Low Temperature VWART Calculation for YGHP 50/10

Primary flow temperature: 60°C; DHW set point: 50°C; Space heating temerpatures: 45°C/35°C
Test carried out by Enertek International for HIGH Temperature BESA Tests
Manufacturer: YGHP; Model: YGHP 50/10; Serial number: 51W19SMP0002;
VWART calculation prepared by Ian Williamson of Enertek International on 16 January 2020

	VWART(°C)	Volume (m3)
DHW	16	27.3
Standby	39	55.5
Space Heating	35	51.3

	VWART with Keep warm active	
Period	**VWART(°C)**	**% Time**
No Heating	31	93%
Heating	35	7%
Overall	**32**	

Table 7.1 - key metrics of Low Temperature Package

	DHW Draw test results			Post DHW Draw (60 seconds)	
	Power (W)	Primary flow (ls)	VWART (°C)	Primary flow (m^3/hr)	VWART (°C)
Low	9063	0.050	16	0.013	18
Medium	15688	0.085	16	0.014	21
High	20274	0.110	16	0.011	20

DHW Draw Volumes pa		
kWh pa	Hours	Volume pa (m^3)
729	69.00	12.40
297	17.00	5.30
444	21.00	8.50

Post DWH Draw Volumes pa		
Events pa	Average duration (secs)	Volume pa (m^3)
10000	30	1.10
660	75	0.20
300	145	0.20

	Standy test results	
	Primary flow (ls)	VWART (°C)
Standby	0.002000	39

Standby Volumes pa	
Hours	Volume pa (m^3)
8,050	55.50

	Space Heating test results		
	Power (W)	Primary flow (m^3/hr)	VWART (°C)
1kWp	1058	0.011	35
2kWp	2103	0.021	35
4kWp	3959	0.039	35

Space Heating Volumes pa		
kWh pa	Hours	Volume pa (m^3)
98	93.00	3.50
787	374.00	27.90
565	143.00	19.90