

Technical parameters for heat pump space heaters and heat pump combination heaters and temperature control packages

		086U9991	086U9992	086U9994	086U9995	086U9997	086U9998		
		086L0002	086L0003	086L0005	086L0006	086L0008			
Model	Conditions	DHP-AQ HP 8	DHP-AQ HP 9	DHP-AQ HP 11	DHP-AQ HP 13	DHP-AQ HP 16	DHP-AQ HP 18	Symbol	Unit
Air to water heat pump		NO	NO	NO	NO	NO	NO		
Water-to-water heat pump		YES	YES	YES	YES	YES	YES		
Brine-to-water heat pump		YES	YES	YES	YES	YES	YES		
Low temperature Heat pump		NO	NO	NO	NO	NO	NO		
Equipped with supplementary heater		YES / NO *	YES / NO *	YES / NO *	YES / NO *	YES / NO *	YES / NO *		
Heat pump combination heater		YES / NO **	YES / NO **	YES / NO **	YES / NO **	YES / NO **	YES / NO **		
Built in temperature control class		III	III	III	III	III	III		
Built in temperature control contribution to energy efficiency		1,5	1,5	1,5	1,5	1,5	1,5		%
Danfoss Link temperature control class		VII	VII	VII	VII	VII	VII		
Danfoss Link temperature control contribution to energy efficiency		3,5	3,5	3,5	3,5	3,5	3,5		%
Rated heat output	(average climate conditions)	6	8	10	11	13	16	Prated	kW
Rated heat output	(colder climate conditions)	5	8	10	8	11	16	Prated	kW
Rated heat output	(warmer climate conditions)	7	9	12	14	17	20	Prated	kW
Rated heat output	(low temperature applications average climate conditions)	5	7	9	11	11	13	Prated	kW
Rated heat output	(low temperature applications colder climate conditions)	4	5	8	9	11	11	Prated	kW
Rated heat output	(low temperature applications warmer climate conditions)	6	8	11	12	15	18	Prated	kW
SCOP	(average climate conditions)	2,78	3,20	3,10	3,23	3,09	2,80		
SCOP	(colder climate conditions)	2,45	2,51	2,74	2,84	2,71	2,51		
SCOP	(warmer climate conditions)	3,55	3,55	3,80	3,82	3,70	3,48		
SCOP	(low temperature applications average climate conditions)	3,58	3,70	4,11	3,82	3,88	3,45		
SCOP	(low temperature applications colder climate conditions)	3,18	3,26	3,69	3,33	3,20	3,08		
SCOP	(low temperature applications warmer climate conditions)	4,69	4,71	5,01	4,85	4,62	4,44		
Seasonal space heating Energy efficiency	(average climate conditions)	108	125	121	126	121	109	rjs	%
Seasonal space heating Energy efficiency Built in temperature control	(average climate conditions)	110	127	123	128	122	110	rjs	%
Seasonal space heating Energy efficiency Danfoss Link temperature control	(average climate conditions)	112	129	125	130	124	112	rjs	%
Seasonal space heating Energy efficiency	(colder climate conditions)	95	97	107	105	102	97	rjs	%
Seasonal space heating Energy efficiency Built in temperature control	(colder climate conditions)	96	108	104	107	107	99	rjs	%
Seasonal space heating Energy efficiency Danfoss Link temperature control	(colder climate conditions)	98	101	110	106	109	101	rjs	%
Seasonal space heating Energy efficiency	(warmer climate conditions)	139	139	149	142	145	136	rjs	%
Seasonal space heating Energy efficiency Built in temperature control	(warmer climate conditions)	141	141	150	143	148	138	rjs	%
Seasonal space heating Energy efficiency Danfoss Link temperature control	(warmer climate conditions)	143	143	152	145	148	140	rjs	%
Seasonal space heating Energy efficiency	(low temperature applications average climate conditions)	140	145	161	150	152	135	rjs	%
Seasonal space heating Energy efficiency Built in temperature control	(low temperature applications average climate conditions)	142	147	163	151	154	137	rjs	%
Seasonal space heating Energy efficiency Danfoss Link temperature control	(low temperature applications average climate conditions)	144	149	165	153	156	139	rjs	%
Seasonal space heating Energy efficiency	(low temperature applications colder climate conditions)	124	128	145	130	125	120	rjs	%
Seasonal space heating Energy efficiency Built in temperature control	(low temperature applications colder climate conditions)	126	129	146	132	126	122	rjs	%
Seasonal space heating Energy efficiency Danfoss Link temperature control	(low temperature applications colder climate conditions)	128	131	148	134	128	124	rjs	%
Seasonal space heating Energy efficiency	(low temperature applications warmer climate conditions)	184	186	197	191	182	175	rjs	%
Seasonal space heating Energy efficiency Built in temperature control	(low temperature applications warmer climate conditions)	186	187	199	192	183	176	rjs	%
Seasonal space heating Energy efficiency Danfoss Link temperature control	(low temperature applications warmer climate conditions)	188	189	201	194	185	178	rjs	%
Energy efficiency class		A+	A+	A+	A++	A+	A+		
Energy efficiency class built in temperature control package		A+	A++	A+	A++	A+	A+		
Energy efficiency class Danfoss Link temperature control package		A+	A++	A+	A++	A+	A+		
Energy efficiency class	(low temperature applications)	A+	A+	A++	A++	A++	A+		
Energy efficiency class built in temperature control package	(low temperature applications)	A+	A+	A++	A++	A++	A+		
Energy efficiency class Danfoss Link temperature control package	(low temperature applications)	A+	A+	A++	A++	A++	A+		
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T									
Tj = -7 °C	(average climate conditions)	3,4	5,2	6,8	7,6	9,7	11,0	Pdh	kW
Tj = -7 °C	(colder climate conditions)	3,5	4,9	6,9	7,5	9,2	11,8	Pdh	kW
Tj = -7 °C	(warmer climate conditions)	NA	NA	NA	NA	NA	NA		
Tj = -7 °C	(low temperature applications average climate conditions)	3,9	5,5	7,1	8,1	10,0	11,1	Pdh	kW
Tj = -7 °C	(low temperature applications colder climate conditions)	4,0	5,1	7,2	7,7	9,6	11,1	Pdh	kW
Tj = -7 °C	(low temperature applications warmer climate conditions)	NA	NA	NA	NA	NA	NA	Pdh	kW
Tj = +2 °C	(average climate conditions)	5,2	6,8	8,4	10,0	12,0	13,1	Pdh	kW
Tj = +2 °C	(colder climate conditions)	5,1	6,1	8,5	9,1	12,1	13,3	Pdh	kW
Tj = +2 °C	(warmer climate conditions)	4,9	5,7	8,5	9,9	12,1	13,2	Pdh	kW
Tj = +2 °C	(low temperature applications average climate conditions)	4,7	6,8	8,7	9,9	12,3	13,4	Pdh	kW
Tj = +2 °C	(low temperature applications colder climate conditions)	4,6	6,4	8,7	9,2	11,2	13,5	Pdh	kW
Tj = +2 °C	(low temperature applications warmer climate conditions)	4,7	6,2	8,6	9,1	11,4	13,3	Pdh	kW
Tj = +7 °C	(average climate conditions)	6,3	8,7	10,6	12,6	13,8	17,6	Pdh	kW
Tj = +7 °C	(colder climate conditions)	6,5	8,5	10,6	12,5	15,4	17,9	Pdh	kW
Tj = +7 °C	(warmer climate conditions)	6,1	8,0	10,3	12,0	14,8	17,2	Pdh	kW
Tj = +7 °C	(low temperature applications average climate conditions)	6,7	7,6	10,2	12,0	14,5	17,9	Pdh	kW
Tj = +7 °C	(low temperature applications colder climate conditions)	6,7	8,9	10,8	12,5	15,6	18,0	Pdh	kW
Tj = +7 °C	(low temperature applications warmer climate conditions)	6,6	8,7	10,7	12,4	15,3	17,8	Pdh	kW
Tj = +12 °C	(average climate conditions)	8,2	10,2	12,8	14,8	17,8	22,6	Pdh	kW
Tj = +12 °C	(colder climate conditions)	8,4	11,1	12,8	15,9	19,7	22,8	Pdh	kW
Tj = +12 °C	(warmer climate conditions)	7,7	10,7	12,7	15,7	18,8	22,2	Pdh	kW
Tj = +12 °C	(low temperature applications average climate conditions)	8,9	10,4	12,9	15,0	18,2	22,6	Pdh	kW
Tj = +12 °C	(low temperature applications colder climate conditions)	8,9	11,4	12,9	15,7	20,0	22,6	Pdh	kW
Tj = +12 °C	(low temperature applications warmer climate conditions)	8,8	11,3	12,9	15,6	19,9	22,5	Pdh	kW
Tj = bivalent temperature	(average climate conditions)	4,2	5,8	7,4	8,5	10,3	12,0	Pdh	kW
Tj = bivalent temperature	(colder climate conditions)	3,4	4,7	6,2	6,9	7,9	10,6	Pdh	kW
Tj = bivalent temperature	(warmer climate conditions)	5,7	7,1	9,5	10,7	13,7	15,5	Pdh	kW
Tj = bivalent temperature	(low temperature applications average climate conditions)	4,1	5,9	7,5	8,6	10,0	11,3	Pdh	kW
Tj = bivalent temperature	(low temperature applications colder climate conditions)	3,1	4,1	7,0	6,1	7,3	8,6	Pdh	kW
Tj = bivalent temperature	(low temperature applications warmer climate conditions)	5,5	7,2	9,5	10,4	12,9	15,1	Pdh	kW
Tj = operation limit temperature	(average climate conditions)	3,1	4,6	6,6	6,8	9,7	9,7	Pdh	kW
Tj = operation limit temperature	(colder climate conditions)	2,1	2,6	3,7	4,5	5,7	6,9	Pdh	kW
Tj = operation limit temperature	(warmer climate conditions)	4,9	5,7	6,7	8,9	12,1	13,2	Pdh	kW
Tj = operation limit temperature	(low temperature applications average climate conditions)	3,4	5,0	6,9	7,4	9,0	10,1	Pdh	kW

Tj = operation limit temperature	(low temperature applications colder climate conditions)	2,2	2,9	3,9	4,7	5,9	7,0	Pdh	kW
Tj = operation limit temperature	(low temperature applications warmer climate conditions)	4,7	6,2	7,1	9,1	11,4	13,3	Pdh	kW
Bivalent temperature	(average climate conditions)	-3	-4	-4	-4	-5	-4	Tbiv	°C
Bivalent temperature	(colder climate conditions)	-8	-8	-10	-10	-12	-10	Tbiv	°C
Bivalent temperature	(warmer climate conditions)	5	4	5	5	5	5	Tbiv	°C
Bivalent temperature	(low temperature applications average climate conditions)	-5	-5	-5	-5	-7	-6	Tbiv	°C
Bivalent temperature	(low temperature applications colder climate conditions)	-14	-13	-15	-14	-15	-15	Tbiv	°C
Bivalent temperature	(low temperature applications warmer climate conditions)	4	5	4	4	4	4	Tbiv	°C
Degradation coefficient Tj= -7 °C	(average climate conditions)	1,0	NA	1,0	NA	1,0	1,0	Cdh	
Degradation coefficient Tj= -7 °C	(colder climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= -7 °C	(warmer climate conditions)	NA	NA	NA	NA	NA	NA	Cdh	
Degradation coefficient Tj= -7 °C	(low temperature applications average climate conditions)	1,0	NA	1,0	NA	1,0	1,0	Cdh	
Degradation coefficient Tj= -7 °C	(low temperature applications colder climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= -7 °C	(low temperature applications warmer climate conditions)	NA	NA	NA	NA	NA	NA	Cdh	
Degradation coefficient Tj= +2 °C	(average climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= +2 °C	(colder climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= +2 °C	(warmer climate conditions)	NA	NA	NA	NA	NA	NA	Cdh	
Degradation coefficient Tj= +2 °C	(low temperature applications average climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= +2 °C	(low temperature applications colder climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= +2 °C	(low temperature applications warmer climate conditions)	NA	NA	NA	NA	NA	NA	Cdh	
Degradation coefficient Tj= +7 °C	(average climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= +7 °C	(colder climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= +7 °C	(warmer climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= +7 °C	(low temperature applications average climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= +7 °C	(low temperature applications colder climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= +7 °C	(low temperature applications warmer climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= +12 °C	(average climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= +12 °C	(colder climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= +12 °C	(warmer climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= +12 °C	(low temperature applications average climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= +12 °C	(low temperature applications colder climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= +12 °C	(low temperature applications warmer climate conditions)	1,0	1,0	1,0	1,0	1,0	1,0	Cdh	
Declared coefficient of performance for part load at indoor temperature 20 °C and outdoor temperature T									
Tj = -7 °C	(average climate conditions)	1,77	2,35	2,33	2,37	2,37	2,06	COPd	
Tj = -7 °C	(colder climate conditions)	2,20	2,41	2,65	2,45	2,41	2,33	COPd	
Tj = -7 °C	(warmer climate conditions)	NA	NA	NA	NA	NA	NA	COPd	
Tj = -7 °C	(low temperature applications average climate conditions)	2,86	3,24	3,26	3,24	3,22	2,79	COPd	
Tj = -7 °C	(low temperature applications colder climate conditions)	3,03	3,10	3,40	3,16	3,06	2,89	COPd	
Tj = -7 °C	(low temperature applications warmer climate conditions)	NA	NA	NA	NA	NA	NA	COPd	
Tj = +2 °C	(average climate conditions)	2,86	3,18	3,07	3,25	3,03	2,69	COPd	
Tj = +2 °C	(colder climate conditions)	3,00	2,96	3,26	3,02	3,16	2,85	COPd	
Tj = +2 °C	(warmer climate conditions)	2,27	2,29	2,54	2,35	2,57	2,24	COPd	
Tj = +2 °C	(low temperature applications average climate conditions)	3,45	3,83	4,16	3,85	3,77	3,26	COPd	
Tj = +2 °C	(low temperature applications colder climate conditions)	3,55	3,74	4,31	3,70	3,36	3,35	COPd	
Tj = +2 °C	(low temperature applications warmer climate conditions)	3,26	3,40	3,90	3,38	3,21	3,10	COPd	
Tj = +7 °C	(average climate conditions)	3,75	4,17	3,98	4,23	3,62	3,58	COPd	
Tj = +7 °C	(colder climate conditions)	4,07	4,02	4,15	4,02	3,99	3,80	COPd	
Tj = +7 °C	(warmer climate conditions)	3,28	3,56	3,56	3,30	3,37	3,14	COPd	
Tj = +7 °C	(low temperature applications average climate conditions)	4,81	4,30	5,07	4,75	4,49	4,30	COPd	
Tj = +7 °C	(low temperature applications colder climate conditions)	4,90	4,77	5,11	4,80	4,48	4,34	COPd	
Tj = +7 °C	(low temperature applications warmer climate conditions)	4,59	4,61	4,93	4,59	4,32	4,16	COPd	
Tj = +12 °C	(average climate conditions)	5,20	5,16	4,77	5,16	4,75	4,57	COPd	
Tj = +12 °C	(colder climate conditions)	5,43	4,74	4,67	4,80	4,79	4,63	COPd	
Tj = +12 °C	(warmer climate conditions)	4,76	4,69	4,79	4,66	4,62	4,41	COPd	
Tj = +12 °C	(low temperature applications average climate conditions)	6,09	5,90	5,66	5,89	5,53	5,24	COPd	
Tj = +12 °C	(low temperature applications colder climate conditions)	5,84	5,05	5,27	5,25	5,08	4,89	COPd	
Tj = +12 °C	(low temperature applications warmer climate conditions)	6,03	5,77	5,88	5,93	5,61	5,30	COPd	
Tj = bivalent temperature	(average climate conditions)	2,33	2,69	2,63	2,70	2,56	2,30	COPd	
Tj = bivalent temperature	(colder climate conditions)	2,13	2,33	2,45	2,26	2,10	2,14	COPd	
Tj = bivalent temperature	(warmer climate conditions)	2,95	2,91	3,19	2,97	3,10	2,24	COPd	
Tj = bivalent temperature	(low temperature applications average climate conditions)	3,04	3,47	3,48	3,45	3,22	2,88	COPd	
Tj = bivalent temperature	(low temperature applications colder climate conditions)	2,43	2,58	2,82	2,56	2,51	2,24	COPd	
Tj = bivalent temperature	(low temperature applications warmer climate conditions)	3,85	3,98	4,40	3,94	3,69	3,58	COPd	
Tj = operation limit temperature	(average climate conditions)	1,50	2,02	1,99	2,10	2,06	1,80	COPd	
Tj = operation limit temperature	(colder climate conditions)	1,10	1,12	1,41	1,41	1,45	2,14	COPd	
Tj = operation limit temperature	(warmer climate conditions)	2,27	2,29	2,20	2,35	2,57	2,24	COPd	
Tj = operation limit temperature	(low temperature applications average climate conditions)	2,52	2,92	2,98	2,98	2,94	2,50	COPd	
Tj = operation limit temperature	(low temperature applications colder climate conditions)	1,77	1,80	2,04	1,94	2,04	1,78	COPd	
Tj = operation limit temperature	(low temperature applications warmer climate conditions)	3,26	3,40	3,20	3,38	3,21	3,10	COPd	
For air-to-water heat pumps: Operation limit temperature	(average climate conditions)	-10	-10	-10	-10	-10	-10	TOL	°C
For air-to-water heat pumps: Operation limit temperature	(colder climate conditions)	-20	-20	-20	-20	-20	-20	TOL	°C
For air-to-water heat pumps: Operation limit temperature	(warmer climate conditions)	2	2	2	2	2	2	TOL	°C
For air-to-water heat pumps: Operation limit temperature	(low temperature applications average climate conditions)	-10	-10	-10	-10	-10	-10	TOL	°C
For air-to-water heat pumps: Operation limit temperature	(low temperature applications colder climate conditions)	-20	-20	-20	-20	-20	-20	TOL	°C
For air-to-water heat pumps: Operation limit temperature	(low temperature applications warmer climate conditions)	2	2	2	2	2	2	TOL	°C
Heating water operating limit temperature		60	60	60	60	60	60	WTOL	°C
Power consumption in other mode than active									
Off mode		0,004	0,007	0,004	0,007	0,007	0,004	POFF	kW
Thermostat off mode		0,004	0,003	0,004	0,047	0,012	0,004	PTO	kW
Standby mode		0,004	0,007	0,004	0,007	0,007	0,004	PSB	kW
Crancase heater mode		0,070	0,070	0,070	0,070	0,070	0,070	PKK	kW

Supplementary heater												
Rated heat output	(average climate conditions)	2,7	1,8	2,2	2,6	3,9	5,9		Psup		kW	
Rated heat output	(colder climate conditions)	3,4	2,8	2,9	3,2	5,0	8,7		Psup		kW	
Rated heat output	(warmer climate conditions)	2,3	1,9	2,6	2,9	5,4	6,5		Psup		kW	
Rated heat output	(low temperature applications average climate conditions)	1,6	1,4	1,8	2,1	2,3	3,3		Psup		kW	
Rated heat output	(low temperature applications colder climate conditions)	1,6	2,4	4,7	3,0	3,1	3,5		Psup		kW	
Rated heat output	(low temperature applications warmer climate conditions)	1,6	2,2	4,0	3,1	3,7	4,3		Psup		kW	
Type of energy input		Electrical	Electrical	Electrical	Electrical	Electrical	Electrical					
Other items												
Capacity control		Fixed	Fixed	Fixed	Fixed	Fixed	Fixed					
Sound power levels outdoors		61	61	61	62	66	76		LWA		dB	
Annual energy consumption	(average climate conditions)	4288	3317	6373	4775	5782	11543		QHE		kWh	
Annual energy consumption	(colder climate conditions)	5479	7381	8124	9365	9742	15254		QHE		kWh	
Annual energy consumption	(warmer climate conditions)	2719	3389	4270	5039	6315	7588		QHE		kWh	
Annual energy consumption	(low temperature applications average climate conditions)	2793	2742	4648	3900	4066	8003		QHE		kWh	
Annual energy consumption	(low temperature applications colder climate conditions)	3571	4062	5699	5690	6918	8441		QHE		kWh	
Annual energy consumption	(low temperature applications warmer climate conditions)	1816	2395	2949	3353	4355	5294		QHE		kWh	
For air-to-water heat pumps: Rated air flow rate, outdoors	(average climate conditions)	4500	4500	6400	7200	8800	12700				m3/h	
For air-to-water heat pumps: Rated air flow rate, outdoors	(colder climate conditions)	4500	4500	6400	7200	8800	12700				m3/h	
For air-to-water heat pumps: Rated air flow rate, outdoors	(warmer climate conditions)	4500	4500	6400	7200	8800	12700				m3/h	
For air-to-water heat pumps: Rated air flow rate, outdoors	(low temperature applications average climate conditions)	4500	4500	6400	7200	8800	12700				m3/h	
For air-to-water heat pumps: Rated air flow rate, outdoors	(low temperature applications colder climate conditions)	4500	4500	6400	7200	8800	12700				m3/h	
For air-to-water heat pumps: Rated air flow rate, outdoors	(low temperature applications warmer climate conditions)	4500	4500	6400	7200	8800	12700				m3/h	
Possibility to run only during off peak hours		Yes	Yes	Yes	Yes	Yes	Yes					
For heat pump combination heater:												
Declared load profile (average conditions)		XL	XL	XL	XL	XXL	XXL					
Declared load profile cold conditions		XL	XL	XL	XL	XXL	XXL					
Declared load profile warmer conditions		XL	XL	XL	XL	XXL	XXL					
Daily electricity consumption (average conditions)		10,210	9,550	9,420	9,410	12,890	13,340		Qelec		kWh	
Daily electricity consumption cold conditions		14,860	14,350	13,950	14,320	18,320	18,790		Qelec		kWh	
Daily electricity consumption warmer conditions		8,420	7,360	7,360	7,310	9,690	10,030		Qelec		kWh	
Annual electricity consumption (average conditions)		2161	2016	1987	1985	2536	2635		AEC		kWh/annum	
Annual electricity consumption (cold conditions)		2871	2759	2671	2752	4030	4134		AEC		kWh/annum	
Annual electricity consumption (warmer conditions)		1809	1575	1575	1564	2132	2207		AEC		kWh/annum	
Water heater energy efficiency		76	81	83	83	76	74		ηwh		%	
Water heater energy efficiency cold conditions		54	56	58	56	50	52		ηwh		%	
Water heater energy efficiency warmer conditions		92	105	105	106	100	98		ηwh		%	
Energy label water heater		B	A	A	A	B	B					
* Depending on selected solution (Mini / Midi / Maxi)												
** Depending on selected solution (Mini / Midi / Maxi)												