

## 1. TECHNICAL SPECIFICATIONS

Model: SIRIUS THREE		WH-50	WH-60	WH-70
Category		II <sub>2H3P</sub>		
Gas used Natural Gas and LPG	-	G20 - G31		
Rated heat input	kW	46,3	56,6	66,9
Reduced heat input	kW	5,1	6,3	7,4
Rated heat output 80/60°C	kW	45	55	65
Rated heat output 50/30 °C	kW	48,6	59,4	70,2
Reduced heat output 80/60 °C	kW	5,0	6,1	7,2
Reduced heat output 50/30 °C	kW	5,4	6,6	7,8
Net Rated efficiency 50/30 °C	%	105,0	105,0	105,0
Max. water pressure in heating circuit	bar	4		
Min. water pressure in heating circuit	bar	1		
Capacity of boiler circuit (volume of water)	l	4	5	6
Temperature range in heating circuit	°C	25 - 80		
Flue Types	-	C13 - C33 - B23		
Concentric flue duct diameter	mm	80/125		
Max. mass flow rate of flue	kg/s	0,021	0,026	0,031
Min. mass flow rate of flue	kg/s	0,002	0,003	0,004
Max. temperature of flue	°C	92	96	76
NOx Class	-	6		
Natural gas supply pressure 2H (G20)	mbar	20		
Propane gas supply pressure 3P (G31)	mbar	37		
Power supply voltage	V	230		
Power supply frequency	Hz	50		
Rated power supply (Without Pump)		W	80	95
Rated power supply (With Pump)		W	230	230
Net weight (empty)	kg	40	40	50
Dimensions - height	mm	766		
- width	mm	450		
- depth	mm	377	377	505
Protection-limit against humidity (EN 60529)	-	IPX5D		
EC certificate	Nr.	0085CM0128		

CONSUMPTION AT HEAT INPUT Qmax and Qmin

Qmax (G20) - 2H	m <sup>3</sup> /h	4,90	5,98	7,07
Qmin (G20) - 2H	m <sup>3</sup> /h	0,54	0,67	0,78
Qmax (G31) - 3P	kg/h	3,60	4,40	5,20
Qmin (G31) - 3P	kg/h	0,40	0,49	0,57

## 1.1 TECHNICAL PARAMETERS

POTTERTON COMMERCIAL			SIRIUS THREE WH-50	SIRIUS THREE WH-60	SIRIUS THREE WH-70
Condensing boiler			Yes	Yes	Yes
Low-temperature boiler <sup>(1)</sup>			No	No	No
B1 boiler			No	No	No
Cogeneration space heater			No	No	No
Combination heater			No	No	No
<b>Rated heat output</b>	<i>P<sub>rated</sub></i>	kW	45	55	65
Useful heat output at rated heat output and high temperature regime <sup>(2)</sup>	<i>P<sub>4</sub></i>	kW	45.0	55.0	65.0
Useful heat output at 30% of rated heat output and low temperature regime <sup>(1)</sup>	<i>P<sub>f</sub></i>	kW	15.0	18.4	21.7
<b>Seasonal space heating energy efficiency</b>	<i>η<sub>s</sub></i>	%	93	92	93
Useful efficiency at rated heat output and high temperature regime <sup>(2)</sup>	<i>η<sub>4</sub></i>	%	87.7	87.6	87.6
Useful efficiency at 30% of rated heat output and low temperature regime <sup>(1)</sup>	<i>η<sub>f</sub></i>	%	97.7	97.4	97.4
<b>Auxiliary electricity consumption</b>					
Full load	<i>e<sub>max</sub></i>	kW	0.080	0.095	0.095
Part load	<i>e<sub>min</sub></i>	kW	0.020	0.020	0.020
Standby mode	<i>P<sub>SB</sub></i>	kW	0.003	0.003	0.003
<b>Other items</b>					
Standby heat loss	<i>P<sub>stby</sub></i>	kW	0.064	0.070	0.075
Ignition burner power consumption	<i>P<sub>ign</sub></i>	kW	0.000	0.000	0.000
Annual energy consumption	<i>Q<sub>HE</sub></i>	GJ	139	172	201
Sound power level, indoors	<i>L<sub>WA</sub></i>	dB	62	59	62
Emissions of nitrogen oxides	<i>NO<sub>x</sub></i>	mg/kWh	29	31	31
<b>Domestic hot water parameters</b>					
<b>Declared load profile</b>					
Daily electricity consumption	<i>Q<sub>elec</sub></i>	kWh			
Annual electricity consumption	<i>AEC</i>	kWh			
<b>Water heating energy efficiency</b>	<i>η<sub>wh</sub></i>	%			
Daily fuel consumption	<i>Q<sub>fuel</sub></i>	kWh			
Annual fuel consumption	<i>AFC</i>	GJ			

(1) Low temperature means for condensing boilers 30°C, for low temperature boilers 37°C and for other heaters 50°C return temperature (at heater inlet).

(2) High temperature regime means 60°C return temperature at heater inlet and 80°C feed temperature at heater outlet.