



VWART Calculation with Keep Warm

Test carried out by Enertek International for Low Temperature BESA Tests
 Manufacturer: Groupe Atlantic
 Model: 70kW
 Serial number: 22524000003
 Calculation performed by S.Broxham of Enertek on: 02/12/2021

Primary Flow Temperature: 60°C
 DHW Setpoint: 50°C
 Space Heating Temperature: 45/35°C

	VWART (°C)	Volume (m3)
DHW	22	33.8
Standby	42	64.6
Space Heating	36	54.7

Period	VWART with keep warm active	
	VWART (°C)	% Time
No Heating	35	93%
Heating	36	7%
Overall	35	

		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	1d	1037	0.038	37	102	97.9	3.68	-	-
2kW Space Heating	1e	2237	0.080	36	832	371.9	29.83	-	-
4kW Space Heating	1f	4137	0.151	36	580	140.2	21.17	-	-
DHW Low Flow Rate	2b	9660	0.210	20	722	75.5	15.87	-	-
DHW Medium Flow Rate	2b	17865	0.436	23	309	16.6	7.25	-	-
DHW High Flow Rate	2b	21617	0.518	23	457	20.5	10.64	-	-
DHW Post Low Flow Rate	2b	-	0.000	0	-	-	0.00	10000	30
DHW Post Medium Flow Rate	2b	-	0.000	0	-	-	0.00	660	70
DHW Post High Flow Rate	2b	-	0.000	0	-	-	0.00	300	145
DHW Keep Warm Standby	4b	-	0.008	42	530	8037.4	64.58	-	-

Table 7.2 - Key Metrics of Low Temperature Package