



## Danfoss Heat Pump DHP-AX

Our most flexible and affordable  
air heat pump ever.



Reduce your heating costs with our most affordable heat pump ever. In DHP-AX we have used our accumulated heating knowledge to develop a flexible air/water heat pump that operates at high performance. Energy is taken from outdoor air, even down to temperatures as low as  $-16^{\circ}\text{C}$ .



DHP-AX can be combined with an existing heating system, or parts of it, for example a water heater.



If you need a complete solution, you can easily supplement DHP-AX with the parts you need – your installer can offer a specially adapted indoor kit to obtain maximum efficiency.



The flexible DHP-AX will suit your needs, however big or small they are, and you'll never invest in more than you need.



The DHP-AX consists of only two major units, the outdoor heat pump and the indoor control unit, which makes installation quick and smooth. And since the compressor is located on the outside there are no components that can create noise on the inside, while the sound created on the outside is at a very low level.

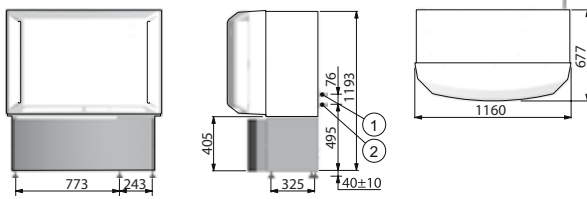


# DANFOSS DHP-AX

## Connection

The stand shown in the image is an accessory.

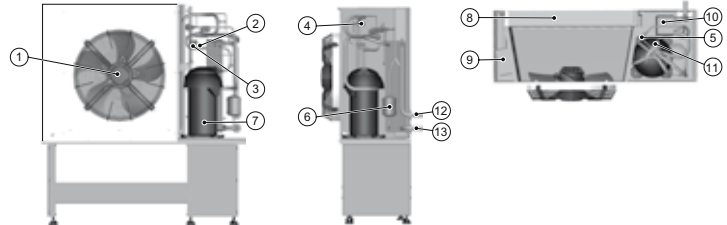
- 1 Supply line heating system, AX 6, 8, 10: 22 Cu, AX 12: 28 Cu
- 2 Return line heating system, AX 6, 8, 10: 22 Cu, AX 12: 28 Cu



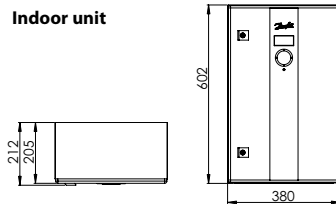
## Components

The component image below shows diagrammatically how the heat pump looks inside. There may be differences between different versions.

- 1 Fan
- 2 Operating pressostat
- 3 High pressure pressostat
- 4 Low pressure pressostat
- 5 2-way expansion valve
- 6 Drying filter
- 7 Compressor
- 8 Air heat exchanger
- 9 Electrical cabinet
- 10 Condenser
- 11 Four way valve
- 12 Heating system supply line
- 13 Return line heating system



## Indoor unit



DHP-AX			6	8	10	12
<b>Refrigerant</b>	Type		R407C	R407C	R407C	R407C
	Amount	kg	1.6	1.6	2.5	2.5
	Test pressure	MPa	3.2	3.2	3.2	3.2
	Design pressure	MPa	3.1	3.1	3.1	3.1
<b>Compressor</b>	Type		Scroll	Scroll	Scroll	Scroll
	Oil		POE	POE	POE	POE
<b>Electrical data 3-N</b>	Main supply	Volt	400	400	400	400
	Rated power, compressor	kW	2.0	2.3	3.6	4.4
	Start current	A	16	17	22	22
	Circuit breaker	A	10	10	16	16
<b>Electrical data 1-N</b>	Main supply	Volt	230	230	230	230
	Rated power, compressor	kW	3.3	4.2	5.4	5.7
	Start current	A	56	76	97	108
	Circuit breaker	A	20	20	25	32
<b>Performance</b>	Heat factor COP <sup>1</sup>		4.37	4.47	4.47	4.26
	Heat factor COP <sup>2</sup>		3.81	3.99	4.05	3.81
	Heating capacity <sup>2</sup>	kW	6.2	7.9	10.2	11.2
<b>Nominal flow<sup>3</sup></b>	Cooling circuit	l/s	0.2	0.3	0.6	0.5
	Heating circuit	l/s	0.3	0.4	0.5	0.5
<b>Lowest outdoor temperature allowed for compressor start</b>		°C	-16	-16	-16	-16
<b>Max temperature<sup>4</sup></b>	Heating circuit	°C	60	60	60	60
<b>Pressure switches</b>	Low pressure	MPa	0.03	0.03	0.03	0.03
	Operating	MPa	2.85	2.85	2.85	2.85
	High pressure	MPa	3.10	3.10	3.10	3.10
<b>Fan speed outdoor unit, low/high</b>	Nominal, free-blowing	rpm	890	890	890	940
<b>Air flow</b>		m <sup>3</sup> /h	3667	3667	3667	4045
<b>Sound power level (ISO 3741)</b>		dB (A) (1 pW)	67.7	67.8	68.1	70.4
<b>Operating temperatures for sound</b>	Air/rad out/rad in	°C	10/45/41	7/45/40	6/45/40	10/45/40
<b>Fan input</b>	Nominal, free-blowing	W	180	180	180	250
<b>Sound pressure level away from outdoor unit<sup>5</sup></b>	1 m	dB (A)	59.7	59.8	60.1	62.0
	4 m	dB (A)	47.7	47.8	48.1	50.0
	8 m	dB (A)	41.7	41.8	42.1	44.0
	16 m	dB (A)	35.6	35.7	36.0	38.0
<b>Weight, heat pump</b>		kg	108	113	123	140

1) At A7/W35 Δ 10K warm side (excluding circulation pumps).

2) At A7/W35 according to EN14511.

3) Heating circuit Δ 10K, cooling circuit Δ 3K.

4) At an outdoor temperature from 0°C and more.

5) Sound pressure calculated by assuming semi-spherical propagation from point source.