51243					
Tested to EN 303-5.						
BioWIN 212 Klassik	J51244		Full Load	21.0	86.3 / 93.8	
BioWIN 212 Premium	J51245		Part Load	6.3	84.6 / 92.0	
BioWIN 212 Exklusiv	J51246					
Tested to EN 303-5.						
BioWIN 262 Klassik	J51247		Full Load	25.9	86.4 / 93.9	
BioWIN 262 Premium	J51248		Part Load	7.6	86.3 / 93.8	
BioWIN 262 Exklusiv	J51249					
Tested to EN 303-5.						
BioWIN Excel 350	J51284		Full Load	35.0	83.9 / 91.2	
Tested to EN 303-5.			Part Load	10.0	81.7 / 88.8	
BioWIN Excel 450	J51285		Full Load	45.0	83.4 / 90.7	
Tested to EN 303-5.			Part Load	13.5	82.2 / 89.3	
BioWIN Excel 600	J51286		Full Load	60.0	82.9 / 90.1	
Tested to EN 303-5.			Part Load	18.0	82.8 / 90.0	
BioWIN 332 Exklusiv	J51635		Full Load	32.5	87.2 / 94.8	
Tested to EN 303-5.		Part Load	9.8	88.0 / 95.7		

J5

Boilers - Pellet or Chip

APPLIANCE NAME	HETAS ID	ICONS	OUTPUT MODE	RATED OUTPUT kW WATER	EFFICIENCY % GROSS / NET	PRODUCT IMAGE
Windhager UK Tormarton Road, Marshfield, South Gloucestershire, SN14 8SR				01225 892 211 admin@windhager.co.uk www.windhager.co.uk		
BioWIN Lite 102	J51636		Full Load	9.9	86.8 / 94.4	
			Part Load	3.0	82.6 / 89.6	
<i>Tested to EN 303-5.</i>						
BioWIN Lite 152	J51637		Full Load	15.0	86.3 / 93.8	
			Part Load	4.3	84.6 / 92.0	
<i>Tested to EN 303-5.</i>						
BioWIN Lite 212	J51638		Full Load	21.0	86.4 / 93.9	
			Part Load	6.3	85.7 / 93.1	
<i>Tested to EN 303-5.</i>						
BioWIN Lite 262	J51639		Full Load	25.9	86.4 / 93.9	
			Part Load	7.6	86.3 / 93.8	
<i>Tested to EN 303-5.</i>						
PuroWIN PW 24	J51655		Full Load	24.0	85.1 / 93.5	
			Part Load	7.2	85.0 / 93.4	
<i>Tested to EN 303-5.</i>						
PuroWIN PW 30	J51656		Full Load	30.0	85.0 / 93.4	
			Part Load	9.0	84.6 / 93.0	
<i>Tested to EN 303-5.</i>						
PuroWIN PW 40	J51657		Full Load	40.0	85.4 / 93.8	
			Part Load	12.0	85.2 / 93.6	
<i>Tested to EN 303-5.</i>						
PuroWIN PW 49	J51658		Full Load	49.0	85.7 / 94.2	
			Part Load	14.7	85.5 / 94.0	
<i>Tested to EN 303-5.</i>						
PuroWIN PW 60	J51659		Full Load	60.0	86.2 / 94.7	
			Part Load	18.0	86.0 / 94.5	
<i>Tested to EN 303-5.</i>						
Zero Ridge Ltd. Much Marcle, Herefordshire, UK				+44 (0)1531 584 000 info@zeroridge.co.uk www.zerobiomass.co.uk		
K Series 26 v2	J52129		Full Load	25.9	86.4 / 93.9	
			Part Load	7.6	86.3 / 93.8	
<i>Tested to BS EN 303-5</i>						
Thermodual TDA 25	J52130		Full Load	25.5	84.4 / 91.7	
			Part Load	8.0	84.4 / 91.7	
<i>Dual fuel source. The performance data given here is for automatic firing on wood pellets</i>						

TYPE J6 - CONDENSING BIOMASS BOILERS

This section lists approved automatic pellet fed independent boilers that under normal operating conditions, and at certain operating water temperatures have the facility to partially condense the water vapour contained within the products of combustion, making use of the latent heat for heating purposes. The liquid condensate formed within the heat exchanger is discharged from the appliance via a condensate drain to a suitable foul water system.

The performance for these appliances is given when operating both with condensation and also without condensation. Boilers of this type incorporate a "wash down" system which uses mains water to wash through the condensate drainage system to ensure it is kept clear of any deposits which might cause blockage.














There is no harmonised testing standard that applies specifically to condensing biomass boilers at present.

The Microgeneration Certification Scheme (MCS) certifies condensing pellet fired boilers against the requirements of their own published scheme standard MCS008 and it Annex A. The Annex details the extra performance and construction requirements, specific to condensing wood pellet fired boilers, and additional to the requirements for CE marking of non-condensing independent boilers, of the standard BS EN 303-5. For HETAS approval of these appliances, the same approach has been adopted.

Approved Fuels

The permitted fuel to be used on this type of appliance is limited to wood pellets certified to EN 14961-2 class A1 in order to ensure their safe and correct operation.

Please Note: These appliances are essentially automatic fed independent boilers when operated in non-condensing mode, and the introductory notes within Section J5 of this guide should be taken into consideration along with the notes given above.

APPLIANCE NAME	HETAS ID	ICONS	OUTPUT MODE	RATED OUTPUT KW WATER	EFFICIENCY % GROSS / NET	PRODUCT IMAGE
Grant Engineering (UK) Ltd Hopton House, Hopton Industrial Estate, Devizes, SN10 2EU				01380 736920 info@grantuk.com www.grantuk.com		
Grant Spira 5-18kW (Performance without Condensation)	J61487		Full Load	17.8	87.9 / 95.5	
			Part Load	5.6	83.0 / 90.2	
<i>Tested to BS EN 303-5 and Annex A of MCS 008.</i>						
Grant Spira 6-26kW (Performance without Condensation)	J61488		Full Load	26.0	86.7 / 94.2	
			Part Load	8.0	88.7 / 96.4	
<i>Tested to BS EN 303-5 and Annex A of MCS 008.</i>						
Grant Spira 9-36kW (Performance without Condensation)	J61489		Full Load	36.0	85.7 / 93.2	
			Part Load	11.0	90.3 / 98.1	
<i>Tested to BS EN 303-5 and Annex A of MCS 008.</i>						
Grant Spira 5-18kW (Performance with Condensation)	J61596		Full Load	17.8	92.0 / 100.0	
			Part Load	5.6	89.2 / 97.0	
<i>Tested to BS EN 303-5 and Annex A of MCS 008.</i>						
Grant Spira 6-26kW (Performance with Condensation)	J61597		Full Load	26.0	92.2 / 100.2	
			Part Load	8.0	91.1 / 99.0	
<i>Tested to BS EN 303-5 and Annex A of MCS 008.</i>						
Grant Spira 9-36kW (Performance with Condensation)	J61598		Full Load	36.0	92.5 / 100.5	
			Part Load	11.0	95.3 / 100.3	
<i>Tested to BS EN 303-5 and Annex A of MCS 008.</i>						