Heat pump model	**Master Therm**	**AQ26IC-1, AQ26IC-0**

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		**η_s [%]**	**190**	**A+++**
Annual electricity consumption		**Q_{HE} [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		**η_s [%]**	**144**	**A++**
Annual electricity consumption		**Q_{HE} [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		**η_s [%]**	**191**	
Annual electricity consumption		**Q_{HE} [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

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Heat pump model	**Master Therm**	**AQ26IC-1, AQ26IC-0**

Reference heating season			**Warmer**	
Reference water temperature			**High, 55°C**	
Full load heating		**Prated [kW]**	**7,99**	
Seasonal efficiency		**η_S [%]**	**141**	
Annual electricity consumption		**Q_{HE} [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		**η_S [%]**	**198**	
Annual electricity consumption		**Q_{HE} [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		**η_S [%]**	**151**	
Annual electricity consumption		**Q_{HE} [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

Heat pump model	**Master Therm**	**AQ26IC-1, AQ26IC-0**

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	P_{sup} [kW]	3-4 (4,5-6)
Supplementary heater type	[-]	electricity

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		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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Heat pump model	**Master Therm**	**AQ26IC-1, AQ26IC-0**

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	

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

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