

CellarPro Wine Cellar Refrigeration - 4000S Split Systems

Cooling Capacity @ 55°F (1)

4000S - Low Fan Speed		BTUH: 3282 Decibels: 51		
4000S - Medium Fan Speed		BTUH: 3617 Decibels: 55		
4000S - High Fan Speed		BTUH: 3938 Decibels: 63		
Cellar Insulation - Walls, Ceiling & Floor (1)		R12	R19	R30
Cellar Size	Ambient Temperature	Thermal Load BTUH		
	70°F	2801	2616	2503
	75°F	2957	2710	2560
750 Cubic Feet	80°F	3112	2803	2616
	85°F	3269	2898	2672
	90°F	3425	2993	2730
	95°F	3582	3088	2788
	70°F	3395	3181	3052
	75°F	3576	3282	3118
1000 Cubic Feet	80°F	3755	3398	3182
	85°F	3935	3508	3248
	90°F	X	3617	3314
	95°F	X	3726	3380
	70°F	X	3750	3606
	75°F	X	3871	3679
1250 Cubic Feet	80°F	X	X	3751
	85°F	X	X	3824
	90°F	X	X	3899
	95°F	X	X	X

Cooling Capacity @ 60°F (1)

4000S - Low Fan Speed		BTUH: 3597 Decibels: 51		
4000S - Medium Fan Speed		BTUH: 3969 Decibels: 55		
4000S - High Fan Speed		BTUH: 4267 Decibels: 63		
Cellar Insulation - Walls, Ceiling & Floor (1)		R12	R19	R30
Cellar Size	Ambient Temperature	Thermal Load BTUH		
	70°F	2465	2302	2203
	75°F	2602	2385	2253
750 Cubic Feet	80°F	2739	2467	2302
	85°F	2877	2550	2351
	90°F	3014	2634	2402
	95°F	3152	2717	2453
	70°F	2988	2799	2686
	75°F	3147	2895	2744
1000 Cubic Feet	80°F	3304	2990	2800
	85°F	3463	3087	2858
	90°F	3622	3183	2916
	95°F	3780	3279	2974
	70°F	3509	3300	3173
	75°F	3685	3406	3238
1250 Cubic Feet	80°F	3861	3512	3301
	85°F	4037	3619	3365
	90°F	4214	3727	3431
	95°F	X	3833	3495
	70°F	4055	3824	3685
	75°F	4250	3942	3756
1500 Cubic Feet	80°F	X	4059	3827
	85°F	X	4176	3898
	90°F	X	4267	3969
	95°F	X	X	4040

Legend

The upper table is shaded to show how the 4000S cooling unit will work at maintaining 55°F, and the lower table is shaded to show how the 4000S cooling unit will work at maintaining 60°F, inside the wine cellar using various fan speeds under various thermal loads. The thermal loads are derived from assumptions about the size of the cellar; the R-value in the **six** cellar surfaces (ie walls, floor and ceiling) and the ambient temperature outside the cellar, as follows:

- The light-shaded numbers represent thermal loads that are within the capacity of the cooling unit at the low fan speed
- The medium-shaded numbers represent thermal loads that are within the capacity of the cooling unit at the medium fan speed
- The dark-shaded numbers represent thermal loads that are within the capacity of the cooling unit at the high fan speed
- "X" indicates conditions that are beyond the capacity of our 4000S Series cooling units

Summary

CellarPro 4000S wine cooling units are designed to maintain optimal wine storage temperatures in wine cellars up to 1250 cubic feet with adequate insulation, and can be operated with the condenser exposed to conditions up to 110°F. For more information, click on our **4000S performance and test data**.

Please note: The thermal loads above are calculated based on the R-Values shown for all walls and ceiling, and a concrete floor. Lower R-Values in the cellar (eg from glass doors) will increase the thermal load on the wine cellar and will require the cooling unit to operate at higher fan speeds. Warmer climates require higher insulation to enable the cooling unit to operate at lower fan speeds. To be certain that the thermal load won't exceed the capacity of the cooling unit, email your wine cellar specifications to us and we'll be glad to assist you.