High Temperature VWART Calculations

VWART Calculation with Keep Warm

Test carried out by Enertek International for High Temperature BESA Tests

Manufacturer:	Switch 2 Energy Ltd
Model:	T3 Eco HIU
Serial number:	S2HIU19000576
Calculation performed by B Meekin of Enertek on:	04/08/2019

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

	VWART (°C)	Volume (m3)
DHW	16	17.7
Standby	51	81.8
Space Heating	40	45.4

	VWART with keep warm active		VWART with keep warm NOT active	
Period	**VWART (°C)**	**% Time**	**VWART (°C)**	**% Time**
No Heating	44	93%	16	93%
Heating	41	7%	39	7%
Overall	**44**		**18**	

		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	1353	0.037	38	123	90.8	3.3	-	-
2kW Space Heating	1b	2211	0.062	40	865	391.4	24.4	-	-
4kW Space Heating	1c	4110	0.122	41	595	144.9	17.7	-	-
DHW Low Flow Rate	2a	13505	0.163	16	555	54.0	8.8	-	-
DHW Medium Flow Rate	2a	22485	0.271	16	227	13.2	3.6	-	-
DHW High Flow Rate	2a	28934	0.343	16	337	15.3	5.3	-	-
DHW Post Low Flow Rate	2a	-	0.000	16	-	-	0.0	10000	30
DHW Post Medium Flow Rate	2a	-	0.001	16	-	-	0.0	660	70
DHW Post High Flow Rate	2a	-	0.000	17	-	-	0.0	300	145
DHW Keep Warm Standby	4a	-	0.010	51	-	8050	81.8	-	-