

Fusion GAHP 35A HT

technical specification sheet.

Date: October 2021

Fusion GAHP 35A HT							
Gas absorption heat pump		35A HT					
Air-to-water heat pump		Yes	Low-temperature heat pump		No		
Water-to-water heat pump		No	Equipped with a supplementary header		No		
Brine-to-water heat pump		No	Heat pump combination heater		No		
Parameters shall be declared for medium-temperature application							
Parameters shall be declared for average, colder and warmer climate conditions							
Average climate conditions							
Rated heat output		Prated	kW	29.3	Seasonal space heating energy efficiency		ns % 112
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	kW	25.8	T _J = -7°C		PERd % 97.0
T _J = +2°C		Pdh	kW	15.8	T _J = +2°C		PERd % 121.0
T _J = +7°C		Pdh	kW	10.3	T _J = +7°C		PERd % 118.0
T _J = +12°C		Pdh	kW	4.4	T _J = +12°C		PERd % 112.0
T _J = bivalent temperature		Pdh	kW	-	T _J = bivalent temperature		PERd % -
Annual energy temperature		QHE	GJ	195			
Colder climate conditions							
Rated heat output		Prated	kW	29.2	Seasonal space heating energy efficiency		ns % 107
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	kW	17.8	T _J = -7°C		Pdh kW 108.0
T _J = +2°C		Pdh	kW	10.8	T _J = +2°C		Pdh kW 117.0
T _J = +7°C		Pdh	kW	7	T _J = +7°C		Pdh kW 112.0
T _J = +12°C		Pdh	kW	3.2	T _J = +12°C		Pdh kW 110.0
T _J = bivalent temperature		Pdh	kW	-	T _J = bivalent temperature		PERd % -
T _J = operation limit temperature		Pdh	kW	29.2	T _J = operation limit temperature		PERd % 87.0
For air-to-water heat pumps: T _J = -15°C (if TOL ≤ -20°C)		Pdh	kW	23.9	For air-to-water heat pumps: T _J = +15°C (if TOL ≤ -20°C)		PERd % 90.0
Annual energy consumption		QHE	GJ	242			
Warmer climate conditions							
Rated heat output		Prated	kW	35.9	Seasonal space heating energy efficiency		ns % 115
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _J				Declared coefficient of performance or primary ratio for part load at indoor temperature 20°C and outdoor temperature T _J			
T _J = +2°C		Pdh	kW	35.9	T _J = +2°C		PERd kW 118.0
T _J = +7°C		Pdh	kW	23.0	T _J = +7°C		PERd kW 121.0
T _J = +12°C		Pdh	kW	10.4	T _J = +12°C		PERd kW 116.0
T _J = bivalent temperature		Pdh	kW	-	T _J = bivalent temperature		PERd % -
Annual energy consumption		QHE	GJ	150			
Bivalent temperature		Tbiv	°C	TOL < Tdesign	For air-to-water heat pumps Operation limit temperature Heating water operating limit		TOL °C -22 WTOL °C 65
Power consumption in modes other than active mode							
Off mode		P _{OFF}	kW	0.000	Rated heat output		P _{sup} kW
Thermostat - off mode		P _{TO}	kW	0.021	Type of energy input		Monovalent
Standby mode		P _{SB}	kW	0.005			
Cranksae heat mode		P _{OK}	kW	-			
Other items							
Capacity control		variable		Rated air flow rate outdoors		m ³ /h	10000
Sound power level, indoors/outdoors		L _{WA}	dB	- / 75.3		For water- or brine-to-water heat pumps	
				Rated brine or water flow rate, outdoor heat exchanger		m ³ /h	
Emissions of nitrogen oxides		NOx	mg/ kWh	40			

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

2) High temperature means 600°C return temperature at heater inlet and 800°C feed temperature at heater outlet.