



### VWART Calculation with Keep Warm

Test carried out by Enertek International for Low Temperature BESA Tests

Manufacturer: Intatec Ltd  
 Model: HIPER2TPSZ80  
 Serial number: INE211410015AR  
 Calculation performed by S.Broxham of Enertek on: 05/05/2021

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

	VWART (°C)	Volume (m <sup>3</sup> )
DHW	16	30.5
Standby	37	24.8
Space Heating	35	51.0

Period	VWART with keep warm active	
	VWART (°C)	% Time
No Heating	26	93%
Heating	35	7%
<b>Overall</b>	<b>26</b>	

Test Results									
		Power [W]	Primary flow [m <sup>3</sup> /hr]	VWART [°C]	Energy Used [kWh]	Annual Operation [Hours]	Volume [m <sup>3</sup> ]	Events [Per Year]	Average duration [Seconds]
1kW Space Heating	1d	1071	0.038	35	104	97.5	3.66	-	-
2kW Space Heating	1e	2074	0.070	35	808	389.6	27.38	-	-
4kW Space Heating	1f	3984	0.140	36	569	142.8	19.94	-	-
DHW Low Flow Rate	2b	450	0.006	15	485	1620.7	9.59	-	-
DHW Medium Flow Rate	2b	613	0.007	16	170	484.6	3.31	-	-
DHW High Flow Rate	2b	708	0.013	18	391	627.3	8.04	-	-
DHW Post Low Flow Rate	2b	-	0.296	15	-	-	6.84	10000	30
DHW Post Medium Flow Rate	2b	-	0.383	16	-	-	1.37	660	70
DHW Post High Flow Rate	2b	-	0.400	17	-	-	1.37	300	145
DHW Keep Warm Standby	4b	-	0.005	37	-	5397.4	24.82	-	-

Table 7.2 - Key Metrics of Low Temperature Package