

Heat pump model		Master Therm		BA26ISC-1	
Heat pump type		Air/Water			
Supplementary heater		Yes			
Heat pump combination heater		Yes			
Reference heating season		Average		SCOP	
Reference water temperature		LOW, 35°C		4.29	
Full load heating		Prated [kW]		6.51	
Seasonal efficiency		η_s [%]		168	
Annual electricity consumption		Q_{HE} [kWh]		3139	
Average 35°C	Outdoor heat exchanger	Declared capacity	COP at part load	Degradation Coefficient	
	Outdoor air				
	Tj [°C]	Pdh [kW]	COPd (-)	Cdh (-)	
A	-7	5.76	2.59	0.900	
B	2	3.72	3.91	0.900	
C	7	2.42	6.53	0.900	
D	12	2.74	7.21	0.951	
TOL (E)	-10	5.88	2.52	0.900	
Tbivalent (F)	-7	5.76	2.59	0.900	
Reference heating season		Average		SCOP	
Reference water temperature		High, 55°C		3.24	
Full load heating		Prated [kW]		6.33	
Seasonal efficiency		η_s [%]		126	
Annual electricity consumption		Q_{HE} [kWh]		4039	
Average 55°C	Outdoor heat exchanger	Declared capacity	COP at part load	Degradation Coefficient	
	Outdoor air				
	Tj [°C]	Pdh [kW]	COPd (-)	Cdh (-)	
A	-7	5.60	1.94	0.900	
B	2	3.50	3.02	0.900	
C	7	2.33	4.69	0.900	
D	12	2.78	5.55	0.963	
TOL (E)	-10	5.66	1.82	0.900	
Tbivalent (F)	-7	5.60	1.94	0.900	
Reference heating season		Warmer			
Reference water temperature		Low, 35°C			
Full load heating		Prated [kW]		7.67	
Seasonal efficiency		η_s [%]		259	
Annual electricity consumption		Q_{HE} [kWh]		1567	
Warmer 35°C	Outdoor heat exchanger	Declared capacity	COP at part load	Degradation Coefficient	
	Outdoor air				
	Tj [°C]	Pdh [kW]	COPd (-)	Cdh (-)	
B	2	7.67	3.41	0.900	
C	7	5.10	5.85	0.900	
D	12	2.52	8.10	0.944	
TOL (E)	2	7.67	3.41	0.900	
Tbivalent (F)	2	7.67	3.41	0.900	

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Reference heating season		Warmer		
Reference water temperature		High, 55°C		
Full load heating	Prated [kW]		7.40	
Seasonal efficiency	η_s [%]		177	
Annual electricity consumption	Q_{HE} [kWh]		2199	
Warmer 55°C	Outdoor heat exchanger	Declared capacity	COP at part load	Degradation Coefficient
	Outdoor air			
	Tj [°C]	Pdh [kW]	COPd (-)	Cdh (-)
B	2	7.40	2.21	0.900
C	7	5.17	3.71	0.900
D	12	2.46	6.09	0.957
TOL (E)	2	7.40	2.21	0.900
Tbivalent (F)	2	7.40	2.21	0.900

Reference heating season		Colder		
Reference water temperature		Low, 35°C		
Full load heating	Prated [kW]		9.65	
Seasonal efficiency	η_s [%]		132	
Annual electricity consumption	Q_{HE} [kWh]		5987	
Colder 35°C	Outdoor heat exchanger	Declared capacity	COP at part load	Degradation Coefficient
	Outdoor air			
	Tj [°C]	Pdh [kW]	COPd (-)	Cdh (-)
A	-7	5.84	2.70	0.900
B	2	3.54	4.55	0.900
C	7	2.97	6.82	0.960
D	12	3.45	7.50	0.959
TOL (E)	-22	4.16	2.08	0.900
Tbivalent (F)	-7	5.84	2.70	0.900
G	-15	4.81	2.32	0.900

Reference heating season		Colder		
Reference water temperature		High, 55°C		
Full load heating	Prated [kW]		9.31	
Seasonal efficiency	η_s [%]		107	
Annual electricity consumption	Q_{HE} [kWh]		7116	
Colder 55°C	Outdoor heat exchanger	Declared capacity	COP at part load	Degradation Coefficient
	Outdoor air			
	Tj [°C]	Pdh [kW]	COPd (-)	Cdh (-)
A	-7	5.63	2.17	0.900
B	2	3.69	3.58	0.900
C	7	2.86	5.58	0.966
D	12	3.33	6.22	0.965
TOL (E)	-22	3.53	1.42	0.900
Tbivalent (F)	-7	5.63	2.17	0.900
G	-15	4.34	1.71	0.900

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Power consumption in modes other than "active mode"			
Off mode	P _{OFF} [kW]	0.018	
Thermostat off mode	P _{TO} [kW]	0.017	
Standby mode	P _{SB} [kW]	0.018	
Crankcaseheater mode	P _{CK} [kW]	-	
Supplementary heater capacity	P _{sup} [kW]	6	
Supplementary heater type	[-]	electricity	
Capacity control		Variable	
Sound power level Indoor	L _{WA} [dBA]	48	
Sound power level Outdoor	L _{WA} [dBA]	55	
Rated airflow	[m ³ /h]	max. 3500	
Declared load profile / Tapping cycle		L	
Daily electricity consumption	Q _{elec} [kWh]	3.129	
Water heating energy efficiency	η _{wh} [%]	90	
Temperature controller			
Type	Carel pCO5/pCO5+/uPC, Master Therm custom SW		
Class	II		
Contribution	%	2.0	
Temperature controller + Room Terminal			
Type	Carel pCO5/pCO5+/uPC + pAD, Master Therm custom SW		
Class	VI		
Contribution	%	4.0	

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Information sheet			
Temperature application		Low, 35°C	High, 55°C
Space heating energy efficiency class, Average climate	-	A++	A++
Nominal heating capacity Pdesign, Average climate	kW	7	6
Space heating seasonal efficiency, Average climate	%	168	126
Space heating annual electricity consumption, Average cl.	kWh	3139	4039

Nominal heating capacity Pdesign, Colder climate	kW	10	9
Space heating seasonal efficiency, Colder climate	%	132	107
Space heating annual electricity consumption, Colder cl.	kWh	5987	7116

Nominal heating capacity Pdesign, Warmer climate	kW	8	7
Space heating seasonal efficiency, Warmer climate	%	259	177
Space heating annual electricity consumption, Warmer cl.	kWh	1567	2199

Sound power level Lwa Outdoor	dBA	55
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Information sheet for energy efficiency Set with Temperature controller			
Temperature application		Low, 35°C	High, 55°C
Controller Carel pCO5/pCO5+/uPC, Class	-	II	II
Controller Carel pCO5/pCO5+/uPC, Contribution	%	2.0	2.0
Set Space heating seasonal efficiency, Average climate	%	170	128
Set Space heating energy efficiency class, Average climate	-	A++	A++
Set Space heating seasonal efficiency, Colder climate	%	134	109
Set Space heating seasonal efficiency, Warmer climate	%	261	179

Information sheet for energy efficiency Set with Temperature controller + Room Terminal			
Temperature application		Low, 35°C	High, 55°C
Controller Carel pCO5/pCO5+/uPC + pAD, Class	-	VI	VI
Controller Carel pCO5/pCO5+/uPC, +pAD, Contribution	%	4.0	4.0
Set Space heating seasonal efficiency, Average climate	%	172	130
Set Space heating energy efficiency class, Average climate	-	A++	A++
Set Space heating seasonal efficiency, Colder climate	%	136	111
Set Space heating seasonal efficiency, Warmer climate	%	263	181