High Temperature VWART Calculation for Hiper II HIU

Primary flow temperature: 70°C; DHW set point: 55°C; Space heating temerpatures: 60°C/40°C

Test carried out by Enertek International for HIGH Temperature BESA Tests

Manufacturer: Intatec Limited; Model: Hiper II; Serial number: 300001 ;

VWART calculation prepared by Ian Williamson of Enertek International on 25 November 2019

	VWART(°C)	Volume (m3)
DHW	15	22.4
Standby	38	26.3
Space Heating	41	43.7

VWART with Keep warm active		
Period	VWART(°C)	% Time
No Heating	27	93%
Heating	40	7%
Overall	28	

DHW Draw test results			Post DHW Draw (60 seconds)	
Power (W)	Primary flow (ls)	VWART (°C)	Primary flow (m^3/hr)	VWART (°C)
Low	10654	0.047	15 0.000	13
Medium	18097	0.079	15 0.000	15
High	23446	0.103	16 0.000	16

Standy test results	
Primary flow (Ls^{-1})	VWART (°C)
0.001000	38

Standby

Space Heating test results		
Power (W)	Primary flow (Ls^{-1})	VWART (°C)
1kWp	1041	0.009 40
2kWp	2039	0.017 40
4kWp	4006	0.033 41

DHW Draw Volumes pa		
kWh pa	Hours	Volume pa (m^3)
729	65.00	11.00
297	16.00	4.60
444	18.00	6.80

Standby Volumes pa	
Hours	Volume pa (m^3)
8,039	26.30

Space Heating Volumes pa		
kWh pa	Hours	Volume pa (m^3)
98	94.00	3.10
787	386.00	24.00
565	141.00	16.70

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

Table 7.1 - Key Metrics of High Temperature Package