VWART Calculation with Keep Warm

Test carried out by Enertek International for Low Temperature BESA Tests

Manufacturer:	Altecnic / Caleffi
Model:	SATK32107
Serial number:	202000939
Calculation performed by S.Broxham of Enertek on:	11/12/2020

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

	VWART (°C)	Volume (m3)
DHW	14.47	17.37
Standby	38.86	21.18
Space Heating	35.17	52.16

VWART with keep warm active

Period	VWART (°C)	% Time
No Heating	27.87	0.93
Heating	34.79	0.07
Overall	**28**	

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	1141.85	0.04	34.30	108.52	95.04	3.66	-	-
2kW Space Heating	1e	2042.33	0.07	35.09	822.79	402.87	28.28	-	-
4kW Space Heating	1f	4091.60	0.14	35.43	580.43	141.86	20.22	-	-
DHW Low Flow Rate	2b	547.69	0.00	13.56	137.91	1331.04	2.40	-	-
DHW Medium Flow Rate	2b	603.17	0.00	14.47	54.86	492.40	0.97	-	-
DHW High Flow Rate	2b	762.67	0.01	14.98	221.25	582.17	4.29	-	-
DHW Post Low Flow Rate	2b	-	0.30	15.27	-	-	6.97	10000.00	30.00
DHW Post Medium Flow Rate	2b	-	0.38	15.57	-	-	1.37	660.00	70.00
DHW Post High Flow Rate	2b	-	0.38	15.30	-	-	1.37	300.00	145.00
DHW Keep Warm Standby	4b	-	0.00	38.86	-	5714.62	21.18	-	-

Table 0.6 - Key Metrics of Low Temperature Package