



VWART Calculation with Keep Warm

Test carried out by Enertek International for High Temperature BESA Tests
 Manufacturer: Groupe Atlantic
 Model: 70kW
 Serial number: 225240000003
 Calculation performed by S.Broxham of Enertek on: 02/12/2021

Primary Flow Temperature: 70°C
 DHW Setpoint: 55°C
 Space Heating Temperature: 60/40°C

	VWART (°C)	Volume (m3)
DHW	21	26.2
Standby	43	49.1
Space Heating	45	52.5

Period	VWART with keep warm active	
	VWART (°C)	% Time
No Heating	36	93%
Heating	44	7%
Overall	36	

		Test Results							
		Power [W]	Primary flow [m³/hr]	VWART [°C]	Energy Used [kWh]	Annual Operation [Hours]	Volume [m³]	Events [Per Year]	Average duration [Seconds]
1kW Space Heating	1a	1280	0.052	48	104	81.3	4.20	-	-
2kW Space Heating	1b	2109	0.071	44	820	388.5	27.55	-	-
4kW Space Heating	1c	4458	0.158	45	586	131.4	20.71	-	-
DHW Low Flow Rate	2a	10848	0.186	20	711	67.2	12.50	-	-
DHW Medium Flow Rate	2a	20053	0.377	22	307	14.8	5.58	-	-
DHW High Flow Rate	2a	24151	0.444	22	452	18.4	8.16	-	-
DHW Post Low Flow Rate	2a	-	0.000	0	-	-	0.00	10000	30
DHW Post Medium Flow Rate	2a	-	0.000	0	-	-	0.00	660	70
DHW Post High Flow Rate	2a	-	0.000	0	-	-	0.00	300	145
DHW Keep Warm Standby	4a	-	0.006	43	551	8058.4	49.05	-	-

Table 7.1 - Key Metrics of High Temperature Package