

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 (*)	<i>Prated</i>	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	<i>Pdh</i>	25,8	kW	$T_j = -7$ °C	<i>PERd</i>	97	%
$T_j = +2$ °C	<i>Pdh</i>	15,8	kW	$T_j = +2$ °C	<i>PERd</i>	121	%
$T_j = +7$ °C	<i>Pdh</i>	10,3	kW	$T_j = +7$ °C	<i>PERd</i>	118	%
$T_j = +12$ °C	<i>Pdh</i>	4,4	kW	$T_j = +12$ °C	<i>PERd</i>	112	%
$T_j =$ bivalent temperature	<i>Pdh</i>	-	kW	$T_j =$ bivalent temperature	<i>PERd</i>	-	%
Annual energy consumption	Q_{HE}	195	GJ				
COLDER CLIMATE CONDITIONS							
Rated heat output (*)	<i>Prated</i>	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	<i>Pdh</i>	17,8	kW	$T_j = -7$ °C	<i>PERd</i>	108	%
$T_j = +2$ °C	<i>Pdh</i>	10,8	kW	$T_j = +2$ °C	<i>PERd</i>	117	%
$T_j = +7$ °C	<i>Pdh</i>	7,0	kW	$T_j = +7$ °C	<i>PERd</i>	112	%
$T_j = +12$ °C	<i>Pdh</i>	3,2	kW	$T_j = +12$ °C	<i>PERd</i>	110	%
$T_j =$ bivalent temperature	<i>Pdh</i>	-	kW	$T_j =$ bivalent temperature	<i>PERd</i>	-	%
$T_j =$ operation limit temperature	<i>Pdh</i>	29,2	kW	$T_j =$ operation limit temperature	<i>PERd</i>	87	%
For air-to-water heat pumps: $T_j = -15$ °C (if TOL < -20 °C)	<i>Pdh</i>	23,9	kW	For air-to-water heat pumps: $T_j = -15$ °C (if TOL < -20 °C)	<i>PERd</i>	90	%
Annual energy consumption	Q_{HE}	242	GJ				
WARMER CLIMATE CONDITIONS							
Rated heat output (*)	<i>Prated</i>	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	<i>Pdh</i>	35,9	kW	$T_j = +2$ °C	<i>PERd</i>	118	%
$T_j = +7$ °C	<i>Pdh</i>	23,0	kW	$T_j = +7$ °C	<i>PERd</i>	121	%
$T_j = +12$ °C	<i>Pdh</i>	10,4	kW	$T_j = +12$ °C	<i>PERd</i>	116	%
$T_j =$ bivalent temperature	<i>Pdh</i>	-	kW	$T_j =$ bivalent temperature	<i>PERd</i>	-	%
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	P_{sup}	-	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				For air-to-water heat pumps:			
Capacity control	variable			Rated air flow rate, outdoors	—	10000	m ³ /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	—	-	m ³ /h

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output P_{rated} is equal to the design load for heating $P_{designh}$, and the rated heat output of a supplementary heater P_{sup} is equal to the supplementary capacity for heating $sup(T_j)$.

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

Emissions of nitrogen oxides: NO_x

40

 mg/
kWh