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

		086L1997 086L1991	086L1998 086L1992	086L1999 086L1993	086L2000 086L1994	086L1995		
		DHP-H OPTI PRO+ 6 DHP-L OPTI PRO+ 6	DHP-H OPTI PRO+ 8 DHP-L OPTI PRO+ 8	DHP-H OPTI PRO+ 10 DHP-L OPTI PRO+ 10	DHP-H OPTI PRO+ 13 DHP-L OPTI PRO+ 13	DHP-L OPTI PRO+ 17		
Model	Conditions						Symbol	Unit
Air to water heat pump		NO	NO	NO	NO	NO		
Water-to-water heat pump		YES	YES	YES	YES	YES		
Brine-to water heat pump		YES	YES	YES	YES	YES		
Low Temperature Heat pump		NO	NO	NO	NO	NO		
Equipped with supplementary heate		YES	YES	YES	YES	YES		
Heat pump combination heate		YES	YES	YES	YES	YES		
Built in temperature control class		III	III	III	III	III		
Built in temperature control contribution to energy efficien		1,5	1,5	1,5	1,5	1.5		%
Danfoss Link temperature control class		VII	VII	VII	VII	VII		
Danfoss Link temperature control contribution to energy efficien		3,5	3,5	3,5	3,5	3.5		%
Rated heat outpu	(average climate conditions	7	9	12	15	20	Prated	kW
Rated heat outpu	(colder climate conditions	7	9	11	15	19	Prated	kW
Rated heat outpu	(warmer climate conditions	7	8	11	14	19	Prated	kW
Rated heat output	(low temperature applications average climate conditions)	7	9	11	14	19	Prated	kW
Rated heat outpu	(low temperature applications colder climate condition	7	9	11	15	19	Prated	kW
Rated heat output	(low temperature applications warmer climate conditions)	7	9	12	15	20	Prated	kW
SCOP	(average climate conditions	3,39	3,57	3,85	3,74	3,68		
SCOP	(colder climate conditions	3,48	3,66	3,94	3,83	3,76		
SCOP	(warmer climate conditions	3,40	3,58	3,87	3,77	3,70		
SCOP	(low temperature applications average climate conditions)	4,70	4,86	5,25	5,02	4,88		
SCOP	(low temperature applications colder climate condition	4,82	5,00	5,38	5,14	4,99		
SCOP	(low temperature applications warmer climate conditions)	4,76	4,93	5,32	5,08	4,94		
Seasonal space heating Energy efficienc	(average climate conditions	128	135	146	142	139	ηs	%
Seasonal space heating Energy efficiency Built in temperature contr	(average climate conditions	129	136	147	143	141	ηs	%
Seasonal space heating Energy efficiency Danfoss Link temperature contr	(average climate conditions	131	138	149	145	143	ηs	%
Seasonal space heating Energy efficienc	(colder climate conditions	131	138	149	145	142	ηs	%
Seasonal space heating Energy efficiency Built in temperature contr	(colder climate conditions	133	140	151	147	144	ηs	%
Seasonal space heating Energy efficiency Danfoss Link temperature contr	(colder climate conditions	135	142	153	149	146	ηs	%
Seasonal space heating Energy efficienc	(warmer climate conditions	128	135	147	143	140	ηs	%
Seasonal space heating Energy efficiency Built in temperature contr	(warmer climate conditions	130	137	148	144	142	ηs	%
Seasonal space heating Energy efficiency Danfoss Link temperature contr	(warmer climate conditions	132	139	150	146	144	ηs	%
Seasonal space heating Energy efficiency	(low temperature applications average climate conditions)	180	186	202	193	187	ηs	%
Seasonal space heating Energy efficiency Built in temperature control	(low temperature applications average climate conditions)	181	188	204	194	189	ηs	%
Seasonal space heating Energy efficiency Danfoss Link temperature control	(low temperature applications average climate conditions)	183	190	206	196	191	ηs	%
Seasonal space heating Energy efficienc	(low temperature applications colder climate condition	185	192	207	197	192	ηs	%
Seasonal space heating Energy efficiency Built in temperature contr	(low temperature applications colder climate condition	186	193	209	199	193	ηs	%
Seasonal space heating Energy efficiency Danfoss Link temperature contr	(low temperature applications colder climate condition	188	195	211	201	195	ηs	%
Seasonal space heating Energy efficiency	(low temperature applications warmer climate conditions)	182	189	205	195	190	ηs	%
Seasonal space heating Energy efficiency Built in temperature control	(low temperature applications warmer climate conditions)	184	191	206	197	191	ηs	%
Seasonal space heating Energy efficiency Danfoss Link temperature control	(low temperature applications warmer climate conditions)	186	193	208	199	193	ηs	%
Energy efficiency class		A++	A++	A++	A++	A++		
Energy efficiency class built in temperature control packag		A++	A++	A++	A++	A++		
Energy efficiency class Danfoss Link temperature control packag		A++	A++	A++	A++	A++		
Energy efficiency class	(low temperature applications	A++	A++	A++	A++	A++		
Energy efficiency class built in temperature control packag	(low temperature applications	A+++	A+++	A+++	A+++	A+++		
Energy efficiency class Danfoss Link temperature control packag	(low temperature applications	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	5,3	7,0	9,5	12,2	15,9	Pdh	kW
Tj = -7 °C	(colder climate conditions	5,5	7,2	9,7	12,5	16,3	Pdh	kW
Tj = -7 °C	(warmer climate conditions	NA	NA	NA	NA	NA	Pdh	kW
Tj = -7 °C	(low temperature applications average climate conditions)	5,8	7,6	10,2	13,1	17,1	Pdh	kW
Tj = -7 °C	(low temperature applications colder climate condition	5,9	7,6	10,3	13,2	17,2	Pdh	kW
Tj = -7 °C	(low temperature applications warmer climate conditions)	NA	NA	NA	NA	NA	Pdh	kW
Tj = +2 °C	(average climate conditions	5,5	7,3	9,8	12,6	16,4	Pdh	kW
Tj = +2 °C	(colder climate conditions	5,6	7,4	9,8	12,7	16,5	Pdh	kW
Tj = +2 °C	(warmer climate conditions	5,2	6,9	9,4	12,0	15,8	Pdh	kW
Tj = +2 °C	(low temperature applications average climate conditions)	5,9	7,6	10,3	13,2	17,2	Pdh	kW
Tj = +2 °C	(low temperature applications colder climate condition	5,9	7,7	10,3	13,3	17,3	Pdh	kW
Tj = +2 °C	(low temperature applications warmer climate conditions)	5,8	7,6	10,2	13,0	17,1	Pdh	kW
Tj = +7 °C	(average climate conditions	5,6	7,4	9,9	12,8	16,6	Pdh	kW
Tj = +7 °C	(colder climate conditions	5,7	7,5	9,9	12,9	16,8	Pdh	kW
Tj = +7 °C	(warmer climate conditions	5,5	7,2	9,6	12,4	16,2	Pdh	kW
Tj = +7 °C	(low temperature applications average climate conditions)	5,9	7,7	10,3	13,2	17,3	Pdh	kW
Tj = +7 °C	(low temperature applications colder climate condition	6,0	7,7	10,4	13,3	17,4	Pdh	kW
Tj = +7 °C	(low temperature applications warmer climate conditions)	5,9	7,6	10,3	13,1	17,2	Pdh	kW
Tj = +12 °C	(average climate conditions	5,7	7,5	10,0	12,9	16,8	Pdh	kW
Tj = +12 °C	(colder climate conditions	5,8	7,6	10,0	13,0	16,9	Pdh	kW
Tj = +12 °C	(warmer climate conditions	5,7	7,4	9,9	12,8	16,7	Pdh	kW
Tj = +12 °C	(low temperature applications average climate conditions)	6,0	7,7	10,4	13,3	17,4	Pdh	kW
Tj = +12 °C	(low temperature applications colder climate condition	6,0	7,7	10,4	13,3	17,4	Pdh	kW
Tj = +12 °C	(low temperature applications warmer climate conditions)	6,0	7,7	10,4	13,3	17,3	Pdh	kW
Tj = bivalent temperatur	(average climate conditions	5,4	7,1	9,6	12,3	16,1	Pdh	kW
Tj = bivalent temperatur	(colder climate conditions	5,4	7,1	9,5	12,3	16,0	Pdh	kW

Tj = bivalent temperatur	(warmer climate conditions	5,4	7,0	9,5	12,2	16,0	Pdh	kW
Tj = bivalent temperature	(low temperature applications average climate conditions)	5,8	7,6	10,2	13,1	17,1	Pdh	kW
Tj = bivalent temperatur	(low temperature applications colder climate condition:	5,8	7,6	10,2	13,1	17,1	Pdh	kW
Tj = bivalent temperature	(low temperature applications warmer climate conditions)	5,8	7,6	10,2	13,1	17,1	Pdh	kW
Tj = operation limit temperatur	(average climate conditions	5,2	6,9	9,4	12,0	15,8	Pdh	kW
Tj = operation limit temperatur	(colder climate conditions	5,2	6,9	9,4	12,0	15,8	Pdh	kW
Tj = operation limit temperatur	(warmer climate conditions	5,2	6,9	9,4	12,0	15,8	Pdh	kW
Tj = operation limit temperature	(low temperature applications average climate conditions)	5,8	7,6	10,2	13,0	17,1	Pdh	kW
Tj = operation limit temperatur	(low temperature applications colder climate condition:	5,8	7,6	10,2	13,0	17,1	Pdh	kW
Tj = operation limit temperature	(low temperature applications warmer climate conditions)	5,8	7,6	10,2	13,0	17,1	Pdh	kW
Bivalent temperature	(average climate conditions	-5	-5	-5	-5	-5	Tbiv	°C
Bivalent temperature	(colder climate conditions	-14	-15	-16	-15	-16	Tbiv	°C
Bivalent temperature	(warmer climate conditions	5	4	4	4	4	Tbiv	°C
Bivalent temperature	(low temperature applications average climate conditions)	-7	-7	-8	-8	-8	Tbiv	°C
Bivalent temperatur	(low temperature applications colder climate condition:	-17	-17	-18	-18	-18	Tbiv	°C
Bivalent temperature	(low temperature applications warmer climate conditions)	4	4	4	4	4	Tbiv	°C
Degradation coefficient Tj= -7 °C	(average climate conditions	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	Cdh	
Degradation coefficient Tj= -7 °C	(warmer climate conditions	NA	NA	NA	NA	NA	Cdh	
Degradation coefficient Tj= -7 °C	(low temperature applications average climate conditions)	1,0	1,0	1,0	1,0	1,0	Cdh	
Degradation coefficient Tj= -7 °C	(low temperature applications colder climate condition:	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	Cdh	
Degradation coefficient Tj= +2 °C	(average climate conditions	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	Cdh	
Degradation coefficient Tj= +2 °C	(warmer climate conditions	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	Cdh	
Degradation coefficient Tj= +2 °C	(low temperature applications colder climate condition:	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	Cdh	
Degradation coefficient Tj= +7 °C	(average climate conditions	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	Cdh	
Degradation coefficient Tj= +7 °C	(warmer climate conditions	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	Cdh	
Degradation coefficient Tj= +7 °C	(low temperature applications colder climate condition:	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	Cdh	
Degradation coefficient Tj= +12 °C	(average climate conditions	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	Cdh	
Degradation coefficient Tj= +12 °C	(warmer climate conditions	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	Cdh	
Degradation coefficient Tj= +12 °C	(low temperature applications colder climate condition:	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	Cdh	
Declared coefficient of performance for part load at indoor temperature 20 °C and outdoor temperature T								
Tj = -7 °C	(average climate conditions	2,77	2,94	3,22	3,12	3,10	COPd	
Tj = -7 °C	(colder climate conditions	3,29	3,45	3,71	3,62	3,55	COPd	
Tj = -7 °C	(warmer climate conditions	NA	NA	NA	NA	NA	COPd	
Tj = -7 °C	(low temperature applications average climate conditions)	4,43	4,54	4,94	4,71	4,61	COPd	
Tj = -7 °C	(low temperature applications colder climate condition:	4,73	4,90	5,27	5,04	4,89	COPd	
Tj = -7 °C	(low temperature applications warmer climate conditions)	NA	NA	NA	NA	NA	COPd	
Tj = +2 °C	(average climate conditions	3,40	3,58	3,87	3,76	3,70	COPd	
Tj = +2 °C	(colder climate conditions	3,71	3,88	4,15	4,06	3,96	COPd	
Tj = +2 °C	(warmer climate conditions	2,56	2,73	3,00	2,91	2,90	COPd	
Tj = +2 °C	(low temperature applications average climate conditions)	4,67	4,84	5,20	4,98	4,84	COPd	
Tj = +2 °C	(low temperature applications colder climate condition:	4,95	5,13	5,50	5,34	5,09	COPd	
Tj = +2 °C	(low temperature applications warmer climate conditions)	4,31	4,40	4,84	4,62	4,53	COPd	
Tj = +7 °C	(average climate conditions	3,78	3,96	4,25	4,14	4,04	COPd	
Tj = +7 °C	(colder climate conditions	4,09	4,26	4,54	4,45	4,31	COPd	
Tj = +7 °C	(warmer climate conditions	3,14	3,27	3,55	3,44	3,40	COPd	
Tj = +7 °C	(low temperature applications average climate conditions)	4,92	5,10	5,47	5,22	5,07	COPd	
Tj = +7 °C	(low temperature applications colder climate condition:	5,12	5,30	5,69	5,41	5,25	COPd	
Tj = +7 °C	(low temperature applications warmer climate conditions)	4,64	4,80	5,19	4,96	4,82	COPd	
Tj = +12 °C	(average climate conditions	4,21	4,39	4,68	4,59	4,44	COPd	
Tj = +12 °C	(colder climate conditions	4,38	4,55	4,85	4,76	4,59	COPd	
Tj = +12 °C	(warmer climate conditions	3,93	4,08	4,37	4,27	4,15	COPd	
Tj = +12 °C	(low temperature applications average climate conditions)	5,17	5,36	5,75	5,46	5,30	COPd	
Tj = +12 °C	(low temperature applications colder climate condition:	5,09	5,28	5,68	5,40	5,25	COPd	
Tj = +12 °C	(low temperature applications warmer climate conditions)	5,02	5,20	5,59	5,32	5,17	COPd	
Tj = bivalent temperatur	(average climate conditions	2,95	3,12	3,40	3,30	3,27	COPd	
Tj = bivalent temperatur	(colder climate conditions	3,00	3,11	3,33	3,29	3,21	COPd	
Tj = bivalent temperatur	(warmer climate conditions	2,96	2,99	3,27	3,17	3,15	COPd	
Tj = bivalent temperature	(low temperature applications average climate conditions)	4,43	4,54	4,92	4,70	4,60	COPd	
Tj = bivalent temperatur	(low temperature applications colder climate condition:	4,51	4,63	5,00	4,78	4,67	COPd	
Tj = bivalent temperature	(low temperature applications warmer climate conditions)	5,00	4,62	5,04	4,81	4,70	COPd	
Tj = operation limit temperatur	(average climate conditions	2,56	2,73	3,00	2,91	2,90	COPd	

Tj = operation limit temperatur	(colder climate conditions	2,56	2,73	3,00	2,91	2,90	COPd	
Tj = operation limit temperatur	(warmer climate conditions	2,56	2,73	3,00	2,91	2,90	COPd	
Tj = operation limit temperature	(low temperature applications average climate conditions)	4,31	4,40	4,84	4,62	4,53	COPd	
Tj = operation limit temperatur	(low temperature applications colder climate condition:	4,31	4,40	4,84	4,62	4,53	COPd	
Tj = operation limit temperature	(low temperature applications warmer climate conditions)	4,31	4,44	4,84	4,62	4,53	COPd	
Heating water operating limit temperatur		60	60	60	60	60	WTOL	°C
Power consumption in other mode than active								
Off mode		0,002	0,002	0,0022	0,002	0,002	POFF	kW
Thermostat off mode		0,003	0,004	0,0031	0,004	0,004	PTO	kW
Standby mode		0,003	0,004	0,0031	0,004	0,004	PSB	kW
Crancase heater mode							PCK	kW
Supplementary heater								
Rated heat outpu	(average climate conditions	**1,4**	**1,9**	**2,5**	**3,2**	4,1	**Psup**	**kW**
Rated heat outpu	(colder climate conditions	1,6	1,8	1,9	3,1	3,3	Psup	kW
Rated heat outpu	(warmer climate conditions	1,6	1,3	1,7	2,2	2,9	Psup	kW
Rated heat output	(low temperature applications average climate conditions)	0,8	1,0	0,9	1,1	1,4	Psup	kW
Rated heat outpu	(low temperature applications colder climate condition:	0,9	1,2	1,2	1,6	2,1	Psup	kW
Rated heat output	(low temperature applications warmer climate conditions)	**1,0**	**1,3**	**1,8**	**2,2**	2,9	**Psup**	**kW**
Type of energy inpu		Electrical	Electrical	Electrical	Electrical	Electrical		
Other items								
Capacity contro		Fixed	Fixed	Fixed	Fixed	Fixed		
Sound power levels indoor		41	44	46	47		LWA	dB
Sound power levels indoors (Duo Versior		41	44	46	47	53	LWA	dB
Annual energy consumptior	(average climate conditions	4065	5086	6369	8405	11166	QHE	kWh
Annual energy consumptior	(colder climate conditions	4857	5863	7099	9695	12462	QHE	kWh
Annual energy consumptior	(warmer climate conditions	**2698**	**3065**	**3837**	**5054**	6727	**QHE**	kWh
Annual energy consumption	(low temperature applications average climate conditions)	2895	3650	4350	5828	7833	QHE	kWh
Annual energy consumptior	(low temperature applications colder climate condition:	3439	4316	5234	7022	9443	QHE	kWh
Annual energy consumption	(low temperature applications warmer climate conditions)	1912	2401	2999	4019	5399	QHE	kWh
For brine to water heat pumps: Rated brine flow rate, outdoor heat exchang	(average climate conditions	1	1	2	3	3		m3/h
For brine to water heat pumps: Rated brine flow rate, outdoor heat exchang	(colder climate conditions	1	1	2	3	3		m3/h
For brine to water heat pumps: Rated brine flow rate, outdoor heat exchang	(warmer climate conditions	1	1	2	3	3		m3/h
For brine to water heat pumps: Rated brine flow rate, outdoor heat exchanger	(low temperature applications average climate conditions)	1	2	3	3	4		m3/h
For brine to water heat pumps: Rated brine flow rate, outdoor heat exchang	(low temperature applications colder climate condition:	1	2	3	3	4		m3/h
For brine to water heat pumps: Rated brine flow rate, outdoor heat exchanger	(low temperature applications warmer climate conditions)	1	2	3	3	4		m3/h
Possibility to run only during off peak hour		Yes	Yes	Yes	Yes	Yes		
For heat pump combination heater:								
Declared load profile '		L	L	L	L	XXL		
Daily electricity consumption		5,920	5,840	4,590	5,490	10,740	Qelec	kWh
Annual electricity consumptior		1260	1246	974	1171	2363	AEC	kWh/annum
Water heater energy efficiency		80	81	104	86	92	ηwh	%
Energy label water heate		A	A	A	A	A		