SECTION 23 81 19

SELF-CONTAINED AIR-CONDITIONERS, WINE CELLARS

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\*\* NOTE TO SPECIFIER \*\* Wine Guardian; Cooling Systems.
This section is based on the products of Wine Guardian, which is located at:7000 Performance Dr.North Syracuse, NY 13212Toll Free Tel: 800-825-3268Tel: 315 452 7400Fax: 315 452 7420 Email: [request info (info@wineguardian.com)](https://arcat.com/rfi?action=email&company=Wine%252BGuardian&message=RE%253A%2520Spec%2520Question%2520(15715wgc)%253A%2520&coid=31480&spec=15715wgc&rep=&fax=315%2520452%25207420%2520%2520%2509%2520)
Web: <https://wineguardian.com> | <https://airinnovations.com>
 [ [Click Here](https://arcat.com/company/wine-guardian-31480) ] for additional information.
Wine Guardian is a world-renowned leader in wine cellar cooling. An Air Innovations company, we combine the resources of a global leader in environmental control systems with a passion and expertise in wine preservation to deliver wine cellar cooling units to meet every need, from the largest commercial cellars to small cellars for wine storage at home.

1. GENERAL
	1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Cabinet cooling systems. (CAB018) (CAB25)
		2. Ceiling mounted cooling systems. (CS025) (CS050)
		3. Ducted cooling systems.
			1. Sentinel Series Pro Ducted Cooling Systems. (DP025) (DP050) (DP088) (DP200)Sentinel Series Ducted Cooling Systems. (D025) (D050) (D088) (D200)
			2. Sentinel Series Ducted Split Cooling Systems (DS025) (DS050) (DS088) (DS200)
			3. Sentinel Series Pro Ducted Split Cooling Systems (SP025) (SP050) (SP088) (SP200)
		4. Ductless split cooling systems. (SS88)
		5. Through the wall cooling systems. (TTW009) (TTW018)
	1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 11 30 13 - Residential Appliances.
		2. Section 13 21 31 - Wine Cellars.
	1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. Canadian Electrical Code:
			1. Can/CSA C22.2 - General Requirements.
			2. No. 117 CE. STD ENG10/0-1, Low Voltage Directive 2006/95/E.
		2. Intertek Group plc
			1. ETLc: ETL listed mark Canada.
		3. Underwriters Laboratories (UL):
			1. UL 484 - Room Air Conditioners.
			2. UL 1995 - Heating and Cooling Equipment.
	1. SUBMITTALS
		1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
		2. Product Data:
			1. Manufacturer's data sheets on each product to be used.
			2. Preparation instructions and recommendations.
			3. Storage and handling requirements and recommendations.
			4. Typical installation methods.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable to product type.

* + 1. Verification Samples: Two representative units of each type, size, pattern, and color.
		2. Shop Drawings: Include details of materials, construction, and finish. Include relationship with adjacent construction.
	1. QUALITY ASSURANCE
		1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum of five years documented experience.
		2. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
		3. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.

\*\* NOTE TO SPECIFIER \*\* Include mock-up if the project size or quality warrant the expense. The following is one example of how a mock-up might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
			1. The intent of mock-up is to demonstrate quality of workmanship and visual appearance.
			2. If mock-up is not acceptable, rebuild mock-up until satisfactory results are achieved.
			3. Retain mock-up during construction as a standard for comparison with completed work.
			4. Do not alter or remove mock-up until work is completed or removal is authorized.
	1. PRE-INSTALLATION CONFERENCE
		1. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.
	2. DELIVERY, STORAGE, AND HANDLING
		1. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
		2. Protect from damage due to weather, excessive temperature, and construction operations.
	3. PROJECT CONDITIONS
		1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
	4. WARRANTY
		1. Manufacturer's standard limited warranty unless indicated otherwise.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: Wine Guardian, which is located at:7000 Performance Dr.North Syracuse, NY 13212Toll Free Tel: 800-825-3268Tel: 315 452 7400Fax: 315 452 7420 Email: [request info (info@wineguardian.com)](https://arcat.com/rfi?action=email&company=Wine%252BGuardian&message=RE%253A%2520Spec%2520Question%2520(15715wgc)%253A%2520&coid=31480&spec=15715wgc&rep=&fax=315%2520452%25207420%2520%2520%2509%2520);Web: <https://wineguardian.com> | <https://airinnovations.com>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
		2. Requests for substitutions will be considered in accordance with the provisions of Section 01 60 00 - Product Requirements.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. CABINET COOLING SYSTEMS
		1. Cabinet Cooling Systems: Professional grade, self-contained climate control system for regulating the temperature of a wine cabinet, wine display, or wine showcase at either aging temperatures or any serving temperature; 41 to 64 degrees F (5 to 18 degrees C).
			1. Installs at the top or bottom of a wine cabinet.
			2. Self-contained. Includes integral air cooled condenser.
			3. Chassis: Aluminum.
			4. Evaporator Coil: Coated.

\*\* NOTE TO SPECIFIER \*\* Delete model option not required.

* + - 1. Model CAB018: Refrigerant: R134A. Compressor: 0.16 HP (119 W).
				1. Standards Compliance: ETL - Conforms To:

UL Std. 484.

Can/CSA C22.2 No. 117 CE. STD ENG10/0-1, Low Voltage Directive 2006/95/E.

* + - * 1. Performance: Cooling Capacity:

At 90 degrees F (32 degrees C) Ambient:

Total: 1540 BTUH (4515 W). Sensible: 1400 BTUH (410 W).

* + - * 1. Controls: Digital electronic via remote interface.

Temperature Accuracy: Plus or minus 1 degrees F (0.56 degrees C).

RH Percent Accuracy: Plus or minus 5 percent.

Temperature Range: 45 to 65 degrees F (7 to 18 degrees C).

* + - * 1. Evaporator Section:

Fan Motor Size: 0.10 HP (75 Watts).

Air Flow: 150 cfm (254.85 cu m per hr).

* + - * 1. Air-Cooled Condenser Section:

Fan Motor Size: 0.10 HP (75 Watts).

Air Flow: 140 cfm (237.85 cu m per hr).

Air Flow with 12 ft (3658 mm) Flex Duct: 130 cfm (220.87 cu m per hr).

* + - * 1. Electrical Requirements:

Power Requirements: 115 Vac, 1 Phase, 60 Hz.

Current Draw - Cooling Mode: 4.15 Amps.

Minimum Circuit Size: 5 Amps.

* + - * 1. Cabinet:

Construction: 0.060 inch (1.5 mm) aluminum.

Finish: Natural, unpainted.

Weight: 75 lbs (34 kg).

Dimensions (L x W x H): 27.25 x 14.25 x 13 inches (692 x 362 x 330 mm).

* + - * 1. Options:

Duct collars.

Remote sensors.

Heater.

Extended warranty.

* + - * 1. Condensate Drain: No external drain.
			1. Model CAB25: Refrigerant: R134A. Compressor: 0.25 HP (186.4 Watts)
				1. Standards Compliance: ETL - Conforms To:

UL Std. 484,

Can/CSA C22.2 No. 117 CE, STD ENG10/0-1, Low Voltage Directive 2006/95/E.

* + - * 1. Performance: Cooling Capacity:

At 90 degrees F (32 degrees C) Ambient:

Total: 1450.2 BTUH (425 W). Sensible: 1450.2 BTUH (425 W).

* + - * 1. Controls: Digital electronic via remote interface.

Temperature Accuracy: Plus or minus 1 degrees F (0.56 degrees C).

RH Percent Accuracy: Plus or minus 5 percent.

Temperature Range: 45 to 65 degrees F (7 to 18 degrees C).

* + - * 1. Evaporator Section:

Fan Motor Size: 0.10 HP (75 Watts).

Air Flow: 125 cfm (212 cu m per hour).

* + - * 1. Air-Cooled Condenser Section:

Fan Motor Size: 0.10 HP (75 Watts).

Air Flow: 125 cfm (212 cu m per hour).

Air Flow with 12 ft (3658 mm) Flex Duct: 108 cfm (184 cu m per hour).

* + - * 1. Electrical Requirements:

Power Requirements 220-240 Vac, 1 Phase, 60 Hz.

Current Draw - Cooling Mode: 2.3 Amps.

Minimum Circuit Size: 2.7 Amps.

* + - * 1. Cabinet:

Construction: 0.060 inch (1.5 mm) aluminum.

Finish: Natural, unpainted.

Weight: 75 lbs (34 kg).

Dimensions (L x W x H): 27.25 x 14.25 x 13 inches (692 x 362 x 330 mm).

* + - * 1. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

Duct collars.

Remote sensors.

Heater.

Extended warranty.

* + - * 1. Condensate Drain: No external drain.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. CEILING MOUNTED COOLING SYSTEMS
		1. Ceiling Mounted Cooling Systems: Quiet, split wine conditioning systems ideal for small to mid-size wine rooms with no space for a traditional unit. Fits comfortably between standard joist construction. Available in two configurations.
			1. Standards Compliance: Listed: UL and CSA.
			2. Light-weight, corrosion-proof construction.
			3. Paintable grille to match wine cellar design.
			4. Advanced condensate removal system.
			5. Paired with a specifically designed Wine Guardian condensing unit.
			6. Low ambient protection.
			7. Controls: Room-mounted, non-programmable combination thermostat humidistat.
				1. Temperature Accuracy: Plus or minus 1 degrees F (0.56 degrees C).
				2. RH Percent Accuracy: Plus or minus 5 percent.
			8. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Electric heater. 1000 Watts.
				2. Freestanding humidifier.
				3. Xtreme low ambient protection.
				4. Remote sensors.

\*\* NOTE TO SPECIFIER \*\* Delete system option not required.

* + - 1. 60Hz System

\*\* NOTE TO SPECIFIER \*\* Delete model option not required.

* + - * 1. Model CS025:

Agency Approvals: ETLc.

Air Flow Factory Setting at Fan Coil: 140 cfm (237.86 cu m per hr).

Cooling Capacity:

At 70 degrees F (21 degrees C) Ambient:

Total: 2900 BTUH (850 W). Sensible: 2370 BTUH (695 W).

At 80 degrees F (27 degrees C) Ambient:

Total: 2755 BTUH (807 W). Sensible: 2285 BTUH (670 W).

At 100 degrees F (degrees C) Ambient:

Total: 2400 BTUH (703 W) (703 W). Sensible: 2100 BTUH (615 W).

Fan Coil Section:

Fan Motor Size: 0.75 Amps. 85 Watts (x2 fans).

Rated Air Flow: 140 cfm (238 cu m per hr).

Electrical - Evaporator Section: 115 Volts, 1 Phase, 60 Hz.

Current Draw - Cooling Mode: 1.5 Amps.

Current Draw - Heating Mode: 10.2 Amps.

\*\* NOTE TO SPECIFIER \*\* Delete the following relevant paragraphs if heater and/or humidifier are not required.

Minimum Circuit Size With Heater: 12.4 Amps.

Free Standing Humidifier: 0.3 Amps.

Weight: 112 lbs (51 kg).

Condensing Unit:

Electrical: 208-230 Volts, 1 Phase, 60 Hz.

Weight: 126 lbs (57 kg).

\*\* NOTE TO SPECIFIER \*\* Delete Heater or humidifier if not required.

Heat: Electric. Capacity: 1.3 HP (1000 Watts).

\*\* NOTE TO SPECIFIER \*\* Delete dimensions option not required.

Standard Dimensions (LxWxH): 43.25 x 18.25 x 13.25 inches (1099 x 464 x 337 mm).

Weight: 48 lbs (21.8 kg).

Finish: Paintable anodized aluminum grille.

Wine Wall Dimensions (LxWxH): 44.19 x 12.44 x 11.41 inches (1122.5 x 316 x 290 mm).

Weight: 43 lbs (19.5 kg).

Finish: Paintable black aluminum grille.

Condensate Drain: 1/2 inch (13 mm).

Condensing Unit:

Nominal Compressor: 3.1 Amps.

Fan Motor Size: 0.1 HP (75 W).

Rated Air Flow Free Blowing: 275 cfm (467.2 cu m per hr).

Weight: 75 lbs (34 kg).

Enclosure, Condensing Unit:

Construction: Aluminum.

Finish: Powder-coated.

Dimensions (LxWxH): 34 x 12 x 26 inches (864 x 305 x 660 mm).

Electrical Requirements:

Power: 208-230 Volts / 1 Phase / 60 Hz.

MCA: 4.2 Amps.

MOP: 8.0 Amps.

* + - * 1. Model CS050: Capacity:

Agency Approvals: ETLc.

Air Flow Factory Setting at Fan Coil: 190 cfm (322.8 cu m per hr).

Cooling Capacity:

At 100 degrees F (degrees C) Ambient:

Total: 3500 BTUH (1026 W) (126 W). Sensible: 2930 BTUH (859 W).

Fan Coil Section:

Fan Motor Size: 0.75 Amps. 85 Watts (x2 fans).

Rated Air Flow: 190 cfm (322.8 cu m per hr).

Electrical - Evaporator Section: 115 Volts, 1 Phase, 60 Hz.

Current Draw - Cooling Mode: 1.5 Amps.

Current Draw - Heating Mode: 10.2 Amps.

\*\* NOTE TO SPECIFIER \*\* Delete the following relevant paragraphs if heater and/or humidifier are not required.

Minimum Circuit Size With Heater: 12.4 Amps.

Free Standing Humidifier: 0.3 Amps.

Weight: 112 lbs (51 kg).

Condensing Unit:

Electrical: 208-230 Volts, 1 Phase, 60 Hz.

Weight: 165 lbs (75 kg).

\*\* NOTE TO SPECIFIER \*\* Delete heater or humidifier if not required.

Heat: Electric. Capacity: 1.3 HP (1000 Watts).

\*\* NOTE TO SPECIFIER \*\* Delete dimensions option not required.

Standard Dimensions (LxWxH): 43.25 x 18.25 x 13.25 inches (1099 x 464 x 337 mm).

Weight: 48 lbs (21.8 kg).

Finish: Paintable anodized aluminum grille.

Wine Wall Dimensions (LxWxH): 44.19 x 12.44 x 11.41 inches (1122.5 x 316 x 290 mm).

Weight: 43 lbs (19.5 kg).

Finish: Paintable black aluminum grille.

Condensate Drain: 1/2 inch (13 mm).

Condensing Unit:

Nominal Compressor: 4.8 Amps.

Fan Motor Size: 0.1 HP (75 W).

Rated Air Flow (free blow): 375 cfm (637.13 cu m per hr).

Weight: 76 lbs (34.5 kg).

Enclosure, Condensing Unit:

Construction: Aluminum.

Finish: Powder-coated.

Dimensions (LxWxH): 34 x 12 x 26 inches (864 x 305 x 660 mm).

Electrical Requirements:

Electrical: 208-230 Volts, 1 Phase, 60 Hz.

MCA: 6.4 Amps.

MOP: 10.0 Amps.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. DUCTED WINE CELLAR COOLING SYSTEMS

\*\* NOTE TO SPECIFIER \*\* Delete paragraph if not required.

* + 1. Pro Ducted Wine Cellar Cooling Systems:
			1. Sentinel Series Pro Ducted Cooling Systems: For wine storage, document preservation, instrument storage, and long-term food storage. Energy efficient wine cellar cooling systems providing low-temperature air conditioning, 52 to 70 degrees F (11 to 21 degrees C). Self-contained units can be placed outside the cooled space. An installed humidifier can achieve 55 to 65 percent relative humidity.
				1. Agency Approvals: UL 1995 and CSA C22.2
				2. Accessories:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

Electric heat.

Water-cooled.

Remote control, monitoring, and sensing.

Duct kits and grilles.

Extended warranties.

Humidifier: Removable drip pad with integral fan.

Capacity at Water Temp of 60 Degrees F (15 degrees C): 0.42 lbs (0.19 kg per hr).

Capacity at Water Temp of 90 Degrees F (32 degrees C): 0.97 lbs (0.44 kg per hr).

Capacity at Water Temp of 100 Degrees F (38 degrees C): 1.10 lbs (0.5 kg per hr).

* + - * 1. Controls: 24 Volt Control. Thermostat by others.

Performance: 57 degrees F (14 degrees C). Relative Humidity: 55 percent.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model DP25: Power Requirements: 115 Vac, 1 Phase, 60 Hz.
				1. Performance: 57 degrees F (14 degrees C). Relative Humidity: 55 percent.

Nominal Compressor: 0.33 HP (246 W).

Net Cooling at 90 Degrees (32 Degrees C)F Inlet Air:

Total: 3450 BTUH (1011 W). Sensible: 2580 BTUH (756 W).

* + - * 1. Evaporator System:

Fan Motor Size: 0.1 HP (75 Watts).

Rated Air Flow, Free Blowing: 245 cfm (416 cu m per hr).

Rated Air Flow at Pressure Loss: 200 cfm (340 cu m per hr) at 0.10 inches wc.

* + - * 1. Air-Cooled Condenser Section:

Fan Motor Size: 0.1 HP (75 Watts).

Rated Air Flow, Free Blowing: 245 cfm (416 cu m per hr).

Rated Air Flow at Pressure Loss: 200 cfm (340 cu m per hr) at 0.10 inches wc.

* + - * 1. Water-Cooled Condenser Section:

Water Usage at 40 degrees F (22 degrees C) Rise: 0.30 gpm (1.14 L per m).

Pressure Drop: 0.40 psi (2.75 kPa).

Pipe Connection Size (In / Out) O.D.: 0.50 inches (13 m).

* + - * 1. Heat: Electric. Capacity: 3400 BTUH (1000 Watts).
				2. Electrical Requirements:

Current Draw, Cooling Mode: 7.1 Amps.

Current Draw, Heating Mode: 9.Amps.

Minimum Circuit Amps: Heat: 11.60. No Heat: 18.6Amps.

Optional Low Ambient: 0.4 Amps.

Optional High Ambient: 0.2 Amps.

Optional Humidifier: 0.4 Amps.

* + - * 1. Cabinets: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC acrylic blend.

Weight: 80 lbs (36.3 kg).

Dimensions (WxDxH): 33.45 x 16.6 x 15.56 inches (850 x 422 x 395 mm).

Condensate Drain Connection (ID): 0.50 inches (3 mm).

Minimum Duct Size: 8 inches (203 mm).

* + - 1. Model DP50: Power Requirements: 115 Vac, 1 Phase, 60 Hz.
				1. Performance: 57 degrees F (14 degrees C). Relative Humidity: 55 percent.

Nominal Compressor: 0.50 HP (373 W).

Net Cooling at 90 Degrees (32 Degrees C)F Inlet Air:

Total: 5860 BTUH (17107 W). Sensible: 4230 BTUH (1240 W).

* + - * 1. Evaporator System:

Fan Motor Size: 0.13 HP (100 Watts).

Rated Air Flow, Free Blowing: 390 cfm (662.6 cu m per hr).

Rated Air Flow at Pressure Loss: 320 cfm (543.7 cu m per hr) at 0.20 inches (5 mm) wc.

* + - * 1. Air-Cooled Condenser Section:

Fan Motor Size: 0.13 HP (100 Watts).

Rated Air Flow, Free Blowing: 390 cfm (662.6 cu m per hr).

Rated Air Flow at Pressure Loss: 320 cfm (543.7 cu m per hr) at 0.20 inches (5 mm) wc.

* + - * 1. Water-Cooled condenser Section:

Water Usage at 40 degrees F (22 degrees C) Rise: 0.60 gpm (2.27 lpm).

Pressure Drop: 0.40 psi (2.75 kPa).

Pipe Connection Size (In / Out) O.D.: 0.50 inches (13 mm).

* + - * 1. Heat: Electric. Capacity: 3400 BTUH (1000 Watts).
				2. Electrical Requirements:

Current Draw, Cooling Mode: 11.3 Amps.

Current Draw, Heating Mode: 9.6 Amps.

Minimum Circuit Amps: Heat: 11.8 Amps. No Heat: 13.7 Amps.

Optional Low Ambient: 0.4 Amps.

Optional High Ambient: 0 Amps.

Optional Humidifier: 0.4 Amps.

* + - * 1. Cabinets: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC acrylic blend.

Weight: 125 lbs (56.7 kg).

Dimensions (WxDxH): 41.5 x 22.4 x 18.85 inches (0154 x 569 x 479 mm).

Condensate Drain Connection (ID): 0.50 inches (13 mm).

Minimum Duct Size: 10 inches (254 mm).

* + - 1. Model DP88: Power Requirements: 208 Vac, 1 Phase, 60 Hz.
				1. Performance: 57 degrees F (14 degrees C). Relative Humidity: 55 percent.

Nominal Compressor: 1 HP (746 W).

Net Cooling at 90 Degrees (32 Degrees C)F Inlet Air:

Total: 8600 BTUH (2520 W). Sensible: 6120 BTUH (1794 W).

* + - * 1. Evaporator System:

Fan Motor Size: 0.23 HP (175 Watts).

Rated Air Flow, Free Blowing: 435 cfm (739 cu m per hr).

Rated Air Flow at Pressure Loss: 370 cfm (629 cu m per hr) at 0.20 inches (5 mm) wc.

* + - * 1. Air-Cooled Condenser Section:

Fan Motor Size: 0.23 HP (175 Watts).

Rated Air Flow, Free Blowing: 435 cfm (739 cu m per hr).

Rated Air Flow at Pressure Loss: 370 cfm (629 cu m per hr) at 0.20 wc.

* + - * 1. Water-Cooled condenser Section:

Water Usage at 40 degrees F (22 degrees C) Rise: 1.20 gpm (227 lph).

Pressure Drop: 0.08 psi (0.55 kPa).

Pipe Connection Size (In / Out) O.D.: 0.50 inches (13 mm).

* + - * 1. Heat: Electric. Capacity: 1635 BTUH (5582 Watts).
				2. Electrical Requirements:

Current Draw, Cooling Mode: 9.8 Amps.

Current Draw, Heating Mode: 838 Amps.

Minimum Circuit Amps: Heat: 10.7 Amps. No Heat: 11.8 Amps.

Optional Low Ambient: 0.2 Amps.

Optional High Ambient: N/A Amps.

Optional Humidifier: 0.4 Amps.

* + - * 1. Cabinets: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC acrylic blend.

Weight: 125 lbs (56.7 kg).

Dimensions (WxDxH): 41.5 x 22.4 x 18.85 x inches (1054 x 569 x 479 mm).

Condensate Drain Connection (ID): 0.50 inches (13 mm).

Minimum Duct Size: 10 inches (254 mm) .

* + - 1. Model DP88: Power Requirements: 230 Vac, 1 Phase, 60 Hz
				1. Performance: 57 degrees F (14 degrees C). Relative Humidity: 55 percent.

Nominal Compressor: 1 HP (746 W).

Net Cooling at 90 Degrees (32 Degrees C)F Inlet Air:

Total: 8760 BTUH (2567 W). Sensible: 6120 BTUH (1794 W).

* + - * 1. Evaporator System:

Fan Motor Size: 0.26 HP (195 Watts).

Rated Air Flow, Free Blowing: 485 cfm (824 cu m per hr).

Rated Air Flow at Pressure Loss: 440 cfm (747.5 cu m per hr) at 0.20 inches (5 mm) wc.

* + - * 1. Air-Cooled Condenser Section:

Fan Motor Size: 0.25 HO (195 Watts).

Rated Air Flow, Free Blowing: 485 cfm (824 cu m per hr).

Rated Air Flow at Pressure Loss: 440 cfm (747.5 cu m per hr) at 0.20 inches (5 mm) wc.

* + - * 1. Water-Cooled condenser Section:

Water Usage at 40 degrees F (22 degrees C) Rise: 1.20 gpm (227 lph).

Pressure Drop: 0.08 psi (0.55 kPa).

Pipe Connection Size (In / Out) O.D.: 0.50 inches (13 mm).

* + - * 1. Heat: Electric. Capacity: 6800 BTUH (2000 Watts).
				2. Electrical Requirements:

Current Draw, Cooling Mode: 8.8 Amps.

Current Draw, Heating Mode: 9.5 Amps.

Minimum Circuit Amps: Heat: 11.7 Amps. No Heat: 10.6 Amps.

Optional Low Ambient: 0.2 Amps.

Optional High Ambient: N/A Amps.

Optional Humidifier: 0.4 Amps.

* + - * 1. Cabinets: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC acrylic blend.

Weight: 125 lbs (56.7 kg).

Dimensions (WxDxH): 41.5 x 22.4 x 18.85 inches (0154 x 569 x 479 mm)

Condensate Drain Connection (ID): 0.50 inches (13 mm).

Minimum Duct Size: 10 inches (254 mm).

* + - 1. Model DP200: Power Requirements: 208 Vac, 1 Phase, 60 Hz.
				1. Performance: 57 degrees F (14 degrees C). Relative Humidity: 55 percent.

Nominal Compressor: 2.5 HP (1864 W).

Net Cooling at 90 Degrees (32 Degrees C)F Inlet Air:

Total: 14000 BTUH (4103 W). Sensible: 10580 BTUH (3100 W).

* + - * 1. Evaporator System:

Fan Motor Size: 0.21 HP (160 Watts).

Rated Air Flow, Free Blowing: 760 cfm (1291 cum per hr).

Rated Air Flow at Pressure Loss: 710 cfm (1206 cu m per hr) at 0.35 inches (9 mm) wc.

* + - * 1. Air-Cooled Condenser Section:

Fan Motor Size: 0.21 HP (160 Watts).

Rated Air Flow, Free Blowing: 760 cfm (1291 cu m per hr).

Rated Air Flow at Pressure Loss: 700 cfm (1189 cu m per hr) at 0.35 inches (9 mm) wc.

* + - * 1. Water-Cooled condenser Section:

Water Usage at 40 degrees F (22 degrees C) Rise: 2.50 gpm (568 lph).

Pressure Drop: 1.20 psi (83 kPa).

Pipe Connection Size (In / Out) O.D.: 0.50 inches (13 mm).

* + - * 1. Heat: Electric. Capacity: 1635 BTUH (5582 Watts).
				2. Electrical Requirements:

Current Draw, Cooling Mode: 15.6 Amps.

Current Draw, Heating Mode: 8.8 Amps.

Minimum Circuit Amps: Heat: 10.7 Amps. No Heat: 19.1 Amps.

Optional Low Ambient: 0.2 Amps.

Optional High Ambient: N/A Amps.

Optional Humidifier: 0.4 Amps.

* + - * 1. Cabinets: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC acrylic blend.

Weight: 206 lbs (93 kg).

Dimensions (WxDxH): 41.5 x 22.4 x 18.85 inches (0154 x 569 x 479 mm).

Condensate Drain Connection (ID): 0.50 inches (13 mm).

Minimum Duct Size: 12 inches (305 mm).

* + - 1. Model DP200: Power Requirements: 230 Vac, 1 Phase, 60 Hz.
				1. Performance: 57 degrees F (14 degrees C). Relative Humidity: 55 percent.

Nominal Compressor: 2.5 HP (1864 W).

Net Cooling at 90 Degrees (32 Degrees C)F Inlet Air:

Total: 15000 BTUH (4396 W). Sensible: 10870 BTUH (3186 W).

* + - * 1. Evaporator System:

Fan Motor Size: 0.25 HP (180 Watts).

Rated Air Flow, Free Blowing: 810 cfm (1376 cu m per hr).

Rated Air Flow at Pressure Loss: 745 cfm (1266 cu m per hr) at 0.35 inches (9 mm) wc.

* + - * 1. Air-Cooled Condenser Section:

Fan Motor Size: 0.25 HP (180 Watts).

Rated Air Flow, Free Blowing: 810 cfm (1376 cu m per hr).

Rated Air Flow at Pressure Loss: 725 cfm (1232 cu m per hr) at 0.35 inches (9 mm) wc.

* + - * 1. Water-Cooled Condenser Section:

Water Usage at 40 degrees F (22 degrees C) Rise: 2.50 gpm (568 lph).

Pressure Drop: 1.20 psi (83 kPa).

Pipe Connection Size (In / Out) O.D.: 0.50 inches (13 mm).

* + - * 1. Heat: Electric. Capacity: 6800 BTUH (2000 Watts).
				2. Electrical Requirements:

Current Draw, Cooling Mode: 14.1 Amps.

Current Draw, Heating Mode: 9.5 Amps.

Minimum Circuit Amps: Heat: 11.7 Amps. No Heat: 17.2 Amps.

Optional Low Ambient: 0.2 Amps.

Optional High Ambient: N/A Amps.

Optional Humidifier: 0.4 Amps.

* + - * 1. Cabinets: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC acrylic blend.

Weight: 206 lbs (93 kg).

Dimensions (WxDxH): 41.5 x 22.4 x 18.85 inches (1054 x 569 x 479 mm).

Condensate Drain Connection (ID): 0.50 inches (13 mm).

Minimum Duct Size: 12 inches (305 mm).

\*\* NOTE TO SPECIFIER \*\* Delete paragraph if not required.

* + 1. Ducted Wine Cellar Cooling Systems:
			1. Sentinel Series Ducted Cooling Systems: Energy efficient wine cellar cooling systems providing low-temperature air conditioning, 55 to 58 degrees F (13 to 14 degrees C). Self-contained units can be placed outside the cooled space. An installed humidifier can achieve 55 to 65 percent relative humidity.
				1. Agency Approvals: UL 1995 and CSA C22.2.
				2. Accessories:

\*\* NOTE TO SPECIFIER \*\* Delete accessories if not required.

Electric heat.

Water-cooled.

Remote control, monitoring, and sensing.

Duct kits and grilles.

Extended warranties.

Humidifier: Removable drip pad with integral fan.

Capacity at Water Temp of 60 Degrees F (15 degrees C): 0.42 lbs (0.19 kg per hr).

Capacity at Water Temp of 90 Degrees F (32 degrees C): 0.97 lbs (0.44 kg per hr).

Capacity at Water Temp of 100 Degrees F (38 degrees C): 1.10 lbs (0.5 kg per hr).

* + - * 1. Controls: Digital electronic.

Temperature Accuracy: 1 degrees F (0.55 degrees C).

Relative Humidity: 10 percent.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model D025: Power Requirements: 115 Vac, 1 Phase, 60 Hz.
				1. Performance: 55 to 58 degrees F (13 to 14 degrees C).

Net Cooling at 90 Degrees (32 Degrees C)F Inlet Air:

Total: 3450 BTUH (1011 W). Sensible: 2580 BTUH (756 W).

* + - * 1. Evaporator System:

Fan Motor Size: 0.10 HP (75 Watts).

Rated Air Flow, Free Blowing: 245 cfm (416 cu m per hr).

Rated Air Flow at Pressure Loss: 200 cfm 200 cfm (340 cu m per hr) at 0.10 inches (0.25 mm) wc.

* + - * 1. Air-Cooled Condenser Section:

Fan Motor Size: 0.10 HP (75 Watts).

Rated Air Flow, Free Blowing: 245 cfm (416 cu m per hr).

Rated Air Flow at Pressure Loss: 200 cfm 200 cfm (340 cu m per hr) at 0.10 inches (0.25 mm) wc.

* + - * 1. Water-Cooled Condenser Section:

Water Usage at 40 degrees F (22 degrees C) Rise: 2.50 gpm (568 lph).

Pressure Drop: 0.20 psi (1.4 kPa).

Pipe Connection Size (In / Out) O.D.: 0.50 inches (13 mm).

* + - * 1. Heat: Electric. Capacity: 3400 BTUH (1000 Watts).
				2. Electrical Requirements:

Current Draw, Cooling Mode: 7.1 Amps.

Current Draw, Heating Mode: 9.4 Amps.

Minimum Circuit Amps: Heat: 11.60. No Heat: 8.6Amps.

Optional Low Ambient: 0.4 Amps.

Optional High Ambient: 0.2 Amps.

Optional Humidifier: 0.4 Amps.

* + - * 1. Cabinets: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC acrylic blend.

Weight: 78 lbs (35.4 kg).

Dimensions (WxDxH): 33.45 x 16.6 x 15.56 inches (850 x 422 x 395 mm).

Condensate Drain Connection (ID): 0.50 inches (13 mm).

Minimum Duct Size: 8 inches (203 mm).

* + - 1. Model D050: Power Requirements: 115 Vac, 1 Phase, 60 Hz.
				1. Performance: 55 to 58 degrees F (13 to 14 degrees C).

Net Cooling at 90 Degrees F (32 Degrees C) Inlet Air:

Total: 5860 BTUH (17107 W). Sensible: 4230 BTUH (1240 W).

* + - * 1. Evaporator System:

Fan Motor Size: 0.13 HP (100 Watts).

Rated Air Flow, Free Blowing: 390 cfm (662.6 cu m per hr).

Rated Air Flow at Pressure Loss: 320 cfm (543.7 cu m per hr) at 0.20 inches (5 mm) wc.

* + - * 1. Air-Cooled Condenser Section:

Fan Motor Size: 0.13 HP (100 Watts).

Rated Air Flow, Free Blowing: 390 cfm (662.6 cu m per hr).

Rated Air Flow at Pressure Loss: 320 cfm (543.7 cu m per hr) at 0.20 inches (5 mm) wc.

* + - * 1. Water-Cooled condenser Section:

Water Usage at 40 degrees F (22 degrees C) Rise: 0.60 gpm.

Pressure Drop: 0.40 psi (2.75 kPa).

Pipe Connection Size (In / Out) O.D.: 0.50 inches (13 mm).

* + - * 1. Heat: Electric. Capacity: 3400 BTUH (1000 Watts).
				2. Electrical Requirements:

Current Draw, Cooling Mode: 11.3 Amps.

Current Draw, Heating Mode: 9.6 Amps.

Minimum Circuit Amps: Heat: 11.8 Amps. No Heat: A13.7 Amps.

Optional Low Ambient: 0.4 Amps.

Optional High Ambient: 0 Amps.

Optional Humidifier: 0.4 Amps.

* + - * 1. Cabinets: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC acrylic blend.

Weight: 125 lbs (56.7 kg).

Dimensions (WxDxH): 41.5 x 22.4 x 18.85 inches (1054 x 569 x 479 mm).

Condensate Drain Connection (ID): 0.50 inches (13 mm).

Minimum Duct Size: 10 inches (254 mm).

* + - 1. Model D088: Power Requirements: 208 Vac, 1 Phase, 60 Hz.
				1. Performance: 55 to 58 degrees F (13 to 14 degrees C).

Net Cooling at 90 Degrees (32 Degrees C)F Inlet Air:

Total: 8600 BTUH (2520 W. Sensible: 6120 BTUH (1794 W).

* + - * 1. Evaporator System:

Fan Motor Size: 0.23 HP (175 Watts).

Rated Air Flow, Free Blowing: 435 cfm (739 cu m per hr).

Rated Air Flow at Pressure Loss: 370 cfm (629 cu m per hr) at 0.20 inches (5 mm) wc.

* + - * 1. Air-Cooled Condenser Section:

Fan Motor Size: 0.23 HP (175 Watts).

Rated Air Flow, Free Blowing: 435 cfm (739 cu m per hr).

Rated Air Flow at Pressure Loss: 370 cfm (629 cu m per hr) at 0.20 wc.

* + - * 1. Water-Cooled condenser Section:

Water Usage at 40 degrees F (22 degrees C) Rise: 1.20 gpm (227 lph).

Pressure Drop: 0.08 psi (0.55 kPa).

Pipe Connection Size (In / Out) O.D.: 0.50 inches (13 mm).

* + - * 1. Heat: Electric. Capacity: 1635 BTUH (5582 Watts).
				2. Electrical Requirements:

Current Draw, Cooling Mode: 9.8 Amps.

Current Draw, Heating Mode: 8.8 Amps.

Minimum Circuit Amps: Heat: 10.7 Amps. No Heat: 11.8 Amps.

Optional Low Ambient: 0.2 Amps.

Optional High Ambient: N/A Amps.

Optional Humidifier: 0.4 Amps.

* + - * 1. Cabinets: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC acrylic blend.

Weight: 125 lbs (56.7 kg).

Dimensions (WxDxH): 41.5 x 22.4 x 18.85 inches (0154 x 569 x 479 mm).

Condensate Drain Connection (ID): 0.50 inches (13 mm).

Minimum Duct Size: 10 inches (254 mm).

* + - 1. Model D088: Power Requirements: 230 Vac, 1 Phase, 60 Hz.
				1. Performance: 55 to 58 degrees F (13 to 14 degrees C).

Net Cooling at 90 Degrees (32 Degrees C)F Inlet Air:

Total: 8760 BTUH (2567 W). Sensible: 6120 BTUH (1794 W).

* + - * 1. Evaporator System:

Fan Motor Size: 0.26 HP (195 Watts).

Rated Air Flow, Free Blowing: 485 cfm (824 cu m per hr).

Rated Air Flow at Pressure Loss: 440 cfm (747.5 cu m per hr) at 0.20 inches (5 mm) wc.

* + - * 1. Air-Cooled Condenser Section:

Fan Motor Size: 0.26 HP (195 Watts).

Rated Air Flow, Free Blowing: 485 cfm (824 cu m per hr).

Rated Air Flow at Pressure Loss: 440 cfm (747.5 cu m per hr) at 0.20 inches (5 mm) wc.

* + - * 1. Water-Cooled condenser Section:

Water Usage at 40 degrees F (22 degrees C) Rise: 1.20 gpm (227 lph).

Pressure Drop: 0.08 psi (0.55 kPa).

Pipe Connection Size (In / Out) O.D.: 0.50 inches (13 mm).

* + - * 1. Heat: Electric. Capacity: 6800 BTUH (2000 Watts).
				2. Electrical Requirements:

Current Draw, Cooling Mode: 8.8 Amps.

Current Draw, Heating Mode: 9.5 Amps.

Minimum Circuit Amps: Heat: 11.7 Amps. No Heat: 10.6 Amps.

Optional Low Ambient: 0.2 Amps.

Optional High Ambient: N/A Amps.

Optional Humidifier: 0.4 Amps.

* + - * 1. Cabinets: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC acrylic blend.

Weight: 125 lbs (56.7 kg).

Dimensions (WxDxH): 41.5 x 22.4 x 18.85 inches (0154 x 569 x 479 mm)

Condensate Drain Connection (ID): 0.50 inches (13 mm).

Minimum Duct Size: 10 inches (254 mm).

* + - 1. Model D0200: Power Requirements: 208 Vac, 1 Phase, 60 Hz.
				1. Performance: 55 to 58 degrees F (13 to 14 degrees C).

Net Cooling at 90 Degrees (32 Degrees C)F Inlet Air:

Total: 14000 BTUH (4103 W). Sensible: 10580 BTUH (3100 W).

* + - * 1. Evaporator System:

Fan Motor Size: 0.21 HP (160 Watts).

Rated Air Flow, Free Blowing: 760 cfm (1291 cum per hr).

Rated Air Flow at Pressure Loss: 710 cfm (1206 cu m per hr) at 0.35 inches (9 mm) wc.

* + - * 1. Air-Cooled Condenser Section:

Fan Motor Size: 0.21 HP (160 Watts).

Rated Air Flow, Free Blowing: 760 cfm (1291 cum per hr).

Rated Air Flow at Pressure Loss: 700 cfm (1189 cu m per hr) at 0.35 inch (9 mm) wc.

* + - * 1. Water-Cooled condenser Section:

Water Usage at 40 degrees F (22 degrees C) Rise: 2.50 gpm (568 lph).

Pressure Drop: 1.20 psi (83 kPa).

Pipe Connection Size (In / Out) O.D.: 0.63 inches (16 mm).

* + - * 1. Heat: Electric. Capacity: 5582 BTUH (16.35 Watts).
				2. Electrical Requirements:

Current Draw, Cooling Mode: 15.6 Amps.

Current Draw, Heating Mode: 8.8 Amps.

Minimum Circuit Amps: Heat: 10.7 Amps. No Heat: 19.1 Amps.

Optional Low Ambient: 0.2 Amps.

Optional High Ambient: N/A Amps.

Optional Humidifier: 0.4 Amps.

* + - * 1. Cabinets: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC acrylic blend.

Weight: 206 lbs (93 kg).

Dimensions (WxDxH): 41.5 x 22.4 x 18.85 inches (0154 x 569 x 479 mm).

Condensate Drain Connection (ID): 0.50 inches (13 mm).

Minimum Duct Size: 12 inches (305 mm).

* + - 1. Model D0200: Power Requirements: 230 Vac, 1 Phase, 60 Hz.
				1. Performance: 55 to 58 degrees F (13 to 14 degrees C).

Net Cooling at 90 Degrees (32 Degrees C)F Inlet Air:

Total: 15000 BTUH (4396 W). Sensible: 10870 BTUH (3186 W).

* + - * 1. Evaporator System:

Fan Motor Size: 0.25 HP (180 Watts).

Rated Air Flow, Free Blowing: 810 cfm (1376 cu m per hr).

Rated Air Flow at Pressure Loss: 745 cfm (1266 cu m per hr) at 0.35 inches (9 mm) wc.

* + - * 1. Air-Cooled Condenser Section:

Fan Motor Size: 0.25 HP (180 Watts).

Rated Air Flow, Free Blowing: 810 cfm (1376 cu m per hr).

Rated Air Flow at Pressure Loss: 745 cfm (1266 cu m per hr) at 0.35 inches (9 mm) wc.

* + - * 1. Water-Cooled condenser Section:

Water Usage at 40 degrees F (22 degrees C) Rise: 2.50 gpm (568 lph).

Pressure Drop: 1.20 psi (83 kPa).

Pipe Connection Size (In / Out) O.D.: 0.63 inches (16 mm).

* + - * 1. Heat: Electric. Capacity: 6800 BTUH (2000 Watts).
				2. Electrical Requirements:

Current Draw, Cooling Mode: 14.1 Amps.

Current Draw, Heating Mode: 9.5 Amps.

Minimum Circuit Amps: Heat: 11.7 Amps. No Heat: 17.2 Amps.

Optional Low Ambient: 0.2 Amps.

Optional High Ambient: N/A Amps.

Optional Humidifier: 0.4 Amps.

* + - * 1. Cabinets: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC acrylic blend.

Weight: 206 lbs (93 kg).

Dimensions (WxDxH): 41.5 x 22.4 x 18.85 inches (0154 x 569 x 479 mm).

Condensate Drain Connection (ID): 0.50 inches (13 mm).

Minimum Duct Size: 12 inches (305 mm).

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + 1. Ducted Split Cooling Systems:
			1. Sentinel Series Ducted Split Cooling Systems: Energy efficient wine cellar cooling systems providing low-temperature air conditioning, 55 to 58 degrees F (13 to 14 degrees C). Self-contained units can be placed outside the cooled space. An installed humidifier can achieve 55 to 65 percent relative humidity.
				1. Agency Approvals: ETLc.
				2. Accessories:

\*\* NOTE TO SPECIFIER \*\* Delete accessories not required.

All Wine Temperatures Bundle.

Extreme Climate Protection Bundle.

Remote control, monitoring, and sensing.

Duct kits and grilles.

Extended warranties.

Humidifier: Removable drip pad with integral fan.

Capacity at Water Temperature of 60 degrees F (15 degrees C): 0.42 lbs (0.19 kg per hr).

Capacity at Water Temperature of 90 degrees F (32 degrees C): 0.97 lbs (0.44 kg per hr).

Capacity at Water Temperature of 120 degrees F (49 degrees C): 1.10 lbs (0.5 kg per hr).

* + - * 1. Controls: Digital electronic.

Temperature Accuracy: 1 degrees F (0.55 degrees C).

Relative Humidity: 10 percent.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model DS025: Power Requirements: 208-230 Vac, 1 Phase, 60 Hz.
				1. Performance: 55 to 58 degrees F (13 to 14 degrees C).

Net Cooling at 100 Degrees (32 Degrees C)F Inlet Air:

Total: 3178 BTUH (931 W). Sensible: 2768 BTUH (810 W).

* + - * 1. Fan Coil System:

Fan Motor Size: 0.12 HP (90 Watts).

Rated Air Flow, Free Blowing: 236 cfm (401 cu m per hr).

Rated Air Flow at Pressure Loss: 226 cfm (384 cu m per hr) at 0.10 inches (2.5 mm) wc.

* + - * 1. Heat: Electric. Capacity: 3400 BTUH (1000 Watts).
				2. Electrical Requirements, Evaporator Section: 115 Vac, 1 Phase, 60 Hz.

Current Draw, Cooling Mode: 0.8 Amps.

Current Draw, Heating Mode: 9.4 Amps.

Minimum Circuit Amps: Heat: 11.60 Amps.

Optional Humidifier: 0.3 Amps.

* + - * 1. Cabinet, Evaporator Section:

Fan Coil Construction: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC Acrylic blend.

Weight: 35 lbs (15.4 kg).

Dimensions (LxWxH): 21.43 x 16.6 x 15.56 inches (544 x 422 x .395 mm).

Condensate Drain: 0.50 inches (13 mm).

* + - * 1. Condensing Unit:

Nominal Compressor: 3.1 Amps.

Fan Motor Size: 0.10 HP (75 Watts).

Rated Air Flow, Free Blowing: 275 cfm (467 cu m per hr).

Weight: 75 lbs (34 kg).

* + - * 1. Condensing Unit Enclosure:

Construction: Aluminum.

Finish: Anodized.

Dimensions (WxLxH): 12 x 34 x 26 inches (305 x 864 x 660 mm).

* + - * 1. Electrical Requirements, Evaporator Section: 115 Vac, 1 Phase, 60 Hz.

Power: 208 - 230 Vac, 1 Phase, 60 Hz.

MCA: 4.2 Amps.

MOP: 8.0 Amps.

* + - 1. Model DS050: Power Requirements: 208-230 Vac, 1 Phase, 60 Hz.
				1. Performance: 55 to 58 degrees F (13 to 14 degrees C).

Net Cooling at 100 Degrees (32 Degrees C)F Inlet Air:

Total: 5740 BTUH (1683 W). Sensible: 4510 BTUH (1322 W).

* + - * 1. Fan Coil System:

Fan Motor Size: 0.15 HP (115 Watts).

Rated Air Flow, Free Blowing: 410 cfm (697 cu m per hr).

Rated Air Flow at Pressure Loss: 359 cfm (610 cu m per hr) at 0.20 inches (5 mm) wc.

* + - * 1. Heat: Electric. Capacity: 3400 BTUH (1000 Watts).
				2. Electrical Requirements, Evaporator Section: 115 Vac, 1 Phase, 60 Hz.

Current Draw, Cooling Mode: 0.9 Amps.

Current Draw, Heating Mode: 9.6 Amps.

Minimum Circuit Amps: Heat: 11.80 Amps.

Optional Humidifier: 0.3 Amps.

* + - * 1. Cabinet, Evaporator Section:

Fan Coil Construction: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC Acrylic blend.

Weight: 54 lbs (24.5 kg).

Dimensions (LxWxH): 23.81 x 25.04 x 19.65 inches (605 x 636 x 499 mm).

Condensate Drain: 0.50 inches (13 mm).

* + - * 1. Condensing Unit:

Nominal Compressor: 4.8 Amps.

Fan Motor Size: 0.10 HP (75 Watts).

Rated Air Flow, Free Blowing: 375 cfm (637.13 cu m per hr).

Weight: 76 lbs (34.5 kg).

* + - * 1. Condensing Unit Enclosure:

Construction: Aluminum.

Finish: Anodized.

Dimensions (WxLxH): 12 x 34 x 26 inches (305 x 864 x 660 mm).

* + - * 1. Electrical Requirements, Evaporator Section: 115 Vac, 1 Phase, 60 Hz.

Power: 208 - 230 Vac, 1 Phase, 60 Hz.

MCA: 6.4 Amps.

MOP: 10.0 Amps.

* + - 1. Model DS088: Power Requirements: 208-230 Vac, 1 Phase, 60 Hz.
				1. Performance: 55 to 58 degrees F (13 to 14 degrees C).

Net Cooling at 100 Degrees (32 Degrees C)F Inlet Air:

Total: 9225 BTUH (2704 W). Sensible: 7073 BTUH (2073 W).

* + - * 1. Fan Coil System:

Fan Motor Size: 0.30 HP (220 Watts).

Rated Air Flow, Free Blowing: 482 cfm (819 cu m per hr).

Rated Air Flow at Pressure Loss: 457 cfm (776 cu m per hr) at 0.20 inches (5 mm) wc.

* + - * 1. Heat: Electric. Capacity: 6800 BTUH (2000 Watts).
				2. Electrical Requirements, Evaporator Section: 208-230 Vac, 1 Phase, 60 Hz.

Current Draw, Cooling Mode: 0.8 Amps.

Current Draw, Heating Mode: 9.5 Amps.

Minimum Circuit Amps: Heat: 11.70 Amps.

Optional Humidifier: 0.3 Amps.

* + - * 1. Cabinet, Evaporator Section:

Fan Coil Construction: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC Acrylic blend.

Weight: 48 lbs (21.8 kg).

Dimensions (LxWxH): 23.81 x 25.04 x 19.65 inches (605 x 636 x 499 mm).

Condensate Drain: 0.50 inches (13 mm).

* + - * 1. Condensing Unit:

Nominal Compressor: 11.3 Amps.

Fan Motor Size: 0.20 HP (150 Watts).

Rated Air Flow, Free Blowing: 420 cfm (714 cu m per hr).

Weight: 96 lbs (45.5 kg).

* + - * 1. Condensing Unit Enclosure:

Construction: Aluminum.

Finish: Anodized.

Dimensions (WxLxH): 12 x 34 x 26 inches (305 x 864 x 660 mm).

* + - * 1. Electrical Requirements, Evaporator Section: 115 Vac, 1 Phase, 60 Hz.

Power: 208 - 230 Vac, 1 Phase, 60 Hz.

MCA: 14.9 Amps.

MOP: 25.0 Amps.

* + - 1. Model DS200: Power Requirements: 208-230 Vac, 1 Phase, 60 Hz.
				1. Performance: 55 to 58 degrees F (13 to 14 degrees C).

Net Cooling at 100 Degrees (32 Degrees C) F Inlet Air:

Total: 14145 BTUH (4146 W). Sensible: 9738 BTUH (2854 W).

* + - * 1. Fan Coil System:

Fan Motor Size: 0.25 HP (180 Watts).

Rated Air Flow, Free Blowing: 759 cfm (1289.5 cu m per hr).

Rated Air Flow at Pressure Loss: 728 cfm (1237 cu m per hr) at 0.35 inches (9 mm) wc.

* + - * 1. Heat: Electric. Capacity: 6800 BTUH (2000 Watts).
				2. Electrical Requirements, Evaporator Section: 208-230 Vac, 1 Phase, 60 Hz.

Current Draw, Cooling Mode: 0.8 Amps.

Current Draw, Heating Mode: 9.5 Amps.

Minimum Circuit Amps: Heat: 11.70 Amps.

Optional Humidifier: 0.3 Amps.

* + - * 1. Cabinet, Evaporator Section:

Fan Coil Construction: Aluminum chassis and UL rated plastic panels.

Finish: Gray metal epoxy powder coat/textured PVC Acrylic blend.

Weight: 69 lbs (31.3 kg).

Dimensions (LxWxH): 23.81 x 25.04 x 19.65 inches (605 x 636 x 499 mm).

Condensate Drain: 0.50 inches (13 mm).

* + - * 1. Condensing Unit:

Nominal Compressor: 11.3 Amps.

Fan Motor Size: 0.20 HP (150 Watts).

Rated Air Flow, Free Blowing: 875 cfm (1487 cu m per hr).

Weight: 120 lbs (54.4 kg).

* + - * 1. Condensing Unit Enclosure:

Construction: Aluminum.

Finish: Anodized.

Dimensions (WxLxH): 12 x 34 x 26 inches (305 x 864 x 660 mm).

* + - * 1. Electrical Requirements, Evaporator Section: 115 Vac, 1 Phase, 60 Hz.

Power: 208 - 230 Vac, 1 Phase, 60 Hz.

MCA: 24.4 Amps.

MOP: 40.0 Amps.

\*\* NOTE TO SPECIFIER \*\* Delete articles if not required.

* 1. DUCTLESS WINE CELLAR COOLING SYSTEMS
		1. Ductless Split Cooling System: offers a high ambient and optional low ambient protection in a sleek styled condensing unit. A smaller footprint able to mount to a variety of structures.
			1. Controls: Room mounted non-programmable combination thermostat humidistat.
				1. Temperature Accuracy: Plus or minus 1 degree F (0.55 degrees C).
				2. Relative Humidity Accuracy: Plus or minus 10 percent.
			2. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Heater.
				2. Standalone humidifier.
				3. Remote monitoring and sensing.

\*\* NOTE TO SPECIFIER \*\* Delete model option not required.

* + - 1. Model SS018: Power Requirements: 208-230 Vac, 1 Phase, 60 Hz.
				1. Agency Approvals: ETLc.

Net Cooling at 100 Degrees (32 Degrees C)F Inlet Air:

Total: 2600 BTUH (762 W). Sensible: 2100 BTUH (615 W).

* + - * 1. Fan-Coil Section:

Fan Motor Size: 0.10 HP (75 Watts).

Rated Air Flow, Free Blowing: 150 cfm (254.85 cu m per hr).

* + - * 1. Heat: Electric. Capacity: 3400 BTUH (1000 Watts).
				2. Humidifier: Free Standing with removeable drip pad and integral fan.

Capacity at Water Temperature of 60 degrees F (15 degrees C): 0.42 lbs (0.19 kg per hr).

Capacity at Water Temperature of 90 degrees F (32 degrees C): 0.97 lbs (0.44 kg per hr).

Capacity at Water Temperature of 120 degrees F (49 degrees C): 1.10 lbs (0.5 kg per hr).

* + - * 1. Electrical Requirements:

Power: 115 Vac, 1 Phase, 60 Hz.

Current Draw, Cooling Mode: 0.7 Amps.

Current Draw, Heating Mode: 5.05 Amps.

Minimum Circuit Amps: Heat: 6.2 Amps.

Optional Humidifier: 0.3 Amps.

* + - * 1. Cabinets: Aluminum.

Finish: Black - textured epoxy powder coat.

Weight: 25 lbs (56.7 kg).

Dimensions (LxWxH): 13.25 x 14.25 x 15.88 inches (336 x 362 x 403 mm).

* + - * 1. Condensing Unit:

Drain Connection (ID): 0.50 inches (13 mm).

Nominal Compressor: 1/4 HP (186 W).

Fan Motor Size: 0.10 HP (75 Watts).

Rated Air Flow, Free Blowing: 350 cfm (595 cu m per hr).

Weight: 75 lbs (34 kg).

* + - * 1. Enclosure:

Construction: Aluminum.

Finish: Anodized.

Dimensions (WxLxH): 12 x 34 x 26 inches (305 x 864 x 660 mm).

* + - * 1. Electrical Requirements:

MCA: 3.3 Amps.

MOP: 6 Amps.

* + - 1. Model WGS26: Power Requirements: 220-240 Vac, 1 Phase, 50 Hz.
				1. Agency Approvals: CE.

Net Cooling at 100 Degrees (32 Degrees C)F Inlet Air:

Total: 680 BTUH (199 W). Sensible: 520 BTUH (152 W).

* + - * 1. Fan-Coil Section:

Fan Motor Size: 0.11 HP (85 Watts).

Rated Air Flow, Free Blowing: 141 cfm (240 cu m per hour).

* + - * 1. Heat: Electric. Capacity: 3400 BTUH(1000 Watts).
				2. Humidifier: Free Standing with removeable drip pad and integral fan.

Capacity at water temperature of 60 degrees F (15 degrees C): 2.62 lbs (1.19 kg) per hour.

Capacity at water temperature of 90 degrees F (32 degrees C): 3.17 lbs (1.44 kg) per hour.

Capacity at water temperature of 120 degrees F (49 degrees C): 3.31 lbs (1.50 kg) per hour.

* + - * 1. Electrical Requirements:

Power: 220-240 Vac, 1 Phase, 60 Hz.

Current Draw, Cooling Mode: 0.4 Amps.

Minimum Circuit Amps: Heat: 3.3 Amps.

Optional Humidifier: 0.3 Amps.

* + - * 1. Cabinets: Aluminum.

Finish: Black - textured epoxy powder coat.

Weight: 25 lbs (11 kg).

Dimensions (LxWxH): 13.25 x 14.25 x 15.88 inches (336 x 362 x 403 mm).

* + - * 1. Condensing Unit:

Drain Connection (ID): 0.50 inches (13 mm).

Nominal Compressor: 1/2 HP (373 W).

Fan Motor Size: 0.10 HP (68 W).

Rated Air Flow, Free Blowing: 300 cfm (510 cu m per hour).

Weight: 75 lbs (34 kg).

* + - * 1. Enclosure:

Construction: Aluminum.

Finish: Anodized.

Dimensions (WxLxH): 12 x 34 x 26 inches (305 x 864 x 660 mm).

* + - * 1. Electrical Requirements:

MCA: 3.43 Amps.

MOP: 7 Amps.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. THROUGH THE WALL COOLING SYSTEMS
		1. Through the Wall Cooling Systems: For small to mid-sized cellars. Commercial-grade, corrosion resistant components. Temperature and humidity display. Temperature controls. Digital remote interface control featuring Wireless2Base technology. EasyMount one-piece wall bracket and support frame.
			1. Agency Approvals: ETL - Conforms to UL Std. 484, Can/CSA C22.2 No. 117.
			2. Controls: Digital electronic via local or remote interface.
				1. Temperature Accuracy: Plus or minus 1 degree F (0.55 degrees C).
				2. Relative Humidity Accuracy: Plus or minus 5 percent.
			3. Options:

\*\* NOTE TO SPECIFIER \*\* Delete options not required.

* + - * 1. Hot air discharge and duct adapter kit.
				2. Remote monitoring and sensing.
				3. Factory-configured serving temperature option (TTW018/WG25 only).
				4. Integrated electric heater.

\*\* NOTE TO SPECIFIER \*\* Delete model options not required.

* + - 1. Model TTW009: Power Requirements: 115 Vac, 1 Phase, 60 Hz.
				1. Performance:

Compressor: 0.125 HP (93 W).

Cooling Capacity at 85 degrees F (29 degrees C) Ambient:

Total: 11300 BTUH (3312 W). Sensible: 830 BTUH (243 W).

* + - * 1. Evaporator Section:

Fan Motor Size: 0.05 HP (35 Watts).

Air Flow: 90 cfm (153 cu m per hr).

* + - * 1. Air-Cooled Condenser Section:

Fan Motor Size: 0.05 HP (35 Watts).

Air Flow: 90 cfm (153 cu m per hr).

Air Flow with 12 ft (3658 mm) flex duct: 80 cfm (136 cu m per hr).

* + - * 1. Electrical Requirements:

Current Draw - Cooling mode: 2.6 Amps.

Minimum Circuit Size: 5 Amps.

* + - * 1. Cabinet:

Construction: 0.060 inches (1.5mm) aluminum.

Finish: Textured Black Morton No. 41-784.

Weight: 60 lbs (27.2 kg).

Dimensions (LxWxH): 25 x14.25 x 15.88 inches (635 x 362 x 403 mm).

* + - * 1. Condensate Drain: 0.25 inch (6 mm) I.D.
			1. Model TTW009: Power Requirements: 115 Vac, 1 Phase, 60 Hz.
				1. Performance:

Compressor: 0.125 HP (93 W).

Cooling Capacity at 85 degrees F (29 degrees C) Ambient:

Total: 1090 BTUH (320 W). Sensible: 830 BTUH (243 W).

* + - * 1. Evaporator Section:

Fan Motor Size: 0.05 HP (35 Watts).

Air Flow: 90 cfm (153 cu m per hr).

* + - * 1. Air-cooled Condenser Section:

Fan Motor Size: 0.05 HP (35 Watts).

Air Flow: 90 cfm (153 cu m per hr).

Air Flow with 12 ft (3658 mm) flex duct: 80 cfm (136 cu m per hr).

* + - * 1. Electrical Requirements:

Current Draw - Cooling mode: 2.6 Amps.

Minimum Circuit Size: 5 Amps.

* + - * 1. Cabinet:

Construction: 0.060 inches (1.5 mm) aluminum.

Finish: Textured Black Morton No. 41-784.

Weight: 60 lbs (27.2 kg).

Dimensions (LxWxH): 25 x14.25 x 15.88 inches (635 x 362 x 403 mm).

* + - * 1. Condensate Drain: 0.25 inches (6 mm) I.D.
			1. Model TTW018: Power Requirements: 115 Vac, 1 Phase, 60 Hz.
				1. Performance:

Compressor: 0.16 HP (119 W).

Cooling Capacity at 85 degrees F (29 degrees C) Ambient:

Total: 1950 BTUH (572 W). Sensible: 1700 BTUH (498 W).

* + - * 1. Evaporator Section:

Fan Motor Size: 0.10 HP (75 Watts).

Air Flow: 150 cfm (254.85 cu m per hr).

* + - * 1. Air-cooled Condenser Section:

Fan Motor Size: 0.10 HP (75 Watts).

Air Flow: 140 cfm (237.85 cu m per hr).

Air Flow with 12 ft (3658 mm) flex duct: 130 cfm (220.87 cu m per hr).

* + - * 1. Electrical Requirements:

Current Draw - Cooling mode: 4.15 Amps.

Minimum Circuit Size: 5 Amps.

* + - * 1. Cabinet:

Construction: 0.060 inches (1.5 mm) aluminum.

Finish: Textured Black Morton No. 41-784.

Weight: 62 lbs (28 kg).

Dimensions (LxWxH): 25 x14.25 x 15.88 inches (635 x 362 x 403 mm).

* + - * 1. Condensate Drain: 0.25 inch (6 mm) I.D.
1. EXECUTION
	1. EXAMINATION
		1. Do not begin installation until the substrates have been properly constructed and prepared.
		2. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.
	2. PREPARATION
		1. Clean surfaces thoroughly prior to installation.
		2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
	3. INSTALLATION
		1. Install in accordance with manufacturer's instructions, approved submittals, and in proper relationship with adjacent construction.
	4. FIELD QUALITY CONTROL
		1. Field Inspection: Coordinate field inspection in accordance with appropriate sections in Division 01.

\*\* NOTE TO SPECIFIER \*\* Include if manufacturer provides field quality control with onsite personnel for instruction or supervision of product installation, application, erection, or construction. Delete if not required.

* + 1. Manufacturer's Services: Coordinate manufacturer's services in accordance with appropriate sections in Division 01.
	1. CLEANING AND PROTECTION
		1. Clean products in accordance with the manufacturers recommendations.
		2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION