



VWART Calculation with Keep Warm

Test carried out by Enertek International for High Temperature BESA Tests
 Manufacturer: Evinox
 Model: ModuSat XR (Eco)
 Serial number: CTPE2B2720A30
 Calculation performed by I.Williamson of Enertek on: 08/09/2020

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

Table 7.1 - Key Metrics of High Temperature Package

	VWART (°C)	Volume (m3)
DHW	13	21.7
Standby	43	22.3
Space Heating	40	45.7

Period	VWART with keep warm active	
	VWART (°C)	% Time
No Heating	28	93%
Heating	40	7%
Overall	29	

		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	1140	0.032	40	116	101.5	3.26	-	-
2kW Space Heating	1b	2204	0.063	40	865	392.4	24.67	-	-
4kW Space Heating	1c	4283	0.127	41	602	140.5	17.79	-	-
DHW Low Flow Rate	2a	11094	0.158	13	682	65.7	10.38	-	-
DHW Medium Flow Rate	2a	18601	0.284	14	296	16.0	4.53	-	-
DHW High Flow Rate	2a	24119	0.370	14	442	18.4	6.80	-	-
DHW Post Low Flow Rate	2a	-	0.000	0	-	-	0.00	10000	30
DHW Post Medium Flow Rate	2a	-	0.000	13	-	-	0.00	660	70
DHW Post High Flow Rate	2a	-	0.000	14	-	-	0.00	300	145
DHW Keep Warm Standby	4a	-	0.003	43	-	8025.5	22.32	-	-