VWART Calculation with Keep Warm

Test carried out by Enertek International for High Temperature BESA Tests

Manufacturer:	Altecnic / Caleffi
Model:	SATK32107
Serial number:	202000939
Calculation performed by S Broxham of Enertek on:	03/02/2021

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

	VWART (°C)	Volume (m3)
DHW	14.59	22.42
Standby	36.86	20.97
Space Heating	42.77	48.27

	VWART with keep warm active	
Period	**VWART (°C)**	**% Time**
No Heating	25.35	0.93
Heating	41.74	0.07
Overall	**27**	

		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	1137.37	0.03	40.89	110.93	97.53	3.28	-	-
2kW Space Heating	1b	2207.67	0.07	42.70	833.36	377.49	26.57	-	-
4kW Space Heating	1c	4084.81	0.13	43.21	577.42	141.36	18.42	-	-
DHW Low Flow Rate	2a	10884.29	0.16	14.73	690.81	66.98	11.00	-	-
DHW Medium Flow Rate	2a	18341.81	0.28	14.22	291.47	16.19	4.56	-	-
DHW High Flow Rate	2a	24110.67	0.37	14.63	437.94	18.42	6.86	-	-
DHW Post Low Flow Rate	2a	-	0.00	0.00	-	-	0.00	10000.00	30.00
DHW Post Medium Flow Rate	2a	-	0.00	0.00	-	-	0.00	660.00	70.00
DHW Post High Flow Rate	2a	-	0.00	0.00	-	-	0.00	300.00	145.00
DHW Keep Warm Standby	4a	-	0.00	36.86	-	8042.04	20.97	-	-

Table 0.5 - Key Metrics of High Temperature Package