VWART Calculation with Keep Warm

Test carried out by Enertek International for Low 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:	60°C
DHW Setpoint:	50°C
Space Heating Temperature:	45/35°C

	VWART (°C)	Volume (m3)
DHW	15	27.0
Standby	44	42.8
Space Heating	35	51.3

	VWART with keep warm active	
Period	**VWART (°C)**	**% Time**
No Heating	33	93%
Heating	35	7%
Overall	**33**	

Table 7.2 - Key Metrics of Low Temperature Package

		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	1d	1062	0.036	34	107	100.5	3.63	-	-
2kW Space Heating	1e	2094	0.071	35	823	393.3	27.80	-	-
4kW Space Heating	1f	4112	0.141	35	579	140.8	19.83	-	-
DHW Low Flow Rate	2b	9941	0.175	14	672	73.3	12.85	-	-
DHW Medium Flow Rate	2b	16916	0.327	15	298	17.6	5.75	-	-
DHW High Flow Rate	2b	21672	0.412	15	440	20.5	8.44	-	-
DHW Post Low Flow Rate	2b	-	0.000	0	-	-	0.00	10000	30
DHW Post Medium Flow Rate	2b	-	0.000	15	-	-	0.00	660	70
DHW Post High Flow Rate	2b	-	0.001	16	-	-	0.00	300	145
DHW Keep Warm Standby	4b	-	0.005	44	-	8014.0	42.78	-	-