THE WALL-MOUNT™ GAS/ELECTRIC - WG-SERIES

WG - SERIES 2 to 5 Ton **60Hz**
23,400 to 60,000 BTUH Cooling Capacity
32,000 to 99,000 BTUH Heating Capacity

The Bard Wall-Mount Electric Air Conditioner with gas fired heating is a self contained energy efficient system which is designed to offer maximum indoor comfort at a minimal cost without using valuable indoor floor space or outside ground space. This unit is the ideal product for versatile applications such as: new construction, modular offices, school modernization, portable structures, correctional facilities, retail stores or other commercial applications. Factory or field installed accessories are available to meet specific job requirements.

MEA # (Heating): 73-03-E
MEA # (Cooling): 179-03-E

Engineered Features

Twin Blowers:
Move air quietly. All models feature multispeed blower motors providing airflow adjustment for high and low static operation.

Air Conditioner Compressor:
Reciprocating compressors with crankcase heaters are standard on WG24 and 36 models. Scroll compressors are used on all other models and no crankcase heaters are required.

Phase Rotation Monitor:
Standard on all 3 phase scroll compressors. Protects against reverse rotation if power supply is not properly connected.

Galvanized 20 Gauge Zinc Coated Steel Cabinet:
Cleaned, rinsed, sealed and dried before the polyurethane primer is applied. The cabinet is handsomely finished with a baked on textured enamel, which allows it to withstand 1000 hours of salt spray tests per ASTM B117-03.

Heat Exchanger:
Heavy duty 18-gauge stainless steel tubular heat exchanger. Mechanically joined construction. Ten-year warranty.

In-Shot Burners:
Advanced burner design, quiet operation. Low NOx models available. Low NOx models can be converted to LP gas. High altitude kits available.

Built-in Circuit Breakers:
Standard on all models.

Electrical Components:
Are easily accessible for routine inspection and maintenance through a right side service panel opening. Features a lockable, hinged access cover to the circuit breaker.

Integrated DSI Control:
Direct spark ignition control and remote sensor delivers smooth, proven ignition sequence. Timed blower control and diagnostics are also features of integrated control.

Gas Controls:
Honeywell gas valve and burner orifices are factory standard for natural gas. Field convertible to LP gas with certified conversion kit.

Hinged Service Door:
Hinged door with compression latches (one lockable) for filter service access, heat exchanger inspection, and indoor blower/motor service.

Air Filters:
Two-inch pleated air filters are standard equipment. Optional 1-inch washable filter available. Factory or field installed.

Barometric Fresh Air Damper:
Standard on all units. Allows up to 25% outside fresh air.

Slope Top:
Standard feature for water run-off.

Top Rain Flashing:
Standard feature on all models.

Full Length Mounting Brackets:
Built into cabinet for improved appearance and easy installation. NOTE: Bottom mounting bracket included to assist in installation.

Ventilation System Packages

All packages are designed to meet your specific ventilation requirements utilizing one of many ventilation options for the product. The ventilation package is mounted within the unit eliminating the need for a large exterior mounted hood or damper assembly on the unit. All assemblies can be factory installed, installed in the field at time of installation or as a retrofit system after installation.

- Standard - Barometric Fresh Air Damper
- Optional - Motorized Fresh Air Damper
- Optional - Blank off Plate
- Optional - Commercial Room Ventilator
  - WGCRVS - Spring Return
  - WGCRVP - Power Return
- Optional - Economizer
- Optional - Energy Recovery Ventilator

- Complies with efficiency requirements of ASHRAE/IESNA 90.1-2004.
- Certified to ARI Standard 390-2003 for SPVU (Single Package Vertical Units).
- Commercial Product - Not intended for Residential application.

Specifications 2 Ton through 3 Ton

Model	WG242-A	WG242-B	WG243-C	WG302-A	WG302-B	WG303-C	WG362-A	WG362-B	WG363-C
Electric Rating - 60Hz	230/208-60-1	230/208-60-3	460-60-3	230/208-60-1	230/208-60-3	460-60-3	230/208-60-1	230/208-60-3	460-60-3
Operating Voltage Range	197-253	187-253	414-506	197-253	187-253	414-506	197-253	187-253	414-506
Minimum Circuit Ampacity	17	13	7	22	16	9	26	18	9
*Field Wire Size/	10	12	14	10	12	14	8	10	14
Ground Wire Size	10	12	14	10	12	14	10	10	14
** Delay Fuse - Max.	25	20	15	35	25	15	40	25	15
Compressor									
Compressor Type	Recip.	Recip.	Recip.	Scroll	Scroll	Scroll	Recip.	Recip.	Recip.
Volts	230/208	230/208	460	230/208	230/208	460	230/208	230/208	460
Rated Load Amps	9.5/10.5	6.2/6.6	3.3	12.5/13.5	9/9.5	5	14/16	9.5/10	5
BCSC	10.5	6.7	3.5	14.1	9.5	5	16	10	5
Locked Rotor Amps	56/56	51/51	25	73/73	63/63	31	78/78	72/72	45
Fan Motor & Condenser									
Fan Motor - HP/RPM/SPD	1/5-1050-1	1/5-1050-1	1/5-1050-1	1/5-1050-1	1/5-1050-1	1/5-1050-1	1/5-1050-1	1/5-1050-1	1/5-1050-1
Fan Motor Amps	1.5	1.5	.8	1.5	1.5	.8	1.5	1.5	.8
Fan DIA./CFM	20" - 1900	20" - 1900	20" - 1900	20" - 1900	20" - 1900	20" - 1900	20" - 1900	20" - 1900	20" - 1900
Motor & Evaporator									
Blower Motor - HP/RPM/SPD	1/4-950-3	1/4-950-3	1/4-950-34	1/3-1075-3	1/3-1075-3	1/3-1075-3	1/3-1075-3	1/3-1075-3	1/3-1075-3
Blower Motor - Amps	1.8	1.8	.8	2.2	2.2	1.1	2.2	2.2	1.1
CFM Cooling & ESP	800 - .15	800 - .15	800 - .15	1000 - .35	1000 - .35	1000 - .35	1100 - .25	1100 - .25	1100 - .25
Filter Size	20 x 25 x 2	20 x 25 x 2	20 x 25 x 2	20 x 25 x 2	20 x 25 x 2	20 x 25 x 2	20 x 25 x 2	20 x 25 x 2	20 x 25 x 2
Shipping Weight (lbs.)	465	465	465	495	495	495	495	495	495
Charge (R-22 oz.)	80	80	80	97	97	97	84	84	84

Specifications 3.5 Ton through 5 Ton

Model	WG423-A	WG423-B	WG424-C	WG482-A	WG482-B	WG483-C	WG602-A	WG602-B	WG603-C
Electric Rating - 60Hz	230/208-60-1	230/208-60-3	460-60-3	230/208-60-1	230/208-60-3	460-60-3	230/208-60-1	230/208-60-3	460-60-3
Operating Voltage Range	197-253	187-253	414-506	197-253	187-253	414-506	197-253	187-253	414-506
Minimum Circuit Ampacity	32	25	13	34	23	12	44	31	15
*Field Wire Size/	8	8	14	8	8	14	8	8	12
Ground Wire Size	10	10	14	10	10	14	10	10	12
** Delay Fuse - Max.	50	35	15	50	35	15	60	45	20
Compressor									
Compressor Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Volts	230/208	230/208	460	230/208	230/208	460	230/208	230/208	460
Rated Load Amps	21/19.5	13.5/14.5	7.5	21/21.5	12.5/13	6.2	27/30	17/19.5	9
BCSC	21	15	7.5	22	13	6.4	30	19.5	9
Locked Rotor Amps	127/127	88/88	44	131/131	91/91	46	148/148	137/137	62
Fan Motor & Condenser									
Fan Motor - HP/RPM/SPD	1/3 - 825 - 2	1/3 - 825 - 2	1/3 - 825 - 1	1/3 - 825 - 2	1/3 - 825 - 2	1/3 - 825 - 1	1/3 - 825 - 2	1/3 - 825 - 2	1/3 - 825 - 1
Fan Motor Amps	2.5	2.5	1.3	2.5	2.5	1.3	2.5	2.5	1.3
Fan DIA./CFM	24" - 2700	24" - 2700	24" - 2700	24" - 2700	24" - 2700	24" - 2700	24" - 2700	24" - 2700	24" - 2700
Motor & Evaporator									
Blower Motor - HP/RPM/SPD	1/2-1050-3	1/2-1050-3	1/2-1050-3	1/2 - 1050 - 3	1/2 - 1050 - 3	1/2 - 1050 - 3	1/2 - 1050 - 3	1/2 - 1050 - 3	1/2 - 1050 - 3
Blower Motor - Amps	3.4	3.4	1.5	3.4	3.4	1.5	3.4	3.4	1.5
CFM Cooling & ESP	1300 - .35	1300 - .35	1300 - .35	1550 - .38	1550 - .38	1550 - .38	1650 - .30	1650 - .30	1650 - .30
Filter Size	20 x 30 x 2	20 x 30 x 2	20 x 30 x 2	20 x 30 x 2	20 x 30 x 2	20 x 30 x 2	20 x 30 x 2	20 x 30 x 2	20 x 30 x 2
Shipping Weight (lbs.)	645	645	645	655	655	655	675	675	675
Charge (R-22 oz.)	101	101	101	116	116	116	143	143	143

*Based on 75°C copper wire. All wiring must conform to the National Electrical Code and all local codes.
**Maximum time delay fuse or HACR type circuit breaker.

Cooling System Capacity, Efficiency and Airflow Ratings, and Available Heating Inputs

Model	WG24	WG30	WG36	WG42	WG48	WG60
Cooling BTUH ①	23,800	29,800	34,400	41,500	47,000	60,000
EER ②	9.5	9.0	9.0	9.0	9.2	9.0
Rated CFM	800	1000	1100	1300	1550	1650
Acceptable Airflow Range	680 - 920	850 - 1150	935 - 1265	1030 - 1500	1280 - 1750	1340 - 1910
Available Heating Inputs ③	90,000	90,000	90,000	125,000	125,000	125,000
	68,000	68,000	68,000	100,000	100,000	100,000
	45,000	45,000	45,000	75,000	75,000	75,000

① Capacity is certified in accordance with ANSI/ARI Standard 390-2003.
② EER = Energy Efficiency Ratio and is certified in accordance with ARI Standard 390-2003.
All ratings based on fresh air intake being 100% closed (no outside air introduction).
③ Any one of the heating inputs shown is available for each basic cooling model as indicated. Each input can be field derated 10% from factory standard and main burner orifices are included with each unit to accomplish this. See table below for additional information.

Heating System Capacity, Efficiency, Derate and Airflow Ratings WG24, WG30, WG36

	Factory Standard	Field Derate	Factory Standard	Field Derate	Factory Standard	Field Derate
Input	90,000	81,000	68,000	61,000	45,000	41,000
Output	74,000	66,000	55,000	49,000	36,000	32,000
AFUE	81.0	81.0	81.0	81.0	81.0	81.0
Temp. Rise Range	50 - 80	50 - 80	40 - 70	40 - 70	25 - 55	25 - 55
Mid-Rise Range Airflow	1040	940	925	825	830	740
Acceptable Airflow Range	845 - 1350	765 - 1220	730 - 1275	650 - 1135	610 - 1330	540 - 1185

Heating ratings certified in accordance with GAMA Efficiency Certification Program.

Heating System Capacity, Efficiency, Derate and Airflow Ratings WG42, WG48, WG60

	Factory Standard	Field Derate	Factory Standard	Field Derate	Factory Standard	Field Derate
Input	125,000	113,000	100,000	90,000	75,000	68,000
Output	99,000	87,000	81,000	72,000	61,000	55,000
AFUE	81.0	81.0	81.0	81.0	81.0	81.0
Temp. Rise Range	50 - 80	50 - 80	40 - 70	40 - 70	30 - 60	30 - 60
Mid-Rise Range Airflow	1410	1270	1365	1230	1250	1135
Acceptable Airflow Range	1145 - 1830	1030 - 1650	1075 - 1875	965 - 1700	940 - 1875	850 - 1700

Heating ratings certified in accordance with GAMA Efficiency Certification Program.

Indoor Blower Performance — Factory Connected Speeds SPEED

WG24 cooling airflow is rated **800 CFM @ .15 ESP**, and wet coil range is **680 - 920 CFM**.
See Heating Airflow Ratings Chart for heating details.

ESP Inches H_20	Cooling Mode			MANUAL FAN and HEATING MODE					
	Wet Coil			90,000 BTU Input			81,000 BTU Input		
	High	Med	**Low**	**High**	Med	Low	High	Med	Low
.10			820	1260	1060			1060	870
.20		950	770	1200	1010		1200	1010	
.30		880	700	1120			1120	940	
.40		790		1030			1030	860	
.50	910	710					950		
.60	800						840		

ESP Inches H_20	Cooling Mode			MANUAL FAN and HEATING MODE					
	Wet Coil			68,000 BTU Input			61,000 BTU Input		
	High	Med	**Low**	**High**	Med	Low	High	Med	Low
.10			820	1260	1060	870		1060	870
.20		950	770	1200	1010			1010	810
.30		880	700	1120	910		1120	940	
.40		790		1030			1030	860	
.50	910	710		950			950	780	
.60	800						840		

ESP Inches H_20	Cooling Mode			MANUAL FAN and HEATING MODE					
	Wet Coil			45,000 BTU Input			41,000 BTU Input		
	High	Med	**Low**	**High**	Med	Low	High	Med	Low
.10			820	1260	1060	870		1060	870
.20		950	770	1200	1010	810	1200	1010	810
.30		880	700	1120	910		1120	940	750
.40		790		1030	860		1030	860	680
.50	910	710		950	780		950	780	
.60	800			840			840		

Voltage adjustment - Reduce airflow by 100 CFM for 208 Volt
Dehumidification coil adjustment - Reduce airflow by 35 CFM for dehumidification coil installed
Top outlet adjustment - Increase airflow by 50 CFM for top outlet models
SG-3, RG-3, non-ducted application adjustment - Reduce airflow by 100 CFM for SG-3 and RG-3 installations

WG30 cooling airflow is rated **1000 CFM @ .35 ESP**, and wet coil range is **850 - 1150 CFM**.
See Heating Airflow Ratings Chart for heating details.

ESP Inches H_20	Cooling Mode			Manual Fan and Heating Mode					
	Wet Coil			90,000 BTU Input			81,000 BTU Input		
	High	**Med**	Low	High	**Med**	Low	High	Med	Low
.10			1000		1260	1060		1260	1060
.20		1160	950	1370	1200	1010		1200	1010
.30		1080	880	1290	1120	940		1120	940
.40	1150	990		1190	1030		1190	1030	860
.50	1050	910		1090	950		1090	950	
.60	940			980			980	840	

ESP Inches H_20	Cooling Mode			Manual Fan and Heating Mode					
	Wet Coil			68,000 BTU Input			61,000 BTU Input		
	High	**Med**	Low	High	**Med**	Low	High	Med	Low
.10			1000		1260	1060			1060
.20		1160	950		1200	1010			1010
.30		1080	880		1120	940		1120	940
.40	1150	990		1190	1030	860		1030	860
.50	1050	910		1090	950	780	1090	950	780
.60	940			980	840		980	840	660

ESP Inches H_20	Cooling Mode			Manual Fan and Heating Mode					
	Wet Coil			45,000 BTU Input			41,000 BTU Input		
	High	**Med**	Low	High	**Med**	Low	High	Med	Low
.10			1000		1260	1060			1060
.20		1160	950		1200	1010		1200	1010
.30		1080	880	1290	1120	940		1120	940
.40	1150	990		1190	1030	860		1030	860
.50	1050	910		1090	950	780	1090	950	780
.60	940			980	840	660	980	840	660

Voltage adjustment - Reduce airflow by 100 CFM for 208 Volt
Dehumidification coil adjustment - Reduce airflow by 35 CFM for dehumidification coil installed
Top outlet adjustment - Increase airflow by 50 CFM for top outlet models
SG-3, RG-3, non-ducted application adjustment - Reduce airflow by 100 CFM for SG-3 and RG-3 installations

Indoor Blower Performance

Factory Connected Speeds

SPEED

WG36 cooling airflow is rated **1100 CFM @ .25 ESP**, and wet coil range is **935 - 1265 CFM**. See Heating Airflow Ratings Chart for heating details.

ESP Inches H_20	Cooling Mode			Manual Fan and Heating Mode					
	Wet Coil			90,000 BTU Input			81,000 BTU Input		
	High	**Med**	Low	High	**Med**	Low	High	Med	Low
.10		1220	1000		1260	1060		1260	1060
.20		1160	950	1370	1200	1010		1200	1010
.30	1250	1080		1290	1120	940		1120	940
.40	1150	990		1190	1030		1190	1030	860
.50	1050			1090	950		1090	950	
.60	940			980			980	840	

ESP Inches H_20	Cooling Mode			Manual Fan and Heating Mode					
	Wet Coil			68,000 BTU Input			61,000 BTU Input		
	High	**Med**	Low	High	**Med**	Low	High	Med	Low
.10		1220	1000		1260	1060			1060
.20		1160	950		1200	1010			1010
.30	1250	1080			1120	940		1120	940
.40	1150	990		1190	1030	860		1030	860
.50	1050			1090	950	780	1090	950	780
.60	940			980	840		980	840	660

ESP Inches H_20	Cooling Mode			Manual Fan and Heating Mode					
	Wet Coil			45,000 BTU Input			41,000 BTU Input		
	High	**Med**	Low	High	**Med**	Low	High	Med	Low
.10		1220	1000		1260	1060			1060
.20		1160	950		1200	1010		1200	1010
.30	1250	1080		1290	1120	940		1120	940
.40	1150	990		1190	1030	860		1030	860
.50	1050			1090	950	780	1090	950	780
.60	940			980	840	660	980	840	660

Voltage adjustment - Reduce airflow by 100 CFM for 208 Volt
Dehumidification coil adjustment - Reduce airflow by 35 CFM for dehumidification coil installed
Top outlet adjustment - Increase airflow by 50 CFM for top outlet models
SG-3, RG-3, non-ducted application adjustment - Reduce airflow by 100 CFM for SG-3 and RG-3 installations

WG42 cooling airflow rangeis **1300 CFM @ .35 ESP**, and wet coil range is **1030 - 1500 CFM.** See Heating Airflow Ratings Chart for heating details.

ESP Inches H_20	Cooling Mode			Manual Fan and Heating Mode					
	Wet Coil			125,000 BTU Input			113,000 BTU Input		
	High	**Med**	Low	High	**Med**	Low	High	Med	Low
.10		1480	1090		1580	1180		1580	1180
.20		1410	1030	1880	1510			1510	1090
.30		1360		1760	1460			1460	
.40		1250		1670	1340		1670	1340	
.50	1460	1150		1560	1240		1560	1240	
.60	1340	1040		1430			1430	1130	

ESP Inches H_20	Cooling Mode			Manual Fan and Heating Mode					
	Wet Coil			100,000 BTU Input			90,000 BTU Input		
	High	**Med**	Low	High	**Med**	Low	High	Med	Low
.10		1530	1140		1630	1230		1630	1230
.20		1460	1070		1560	1160		1560	1160
.30		1410	1050	1810	1510	1140		1510	1140
.40		1300		1720	1390		1720	1390	1020
.50	1510	1200		1610	1290		1610	1290	
.60	1390	1090		1480	1180		1480	1180	

ESP Inches H_20	Cooling Mode			Manual Fan and Heating Mode					
	Wet Coil			75,000 BTU Input			68,000 BTU Input		
	High	**Med**	Low	High	**Med**	Low	High	Med	Low
.10		1580	1190		1680	1280		1680	1280
.20		1510	1120		1610	1210		1610	1210
.30		1460	1100	1860	1560	1190		1560	1190
.40		1340	1070	1770	1440	1070		1440	1070
.50		1260		1660	1340		1660	1340	970
.60	1440	1140		1530	1230		1530	1230	

Voltage adjustment - Reduce airflow by 130 CFM for 208 Volt
Dehumidification coil adjustment - Reduce airflow by 35 CFM for dehumidification coil installed
Top outlet adjustment - Increase airflow by 65 CFM for top outlet models
SG-5, RG-5, non-ducted application adjustment - Reduce airflow by 170 CFM for SG-5 and RG-5 installations

WG48 cooling airflow is rated **1550 CFM @ .38 ESP**, and wet coil range is **1280-1750 CFM.** See Heating Airflow Ratings Chart for heating details.

ESP Inches H_20	Cooling Mode			Manual Fan and Heating Mode					
	Wet Coil			125,000 BTU Input			113,000 BTU Input		
	High	Med	Low	High	**Med**	Low	High	Med	Low
.10	1850	1480			1580	1180		1580	1180
.20	1780	1410		1880	1510			1510	1110
.30	1670	1360		1760	1460			1460	1090
.40	1570	1250		1670	1340		1670	1340	
.50	1460			1560	1240		1560	1240	
.60	1340			1430			1430	1130	

ESP Inches H_20	Cooling Mode			Manual Fan and Heating Mode					
	Wet Coil			100,000 BTU Input			90,000 BTU Input		
	High	Med	Low	High	**Med**	Low	High	Med	Low
.10		1530			1630	1230		1630	1230
.20	1830	1460			1560	1160		1560	1160
.30	1700	1410		1810	1510	1140		1510	1140
.40	1620	1300		1720	1390		1720	1390	1020
.50	1510			1610	1290		1610	1290	
.60	1390			1480	1180		1480	1180	

ESP Inches H_20	Cooling Mode			Manual Fan and Heating Mode					
	Wet Coil			75,000 BTU Input			68,000 BTU Input		
	High	Med	Low	High	**Med**	Low	High	Med	Low
.10		1580			1680	1280		1680	1280
.20	1880	1510			1610	1210		1610	1210
.30	1750	1460		1860	1560	1190		1560	1190
.40	1670	1340		1770	1440	1070		1440	1070
.50	1560	1260		1660	1340		1660	1340	970
.60	1440			1530	1230		1530	1230	

Voltage adjustment - Reduce airflow by 130 CFM for 208 Volt
Dehumidification coil adjustment - Reduce airflow by 35 CFM for dehumidification coil installed
Top outlet adjustment - Increase airflow by 65 CFM for top outlet models
SG-5, RG-5, non-ducted application adjustment - Reduce airflow by 170 CFM for SG-5 and RG-5 installations

WG60 cooling airflow range is **1650 CFM @ .30 ESP**, and wet coil range is **1910-1340 CFM**. See Heating Airflow Ratings Chart for heating details.

ESP Inches H_20	Cooling Mode			Manual Fan and Heating Mode					
	Wet Coil			125,000 BTU Input			113,000 BTU Input		
	High	Med	Low	High	**Med**	Low	High	Med	Low
.10	1850	1480		1950	1580	1180		1580	1180
.20	1780	1410		1880	1510		1880	1510	1110
.30	1650	1360		1760	1460		1760	1460	1090
.40	1570			1670	1340		1670	1340	
.50	1460			1560	1240		1560	1240	
.60	1340			1430			1430	1130	

ESP Inches H_20	Cooling Mode			Manual Fan and Heating Mode					
	Wet Coil			100,000 BTU Input			90,000 BTU Input		
	High	Med	Low	High	**Med**	Low	High	Med	Low
.10	1900	1530			1630	1230		1630	1230
.20	1830	1460		1930	1560	1160		1560	1160
.30	1700	1410		1810	1510	1140		1510	1140
.40	1620			1720	1390		1720	1390	1020
.50	1510			1610	1290		1610	1290	
.60	1390			1480	1180		1480	1180	

ESP Inches H_20	Cooling Mode			Manual Fan and Heating Mode					
	Wet Coil			75,000 BTU Input			68,000 BTU Input		
	High	Med	Low	High	**Med**	Low	High	Med	Low
.10	1950	1580			1680	1280		1680	1280
.20	1880	1510		1980	1610	1210		1610	1210
.30	1750	1460		1860	1560	1190		1560	1190
.40	1670	1340		1770	1440	1070		1440	1070
.50	1560			1660	1340		1660	1340	970
.60	1440			1530	1230		1530	1230	

Voltage adjustment - Reduce airflow by 130 CFM for 208 Volt
Dehumidification coil adjustment - Reduce airflow by 35 CFM for dehumidification coil installed
Top outlet adjustment - Increase airflow by 65 CFM for top outlet models
SG-5, RG-5, non-ducted application adjustment - Reduce airflow by 170 CFM for SG-5 and RG-5 installations

Important Information Concerning Altitude Impact on Heating Input Ratings

Heating input, and thus heating output, decreases with altitude. No orifice change is required up to 6,000 feet elevation and derate occurs naturally due to altitude impact. **Natural gas models may require orifice change based on BTU content of gas. See Natural Gas Orifice and Altitude Tables on next page for details**. For Propane Gas see the Propane Gas Conversion Table below.

Above 6,000 feet elevation orifice changes are required, and capacity reductions are a function of altitude impact and orifice change. Pressure switch change is required above 6,000 feet elevation. For Natural Gas see the Orifice and Altitude Tables on next page. For Propane Gas see the Propane Gas Conversion Table below.

NATURAL GAS DERATE CAPACITIES

WG Rated Input	Sea Level	1000	2000	3000	4000	5000	6000	7000	8000	9000	10,000
41,000	41,000	39,204	37,908	36,612	35,640	34,992	34,182	33,696	33,048	32,643	32,076
45,000	45,000	43,560	42,120	40,680	39,600	38,880	37,980	37,440	36,720	36,270	35,640
61,000	61,000	58,806	56,862	54,918	53,460	52,488	51,273	50,544	49,572	48,965	48,114
68,000	68,000	65,340	63,180	61,020	59,400	58,320	56,970	56,160	55,080	54,405	53,460
75,000	75,000	72,600	70,200	67,800	66,000	64,800	63,300	62,400	61,200	60,450	59,400
81,000	81,000	78,408	75,816	73,224	71,280	69,984	68,364	67,392	66,096	65,286	64,152
90,000	90,000	87,120	84,240	81,360	79,200	77,760	75,960	74,880	73,440	72,540	71,280
100,000	100,000	96,800	93,600	90,400	88,000	86,400	84,400	83,200	81,600	80,600	79,200
113,000	113,000	108,900	105,300	101,700	99,000	97,200	94,950	93,600	91,800	90,675	89,100
125,000	125,000	121,000	117,000	113,000	110,000	108,000	105,500	104,000	102,000	100,750	99,000

PROPANE (LP) DERATE CAPACITIES

WG Rated Input	Sea Level	1000	2000	3000	4000	5000	6000	7000	8000	9000	10,000
41,000	41,000	39,852	39,528	39,204	38,556	38,232	37,584	36,612	35,640	34,344	32,724
45,000	45,000	44,280	43,920	43,560	42,840	42,480	41,760	40,680	39,600	38,160	36,360
61,000	61,000	59,778	59,292	58,806	57,834	57,348	56,376	54,918	53,460	51,516	49,086
68,000	68,000	66,420	65,880	65,340	64,260	63,720	62,640	61,020	59,400	57,240	54,540
75,000	75,000	73,800	73,200	72,600	71,400	70,800	69,600	67,800	66,000	63,600	60,600
81,000	81,000	79,704	79,056	78,408	77,112	76,464	75,168	73,224	71,280	68,688	65,448
90,000	90,000	88,560	87,840	87,120	85,680	84,960	83,520	81,360	79,200	76,320	72,720
100,000	100,000	98,400	97,600	96,800	95,200	94,400	92,800	90,400	88,000	84,800	80,800
113,000	113,000	110,700	109,800	108,900	107,100	106,200	104,400	101,700	99,000	95,400	90,900
125,000	125,000	123,000	122,000	121,000	119,000	118,000	116,000	113,000	110,000	106,000	101,000

Propane Gas Conversion Kits -- Fits All WG-Series Models

PROPANE (LP) GAS -- Use Gas Conversion Kits As Indicated

MODELS	Propane Gas Conversion Kit		Use WGCK-1	Use WGCK-2	
	Factory Standard Input	Gas Heat Value BTU/Cu. Ft.	Up to 6000 Feet Install Orifice	6001 to 8000 Feet Requires Pressure Switch Change and Orifice as Shown	8001 to 10,000 Feet Requires Pressure Switch Change and Orifice as Shown
WG24	**22,500 - 22,650 BTU Per Burner**	2500	**1.45**	**1.45**	**1.40**
WG30		Pressure Switch	Standard (.55)	Pressure Switch (.42) Included in Conversion Kit	
WG36	Optional 10% Field Converted Derate	Gas Heat Value BTU/Cu. Ft.	Up to 6000 Feet Install Orifice	6001 to 8000 Feet Requires Pressure Switch Change and Orifice as Shown	8001 to 10,000 Feet Requires Pressure Switch Change and Orifice as Shown
	20,250 - 20,500 BTU Per Burner	2500	**1.35**	**1.35**	**1.30**
		Pressure Switch	Standard (.55)	Pressure Switch (.42) Included in Conversion Kit	

PROPANE (LP) GAS -- Use Gas Conversion Kits As Indicated

MODELS	Propane Gas Conversion Kit		Use WGCK-1	Use WGCK-2	
	Factory Standard Input	Gas Heat Value BTU/Cu. Ft.	Up to 6000 Feet Install Orifice	6001 to 8000 Feet Requires Pressure Switch Change and Orifice as Shown	8001 to 10,000 Feet Requires Pressure Switch Change and Orifice as Shown
WG42	**25,000 BTU Per Burner**	2500	**1.50**	**1.50**	**1.45**
WG48		Pressure Switch	Standard (.55)	Pressure Switch (.42) Included in Conversion Kit	
WG60	Optional 10% Field Converted Derate	Gas Heat Value BTU/Cu. Ft.	Up to 6000 Feet Install Orifice	6001 to 8000 Feet Requires Pressure Switch Change and Orifice as Shown	8001 to 10,000 Feet Requires Pressure Switch Change and Orifice as Shown
	22,500 - 22,650 BTU Per Burner	2500	**1.45**	**1.45**	**1.40**
		Pressure Switch	Standard (.55)	Pressure Switch (.42) Included in Conversion Kit	

All orifice sizes shown are millimeters (mm).

Natural Gas Orifice and Altitude Tables

NATURAL GAS -- WG24-30-36 Models				
Factory Standard Inupt	Gas Heat* Value BTU/Cu. Ft.	Up to 6000 Feet No Changes Except For BTU Content	6001 to 8000 Feet Requires Pressure Switch Change and Orifice Change Based on BTU Content	8001 to 10,000 Feet Requires Pressure Switch Change and Orifice Change Basesd on BTU Content
22,500 to 22,650 BTU Per Burner	700-749	2.75	2.70	2.60
	750-799	2.70	2.60	2.50
	800-849	2.60	2.50	2.45
	850-899	2.50	2.40	2.35
	900-949	2.45	2.35	**(2.30)**
WG24	950-999	2.35	**(2.30)**	2.25
WG30	1000-1049**	**(2.30)**	2.25	**[2.20]**
	1050-1100	2.25	**[2.20]**	2.15
WG36	Pressure Switch	Standard (.55)	Order 8620-189 High Altitude Pressure Switch Kit (.42)	
Optional 10% Field Converted Derate	Gas Heat* Value BTU/Cu. Ft.	Up to 6000 Feet No Changes Except For BTU Content	6001 to 8000 Feet Requires Pressure Switch Change and Orifice Change Based on BTU Content	8001 to 10,000 Feet Requires Pressure Switch Change and Orifice Change Basesd on BTU Content
20,250 to 20,500 BTU Per Burner	700-749	2.60	2.50	2.45
	750-799	2.50	2.45	2.40
	800-849	2.45	2.40	(2.30)
	850-899	2.40	**(2.30)**	2.25
	900-949	**(2.30)**	2.25	**[2.20]**
WG24	950-999	2.25	[2.20]	2.15
WG30	1000-1049**	**[2.20]**	2.15	2.10
	1050-1100	2.15	2.15	2.10
WG36	Pressure Switch	Standard (.55)	Order 8620-189 High Altitude Pressure Switch Kit (.42)	

(2.30) is the standard factory installed orifice size.

[2.20] orifices are shipped with the unit for field installed optional 10% derate.

All other orifice sizes shown are available as individual items, see orifice chart below for part numbers.

[2.20] orifices are shipped with the unit for field installed optional 10% input derate.

(2.30) is the factory installed orifice size for full rated input.

All other orifice sizes shown are available as individual items, see orifice chart below for part numbers.

* At standard conditions: 30.00 Inches Mercury, 60F, Saturated, .60 Specific Gravity

** All Natural Gas factory orifice sizing and standard input ratings based on nominal 1025 BTU per cubic foot gas and sea level conditions.

NATURAL GAS -- WG42-48-60 Models				
Factory Standard Inupt	Gas Heat* Value BTU/Cu. Ft.	Up to 6000 Feet No Changes Except For BTU Content	6001 to 8000 Feet Requires Pressure Switch Change and Orifice Change Based on BTU Content	8001 to 10,000 Feet Requires Pressure Switch Change and Orifice Change Basesd on BTU Content
25,000 BTU Per Burner	700-749	2.90	2.80	2.70
	750-799	2.80	2.70	2.60
	800-849	2.70	2.60	2.50
WG42	850-899	2.60	2.50	2.45
	900-949	2.50	2.45	**(2.40)**
WG48	950-999	2.45	**(2.40)**	2.35
WG60	1000-1049**	**(2.40)**	2.35	**[2.30]**
	1050-1100	**[2.30]**	2.25	2.20
	Pressure Switch	Standard (.55)	Order 8620-189 High Altitude Pressure Switch Kit (.42)	
Optional 10% Field Converted Derate	Gas Heat* Value BTU/Cu. Ft.	Up to 6000 Feet No Changes Except For BTU Content	6001 to 8000 Feet Requires Pressure Switch Change and Orifice Change Based on BTU Content	8001 to 10,000 Feet Requires Pressure Switch Change and Orifice Change Basesd on BTU Content
22,500 to 22,650 BTU Per Burner	700-749	2.75	2.70	2.60
	750-799	2.70	2.60	2.50
	800-849	2.60	2.50	2.45
	850-899	2.50	2.45	**(2.40)**
	900-949	**(2.40)**	2.35	**[2.30]**
WG42	950-999	2.35	[2.30]	2.25
WG48	1000-1049**	**[2.30]**	2.25	2.20
	1050-1100	2.25	2.25	2.20
WG60	Pressure Switch	Standard (.55)	Order 8620-189 High Altitude Pressure Switch Kit (.42)	

(2.40) is the standard factory installed orifice size.

[2.30] orifices are shipped with the unit for field installed optional 10% derate.

All other orifice sizes shown are available as individual items, see orifice chart below for part numbers.

[2.30] orifices are shipped with the unit for field installed optional 10% input derate.

(2.40) is the factory installed orifice size for full rated input.

All other orifice sizes shown are available as individual items, see orifice chart below for part numbers.

* At standard conditions: 30.00 Inches Mercury, 60F, Saturated, .60 Specific Gravity

** All Natural Gas factory orifice sizing and standard input ratings based on nominal 1025 BTU per cubic foot gas and sea level conditions.

Bard Part No.	Orifice Size (mm)	Orifice Diameter
9010-092	2.10	0.0826
9010-088	2.15	0.0846
9010-087	2.20	0.0866
9010-086	2.25	0.0885
9010-082	2.30	0.0905
9010-085	2.35	0.0925
9010-079	2.40	0.0945
9010-084	2.45	0.0964
9010-093	2.50	0.0984
9010-094	2.60	0.1024
9010-095	2.70	0.1063
9010-096	2.75	0.1082
9010-097	2.80	0.1102
9010-098	2.90	0.1142

No. of Orifices Required Based on Unit Input Rating
41,000 (2)
45,000 (2)
61,000 (3)
68,000 (3)
75,000 (3)
81,000 (4)
90,000 (4)
100,000 (4)
113,000 (5)
125,000 (5)

All orifice sizes shown are in millimeters (mm).

Ventilation System Packages

Bard Wall-Mounts are designed to provide optional ventilation packages to meet all of your ventilation and indoor air quality requirements. All units are equipped with a barometric fresh air damper as the standard ventilation package. All ventilation packages can be built-in at the factory, or field-installed at a later date.

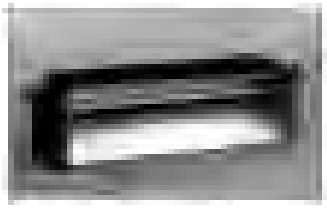
BAROMETRIC FRESH AIR DAMPER

BAROMETRIC FRESH AIR DAMPER - WGBFAD — STANDARD

The barometric fresh air damper is a standard feature on all models. It is installed on the inside of the service door and allows outside ventilation air, up to 25% of the total airflow rating of the unit, to be introduced through the air inlet openings and to be mixed with the conditioned air. The damper opens during blower operation and closes when the blower is off. Adjustable blade stops allow different amounts of outside air to be introduced into the building and can be easily locked closed if required.

BLANK OFF PLATE - WGBOP — OPTIONAL

A blank off plate is installed on the inside of the service door. It covers the air inlet openings which restricts any outside air from entering the unit. The blank off plate should be utilized in applications where outside air is not required to be mixed with the conditioned air.



MOTORIZED FRESH AIR DAMPER

MOTORIZED FRESH AIR DAMPER - WGMFAD — OPTIONAL

The motorized fresh air damper is internally mounted behind the service door and allows outside ventilation air, up to 25% of the total airflow rating of the unit, to be introduced through the air inlet openings and to be mixed with the conditioned air. The two position damper can be fully open or closed. The damper blade is powered open by a 24VAC motor with spring return on power loss. The damper can be controlled by indoor blower operation or can be field connected to be managed based on building occupancy.

NOTE: The above vent systems are intake only without built-in exhaust capability. Building will likely require separate field installed barometric relief or mechanical exhaust elsewhere within the conditioned space. Balancing dampers in the return air grille may be required to achieve specified amount of outdoor air intake.

COMMERCIAL ROOM VENTILATOR

COMMERCIAL ROOM VENTILATOR - WGCRV — OPTIONAL

The built-in commercial room ventilator is internally mounted behind the service door and allows outside ventilation air, up to 50% of the total airflow rating of the unit, to be introduced through the air inlet openings. It includes a built-in exhaust air damper.

The commercial room ventilator (WGCRV) is a simple and innovative approach to improving the indoor air quality by providing fresh air intake and exhaust capability through the WGCRV. The damper can be easily adjusted to control the amount of fresh air supplied into the building. The WGCRV can be controlled by indoor blower operation or field controlled based on room occupancy. Complies with ANSI/ASHRAE Standard 62.1 "Ventilation for Acceptable Indoor Air Quality".

Two Models Available: WGCRVS - spring return on power loss or deactivation
WGCRVP - power return (will not close on power loss)

ECONOMIZER

ECONOMIZER - WGEIFM — OPTIONAL

The built-in economizer system is internally mounted behind the service door and allows outdoor air to be introduced through the air inlet openings. The amount of outdoor air varies in response to the system controls and settings defined by the end user. It includes a built-in exhaust air damper. The economizer is designed to provide "free cooling" when outside air conditions are cool and dry enough to satisfy cooling requirements without running the compressor. This in turn provides lower operating costs, while extending the life of the compressor.

Standard Features:

- One Piece Construction - Easy to install with no mechanical linkage adjustment required.
- Exhaust Air Damper - Built in with positive closed position. Provides exhaust air capability to prevent pressurization of tight buildings.
- Actuator Motor - 24 volt, power open, spring return with built in torque limiting switch.
- Proportioning Type Control - for maximum "free cooling" economy and comfort.
- Moisture Eliminator & Prefilter - permanent, washable aluminum construction.
- Enthalpy Control - adjustable to monitor outdoor temperature and humidity.
- Minimum Position Potentiometer - adjustable to control minimum damper blade position for ventilation purposes.
- Mixed Air Sensor - to monitor outside and return air to automatically modulate damper position.

ENERGY RECOVERY VENTILATOR

WALL-MOUNT ENERGY RECOVERY VENTILATOR - WGERV — OPTIONAL

The wall-mount energy recovery ventilator (WGERV) is a highly innovative approach to address indoor air quality ventilation requirements as established by ANSI/ASHRAE Standard 62.1. The WGERV allows up to 450 CFM (depending upon speed setting) of fresh air and exhaust through the unit while maintaining superior indoor comfort and humidity levels. In most cases this can be accomplished without increasing equipment sizing or operating costs. Heat transfer efficiency is up to 74% during summer and 80% during winter conditions.

The WGERV consists of a unique "rotary energy recovery cassette" that provides effective sensible and latent heat transfer capabilities during summer and winter conditions. Various control schemes are addressed including limiting ventilation during building occupancy only.

The WGERV is designed to be internally mounted behind the service door in the WG Gas/Electric units. It can be built-in at the factory or field installed as an option. WGERV can be independently adjusted for intake and exhaust rates.

NOTE: See Page 8 for WGERV Performance Data and Page 9 for WGCRV Performance Data

Energy Recovery Ventilator Performance Data (Note: 280CFM Low Speed Not Available on -C 460V Models)

APPLICATION DATA -- WGERV-*3

SUMMER COOLING PERFORMANCE (INDOOR DESIGN CONDITIONS 75°DB/62°WB)

Ambient O.D.		VENTILATION RATE – 450 CFM High Speed (Black) 72% EFFICIENCY						VENTILATION RATE -- 370 CFM Medium Speed (Blue) 73% EFFICIENCY						VENTILATION RATE -- 280 CFM Low Speed (Red) 74% EFFICIENCY					
DB/WB	F	VLT	VLS	VLL	HRT	HRS	HRL	VLT	VLS	VLL	HRT	HRS	HRL	VLT	VLS	VLL	HRT	HRS	HRL
	75	21465	14580	6884	15455	10498	4957	17649	11988	5661	12884	8751	4133	13356	9072	4284	9883	6713	3170
105	70	14580	14580	0	10498	10498	0	11988	11988	0	8751	8751	0	9072	9072	0	6713	6713	0
	65	14580	14580	0	10498	10498	0	11988	11988	0	8751	8751	0	9072	9072	0	6713	6713	0
	80	31500	12150	19440	22680	8748	13932	25900	9990	15910	18907	7293	11614	19600	7560	12040	14504	5594	8910
	75	21465	12150	9314	15455	8748	6707	17649	9990	7659	12884	7293	5591	13356	7560	5796	9883	5594	4289
100	70	12352	12150	202	8893	8748	145	10156	9990	166	7414	7293	121	7686	7560	126	5687	5594	93
	65	12150	12150	0	8748	8748	0	9990	9990	0	7293	7293	0	7560	7560	0	5594	5594	0
	60	12150	12150	0	8748	8748	0	9990	9990	0	7293	7293	0	7560	7560	0	5594	5594	0
	80	31590	9720	21870	22745	6998	15746	25974	7992	17982	18961	5834	13127	19656	6048	13608	14545	4476	10070
	75	21465	9720	11744	15455	6998	8456	17649	7992	9657	12884	5834	7050	13356	6048	7308	9883	4476	5408
95	70	12352	9720	2632	8893	6998	1895	10156	7992	2164	7414	5834	1580	7686	6048	1638	5687	4476	1212
	65	9720	9720	0	6998	6998	0	7992	7992	0	5834	5834	0	6048	6048	0	4476	4476	0
	60	9720	9720	0	6998	6998	0	7992	7992	0	5834	5834	0	6048	6048	0	4476	4476	0
	80	31590	7290	24300	22745	5249	17496	25974	5994	19980	18961	4376	14585	19656	4536	15120	14545	3357	11189
	75	21465	7290	14175	15455	5249	10206	17649	5994	11655	12884	4376	8508	13356	4536	8820	9883	3357	6527
90	70	12352	7290	5062	8893	5249	3645	10156	5994	4162	7414	4376	3038	7686	4536	3150	5687	3357	2331
	65	7290	7290	0	5249	5249	0	5994	5994	0	4376	4376	0	4536	4536	0	3357	3357	0
	60	7290	7290	0	5249	5249	0	5994	5994	0	4376	4376	0	4536	4536	0	3357	3357	0
	80	31590	4860	26730	22745	3499	19246	25974	3996	21978	18961	2917	16044	19656	3024	16632	14545	2238	12308
	75	21465	4860	16605	15455	3499	11956	17649	3996	13653	12884	2917	9967	13356	3024	10332	9883	2238	7646
85	70	12352	4860	7492	8893	3499	5394	10156	3996	6160	7414	2917	4497	7686	3024	4662	5687	2238	3450
	65	4860	4860	0	3499	3499	0	3996	3996	0	2917	2917	0	3024	3024	0	2238	2238	0
	60	4860	4860	0	3499	3499	0	3996	3996	0	2917	2917	0	3024	3024	0	2238	2238	0
	75	21465	2430	19035	15455	1750	13705	17649	1998	15651	12884	1459	11425	13356	1512	11844	9883	1119	8765
80	70	12352	2430	9922	8893	1750	7144	10156	1998	8158	7414	1459	5955	7686	1512	6174	5687	1119	4569
	65	4252	2430	1822	3061	1750	1312	3496	1998	1498	2552	1489	1094	2646	1512	1134	1958	1119	839
	60	2430	2430	0	1750	1750	0	1998	1998	0	1459	1459	0	1512	1512	0	1119	1119	0
75	70	12352	0	12352	8893	0	8893	10156	0	10156	7414	0	7414	7686	0	7686	5687	0	5687
	65	4252	0	4252	3061	0	3061	3496	0	3496	2552	0	2552	2646	0	2646	1958	0	1958
	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

APPLICATION DATA -- WGERV-*5

SUMMER COOLING PERFORMANCE (INDOOR DESIGN CONDITIONS 75°DB/63°WB)

Ambient O.D.		VENTILATION RATE -- 450 CFM High Speed (Black) 60% EFFICIENCY						VENTILATION RATE -- 370 CFM Medium Speed (Blue) 62% EFFICIENCY						VENTILATION RATE -- 280 CFM Low Speed (Red) 64% EFFICIENCY					
DB/WB	F	VLT	VLS	VLL	HRT	HRS	HRL	VLT	VLS	VLL	HRT	HRS	HRL	VLT	VLS	VLL	HRT	HRS	HRL
	75	21465	14580	6884	12879	8748	4131	17649	11988	5661	10942	7433	3510	13356	9072	4284	8548	5806	2742
105	70	14580	14580	0	8748	8748	0	11988	11988	0	7433	7433	0	9072	9072	0	5806	5806	0
	65	14580	14580	0	8748	8748	0	11988	11988	0	7433	7433	0	9072	9072	0	5806	5806	0
	80	31500	12150	19440	18900	7290	11610	25900	9990	15910	16058	6194	9864	19600	7560	12040	12544	4838	7706
	75	21465	12150	9314	12879	7290	5589	17649	9990	7659	10942	6194	4749	13356	7560	5796	8548	4838	3709
100	70	12352	12150	202	7411	7290	121	10156	9990	166	6297	6194	103	7686	7560	126	4919	4838	80
	65	12150	12150	0	7290	7290	0	9990	9990	0	6194	6194	0	7560	7560	0	4838	4838	0
	60	12150	12150	0	7290	7290	0	9990	9990	0	6194	6194	0	7560	7560	0	4838	4838	0
	80	31590	9720	21870	18954	5832	13122	25974	7992	17982	16104	4955	11149	19656	6048	13608	12580	3871	8709
	75	21465	9720	11744	12879	5832	7047	17649	7992	9657	10942	4955	5987	13356	6048	7308	8548	3871	4677
95	70	12352	9720	2632	7411	5832	1579	10156	7992	2164	6297	4955	1342	7686	6048	1638	4919	3871	1048
	65	9720	9720	0	5832	5832	0	7992	7992	0	4955	4955	0	6048	6048	0	3871	3871	0
	60	9720	9720	0	5832	5832	0	7992	7992	0	4955	4955	0	6048	6048	0	3871	3871	0
	80	31590	7290	24300	18954	4374	14580	25974	5994	19980	16104	3716	12388	19656	4536	15120	12580	2903	9677
	75	21465	7290	14175	12879	4374	8505	17649	5994	11655	10942	3716	7226	13356	4536	8820	8548	2903	5645
90	70	12352	7290	5062	7411	4374	3037	10156	5994	4162	6297	3716	2580	7686	4536	3150	4919	2903	2016
	65	7290	7290	0	4374	4374	0	5994	5994	0	3716	3716	0	4536	4536	0	2903	2903	0
	60	7290	7290	0	4374	4374	0	5994	5994	0	3716	3716	0	4536	4536	0	2903	2903	0
	80	31590	4860	26730	18954	2916	16038	25974	3996	21978	16104	2478	13626	19656	3024	16632	12580	1935	10644
	75	21465	4860	16605	12879	2916	9963	17649	3996	13653	10942	2478	8465	13356	3024	10332	8548	1935	6612
85	70	12352	4860	7492	7411	2916	4495	10156	3996	6160	6297	2478	3819	7686	3024	4662	4919	1935	2983
	65	4860	4860	0	2916	2916	0	3996	3996	0	2478	2478	0	3024	3024	0	1935	1935	0
	60	4860	4860	0	2916	2916	0	3996	3996	0	2478	2478	0	3024	3024	0	1935	1935	0
	75	21465	2430	19035	12879	1458	11421	17649	1998	15651	10942	1239	9704	13356	1512	11844	8548	968	7580
80	70	12352	2430	9922	7411	1458	5953	10156	1998	8158	6297	1239	5058	7686	1512	6174	4919	968	3951
	65	4252	2430	1822	2551	1458	1093	3496	1998	1498	2168	1239	929	2646	1512	1134	1693	968	726
	60	2430	2430	0	1458	1458	0	1998	1998	0	1239	1239	0	1512	1512	0	968	968	0
	70	12352	0	12352	7411	0	7411	10156	0	10156	6297	0	6297	7686	0	7686	4919	0	4919
75	65	4252	0	4252	2551	0	2551	3496	0	3496	2168	0	2168	2646	0	2646	1693	0	1693
	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

WGERV-*3 WINTER HEATING PERFORMANCE (INDOOR DESIGN CONDITIONS 70°F DB)

Ambient O.D.	VENTILATION RATE 450 CFM 76% EFF.		370 CFM 78% EFF.		280 CFM 80% EFF.	
DB/°F	WVL	WHR	WVL	WHR	WVL	WHR
65	2430	1847	1998	1558	1512	1210
60	4860	3694	3996	3117	3024	2419
55	7290	5540	5994	4675	4536	3629
50	9720	7387	7992	6234	6048	4838
45	12150	9234	9990	7792	7560	6048
40	14580	11081	11988	9351	9072	7258
35	17010	12928	13986	10909	10584	8467
30	19440	14774	15984	12468	12096	9677
25	21870	16621	17982	14026	13608	10886
20	24300	18468	19980	15584	15120	12096
15	26730	20315	21978	17143	16632	13306

NOTE: Sensible performance only is shown for winter application.

LEGEND:

VLT = Ventilation Load - Total
VLS = Ventilation Load - Sensible
VLL = Ventilation Load - Latent
HRT = Heat Recovery - Total
HRS = Heat Recovery - Sensible
HRL = Heat Recovery - Latent
WVL = Winter Ventilation Load
WHR = Winter Heat Recovery

WGERV-*5 WINTER HEATING PERFORMANCE (INDOOR DESIGN CONDITIONS 70°F DB)

Ambient O.D.	VENTILATION RATE 450 CFM 77% EFF.		370 CFM 78% EFF.		280 CFM 79% EFF.	
DB/°F	WVL	WHR	WVL	WHR	WVL	WHR
65	2430	1870	2000	1560	1510	1190
60	4860	3740	4000	3120	3020	2390
55	7290	5610	5990	4680	4540	3580
50	9720	7480	8000	6230	6050	4780
45	12150	9360	9990	7790	7560	5970
40	14580	11230	11990	9350	9070	7170
35	17010	19100	13990	10910	10580	8360
30	19440	14970	15980	12470	12100	9560
25	21870	16840	17980	14030	13610	10750
20	24300	18710	19980	15580	15120	11950
15	26730	20580	21980	17140	16630	13140

NOTE: Sensible performance only is shown for winter application.

Commercial Room Ventilator Performance Data

WG24	WGCRV-3 VENTILATION AIR - HIGH SPEED						
HIGH SPEED	**0.00 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	155/1360	175/1320	195/1290	215/1260	240/1220	260/1180	290/1150
"B"	320/1340	340/1300	370/1280	400/1250	440/1210	480/1170	530/1140
"C"	480/1320	500/1280	540/1270	580/1240	640/1200	700/1160	780/1130
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
HIGH SPEED	**0.20 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	125/1190	145/1160	180/1140	200/1110	220/1080	240/1040	270/1010
"B"	270/1180	290/1150	350/1130	370/1100	410/1065	420/1025	450/990
"C"	420/1170	440/1140	520/1120	540/1090	600/1050	620/1010	650/970
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
HIGH SPEED	**0.40 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	120/1040	135/1020	170/1000	190/925	200/850	220/800	250/760
"B"	250/1030	270/1010	330/955	350/890	385/840	400/780	430/740
"C"	385/1020	400/1000	490/910	510/860	570/830	590/760	620/720
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**

WG24	WGCRV-3 VENTILATION AIR - MEDIUM SPEED						
MEDIUM SPEED	**0.00 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	140/1160	160/1125	180/1095	200/1010	230/1050	250/1035	280/1025
"B"	270/1135	320/1100	360/1085	390/1050	420/1040	440/1025	460/1010
"C"	400/1110	470/1075	530/1075	580/1040	620/1030	650/1010	670/990
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
MEDIUM SPEED	**0.20 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	120/1020	140/980	170/960	190/930	200/880	220/860	250/840
"B"	250/1010	280/970	330/950	360/920	390/870	410/850	430/830
"C"	380/1000	420/960	500/940	520/910	580/860	600/840	630/820
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
MEDIUM SPEED	**0.40 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	100/870	120/830	160/810	180/760	780/710	NA	NA
"B"	210/860	240/520	310/800	340/750	NA	NA	NA
"C"	325/850	340/810	440/790	460/740	NA	NA	NA
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**

WG24	WGCRV-3 VENTILATION AIR - LOW SPEED						
LOW SPEED	**0.00 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	110/940	140/920	170/900	185/880	200/860	220/840	240/820
"B"	220/930	270/910	320/890	360/870	400/850	430/830	460/810
"C"	330/920	390/900	450/880	500/860	550/840	590/820	630/800
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
LOW SPEED	**0.20 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	100/830	130/810	160/780	170/760	190/680	NA	NA
"B"	200/820	250/800	300/770	340/750	NA	NA	NA
"C"	300/810	360/790	430/760	NA	NA	NA	NA
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
LOW SPEED	**0.40 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	90/710	110/680	NA	NA	NA	NA	NA
"B"	170/700	NA	NA	NA	NA	NA	NA
"C"	250/690	NA	NA	NA	NA	NA	NA
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**

WG30-36	WGCRV-3 VENTILATION AIR - HIGH SPEED						
HIGH SPEED	**0.00 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	180/1500	200/1480	220/1460	240/1400	270/1370	300/1300	330/1290
"B"	360/1490	380/1460	410/1430	440/1390	470/1360	500/1290	520/1285
"C"	540/1480	560/1440	600/1400	640/1375	675/1350	700/1270	730/1280
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
HIGH SPEED	**0.20 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	175/1330	190/1320	210/1310	220/1275	250/1225	280/1160	320/1100
"B"	340/1310	360/1300	390/1285	420/1250	450/1210	480/1150	510/1090
"C"	500/1300	520/1280	570/1260	610/1230	625/1200	650/1140	720/1080
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
HIGH SPEED	**0.40 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	140/1160	155/1130	165/1100	180/1050	230/990	260/930	300/870
"B"	280/1150	300/1120	320/1095	350/1030	410/970	440/910	480/850
"C"	420/1140	440/1110	470/1090	510/1010	590/950	620/890	690/830
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**

WG30-36	WGCRV-3 VENTILATION AIR - MEDIUM SPEED						
MEDIUM SPEED	**0.00 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	155/1360	175/1320	195/1290	215/1260	240/1220	260/1180	290/1150
"B"	320/1340	340/1300	370/1280	400/1250	440/1210	480/1170	530/1140
"C"	480/1320	500/1280	540/1270	580/1240	640/1200	700/1160	780/1130
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
MEDIUM SPEED	**0.20 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	125/1190	145/1160	180/1140	200/1110	220/1080	240/1040	270/1010
"B"	270/1180	290/1150	350/1130	370/1100	410/1065	420/1025	450/990
"C"	420/1170	440/1140	520/1120	540/1090	600/1050	620/1010	650/970
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
MEDIUM SPEED	**0.40 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	120/1040	135/1020	170/1000	190/925	200/850	220/800	250/760
"B"	250/1030	270/1010	330/955	350/890	385/840	400/780	430/740
"C"	385/1020	400/1000	490/910	510/860	570/830	590/760	620/720
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**

WG30-36	WGCRV-3 VENTILATION AIR - LOW SPEED						
LOW SPEED	**0.00 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	140/1160	160/1125	180/1095	200/1010	230/1050	250/1035	280/1025
"B"	270/1135	320/1100	360/1085	390/1050	420/1040	440/1025	460/1010
"C"	400/1110	470/1075	530/1075	580/1040	620/1030	650/1010	670/990
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
LOW SPEED	**0.20 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	120/1020	140/980	170/960	190/930	200/880	220/860	250/840
"B"	250/1010	280/970	330/950	360/920	390/870	410/850	430/830
"C"	380/1000	420/960	500/940	520/910	580/860	600/840	630/820
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
LOW SPEED	**0.40 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	100/870	120/830	160/810	180/760	780/710	NA	NA
"B"	210/860	240/520	310/800	340/750	NA	NA	NA
"C"	325/850	340/810	440/790	460/740	NA	NA	NA
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**

WG42-48-60	WGCRV-5 VENTILATION AIR - HIGH SPEED						
HIGH SPEED	**0.00 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	240/1895	250/1870	260/1845	280/1820	300/1790	330/1760	360/1740
"B"	435/1870	445/1850	460/1830	480/1815	500/1780	530/1750	560/1735
"C"	560/1815	570/1795	585/1775	605/1760	625/1725	655/1700	675/1685
"D"	680/1730	690/1715	705/1700	725/1690	745/1660	770/1630	785/1615
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
HIGH SPEED	**0.20 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	205/1615	220/1600	235/1575	265/1560	285/1530	320/1500	355/1430
"B"	380/1605	400/1590	410/1565	425/1550	445/1520	500/1480	540/1420
"C"	490/1560	510/1545	520/1510	535/1495	560/1460	610/1430	640/1385
"D"	590/1460	610/1445	635/1415	645/1400	675/1360	710/1340	730/1300
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
HIGH SPEED	**0.40 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	180/1315	195/1300	220/1275	250/1240	270/1170	310/1120	355/1045
"B"	315/1305	330/1280	350/1250	395/1210	415/1140	455/1090	540/1015
"C"	410/1245	425/1220	440/1190	485/1155	505/1090	555/1020	600/985
"D"	495/1165	515/1145	530/1105	555/1090	575/1020	615/990	660/935
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**

WG42-48-60	WGCRV-5 VENTILATION AIR - MEDIUM SPEED						
MEDIUM SPEED	**0.00 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	165/1540	180/1535	195/1530	220/1525	250/1510	295/1495	340/1475
"B"	360/1525	375/1515	390/1505	420/1500	450/1480	495/1460	540/1440
"C"	470/1490	485/1480	500/1470	530/1465	560/1440	605/1420	625/1400
"D"	590/1455	615/1445	630/1440	650/1430	670/1400	715/1380	735/1365
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
MEDIUM SPEED	**0.20 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	125/1325	150/1310	170/1290	200/1275	230/1250	280/1200	330/1170
"B"	320/1310	345/1295	370/1275	390/1260	420/1230	480/1175	535/1155
"C"	405/1270	430/1255	455/1235	470/1220	500/1180	550/1150	590/1120
"D"	505/1225	530/1200	555/1185	580/1175	610/1150	630/1120	680/1080
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
MEDIUM SPEED	**0.40 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	120/1060	140/1020	185/1000	190/985	220/920	280/860	300/700
"B"	255/1045	275/1005	315/980	370/955	410/880	460/800	520/670
"C"	325/1000	355/960	390/940	435/920	480/850	520/750	580/660
"D"	410/960	440/940	470/900	505/885	535/815	580/710	600/635
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**

WG42-48-60	WGCRV-5 VENTILATION AIR - LOW SPEED						
LOW SPEED	**0.00 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	75/1190	110/1180	150/1165	190/1150	235/1130	290/1100	340/1075
"B"	270/1165	305/1150	345/1140	390/1130	435/1100	490/1070	540/1055
"C"	325/1140	360/1130	400/1125	430/1110	475/1090	530/1060	560/1040
"D"	445/1120	480/1110	520/1100	550/1090	595/1070	640/1040	655/1025
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
LOW SPEED	**0.20 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	55/995	90/970	130/950	160/925	205/890	280/870	330/840
"B"	230/980	265/955	305/940	370/910	415/870	480/850	520/820
"C"	285/955	320/925	360/910	390/895	435/850	510/810	550/790
"D"	385/930	420/910	460/900	495/880	540/840	590/790	610/760
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**
LOW SPEED	**0.40 SUPPLY AIR STATIC**						
Damper Position	Ventilation Air / Total Air (CFM)						
"A"	40/740	75/700	115/650	140/600	NA	NA	NA
"B"	180/730	215/680	255/630	360/585	NA	NA	NA
"C"	210/710	245/660	290/610	380/570	NA	NA	NA
"D"	290/690	325/650	375/590	450/560	NA	NA	NA
Return Static	**0.00**	**0.05**	**0.10**	**0.15**	**0.20**	**0.25**	**0.30**

Commercial Room Ventilator Free Blow (Non-Ducted) Performance Data

WG24 WITH WGCRV-3 VENTILATION AIR FREE BLOW APPLICATION WITH SUPPLY AND RETURN GRILLES

High Speed @ 0.05 Supply Air Static	
Damper Position	Ventilation Air / Total Air (CFM)
"A"	300 / 1225
"B"	410 / 1235
"C"	475 / 1210
Return Static	**0.10**

Medium Speed @ 0.05 Supply Air Static	
Damper Position	Ventilation Air / Total Air (CFM)
"A"	385 / 1050
"B"	370 / 1070
"C"	425 / 1070
Return Static	**0.10**

Low Speed @ 0.05 Supply Air Static	
Damper Position	Ventilation Air / Total Air (CFM)
"A"	260 / 850
"B"	345 / 840
"C"	400 / 840
Return Static	**0.10**

WG30-36 WITH WGCRV-3 VENTILATION AIR FREE BLOW APPLICATION WITH SUPPLY AND RETURN GRILLES

High Speed @ 0.05 Supply Air Static	
Damper Position	Ventilation Air / Total Air (CFM)
"A"	310 / 1390
"B"	445 / 1400
"C"	525 / 1390
Return Static	**0.10**

Medium Speed @ 0.05 Supply Air Static	
Damper Position	Ventilation Air / Total Air (CFM)
"A"	300 / 1225
"B"	410 / 1235
"C"	475 / 1210
Return Static	**0.10**

Low Speed @ 0.05 Supply Air Static	
Damper Position	Ventilation Air / Total Air (CFM)
"A"	385 / 1050
"B"	370 / 1070
"C"	425 / 1070
Return Static	**0.10**

WG42-48-60 WITH WGCRV-5 VENTILATION AIR FREE BLOW APPLICATION WITH SUPPLY AND RETURN GRILLES

High Speed @ 0.05 Supply Air Static	
Damper Position	Ventilation Air / Total Air (CFM)
"A"	240 / 1780
"B"	430 / 1760
"C"	540 / 1710
"D"	650 / 1630
Return Static	**0.10**

Medium Speed @ 0.05 Supply Air Static	
Damper Position	Ventilation Air / Total Air (CFM)
"A"	180 / 1480
"B"	385 / 1450
"C"	480 / 1410
"D"	600 / 1375
Return Static	**0.10**

Low Speed @ 0.05 Supply Air Static	
Damper Position	Ventilation Air / Total Air (CFM)
"A"	145 / 1110
"B"	335 / 1100
"C"	390 / 1070
"D"	500 / 1050
Return Static	**0.10**

Cooling Application Data - Outdoor Temperature ①

Model	D.B./W.B. ②	Cooling Capacity	Air Temperature Entering Outdoor Coil Degree F									
			75°F	80°F	85°F	90°F	95°F	100°F	105°F	110°F	115°F	120°F
WG24	75/ 62	Total Cooling	25,000	24,000	23,000	21,800	20,700	19,500	18,200	16,900	15,600	14,300
		Sensible Cooling	19,400	19,100	18,800	18,300	17,800	17,200	16,500	15,800	15,000	14,000
	80/ 67	Total Cooling	26,800	26,200	25,500	24,700	23,800	22,700	21,500	20,200	18,800	17,400
		Sensible Cooling	19,200	18,900	18,600	18,300	18,000	17,700	17,300	16,900	16,600	16,200
	85/ 72	Total Cooling	31,900	30,600	29,300	27,900	26,400	24,800	23,200	21,500	19,800	18,100
		Sensible Cooling	19,500	19,000	18,600	18,100	17,600	17,000	16,400	15,800	15,200	14,300
WG30	75/ 62	Total Cooling	30,500	29,500	28,400	27,200	25,900	24,400	22,900	21,300	19,600	-
		Sensible Cooling	24,800	24,200	23,600	23,000	22,300	21,500	20,700	19,900	19,000	-
	80/ 67	Total Cooling	32,600	32,200	31,600	30,800	29,800	28,600	27,100	25,400	23,600	-
		Sensible Cooling	24,300	23,800	23,400	23,000	22,600	22,100	21,700	21,300	20,900	-
	85/ 72	Total Cooling	38,900	37,600	36,200	34,700	33,000	31,100	29,100	27,000	24,800	-
		Sensible Cooling	24,800	24,100	23,400	22,800	22,100	21,300	20,600	19,900	19,200	-
WG36	75/ 62	Total Cooling	35,800	34,500	33,200	31,500	29,800	28,600	27,300	25,700	24,100	-
		Sensible Cooling	29,100	28,400	27,600	26,500	25,500	24,800	24,300	23,400	22,600	-
	80/ 67	Total Cooling	38,200	37,600	36,900	35,700	34,400	33,400	32,300	30,700	29,000	-
		Sensible Cooling	28,300	27,900	27,400	26,500	25,900	25,300	25,000	24,300	23,600	-
	85/ 72	Total Cooling	45,400	43,900	42,300	40,300	38,200	36,500	34,800	32,700	30,500	-
		Sensible Cooling	28,900	28,200	27,400	26,300	25,300	24,500	23,700	22,700	21,700	-
WG42	75/ 62	Total Cooling	44,600	42,600	40,500	38,500	36,500	34,400	32,400	30,400	28,400	26,200
		Sensible Cooling	34,300	33,000	31,800	30,700	29,700	28,700	27,800	26,900	26,200	25,600
	80/ 67	Total Cooling	47,700	46,500	45,100	43,600	41,500	40,200	38,200	36,200	34,000	31,800
		Sensible Cooling	33,500	32,500	31,600	30,700	30,000	29,200	28,500	27,900	27,400	26,900
	85/ 72	Total Cooling	56,600	54,100	51,700	49,100	46,600	43,900	41,300	38,500	35,800	33,100
		Sensible Cooling	34,000	32,800	31,600	30,500	29,400	28,200	27,100	26,000	25,000	24,000
WG48	75/ 62	Total Cooling	48,000	46,200	44,400	42,600	40,800	39,000	37,200	35,500	33,800	32,100
		Sensible Cooling	36,900	35,800	34,800	33,800	33,100	32,400	21,800	31,300	31,000	30,700
	80/ 67	Total Cooling	51,200	50,400	49,300	48,200	47,000	45,500	44,000	42,300	40,500	38,700
		Sensible Cooling	36,000	35,200	34,500	33,900	33,500	33,100	32,800	32,600	32,500	32,200
	85/ 72	Total Cooling	60,900	58,800	56,600	54,400	52,200	49,800	47,500	45,000	42,600	40,200
		Sensible Cooling	36,800	35,700	34,600	33,700	32,800	31,900	31,100	30,400	29,800	29,200
WG60	75/ 62	Total Cooling	62,900	60,100	57,300	54,700	52,200	49,700	47,400	45,100	43,000	-
		Sensible Cooling	44,700	43,300	42,000	40,700	39,600	38,500	37,500	36,600	35,800	-
	80/ 67	Total Cooling	67,500	65,700	63,800	61,900	60,000	57,900	55,900	53,700	51,600	-
		Sensible Cooling	43,500	42,500	41,600	40,800	40,000	39,200	38,500	37,900	37,400	-
	85/ 72	Total Cooling	79,600	76,300	73,000	69,800	66,600	63,400	60,300	57,200	54,200	-
		Sensible Cooling	44,300	43,000	41,700	40,400	39,200	37,900	36,700	35,500	34,400	-

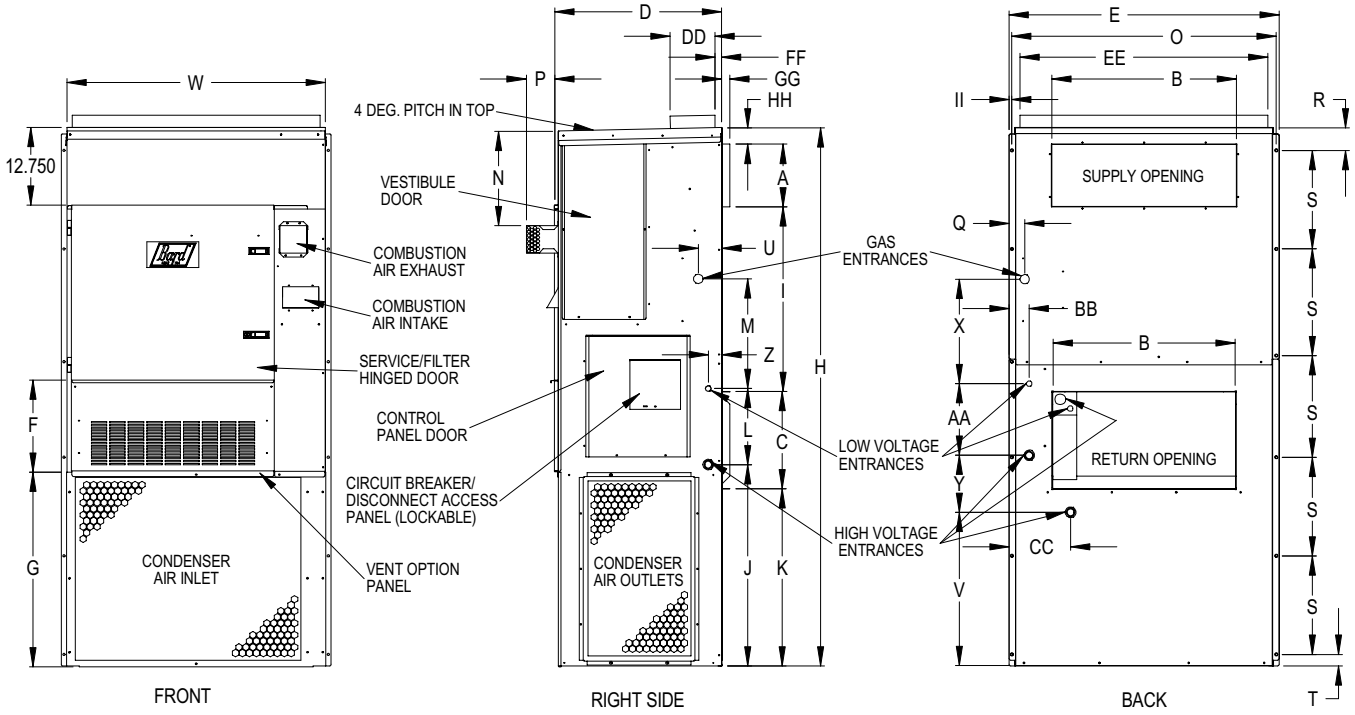
① Below 65°F (18.3C) unit requires a factory of field installed low ambient control.
② Return air temperature

Capacity Multiplier Factors			
% of Rated Airflow	-10	Rated	+10
Total BTUH	0.975	1.0	1.02
Sensible BTUH	0.950	1.0	1.02

DIMENSIONS OF BASIC UNIT

UNIT	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
WG24-WG30-WG36	7.88	27.88	13.88	24.25	40	14.88	25.63	81.63	30	27.38	27.5	14.12	15.44	15.31	39.25	4.5	2.5
WG42-WG48-WG60	9.88	29.88	15.88	27.25	43.81		31.63	87.5		33.38	28.75				42.88		

UNIT	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF	GG	HH	II
WG24-WG30-WG36	12 - 7 HOLES	3.75	2.88	22.9	38	17.84	4.44	2.25	11.44	3.25	9	7.25	36.25	1.13	1.25	2	0.38
WG42-WG48-WG60	16 - 6 HOLES		3.88	24.9	42	17.34	8.44		12.19		10		40.25			2.75	0.44



MIS-1680 E

Minimum Clearances

INSTALLATION	WG24 - WG30 - WG36	WG42 - WG48 - WG60
Installation Wall (from combustible materials)	0"	0"
Outlet Duct (from combustible materials)	1" first 3'	1" first 3'
Vent Terminal (from combustible materials)	17"	16"
Top (from combustible materials)	1" ①	0" ②
Condenser Outlet (sides - airflow discharge)	20"	20"

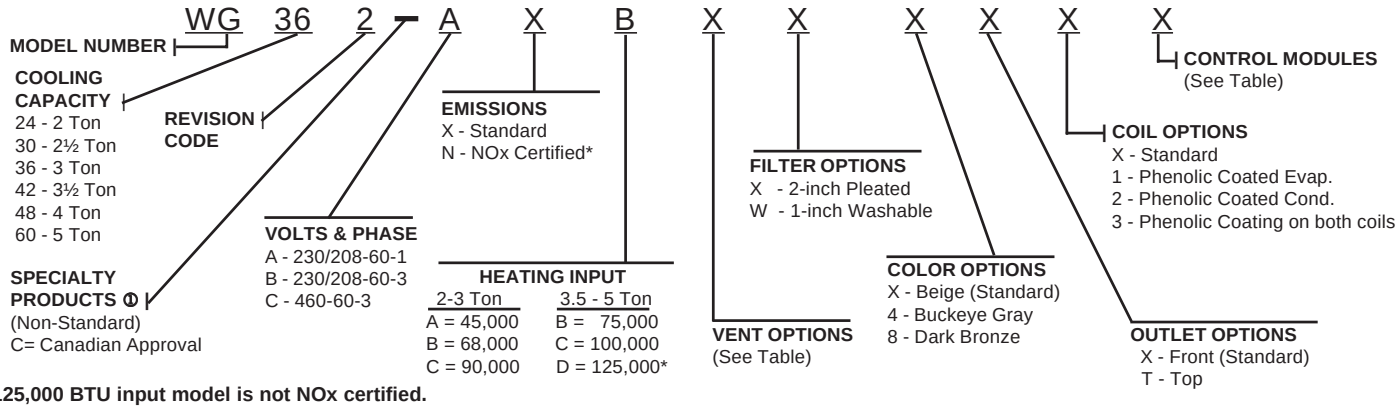
① 1-inch clearance at rear top of unit (at the wall surface). The 4° pitch of top creates 1.688 inch clearance between front top and any extended overhang above the top of the unit.

② 0-inch clearance at rear top of unit (at the wall surface). The 4° pitch of top creates .688 inch clearance between front top and any extended overhang above the top of the unit.

Service Access

All Models	
Burner Service - Right side	20"
Compressor - Right side	20"
Controls - Right side	20"
Condenser Fan - Left side	20"

Air Conditioning Wall-Mount Model Nomenclature



***125,000 BTU input model is not NOx certified.**

① Insert "D" for dehumidification with hot gas reheat. Reference Form F1753 for complete details.

Ventilation Options

Models	WG24, WG30, WG36		WG42, WG48, WG60	
Description	**Factory Installed Code No.**	**Field Installed Part No.**	**Factory Installed Code No.**	**Field Installed Part No.**
Barometric Fresh Air Damper - No Exhaust	X	WGBFAD-3	X	WGBFAD-5
Blank-Off Plate	B	WGBOP-3	B	WGBOP-5
Motorized Fresh Air Damper - No Exhaust	M	WGMFAD-3	M	WGMFAD-5
Commercial Ventilator - Spring Return w/Exhaust	V	WGCRVS-3	V	WGCRVS-5
Commercial Ventilator - Power Return w/Exhaust	P	WGCRVP-3	P	WGCRVP-5
Economizer (Internal) Fully Modulating ① w/Exhaust	E	WGEIFM-3B	E	WGEIFM-5B
Energy Recovery Ventilator - 230 Volt w/Exhaust ②	R	WGERV-A3A-✳	R	WGERV-A5A-✳
Energy Recovery Ventilator - 460 Volt w/Exhaust ②	R	WGERV-C3A-✳	R	WGERV-C5A-✳

① Low ambient control is required with economizer for low temperature compressor operation.
② Independent selection of intake and exhaust speeds (rate) with terminal block selection.
✳ Color option must be specified to match unit ("X" = Beige; "4" = Buckeye Gray)

Top Supply Outlet Conversion Kits - Field Installed

USED WITH MODELS	UNIT COLOR X - BEIGE	UNIT COLOR 4 - GRAY	UNIT COLOR 8 - DARK BRONZE
WG24, WG30, WG36	TSO-WG3-X	TSO-WG3-4	TSO-WG3-8
WG42, WG48, WG60	TSO-WG5-X	TSO-WG5-4	TSO-WG5-8

Air Conditioning Control Modules

AVAILABLE CONTROL OPTIONS

CCM ①	HPC ②	LPC ③	LAC ④	Factory Installed Code	Field Installed Part
STD	STD	●		G	CMA-16A
STD	STD	●	●	H	CMA-18A
STD	STD		●	I	CMA-6

STD = Standard equipment

① CCM. Compressor control module has adjustable 30-second to 5-minute delay-on-break timer. On initial power-up, or any time the power is interrupted, the delay-on-make will be 2-minutes plus 10% of the delay-on-break setting. There is no delay-on-make during routine operation of the unit. The module also provides the lockout feature (with 1 retry) for high and/or low-pressure controls, and a 2-minute timed bypass for low-pressure control.

② HPC. High pressure control is auto reset. Always used with compressor control module (CCM) which is included. See note ①.

③ LPC. Low pressure control is auto reset. Always used with compressor control module (CCM) which is included. See note ①.

④ LAC. Low ambient control permits cooling operation down to 0°F.

Optional Field Installed Accessories

DESCRIPTION	PART NUMBER
Natural Gas High Altitude Pressure Switch Kit (6000 - 10,000 Feet)	8620-189
Note: Natural Gas Orifice Change May Be Required Depending Upon Altitude and Gas BTU content. See Orifice and Altitude Tables.	
Propane Gas Conversion Kit (0 - 6000 Feet Altitude)	WGCK-1
Propane Gas Conversion Kit (6000 - 10,000 Feet Altitude)	WGCK-2
Vertical Vent Kit (Includes all parts for 5 foot vertical vent)	VVK-5A
Additional 1 foot vertical vent pipe section for VVK-5A	8620-201
Additional 2 foot vertical vent pipe section for VVK-5A	8620-170
Additional 3 foot vertical vent pipe section for VVK-5A	8620-200
Additional 5 foot vertical vent pipe section for VVK-5A	8620-171

Bard Manufacturing Company, Inc.
Bryan, Ohio 43506
www.bardhvac.com

Due to our continuous product improvement policy, all specifications subject to change without notice.

Before purchasing this appliance, read important energy cost and efficiency information available from your retailer.

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Supersedes S3344-408