

Single boiler:

Energy efficiency class	A+
Rated heat output (kW).....	15,0
Energy efficiency index (EEI).....	112
Seasonal space heating energy efficiency (%).....	75

Composite system: (Boiler + regulator)

Energy efficiency class combine.....	A+
Energy efficiency index (EEI) combine.....	116

Model identifier	Biostar 12
Valid from year	2020
Start mode	automatic
Condensing boiler.....	No
Solid fuel boiler with combined heat and power	No
Combi heater	Yes
Recommended hot water tank size.....	300 liter

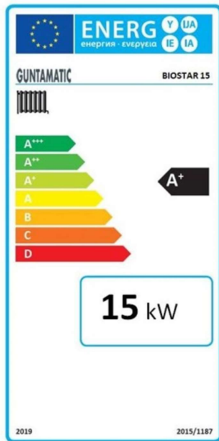
Biostar 12
2020
automatic
No
No
Yes
300 liter

Fuel according Norm	EN 17225-2 pellets	preferred fuel	other suitable fuel	seasonal space heating energy efficiency	seasonal space heating emissions according EN 303-5 (mg/m ³)			
					η_s (%)	PM	OGC	CO
Wood Pellets EN plus A1 = commercial fuel		X		≥ 75	≤ 40	≤ 20	≤ 500	≤ 200
Wood Pellets EN plus A1 = with ideal fuel , version for condensing fireplace (low in potassium, without bark, hardly fines, maximum best values)		X		75	26	< 1	148	135

Properties when operating with the preferred fuel

Usable heat at nominal heat output	P_n	15,0	kW
Usable heat at 30% / 50% nominal heat output.....	P_p	4,5	kW
Fuel efficiency at nominal output.....	η_n	93,2	%
Fuel efficiency at 30% / 50% of nominal output.....	η_p	93,9	%
Auxiliary power consumption at nominal heat output	$e_{l,max}$	0,10	kW
Auxiliary power consumption at 30% / 50% of nominal output.....	$e_{l,min}$	0,05	kW
Auxiliary power consumption of integrated components for emission reduction.....	---	---	kW
Auxiliary power consumption in standby mode	P_{SB}	0,01	kW
Electrical efficiency with combined heat and power at nominal heat output	$\eta_{el,n}$	---	%

P_n	15,0	kW
P_p	4,5	kW
η_n	93,2	%
η_p	93,9	%
$e_{l,max}$	0,10	kW
$e_{l,min}$	0,05	kW
---	---	kW
P_{SB}	0,01	kW
$\eta_{el,n}$	---	%



Single boiler:

Energy efficiency class	A+
Rated heat output (kW).....	15,0
Energy efficiency index (EEI).....	112
Seasonal space heating energy efficiency (%).....	75

Composite system: (Boiler + regulator)

Energy efficiency class combine.....	A+
Energy efficiency index (EEI) combine.....	116

Model identifier	Biostar 15
Valid from year	2020
Start mode	automatic
Condensing boiler.....	No
Solid fuel boiler with combined heat and power	No
Combi heater	Yes
Recommended hot water tank size.....	300 liter

Biostar 15
2020
automatic
No
No
Yes
300 liter

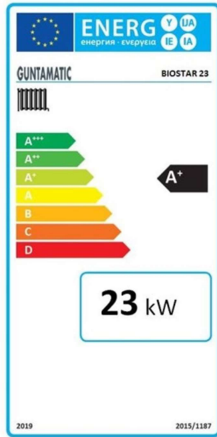
Fuel according Norm	EN 17225-2 pellets	preferred fuel	other suitable fuel	seasonal space heating energy efficiency	seasonal space heating emissions according EN 303-5 (mg/m ³)			
					η_s (%)	PM	OGC	CO
Wood Pellets EN plus A1 = commercial fuel		X		≥ 75	≤ 40	≤ 20	≤ 500	≤ 200
Wood Pellets EN plus A1 = with ideal fuel , version for condensing fireplace (low in potassium, without bark, hardly fines, maximum best values)		X		75	26	< 1	148	135

Properties when operating with the preferred fuel

Usable heat at nominal heat output	P_n	15,0	kW
Usable heat at 30% / 50% nominal heat output.....	P_p	4,5	kW
Fuel efficiency at nominal output.....	η_n	93,2	%
Fuel efficiency at 30% / 50% of nominal output.....	η_p	93,9	%
Auxiliary power consumption at nominal heat output	e_{lmax}	0,10	kW
Auxiliary power consumption at 30% / 50% of nominal output.....	e_{lmin}	0,05	kW
Auxiliary power consumption of integrated components for emission reduction.....	---	---	kW
Auxiliary power consumption in standby mode	P_{SB}	0,01	kW
Electrical efficiency with combined heat and power at nominal heat output	$\eta_{el,n}$	---	%

P_n	15,0	kW
P_p	4,5	kW
η_n	93,2	%
η_p	93,9	%
e_{lmax}	0,10	kW
e_{lmin}	0,05	kW
---	---	kW
P_{SB}	0,01	kW
$\eta_{el,n}$	---	%

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Single boiler:

Energy efficiency class	A+
Rated heat output (kW).....	23,0
Energy efficiency index (EEI).....	113
Seasonal space heating energy efficiency (%).....	77

Composite system: (Boiler + regulator)

Energy efficiency class combine.....	A+
Energy efficiency index (EEI) combine.....	117

Model identifier	Biostar 23
Valid from year	2020
Start mode	automatic
Condensing boiler.....	No
Solid fuel boiler with combined heat and power	No
Combi heater	Yes
Recommended hot water tank size.....	460 liter

Biostar 23
2020
automatic
No
No
Yes
460 liter

Fuel according Norm	EN 17225-2 pellets	preferred fuel	other suitable fuel	seasonal space heating energy efficiency	seasonal space heating emissions according EN 303-5 (mg/m ³)			
					η_s (%)	PM	OGC	CO
Wood Pellets EN plus A1 = commercial fuel		X		≥ 77	≤ 40	≤ 20	≤ 500	≤ 200
Wood Pellets EN plus A1 = with ideal fuel , version for condensing fireplace (low in potassium, without bark, hardly fines, maximum best values)		X		77	26	< 1	147	137

Properties when operating with the preferred fuel

Usable heat at nominal heat output	P_n	23,0	kW
Usable heat at 30% / 50% nominal heat output.....	P_p	4,5	kW
Fuel efficiency at nominal output.....	η_n	90,1	%
Fuel efficiency at 30% / 50% of nominal output.....	η_p	93,9	%
Auxiliary power consumption at nominal heat output	$e_{l_{max}}$	0,21	kW
Auxiliary power consumption at 30% / 50% of nominal output.....	$e_{l_{min}}$	0,05	kW
Auxiliary power consumption of integrated components for emission reduction.....	---	---	kW
Auxiliary power consumption in standby mode	P_{SB}	0,01	kW
Electrical efficiency with combined heat and power at nominal heat output	$\eta_{el,n}$	---	%

P_n	23,0	kW
P_p	4,5	kW
η_n	90,1	%
η_p	93,9	%
$e_{l_{max}}$	0,21	kW
$e_{l_{min}}$	0,05	kW
---	---	kW
P_{SB}	0,01	kW
$\eta_{el,n}$	---	%

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