

Product information

(in accordance with EU Regulation No. 813/2013)

Heat pump, 35°C supply temperature

Model

HPR 400 Deluxe

Air/water heat pump	yes
Water/water heat pump	no
Brine/water heat pump	no

Low-temperature heat pump	no
Equipped with an auxiliary heater	no
Multifunction heater with heat pump	no

Parameter	Symbol	Value	Unit
Rated thermal power (*)	Prated	7	kW

Parameter	Symbol	Value	Unit
Seasonal energy efficiency of space heating	η_s	153	%

Declared heating capacity at part load at room temperature of 20°C and outdoor temperature T_j

T_j	Symbol	Value	Unit
$T_j = -7\text{ °C}$	P _{dh}	6,53	kW
$T_j = +2\text{ °C}$	P _{dh}	7,96	kW
$T_j = +7\text{ °C}$	P _{dh}	10,87	kW
$T_j = +12\text{ °C}$	P _{dh}	12,22	kW
$T_j = \text{bivalent temperature}$	P _{dh}	6,53	kW
$T_j = \text{limiting operating temperature}$	P _{dh}	5,94	kW
For air/water heat pumps: $T_j = -15\text{ °C}$ (if TOL < -20°C)	P _{dh}	-	kW
Bivalent temperature	T_{biv}	-7	°C
Performance during the cycle period in the interval for heating	P_{cyc}	-	kW
Loss ratio (**)	C _{dh}	0,9	-

Declared efficiency rate or primary energy consumption rate at part load at room temperature of 20°C and outdoor temperature T_j

T_j	Symbol	Value	Unit
$T_j = -7\text{ °C}$	COP _d	3,13	-
$T_j = +2\text{ °C}$	COP _d	3,69	-
$T_j = +7\text{ °C}$	COP _d	4,89	-
$T_j = +12\text{ °C}$	COP _d	5,60	-
$T_j = \text{bivalent temperature}$	COP _d	3,13	-
$T_j = \text{limiting operating temperature}$	COP _d	2,85	-
For air/water heat pumps: $T_j = -15\text{ °C}$ (if TOL < -20°C)	COP _d	-	-
For air/water heat pumps: Operating temperature limit	TOL	-10	°C
Energy efficiency of the cycle	COP _{cyc}	-	-
Operating temperature limit for water heating	WTOL	65	°C

Power consumption in modes other than active

Mode	Symbol	Value	Unit
Shutdown mode	P_{OFF}	0,016	kW
Thermostat off mode	P_{TO}	0,016	kW
Standby power consumption	P_{SB}	0,016	kW
In crankcase heater off mode	P_{CK}	0,000	kW

Additional heater

Rated thermal power (*)	P_{sup}	-	kW
Type of energy consumed	-		

Other parameters

Capacity control	fixed output		
Sound power level indoors/outdoors	L_{WA}	-/58	dB
Emissions of nitrogen oxides	NOx	-	mg/ kWh
Annual energy consumption	QHE	3911	kWh

For air/water heat pumps: Rated air flow, outdoor	-	3800	m ³ /h
For brine/water heat pumps: Nominal flow rate of brine or water, external heat exchanger	-	-	m ³ /h

Contact details

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(*) For heat pump space heaters and multifunction heat pump heaters, rated thermal output Prated is equal to the design load for heating mode Pdesignh, and the rated thermal output of auxiliary heater Psup is equal to the additional heating capacity for heating mode sup(Tj).

(**) If the Cdh factor is not determined by measurement, the loss factor takes the default value of Cdh=0.9. Parameters are given for medium-temperature applications, except for low-temperature pumps. For low-temperature heat pumps, parameters are given for low-temperature applications. All parameters are given for temperate climate conditions.

Data: 2024-07-25

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Product information

(in accordance with EU Regulation No. 813/2013)

Heat pump, 55°C supply temperature

Model

HPR 400 Deluxe

Air/water heat pump	yes
Water/water heat pump	no
Brine/water heat pump	no

Low-temperature heat pump	no
Equipped with an auxiliary heater	no
Multifunction heater with heat pump	no

Parameter	Symbol	Value	Unit
Rated thermal power (*)	Prated	7	kW
Declared heating capacity at part load at room temperature of 20°C and outdoor temperature T_j			
T _j = -7 °C	P _{d,h}	6,17	kW
T _j = +2 °C	P _{d,h}	7,78	kW
T _j = +7 °C	P _{d,h}	10,31	kW
T _j = +12 °C	P _{d,h}	12,12	kW
T _j = bivalent temperature	P _{d,h}	6,17	kW
T _j = limiting operating temperature	P _{d,h}	5,49	kW
For air/water heat pumps: T _j = -15 °C (if TOL < -20°C)	P _{d,h}	-	kW
Bivalent temperature	T _{biv}	-7	°C
Performance during the cycle period in the interval for heating	P _{cyh}	-	kW
Loss ratio (**)	C _{d,h}	0,9	-
Power consumption in modes other than active			
Shutdown mode	P _{OFF}	0,016	kW
Thermostat off mode	P _{TO}	0,016	kW
Standby power consumption	P _{SB}	0,016	kW
In crankcase heater off mode	P _{CK}	0,000	kW
Other parameters			
Capacity control	fixed output		
Sound power level indoors/outdoors	L _{WA}	-/58	dB
Emissions of nitrogen oxides	NOx	-	mg/ kWh
Annual energy consumption	QHE	4538	kWh

Parameter	Symbol	Value	Unit
Seasonal energy efficiency of space heating	η _s	125	%
Declared efficiency rate or primary energy consumption rate at part load at room temperature of 20°C and outdoor temperature T_j			
T _j = -7 °C	COP _d	2,32	-
T _j = +2 °C	COP _d	3,01	-
T _j = +7 °C	COP _d	4,09	-
T _j = +12 °C	COP _d	5,06	-
T _j = bivalent temperature	COP _d	2,32	-
T _j = limiting operating temperature	COP _d	2,02	-
For air/water heat pumps: T _j = -15 °C (if TOL < -20°C)	COP _d	-	-
For air/water heat pumps: Operating temperature limit	TOL	-10	°C
Energy efficiency of the cycle	COP _{cyh}	-	-
Operating temperature limit for water heating	WTOL	65	°C
Additional heater			
Rated thermal power (*)	P _{sup}	-	kW
Type of energy consumed	-		
For air/water heat pumps: Rated air flow, outdoor	-	3800	m ³ /h
For brine/water heat pumps: Nominal flow rate of brine or water, external heat exchanger	-	-	m ³ /h

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