Table 8

COMMISSION DELEGATED REGULATION (EU) No 811/2013

Technical parameters for heat pump space heaters and heat pump combination heaters

Model(s):	GAS HP 35A HT
Air-to-water heat pump:	yes
Water-to-water heat pump:	no
Brine-to-water heat pump:	no
Low-temperature heat pump:	no
Equipped with a supplementary heater:	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.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
AVERAGE CLIMATE CONDITIONS							
Rated heat output (*)	*Prated*	29,3	kW	**Seasonal space heating energy efficiency**	η_s	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*	25,8	kW	T_j = -7 °C	*PERd*	97,0	%
T_j = +2 °C	*Pdh*	15,8	kW	T_j = +2 °C	*PERd*	121,0	%
T_j = +7 °C	*Pdh*	10,3	kW	T_j = +7 °C	*PERd*	118,0	%
T_j = +12 °C	*Pdh*	4,4	kW	T_j = +12 °C	*PERd*	112,0	%
T_j = bivalent temperature	*Pdh*	-	kW	T_j = bivalent temperature	*PERd*	-	%
Annual energy consumption	Q_{HE}	195	GJ				
COLDER CLIMATE CONDITIONS							
Rated heat output (*)	*Prated*	29,2	kW	**Seasonal space heating energy efficiency**	η_s	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*	17,8	kW	T_j = -7 °C	*PERd*	108,0	%
T_j = +2 °C	*Pdh*	10,8	kW	T_j = +2 °C	*PERd*	117,0	%
T_j = +7 °C	*Pdh*	7,0	kW	T_j = +7 °C	*PERd*	112,0	%
T_j = +12 °C	*Pdh*	3,2	kW	T_j = +12 °C	*PERd*	110,0	%
T_j = bivalent temperature	*Pdh*	-	kW	T_j = bivalent temperature	*PERd*	-	%
T_j = operation limit temperature	*Pdh*	29,2	kW	T_j = operation limit temperature	*PERd*	87,0	%
For air-to-water heat pumps: T_j = –15 °C (if TOL < –20 °C)	*Pdh*	23,9	kW	For air-to-water heat pumps: T_j = –15 °C (if TOL < –20 °C)	*PERd*	90,0	%
Annual energy consumption	Q_{HE}	242	GJ				
WARMER CLIMATE CONDITIONS							
Rated heat output (*)	*Prated*	35,9	kW	**Seasonal space heating energy efficiency**	η_s	115	%
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 = +2 °C	*Pdh*	35,9	kW	T_j = +2 °C	*PERd*	118,0	%
T_j = +7 °C	*Pdh*	23,0	kW	T_j = +7 °C	*PERd*	121,0	%
T_j = +12 °C	*Pdh*	10,4	kW	T_j = +12 °C	*PERd*	116,0	%
T_j = bivalent temperature	*Pdh*	-	kW	T_j = bivalent temperature	*PERd*	-	%
Annual energy consumption	Q_{HE}	150	GJ				

Bivalent temperature	T_{biv}	TOL < $T_{designh}$	°C	For air-to-water heat pumps: Operation limit temperature	*TOL*	-22	°C
				Heating water operating limit	*WTOL*	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0,000	kW	Rated heat output	*Psup*	-	kW
Thermostat-off mode	P_{TO}	0,021	kW	Type of energy input	monovalent		
Standby mode	P_{SB}	0,005	kW				
Crankcase heater mode	P_{CK}	-	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	—	10000	m³/h
Sound power level, indoors/ outdoors	L_{WA}	- / 75,3	dB	For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	—	-	m³/h

(*) 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(Tj)*.

Additional information required by COMMISSION REGULATION (EU) No 813/2013, Table 2:

Emissions of nitrogen oxides:	NO_x	40	mg/ kWh