

ENVIROAIR 7.5 FICHE

According to Annex IV of COMMISSION DELEGATED REGULATION (EU) NO 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European parliament and of the council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar devices and packages of combination heater, temperature control and solar device.

Outdoor Unit Reference: **ENVIROAIR 7.5**

In Average Climatic Conditions	Seasonal Energy Efficiency class ns	A++	A++
	Normal Heating power (Kw)	7	6
	Seasonal Energy Efficiency ns (%)	164	125
	Annual energy consumption Qhe (kWh/year)	3298	3724

Manufacturer: Hitachi on behalf of **FIREBIRD PRODUCTS LTD**

Indoor Sound Power Level (dBa)

Special Precautions to take during assembly, installation, maintenance

This appliance must be installed, maintained and dismantled by professionals. Do not vent contained refrigerant into the atmosphere since this fluid is a fluorinated greenhouse gas regulated under European Regulation (EU) No 517/2014

	35°C	55°C	35°C	55°C
Nominal Heating power (Kw)	8	6	8	6
Seasonal Energy Efficiency ns (%)	148	116	219	164
Annual energy consumption Qhe (kWh/year)	4922	4987	1925	1919

Outdoor Sound Power Level (dBa)

64

The sound power level is measured in heating mode, according to standard EN12102/2013. The nominal heating capacity is equal to Pdesign requirement at Tdesign, supplemented by Psup, if needed. Data is calculated according to EN14825 Standard & EN 14511 and the commission communication 2014/C207/02

Information requirements for heat pump space heaters and heat pump combination heaters				Source: 813/2013
Model(s):	Outdoor unit: ENVIROAIR 7.5	Indoor unit: -	Tank model: -	
Air-to-water heat pump:				YES
Low-temperature heat pump:				NO
Equipped with a supplementary heater:				NO
Heat pump combination heater:				NO

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
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Average

Rated heat output ⁽³⁾	Prated	6	kW	Seasonal space heating energy efficiency	η_{hs}	125%	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = -7 °C	P _{dh}	5,1	kW	T _j = -7 °C	COP _d	1,84	-
T _j = +2 °C	P _{dh}	3,1	kW	T _j = +2 °C	COP _d	3,20	-
T _j = +7 °C	P _{dh}	2,0	kW	T _j = +7 °C	COP _d	4,45	-
T _j = +12 °C	P _{dh}	2,3	kW	T _j = +12 °C	COP _d	5,96	-
T _j = bivalent temperature	P _{dh}	5,2	kW	T _j = bivalent temperature	COP _d	1,65	-
T _j = operation limit temperature	P _{dh}	5,1	kW	T _j = operation limit temperature	COP _d	1,84	-
For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	P _{dh}	X	kW	For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	COP _d	X	-
Bivalent temperature	T _{biv}	-7	°C	For air-to-water HP : Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P _{cyh}	X	kW	Cycling interval efficiency	COP _{cyh}	X	-
				Heating water operating limit temperature	WTOL	55	°C
				Supplementary heater			
Degradation coefficient ⁽⁴⁾	C _{dh}	0,9	—	Rated heat output (3)	P _{sup}	1,5	kW
Annual Energy consumption	Q _{HE}	3724	kWh	Type of energy input		Electricity	

Colder

Rated heat output ⁽³⁾	Prated	6	kW	Seasonal space heating energy efficiency	η_{hs}	116%	%
				Supplementary heater			
Annual Energy consumption	Q _{HE}	4987	kWh	Rated heat output (3)	P _{sup}	1,2	kW
				Type of energy input		Electricity	

Warmer

Rated heat output ⁽³⁾	Prated	6	kW	Seasonal space heating energy efficiency	η_{hs}	164%	%
				Supplementary heater			
Annual Energy consumption	Q _{HE}	1919	kWh	Rated heat output (3)	P _{sup}	0	kW
				Type of energy input		Electricity	

Power consumption in modes other than active mode			
Off mode	P _{OFF}	0,015	kW
Thermostat-off mode	P _{TO}	0	kW
Standby mode	P _{SB}	0,015	kW
Crankcase heater mode	P _{CK}	0	kW

Other items			
Capacity control	fixed/variable	Variable	
Sound power level, indoors	L _{WA}	-	dB(A)
Sound power level, outdoors	L _{WA}	64	dB(A)

Outdoor heat exchanger			
For air-to-water HP: Rated air flow rate	Q _{airsource}	2682	m ³ /h
For water-to-water: Rated water flow rate	or Q _{watersource}	X	m ³ /h
For brine-to-water: Rated brine flow rate	or Q _{brinesource}	X	m ³ /h

For heat pump combination heater							
Declared load profile	-	-	—	Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q _{elec}	-	kWh	Daily fuel consumption	Q _{fuel}	X	kWh
Annual energy consumption	AEC	-	kWh				

Contact details	Firebird Products Ltd Phoenix House, Eastern Wood Road, Langage Industrial Estate Plympton, Plymouth PL7 5ET		
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Legend

(3) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(T_j).

(4) If C_{dh} is not determined by measurement then the default degradation coefficient is C_{dh} = 0,9.

ENVIROAIR 11.0 FICHE

According to Annex IV of COMMISSION DELEGATED REGULATION (EU) NO 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European parliament and of the council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar devices and packages of combination heater, temperature control and solar device.

Outdoor Unit Reference: **ENVIROAIR 11.0**

In Average Climatic Conditions	Seasonal Energy Efficiency class ns	A+++	A++
	Normal Heating power (Kw)	11	10
	Seasonal Energy Efficiency ns (%)	187	136
	Annual energy consumption Qhe (kWh/year)	4714	8515

Manufacturer: Hitachi on behalf of **FIREBIRD PRODUCTS LTD**

Indoor Sound Power Level (dBa)

Special Precautions to take during assembly, installation, maintenance

This appliance must be installed, maintained and dismantled by professionals. Do not vent contained refrigerant into the atmosphere since this fluid is a fluorinated greenhouse gas regulated under European Regulation (EU) No 517/2014

	35°C	55°C	35°C	55°C
Nominal Heating power (Kw)	12	11	11	10
Seasonal Energy Efficiency ns (%)	160	120	240	193
Annual energy consumption Qhe (kWh/year)	7230	8640	2423	2748

Outdoor Sound Power Level (dBa)

64

The sound power level is measured in heating mode, according to standard EN12102/2013. The nominal heating capacity is equal to Pdesign requirement at Tdesign, supplemented by Psup, if needed. Data is calculated according to EN14825 Standard & EN 14511 and the commission communication 2014/C207/02

Information requirements for heat pump space heaters and heat pump combination heaters				Source: 813/2013
Model(s):	Outdoor unit: ENVIROAIR 11.0	Indoor unit: -	Tank model: -	
Air-to-water heat pump:				YES
Low-temperature heat pump:				NO
Equipped with a supplementary heater:				NO
Heat pump combination heater:				NO

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
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Average

Rated heat output ⁽³⁾	Prated	10	kW	Seasonal space heating energy efficiency	η_{ls}	136%	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = -7 °C	P _{dh}	8,6	kW	T _j = -7 °C	COP _d	1,80	-
T _j = +2 °C	P _{dh}	5,2	kW	T _j = +2 °C	COP _d	3,60	-
T _j = +7 °C	P _{dh}	3,5	kW	T _j = +7 °C	COP _d	4,80	-
T _j = +12 °C	P _{dh}	3,6	kW	T _j = +12 °C	COP _d	5,80	-
T _j = bivalent temperature	P _{dh}	8,6	kW	T _j = bivalent temperature	COP _d	1,80	-
T _j = operation limit temperature	P _{dh}	7,4	kW	T _j = operation limit temperature	COP _d	1,70	-
For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	P _{dh}	X	kW	For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	COP _d	X	-
Bivalent temperature	T _{biv}	-7	°C	For air-to-water HP : Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P _{ych}	X	kW	Cycling interval efficiency	COP _{cyc}	X	-
				Heating water operating limit temperature	WTOL	55	°C
				Supplementary heater			
Degradation coefficient ⁽⁴⁾	C _{dh}	0,9	—	Rated heat output (3)	P _{sup}	2,3	kW
Annual Energy consumption	Q _{HE}	8515	kWh	Type of energy input		Electricity	

Colder

Rated heat output ⁽³⁾	Prated	11	kW	Seasonal space heating energy efficiency	η_{ls}	120%	%
				Supplementary heater			
Annual Energy consumption	Q _{HE}	8640	kWh	Rated heat output (3)	P _{sup}	2,3	kW
				Type of energy input		Electricity	

Warmer

Rated heat output ⁽³⁾	Prated	10	kW	Seasonal space heating energy efficiency	η_{ls}	193%	%
				Supplementary heater			
Annual Energy consumption	Q _{HE}	2748	kWh	Rated heat output (3)	P _{sup}	0	kW
				Type of energy input		Electricity	

Power consumption in modes other than active mode

Off mode	P _{OFF}	0,013	kW
Thermostat-off mode	P _{TO}	0	kW
Standby mode	P _{SB}	0,013	kW
Crankcase heater mode	P _{CK}	0	kW

Other items

Capacity control	fixed/variable	Variable	
Sound power level, indoors	L _{WA}	-	dB(A)
Sound power level, outdoors	L _{WA}	64	dB(A)

Outdoor heat exchanger

For air-to-water HP: Rated air flow rate	Q _{airsource}	4800	m ³ /h
For water-to-water: Rated water flow rate	or Q _{watersource}	X	m ³ /h
For brine-to-water: Rated brine flow rate	or Q _{brinesource}	X	m ³ /h

For heat pump combination heater

Declared load profile	-	-	—	Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q _{elec}	-	kWh	Daily fuel consumption	Q _{fuel}	X	kWh
Annual energy consumption	AEC	-	kWh				

Contact details	Firebird Products Ltd Phoenix House, Eastern Wood Road, Llangage Industrial Estate Plympton, Plymouth PL7 5ET						
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Legend

(3) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(T_j).

(4) If C_{dh} is not determined by measurement then the default degradation coefficient is C_{dh} = 0.9.

ENVIROAIR 14.0 FICHE

According to Annex IV of COMMISSION DELEGATED REGULATION (EU) NO 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European parliament and of the council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar devices and packages of combination heater, temperature control and solar device.

Outdoor Unit Reference: **ENVIROAIR 14.0**

In Average Climatic Conditions	Seasonal Energy Efficiency class ns	A+++	A++
	Normal Heating power (Kw)	14	12
	Seasonal Energy Efficiency ns (%)	175	133
	Annual energy consumption Qhe (kWh/year)	6313	7066

Manufacturer: Hitachi on behalf of **FIREBIRD PRODUCTS LTD**

Indoor Sound Power Level (dBa)

Special Precautions to take during assembly, installation, maintenance

This appliance must be installed, maintained and dismantled by professionals. Do not vent contained refrigerant into the atmosphere since this fluid is a fluorinated greenhouse gas regulated under European Regulation (EU) No 517/2014

	35°C	55°C	35°C	55°C
Nominal Heating power (Kw)	13	12	14	12
Seasonal Energy Efficiency ns (%)	155	119	235	183
Annual energy consumption Qhe (kWh/year)	8201	9514	3145	3454

Outdoor Sound Power Level (dBa)

65

The sound power level is measured in heating mode, according to standard EN12102/2013. The nominal heating capacity is equal to Pdesign requirement at Tdesign, supplemented by Psup, if needed. Data is calculated according to EN14825 Standard & EN 14511 and the commission communication 2014/C207/02

Information requirements for heat pump space heaters and heat pump combination heaters				Source: 813/2013
Model(s):	Outdoor unit: ENVIROAIR 14.0	Indoor unit: -	Tank model: -	
Air-to-water heat pump:				YES
Low-temperature heat pump:				NO
Equipped with a supplementary heater:				NO
Heat pump combination heater:				NO

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
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Average

Rated heat output ⁽³⁾	Prated	12	kW	Seasonal space heating energy efficiency	η_{hs}	133%	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = -7 °C	Pdh	10,3	kW	T _j = -7 °C	COPd	1,70	-
T _j = +2 °C	Pdh	6,2	kW	T _j = +2 °C	COPd	3,60	-
T _j = +7 °C	Pdh	4,0	kW	T _j = +7 °C	COPd	4,60	-
T _j = +12 °C	Pdh	3,5	kW	T _j = +12 °C	COPd	5,50	-
T _j = bivalent temperature	Pdh	10,3	kW	T _j = bivalent temperature	COPd	1,70	-
T _j = operation limit temperature	Pdh	9,0	kW	T _j = operation limit temperature	COPd	1,60	-
For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	Pdh	X	kW	For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	COPd	X	-
Bivalent temperature	Tbiv	-7	°C	For air-to-water HP : Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	Pcyc	X	kW	Cycling interval efficiency	COPcyc	X	-
				Heating water operating limit temperature	WTOL	55	°C
				Supplementary heater			
Degradation coefficient ⁽⁴⁾	Cdh	0,9	—	Rated heat output (3)	Psup	2,6	kW
Annual Energy consumption	Q _{HE}	7066	kWh	Type of energy input		Electricity	

Colder

Rated heat output ⁽³⁾	Prated	12	kW	Seasonal space heating energy efficiency	η_{hs}	119%	%
				Supplementary heater			
Annual Energy consumption	Q _{HE}	9514	kWh	Rated heat output (3)	Psup	2,8	kW
				Type of energy input		Electricity	

Warmer

Rated heat output ⁽³⁾	Prated	12	kW	Seasonal space heating energy efficiency	η_{hs}	183%	%
				Supplementary heater			
Annual Energy consumption	Q _{HE}	3454	kWh	Rated heat output (3)	Psup	0	kW
				Type of energy input		Electricity	

Power consumption in modes other than active mode			
Off mode	P _{OFF}	0,013	kW
Thermostat-off mode	P _{TO}	0	kW
Standby mode	P _{SB}	0,013	kW
Crankcase heater mode	P _{CK}	0	kW

Other items			
Capacity control	fixed/variable	Variable	
Sound power level, indoors	L _{WA}	-	dB(A)
Sound power level, outdoors	L _{WA}	65	dB(A)

Outdoor heat exchanger			
For air-to-water HP: Rated air flow rate	Q _{airsource}	5400	m ³ /h
For water-to-water: Rated water flow rate	or Q _{watersource}	X	m ³ /h
For brine-to-water: Rated brine flow rate	or Q _{brinesource}	X	m ³ /h

For heat pump combination heater			
Declared load profile	-	-	—
Daily electricity consumption	Q _{elec}	-	kWh
Annual energy consumption	AEC	-	kWh
Water heating energy efficiency	η_{wh}	-	%
Daily fuel consumption	Q _{fuel}	X	kWh

Contact details	Firebird Products Ltd Phoenix House, Eastern Wood Road, Langage Industrial Estate Plympton, Plymouth PL7 5ET		
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Legend

(3) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(T_j).

(4) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

ENVIROAIR 16.0 FICHE

According to Annex IV of COMMISSION DELEGATED REGULATION (EU) NO 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European parliament and of the council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar devices and packages of combination heater, temperature control and solar device.

Outdoor Unit Reference: **ENVIROAIR 16.0**

In Average Climatic Conditions	Seasonal Energy Efficiency class ns	A++	A++
	Normal Heating power (Kw)	16	14
	Seasonal Energy Efficiency ns (%)	153	125
	Annual energy consumption Qhe (kWh/year)	8287	8780

Manufacturer: Hitachi on behalf of **FIREBIRD PRODUCTS LTD**

Indoor Sound Power Level (dBa)

Special Precautions to take during assembly, installation, maintenance

This appliance must be installed, maintained and dismantled by professionals. Do not vent contained refrigerant into the atmosphere since this fluid is a fluorinated greenhouse gas regulated under European Regulation (EU) No 517/2014

	35°C	55°C	35°C	55°C
Nominal Heating power (Kw)	14	14	15	14
Seasonal Energy Efficiency ns (%)	152	112	230	177
Annual energy consumption Qhe (kWh/year)	8941	11620	3442	4148

Outdoor Sound Power Level (dBa)

67

The sound power level is measured in heating mode, according to standard EN12102/2013. The nominal heating capacity is equal to Pdesign requirement at Tdesign, supplemented by Psup, if needed. Data is calculated according to EN14825 Standard & EN 14511 and the commission communication 2014/C207/02

Information requirements for heat pump space heaters and heat pump combination heaters				Source: 813/2013
Model(s):	Outdoor unit: ENVIROAIR 16.0	Indoor unit: -	Tank model: -	
Air-to-water heat pump:				YES
Low-temperature heat pump:				NO
Equipped with a supplementary heater:				NO
Heat pump combination heater:				NO

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
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Average

Rated heat output ⁽³⁾	Prated	14	kW	Seasonal space heating energy efficiency	η_{hs}	125%	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = -7 °C	Pdh	12,0	kW	T _j = -7 °C	COPd	1,60	-
T _j = +2 °C	Pdh	7,3	kW	T _j = +2 °C	COPd	3,35	-
T _j = +7 °C	Pdh	4,7	kW	T _j = +7 °C	COPd	4,35	-
T _j = +12 °C	Pdh	3,6	kW	T _j = +12 °C	COPd	5,50	-
T _j = bivalent temperature	Pdh	12,0	kW	T _j = bivalent temperature	COPd	1,60	-
T _j = operation limit temperature	Pdh	10,5	kW	T _j = operation limit temperature	COPd	1,40	-
For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	Pdh	X	kW	For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	COPd	X	-
Bivalent temperature	Tbiv	-7	°C	For air-to-water HP : Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	Pcyc	X	kW	Cycling interval efficiency	COPcyc	X	-
				Heating water operating limit temperature	WTOL	55	°C
				Supplementary heater			
Degradation coefficient ⁽⁴⁾	Cdh	0,9	—	Rated heat output (3)	Psup	3,1	kW
Annual Energy consumption	Q _{HE}	8780	kWh	Type of energy input		Electricity	

Colder

Rated heat output ⁽³⁾	Prated	14	kW	Seasonal space heating energy efficiency	η_{hs}	112%	%
				Supplementary heater			
Annual Energy consumption	Q _{HE}	11620	kWh	Rated heat output (3)	Psup	4,1	kW
				Type of energy input		Electricity	

Warmer

Rated heat output ⁽³⁾	Prated	14	kW	Seasonal space heating energy efficiency	η_{hs}	177%	%
				Supplementary heater			
Annual Energy consumption	Q _{HE}	4148	kWh	Rated heat output (3)	Psup	0	kW
				Type of energy input		Electricity	

Power consumption in modes other than active mode			
Off mode	P _{OFF}	0,013	kW
Thermostat-off mode	P _{TO}	0	kW
Standby mode	P _{SB}	0,013	kW
Crankcase heater mode	P _{CK}	0	kW

Other items			
Capacity control	fixed/variable	Variable	
Sound power level, indoors	L _{WA}	-	dB(A)
Sound power level, outdoors	L _{WA}	67	dB(A)

Outdoor heat exchanger			
For air-to-water HP: Rated air flow rate	Q _{airsource}	6000	m ³ /h
For water-to-water: Rated water flow rate	or Q _{watersource}	X	m ³ /h
For brine-to-water: Rated brine flow rate	or Q _{brinesource}	X	m ³ /h

For heat pump combination heater							
Declared load profile	-	-	—	Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q _{elec}	-	kWh	Daily fuel consumption	Q _{fuel}	X	kWh
Annual energy consumption	AEC	-	kWh				

Contact details	Firebird Products Ltd Phoenix House, Eastern Wood Road, Langage Industrial Estate Plympton, Plymouth PL7 5ET
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Legend

(3) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(T_j).

(4) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.