



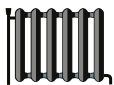
# ENERG

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OCHSNER

AQUA 11 HSTA



55 °C

35 °C

A+++

A+++

A+++

A++

A+

A

B

C

D



45 dB



■ 8 kW

■ 10 kW

■ 8 kW

■ 10 kW

■ 8 kW

■ 10 kW



**Heatpump datasheet:**

Manufacturer:	OCHSNER
Model:	AQUA 11 HSTA

**Information concerning energy efficiency class and rated heat output:**

	average/low	average/medium
Energy efficiency class space heater:	A+++	A+++
Rated heat output:	10 kW	8 kW
Energy efficiency space heater:	247.0 %	150.0 %
Annual final energy consumption space heater:	3210 kWh	4155 kWh
Sound power level indoors	45 dB(A)	

**Special precautions concerning assembly, installation or maintenance:**

The system was sized, connected, laid out and filled in accordance with applicable standards, regulations and ordinances by a qualified contractor. If the system consists of several sections, these must be connected and installed using original OCHSNER accessories as supplied by OCHSNER. System sections must be connected via the shortest route possible and must not exceed a connection distance of 5 m. In accordance with the operating and installation manual, the system is used as intended for a private building heating system. Commissioning must only be carried out by OCHSNER Customer Service. Maintenance and inspection according to the manufacturer's instructions must be carried out at least every 12 months unless legal requirements and ordinances specify a shorter interval.

<b>Additional information:</b>	low	medium
Rated heat output colder climate:	10 kW	8 kW
Rated heat output warmer climate:	10 kW	8 kW
Energy efficiency space heater colder climate:	258.0 %	156.0 %
Energy efficiency space heater warmer climate:	244.0 %	149.0 %
Annual energy consumption space heater colder climate:	3665 kWh	4779 kWh
Annual energy consumption space heater warmer climate:	2092 kWh	2713 kWh

**Technical data of the temperature controller:**

Manufacturer:	OCHSNER	
Model:	OTE controller	
Controller class with room remote control:	VII	-
Contribution of the controller to the energy efficiency space heater with room remote control:	3.5	%
Controller class without room remote control:	III	-
Contribution of the controller to the energy efficiency space heater without room remote control:	1.5	%

Model:	AQUA 11 HSTA
	Water heating heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	no
Heat pump combination heater:	no
Temperature application:	low
Climate conditions:	colder

Item	Symbol	Value
Rated heat output (*)	Prated	10 kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature $T_j$		
$T_j = -7\text{ °C}$	Pdh	10.3 kW
$T_j = +2\text{ °C}$	Pdh	10.4 kW
$T_j = +7\text{ °C}$	Pdh	10.6 kW
$T_j = +12\text{ °C}$	Pdh	10.6 kW
$T_j =$ bivalent temperature	Pdh	10.0 kW
$T_j =$ operation limit temperature	Pdh	10.0 kW
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$ )	Pdh	10.2 kW
Bivalent temperature	$T_{biv}$	-22 °C
Power input „compressor off“		0 W
Power consumption in modes other than active mode		
Off mode	$P_{OFF}$	20 W
Thermostat-off mode	$P_{TO}$	20 W
Standby mode	$P_{SB}$	20 W
Crankcase heater mode	$P_{CK}$	0 W
Other items		
Capacity control		fixed
Sound power level	indoors	$L_{WA}$ 45 dB
	outdoors	
Annual energy consumption	$Q_{HE}$	3665 kWh
For heat pump combination heater:		
Declared load profile		-
Daily electricity consumption	$Q_{elec}$	-

Item	Symbol	Value
Seasonal space heating energy efficiency	$\eta_s$	258.0 %
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature $T_j$		
$T_j = -7\text{ °C}$	COPd	6.54
$T_j = +2\text{ °C}$	COPd	7.00
$T_j = +7\text{ °C}$	COPd	7.36
$T_j = +12\text{ °C}$	COPd	7.46
$T_j =$ bivalent temperature	COPd	5.88
$T_j =$ operation limit temperature	COPd	5.88
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$ )	COPd	6.33
For air-to-water heat pumps: Operation limit temperature	TOL	-22 °C
Heating water operating limit temperature	WTOL	68 °C
Supplementary heater		
Rated heat output (*)	$P_{sup}$	0.00 kW
Type of energy input		electricity
For air-to-water heat pumps: Rated air flow rate, outdoors	-	-
For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	1800 l/h
Water heating energy efficiency	$\eta_{wh}$	-
Daily fuel consumption	$Q_{fuel}$	-

Contact details OCHSNER Wärmepumpen GmbH, Ochsner-Straße 1, A-3350 Haag

(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating-Pde-signh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup( $T_j$ ).

Model:	AQUA 11 HSTA
	Water heating heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	no
Heat pump combination heater:	no
Temperature application:	medium
Climate conditions:	colder

Item	Symbol	Value
Rated heat output (*)	Prated	8 kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature $T_j$		
$T_j = -7\text{ °C}$	Pdh	8.8 kW
$T_j = +2\text{ °C}$	Pdh	9.2 kW
$T_j = +7\text{ °C}$	Pdh	9.6 kW
$T_j = +12\text{ °C}$	Pdh	9.8 kW
$T_j =$ bivalent temperature	Pdh	8.1 kW
$T_j =$ operation limit temperature	Pdh	8.1 kW
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$ )	Pdh	8.5 kW
Bivalent temperature	$T_{biv}$	-22 °C
Power input „compressor off“		0 W
Power consumption in modes other than active mode		
Off mode	$P_{OFF}$	20 W
Thermostat-off mode	$P_{TO}$	20 W
Standby mode	$P_{SB}$	20 W
Crankcase heater mode	$P_{CK}$	0 W
Other items		
Capacity control		fixed
Sound power level	indoors	$L_{WA}$ 45 dB
	outdoors	-
Annual energy consumption	$Q_{HE}$	4779 kWh
For heat pump combination heater:		
Declared load profile		-
Daily electricity consumption	$Q_{elec}$	-

Item	Symbol	Value
Seasonal space heating energy efficiency	$\eta_s$	156.0 %
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature $T_j$		
$T_j = -7\text{ °C}$	COPd	3.86
$T_j = +2\text{ °C}$	COPd	4.46
$T_j = +7\text{ °C}$	COPd	5.02
$T_j = +12\text{ °C}$	COPd	5.51
$T_j =$ bivalent temperature	COPd	3.12
$T_j =$ operation limit temperature	COPd	3.12
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$ )	COPd	3.52
For air-to-water heat pumps: Operation limit temperature	TOL	-22 °C
Heating water operating limit temperature	WTOL	68 °C
Supplementary heater		
Rated heat output (*)	$P_{sup}$	0.00 kW
Type of energy input		electricity
For air-to-water heat pumps:		
Rated air flow rate, outdoors	-	-
For water-/brine-to-water heat pumps:		
Rated brine or water flow rate, outdoor heat exchanger	-	1800 l/h
Water heating energy efficiency		
	$\eta_{wh}$	-
Daily fuel consumption		
	$Q_{fuel}$	-

Contact details OCHSNER Wärmepumpen GmbH, Ochsner-Straße 1, A-3350 Haag

(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating-Pde-signh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup( $T_j$ ).

Model:	AQUA 11 HSTA
	Water heating heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	no
Heat pump combination heater:	no
Temperature application:	low
Climate conditions:	average

Item	Symbol	Value
Rated heat output (*)	Prated	10 kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature $T_j$		
$T_j = -7\text{ °C}$	Pdh	10.0 kW
$T_j = +2\text{ °C}$	Pdh	10.2 kW
$T_j = +7\text{ °C}$	Pdh	10.4 kW
$T_j = +12\text{ °C}$	Pdh	10.6 kW
$T_j =$ bivalent temperature	Pdh	10.0 kW
$T_j =$ operation limit temperature	Pdh	10.0 kW
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$ )	Pdh	10.0 kW
Bivalent temperature	$T_{biv}$	-10 °C
Power input „compressor off“		0 W
Power consumption in modes other than active mode		
Off mode	$P_{OFF}$	20 W
Thermostat-off mode	$P_{TO}$	20 W
Standby mode	$P_{SB}$	20 W
Crankcase heater mode	$P_{CK}$	0 W
Other items		
Capacity control		fixed
Sound power level	indoors	$L_{WA}$ 45 dB
	outdoors	-
Annual energy consumption	$Q_{HE}$	3210 kWh
For heat pump combination heater:		
Declared load profile		-
Daily electricity consumption	$Q_{elec}$	-

Item	Symbol	Value
Seasonal space heating energy efficiency	$\eta_s$	247.0 %
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature $T_j$		
$T_j = -7\text{ °C}$	COPd	5.97
$T_j = +2\text{ °C}$	COPd	6.47
$T_j = +7\text{ °C}$	COPd	6.97
$T_j = +12\text{ °C}$	COPd	7.53
$T_j =$ bivalent temperature	COPd	5.88
$T_j =$ operation limit temperature	COPd	5.88
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$ )	COPd	5.88
For air-to-water heat pumps: Operation limit temperature	TOL	-10 °C
Heating water operating limit temperature	WTOL	68 °C
Supplementary heater		
Rated heat output (*)	$P_{sup}$	0.00 kW
Type of energy input		electricity
For air-to-water heat pumps: Rated air flow rate, outdoors	-	-
For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	1800 l/h
Water heating energy efficiency	$\eta_{wh}$	-
Daily fuel consumption	$Q_{fuel}$	-

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(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating-Pde-signh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup( $T_j$ ).

Model:	AQUA 11 HSTA
	Water heating heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	no
Heat pump combination heater:	no
Temperature application:	medium
Climate conditions:	average

Item	Symbol	Value
Rated heat output (*)	Prated	8 kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature $T_j$		
$T_j = -7\text{ °C}$	Pdh	8.3 kW
$T_j = +2\text{ °C}$	Pdh	8.9 kW
$T_j = +7\text{ °C}$	Pdh	9.3 kW
$T_j = +12\text{ °C}$	Pdh	9.7 kW
$T_j =$ bivalent temperature	Pdh	8.1 kW
$T_j =$ operation limit temperature	Pdh	8.1 kW
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$ )	Pdh	8.1 kW
Bivalent temperature	$T_{biv}$	-10 °C
Power input „compressor off“		0 W
Power consumption in modes other than active mode		
Off mode	$P_{OFF}$	20 W
Thermostat-off mode	$P_{TO}$	20 W
Standby mode	$P_{SB}$	20 W
Crankcase heater mode	$P_{CK}$	0 W
Sonstige Elemente		
Capacity control		fixed
Sound power level	indoors	$L_{WA}$ 45 dB
	outdoors	-
Annual energy consumption	$Q_{HE}$	4155 kWh
For heat pump combination heater:		
Declared load profile		-
Daily electricity consumption	$Q_{elec}$	-

Item	Symbol	Value
Seasonal space heating energy efficiency	$\eta_s$	150.0 %
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature $T_j$		
$T_j = -7\text{ °C}$	COPd	3.29
$T_j = +2\text{ °C}$	COPd	4.02
$T_j = +7\text{ °C}$	COPd	4.57
$T_j = +12\text{ °C}$	COPd	5.23
$T_j =$ bivalent temperature	COPd	3.12
$T_j =$ operation limit temperature	COPd	3.12
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$ )	COPd	3.12
For air-to-water heat pumps: Operation limit temperature	TOL	-10 °C
Heating water operating limit temperature	WTOL	68 °C
Supplementary heater		
Rated heat output (*)	$P_{sup}$	0.00 kW
Type of energy input		electricity
For air-to-water heat pumps: Rated air flow rate, outdoors	-	-
For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	1800 l/h
Water heating energy efficiency	$\eta_{wh}$	-
Daily fuel consumption	$Q_{fuel}$	-

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(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating-Pde-signh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup( $T_j$ ).

Model:	AQUA 11 HSTA
	Water heating heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	no
Heat pump combination heater:	no
Temperature application:	low
Climate conditions:	warmer

Item	Symbol	Value
Rated heat output (*)	Prated	10 kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>		
T <sub>j</sub> = -7 °C	Pdh	10.0 kW
T <sub>j</sub> = +2 °C	Pdh	10.0 kW
T <sub>j</sub> = +7 °C	Pdh	10.2 kW
T <sub>j</sub> = +12 °C	Pdh	10.5 kW
T <sub>j</sub> = bivalent temperature	Pdh	10.0 kW
T <sub>j</sub> = operation limit temperature	Pdh	10.0 kW
For air-to-water heat pumps: T <sub>j</sub> = -15 °C (if TOL < -20 °C)	Pdh	10.0 kW
Bivalent temperature	T <sub>biv</sub>	2 °C
Power input „compressor off“		0 W
Power consumption in modes other than active mode		
Off mode	P <sub>OFF</sub>	20 W
Thermostat-off mode	P <sub>TO</sub>	20 W
Standby mode	P <sub>SB</sub>	20 W
Crankcase heater mode	P <sub>CK</sub>	0 W
Sonstige Elemente		
Capacity control		fixed
Sound power level	indoors	L <sub>WA</sub> 45 dB
	outdoors	-
Annual energy consumption	Q <sub>HE</sub>	2092 kWh
For heat pump combination heater:		
Declared load profile		-
Daily electricity consumption	Q <sub>elec</sub>	-

Item	Symbol	Value
Seasonal space heating energy efficiency	η <sub>s</sub>	244.0 %
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>		
T <sub>j</sub> = -7 °C	COPd	5.88
T <sub>j</sub> = +2 °C	COPd	5.88
T <sub>j</sub> = +7 °C	COPd	6.36
T <sub>j</sub> = +12 °C	COPd	7.15
T <sub>j</sub> = bivalent temperature	COPd	5.88
T <sub>j</sub> = operation limit temperature	COPd	5.88
For air-to-water heat pumps: T <sub>j</sub> = -15 °C (if TOL < -20 °C)	COPd	5.88
For air-to-water heat pumps: Operation limit temperature	TOL	2 °C
Heating water operating limit temperature	WTOL	68 °C
Supplementary heater		
Rated heat output (*)	P <sub>sup</sub>	0.00 kW
Type of energy input		electricity
For air-to-water heat pumps: Rated air flow rate, outdoors	-	-
For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	1800 l/h
Water heating energy efficiency	η <sub>wh</sub>	-
Daily fuel consumption	Q <sub>fuel</sub>	-

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(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating-Pde-signh, and the rated heat output of a supplementary heater P<sub>sup</sub> is equal to the supplementary capacity for heating sup(T<sub>j</sub>).

Model:	AQUA 11 HSTA
	Water heating heat pump
Low-temperature heat pump:	no
Equipped with a supplementary heater:	no
Heat pump combination heater:	no
Temperature application:	medium
Climate conditions:	warmer

Item	Symbol	Value
Rated heat output (*)	Prated	8 kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature $T_j$		
$T_j = -7\text{ °C}$	Pdh	8.1 kW
$T_j = +2\text{ °C}$	Pdh	8.1 kW
$T_j = +7\text{ °C}$	Pdh	8.6 kW
$T_j = +12\text{ °C}$	Pdh	9.4 kW
$T_j =$ bivalent temperature	Pdh	8.1 kW
$T_j =$ operation limit temperature	Pdh	8.1 kW
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$ )	Pdh	8.1 kW
Bivalent temperature	$T_{biv}$	2 °C
Power input „compressor off“		0 W
Power consumption in modes other than active mode		
Off mode	$P_{OFF}$	20 W
Thermostat-off mode	$P_{TO}$	20 W
Standby mode	$P_{SB}$	20 W
Crankcase heater mode	$P_{CK}$	0 W
Other items		
Capacity control	fixed	
Sound power level	indoors	$L_{WA}$ 45 dB
	outdoors	-
Annual energy consumption	$Q_{HE}$	2713 kWh
For heat pump combination heater:		
Declared load profile	-	
Daily electricity consumption	$Q_{elec}$	-

Item	Symbol	Value
Seasonal space heating energy efficiency	$\eta_s$	149.0 %
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature $T_j$		
$T_j = -7\text{ °C}$	COPd	3.12
$T_j = +2\text{ °C}$	COPd	3.12
$T_j = +7\text{ °C}$	COPd	3.68
$T_j = +12\text{ °C}$	COPd	4.78
$T_j =$ bivalent temperature	COPd	3.12
$T_j =$ operation limit temperature	COPd	3.12
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$ )	COPd	3.12
For air-to-water heat pumps: Operation limit temperature	TOL	2 °C
Heating water operating limit temperature	WTOL	68 °C
Supplementary heater		
Rated heat output (*)	$P_{sup}$	0.00 kW
Type of energy input	electricity	
For air-to-water heat pumps: Rated air flow rate, outdoors	-	-
For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	1800 l/h
Water heating energy efficiency	$\eta_{wh}$	-
Daily fuel consumption	$Q_{fuel}$	-

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(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating-Pde-signh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup( $T_j$ ).