GAS ENGINE HEAT PUMP POLO100
Performance data
Refrigerant: R407c

Date: 8.11.2018		T out [°C] Brine	-22	-17	-12	-7	-2	3	8	13	18	23
T out [°C] Hot Water	Tc [°C] condensation	Te [°C] Evaporation	-25	-20	-15	-10	-5	0	5	10	15	20
28	30	Cooling capacity [kW]	43.5	57.0	73.0	92.1	115.0	141.0	172.0	207.0	247.0	292.0
		Heating output [kW]	91.5	110.5	132.3	156.4	183.0	211.0	241.8	274.0	307.8	342.8
		Fuel consumption [kW]	53.3	59.4	65.8	71.4	75.6	77.8	77.5	74.4	67.5	56.4
		Heat factor [-]	1.72	1.86	2.01	2.19	2.42	2.71	3.12	3.68	4.56	6.08
33	35	Cooling capacity [kW]	39.7	52.6	67.9	86.1	108.0	133.0	162.0	196.0	234.0	278.0
		Heating output [kW]	90.5	109.6	131.4	180.6	182.5	211.3	242.3	275.5	309.8	346.8
		Fuel consumption [kW]	56.4	63.3	70.6	105.0	82.8	86.9	89.2	88.3	84.2	76.4
		Heat factor [-]	1.60	1.73	1.86	1.72	2.20	2.43	2.72	3.12	3.68	4.54
38	40	Cooling capacity [kW]	36.0	48.2	62.7	79.9	101.0	125.0	152.0	185.0	221.0	263.0
		Heating output [kW]	89.8	108.5	130.2	154.2	181.8	210.8	241.8	276.3	311.0	348.5
		Fuel consumption [kW]	59.7	66.9	75.0	82.5	89.7	95.3	99.7	101.4	100.0	95.0
		Heat factor [-]	1.50	1.62	1.74	1.87	2.03	2.21	2.42	2.72	3.11	3.67
43	45	Cooling capacity [kW]		43.8	57.5	73.7	92.9	116.0	142.0	173.0	208.0	248.0
		Heating output [kW]		104.7	125.6	149.2	175.6	205.1	236.1	275.0	311.3	349.3
		Fuel consumption [kW]		70.8	79.2	87.8	96.1	103.6	109.4	113.3	114.7	112.5
		Heat factor [-]		1.48	1.59	1.70	1.83	1.98	2.16	2.43	2.71	3.10
48	50	Cooling capacity [kW]		39.3	52.2	67.4	85.4	107.0	132.0	161.0	195.0	233.0
		Heating output [kW]		103.3	123.9	147.2	173.3	202.6	234.0	273.3	310.5	349.0
		Fuel consumption [kW]		74.4	83.3	92.8	102.2	111.1	118.6	124.7	128.3	128.9
		Heat factor [-]		1.39	1.49	1.59	1.70	1.82	1.97	2.19	2.42	2.71
53	55	Cooling capacity [kW]			46.9	61.0	77.8	97.7	122.0			
		Heating output [kW]			125.4	148.8	174.8	204.0	236.5			
		Fuel consumption [kW]			87.2	97.5	107.8	118.1	127.2			
		Heat factor [-]			1.44	1.53	1.62	1.73	1.86			
58	60	Cooling capacity [kW]				54.6	70.1	88.6				
		Heating output [kW]				146.4	171.9	200.6				
		Fuel consumption [kW]				101.9	113.1	124.4				
		Heat factor [-]				1.44	1.52	1.61				

Notes:
Spread ca. 5-8 K. T out of hot water is the mixed output of condenser heat and engine waste heat,
The engine waste heat (ca. 1/3 of the heat output) can be supplied separately up to 90/70°C.
The data are for information only. For project specific performance calculation contact TEDOM.
Heat factor = Heat output / Fuel consumtion(LHV). Power consumption 1,7 kW.
For hot water temperatures 58-78°C refrigerant R134c shall be applied. See performance data for R134a.