

Heat pump model		Master Therm	AQ26IC-1	
Heat pump type			Brine/Water	
Supplementary heater			No	
Heat pump combination heater			Yes	
Reference heating season			Average	
Reference water temperature			LOW, 35°C	
Full load heating		Prated [kW]	8.94	
Seasonal efficiency		ηs [%]	190	
Annual electricity consumption		QHE [kWh]	3735	
Average 35°C	Outdoor heat exchanger	Declared capacity	COP at part load	Degradation Coefficient
	Outdoor air			
	Tj [°C]	Pdh [kW]	COPd (-)	Cdh (-)
A	-7	8.06	4.34	0.900
B	2	4.99	4.91	0.900
C	7	3.16	5.51	0.900
D	12	1.90	5.65	0.965
TOL (E)	-10	8.94	4.13	0.900
Tbivalent (F)	-10	8.94	4.13	0.900

Reference heating season			Average	
Reference water temperature			High, 55°C	
Full load heating		Prated [kW]	7.99	
Seasonal efficiency		ηs [%]	144	
Annual electricity consumption		QHE [kWh]	4333	
Average 55°C	Outdoor heat exchanger	Declared capacity	COP at part load	Degradation Coefficient
	Outdoor air			
	Tj [°C]	Pdh [kW]	COPd (-)	Cdh (-)
A	-7	7.17	3.04	0.900
B	2	4.35	3.77	0.900
C	7	2.77	4.42	0.900
D	12	1.83	4.64	0.970
TOL (E)	-10	7.99	2.86	0.900
Tbivalent (F)	-10	7.99	2.86	0.900

Reference heating season			Warmer	
Reference water temperature			Low, 35°C	
Full load heating		Prated [kW]	8.94	
Seasonal efficiency		ηs [%]	191	
Annual electricity consumption		QHE [kWh]	2400	
Warmer 35°C	Outdoor heat exchanger	Declared capacity	COP at part load	Degradation Coefficient
	Outdoor air			
	Tj [°C]	Pdh [kW]	COPd (-)	Cdh (-)
B	2	8.94	4.13	0.900
C	7	6.21	4.69	0.900
D	12	2.54	5.65	0.900
TOL (E)	2	8.94	4.13	0.900
Tbivalent (F)	2	8.94	4.13	0.900

Heat pump model		Master Therm		AQ26IC-1	
Reference heating season			Warmer		
Reference water temperature			High, 55°C		
Full load heating		Prated [kW]	7.99		
Seasonal efficiency		ηs [%]	141		
Annual electricity consumption		QHE [kWh]	2866		
Warmer 55°C	Outdoor heat exchanger	Declared capacity	COP at part load	Degradation Coefficient	
	Outdoor air				
	Tj [°C]	Pdh [kW]	COPd (-)	Cdh (-)	
B	2	7.99	2.86	0.900	
C	7	5.18	3.35	0.900	
D	12	2.41	4.42	0.900	
TOL (E)	2	7.99	2.86	0.900	
Tbivalent (F)	2	7.99	2.86	0.900	

Reference heating season			Colder		
Reference water temperature			Low, 35°C		
Full load heating		Prated [kW]	8.94		
Seasonal efficiency		ηs [%]	198		
Annual electricity consumption		QHE [kWh]	4287		
Colder 35°C	Outdoor heat exchanger	Declared capacity	COP at part load	Degradation Coefficient	
	Outdoor air				
	Tj [°C]	Pdh [kW]	COPd (-)	Cdh (-)	
A	-7	5.61	4.84	0.900	
B	2	3.41	5.51	0.900	
C	7	2.29	5.65	0.900	
D	12	1.89	5.51	0.965	
TOL (E)	-22	8.94	4.13	0.900	
Tbivalent (F)	-22	8.94	4.13	0.900	
G	-15	7.44	4.53	0.900	

Reference heating season			Colder		
Reference water temperature			High, 55°C		
Full load heating		Prated [kW]	7.99		
Seasonal efficiency		ηs [%]	151		
Annual electricity consumption		QHE [kWh]	4966		
Colder 55°C	Outdoor heat exchanger	Declared capacity	COP at part load	Degradation Coefficient	
	Outdoor air				
	Tj [°C]	Pdh [kW]	COPd (-)	Cdh (-)	
A	-7	4.90	3.58	0.900	
B	2	3.00	4.32	0.900	
C	7	1.85	4.87	0.900	
D	12	1.84	4.82	0.969	
TOL (E)	-22	7.99	2.86	0.900	
Tbivalent (F)	-22	7.99	2.86	0.900	
G	-15	7.58	3.19	0.995	

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Power consumption in modes other than "active mode"		
Off mode	P_{OFF} [kW]	0.012
Thermostat off mode	P_{TO} [kW]	0.012
Standby mode	P_{SB} [kW]	0.012
Crankcaseheater mode	P_{CK} [kW]	-
Supplementary heater capacity		
Supplementary heater capacity	P_{sup} [kW]	3-4 (4,5-6)
Supplementary heater type	[-]	electricity
Capacity control		
Capacity control		Variable
Sound power level Indoor	L_{WA} [dBA]	48
Sound power level Outdoor	L_{WA} [dBA]	-
Rated brine flow	[m ³ /h]	1.73
Declared load profile / Tapping cycle		
Declared load profile / Tapping cycle		L
Daily electricity consumption	Q_{elec} [kWh]	3.332
Water heating energy efficiency	η_{wh} [%]	86
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	9	8
Space heating seasonal efficiency, Average climate	%	190	144
Space heating annual electricity consumption, Average cl.	kWh	3735	4333

Nominal heating capacity Pdesign, Colder climate	kW	9	8
Space heating seasonal efficiency, Colder climate	%	198	151
Space heating annual electricity consumption, Colder cl.	kWh	4287	4966

Nominal heating capacity Pdesign, Warmer climate	kW	9	8
Space heating seasonal efficiency, Warmer climate	%	191	141
Space heating annual electricity consumption, Warmer cl.	kWh	2400	2866

Sound power level Lwa	dBA	48
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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	%	192	146
Set Space heating energy efficiency class, Average climate	-	A+++	A++
Set Space heating seasonal efficiency, Colder climate	%	200	153
Set Space heating seasonal efficiency, Warmer climate	%	193	143

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	%	194	148
Set Space heating energy efficiency class, Average climate	-	A+++	A++
Set Space heating seasonal efficiency, Colder climate	%	202	155
Set Space heating seasonal efficiency, Warmer climate	%	195	145