

BUYING GUIDE: 400-600 CU FT - MINI SPLIT 3000S

CellarPro Cooling Systems - Mini-Split 3000S Wine Cellar Refrigeration System

Cooling Capacity @ 55°F (1)

3000S - Low Fan Speed		BTUH: 2190 Decibels: 51		
3000S - Medium Fan Speed		BTUH: 2369 Decibels: 55		
3000S - High Fan Speed		BTUH: 2446 Decibels: 63		
Cellar Insulation - Walls, Ceiling & Floor (1)		R12	R19	R30
Cellar Size	Ambient Temperature	Thermal Load (BTUH)		
	70°F	1810	1676	1596
	75°F	1921	1744	1636
400 Cubic Feet	80°F	2033	1811	1676
	85°F	2146	1879	1717
	90°F	2256	1946	1758
	95°F	2369	2015	1800
	70°F	2111	1958	1867
	75°F	2238	2035	1913
500 Cubic Feet	80°F	2366	2112	1958
	85°F	X	2190	2006
	90°F	X	2267	2052
	95°F	X	2345	2100
	70°F	2359	2192	2092
	75°F	X	2278	2143
600 Cubic Feet	80°F	X	2362	2194
	85°F	X	2446	2244
	90°F	X	X	2296
	95°F	X	X	2347

Cooling Capacity @ 60°F (1)

3000S - Low Fan Speed		BTUH: 2307 Decibels: 51		
3000S - Medium Fan Speed		BTUH: 2594 Decibels: 55		
3000S - High Fan Speed		BTUH: 2693 Decibels: 63		
Cellar Insulation - Walls, Ceiling & Floor (1)		R12	R19	R30
Cellar Size	Ambient Temperature	Thermal Load BTUH		
	70°F	1593	1475	1404
	75°F	1690	1535	1440
400 Cubic Feet	80°F	1789	1594	1475
	85°F	1888	1654	1511
	90°F	1985	1712	1547
	95°F	2085	1773	1584
	70°F	1858	1723	1643
	75°F	1969	1791	1683
500 Cubic Feet	80°F	2082	1859	1723
	85°F	2196	1927	1765
	90°F	2307	1995	1806
	95°F	2420	2064	1848
	70°F	2076	1929	1841
	75°F	2200	2005	1886
600 Cubic Feet	80°F	2322	2079	1931
	85°F	2446	2152	1975
	90°F	2570	2227	2020
	95°F	2693	2302	2065
	70°F	2314	2156	2059
	75°F	2448	2237	2108
700 Cubic Feet	80°F	2582	2318	2158
	85°F	X	2398	2205
	90°F	X	2480	2255
	95°F	X	2561	2303

Legend

The top table is shaded to show how our mini-split 3000S wine cellar refrigeration system will work at maintaining 55°F inside the wine cellar, and the bottom table is shaded to show how our mini-split 3000S 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 3000S split refrigeration system