



FRIEDRICH

1 8 8 3

VERT-I-PAK®

Single Package Vertical Heat Pumps

Features

- Up to 10.4 EER
- Completely self-contained; no outside condensing unit
- Can be installed from any interior side (front, right or left)
- Patented telescoping plenum (accessory) easily adapts to more installations
- Unique free-floating chassis and fully insulated cabinets for improved sound characteristics and unit performance
- Condensate removal system uses slinger ring technology to cool the coil and increase efficiency
- Primary condensate removal system provided thru 3/4" pipe fittings for more placement options
- Secondary overflow from primary drain*
- Pre wired, charged and piped
- Two-speed fan control from wireless or wired wall thermostat
- Safety power disconnect
- 5 YR. limited warranty- includes labor



*24000 Btu models (VHA24K & VHA24R) and 18000 BTU model (VHA18K & VHA18R) use secondary gravity-fed drain (VPDP1).

THE EXPERTS IN ROOM AIR CONDITIONING

CHASSIS SPECIFICATIONS

K-Series models 230/208V, R-Series models 265V

	★	★	★	★	★	★	★	★
MODEL	VHA09K	VHA09R	VHA12K	VHA12R	VHA18K	VHA18R	VHA24K	VHA24R
COOLING DATA								
COOLING BTU	9400/9400	9400	12200/12000	12400	18200/18000	18000	23000/22800	22500
POWER (W)	905/905	915	1220/1200	1240	1825/1800	1815	2527/2505	2475
EER	10.4/10.4	10.3	10.0/10.0	10.0	10.0/10.0	10.0	9.1/9.1	9.1
SENSIBLE HEAT RATIO	0.76	0.77	0.75	0.75	0.66	0.70	0.70	0.70
HEATER SIZE (kW)	2.5/3.4/5.0	2.5/3.4/5.0	2.5/3.4/5.0	2.5/3.4/5.0	2.5/3.4/5.0	2.5/3.4/5.0	2.5/3.4/5.0/7.5/10.0	2.5/3.4/5.0/7.5/10.0
HEAT PUMP DATA								
REVERSE HEATING BTU	8400/8400	8500	11100/10900	11300	16800/16400	16700	20000/20000	20000
COP @ 47F	3.0/3.0	3.0	3.0/3.0	3.0	3.0/3.0	3.0	3.0/3.0	3.0
HEATING POWER (W)	830/830	820	1075/1050	1095	1650/1600	1620	1953/1953	1950
HEATING CURRENT (A)	4.0/4.0	3.2	5.0/5.3	4.5	7.8/8.3	6.9	8.5/9.4	8.1
ELECTRICAL DATA								
VOLTAGE (1 PHASE, 60 HZ)	230/208	265	230/208	265	230/208	265	230/208	265
VOLT RANGE	253-197	292/239	253-197	292/239	253-197	292-239	253-197	292-239
COOLING CURRENT (A)	4.3/4.3	3.5	5.7/5.9	5.1	8.6/9.2	7.6	10.9/10.6	9.7
AMPS L.R	21.0	21.0	30.0	30.0	42.0	42.0	46.0	46.0
AMPS F.L.	3.5	3.5	4.8	4.8	7.8	7.8	9.5	9.5
INDOOR MOTOR (HP)	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
INDOOR MOTOR (A)	1.2	1.2	1.2	1.2	1.2	0.42	1.9	1.8
OUTDOOR MOTOR (HP)	—	—	—	—	1/4	1/4	1/4	1/4
OUTDOOR MOTOR (A)	—	—	—	—	—	0.9	0.85	0.85
PHYSICAL								
DIMENSIONS (W X D X H)	23"x23"x32"	23x23x32	23"x23"x32"	23x23x32	23"x23"x47"	23"x23"x47"	23"x23"x47"	23"x23"x47"
NET WEIGHT (LBS)	142	144	147	149	190	192	205	207
SHIPPING WEIGHT (LBS)	164	166	169	171	216	218	231	233
TEST SETTING	LOW	LOW	LOW	LOW	HIGH	HIGH	LOW	LOW
R410A CHARGE (OZ)	38	39	39.5	37	54	52.8	65	65
AIRFLOW DATA								
INDOOR CFM	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
.10" ESP	420	450	420	450	390	450	420	465
.15" ESP	405	425	405	425	375	425	390	420
.20" ESP	385	400	385	400	350	400	345	380
.25" ESP	355	375	355	375	325	375	300	325
.30" ESP	320	350	320	350	320	350	255	280
VENT CFM	60	60	60	60	60	60	60	60

★ ASHRAE 90.1-2013 Compliant Model

NOTES:

Cooling Standards: 95°F DB/75°F WB OUTDOOR, 80°F DB/67°F WB INDOOR

Heating Standards: 47°F DB/43°F WB OUTDOOR, 70°F DB/60°F WB INDOOR

Normal Value Wet Coil @ .1" ESP.

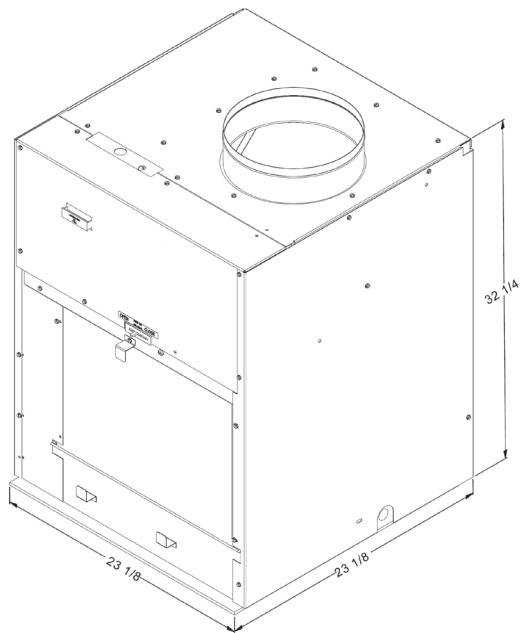
Rated CFM at Low Speed: VHA09....420 VHA12....420

VHA18....420 VHA24....610

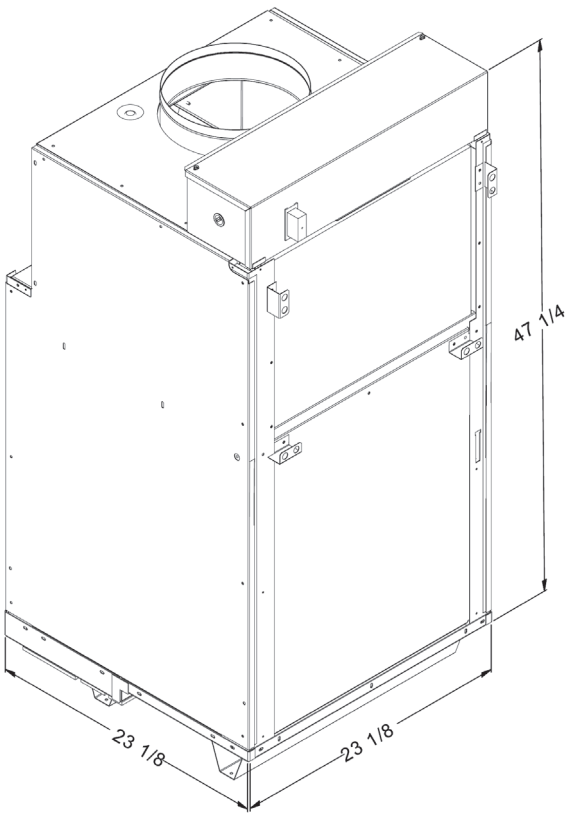
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UNIT CHASSIS DIMENSIONS

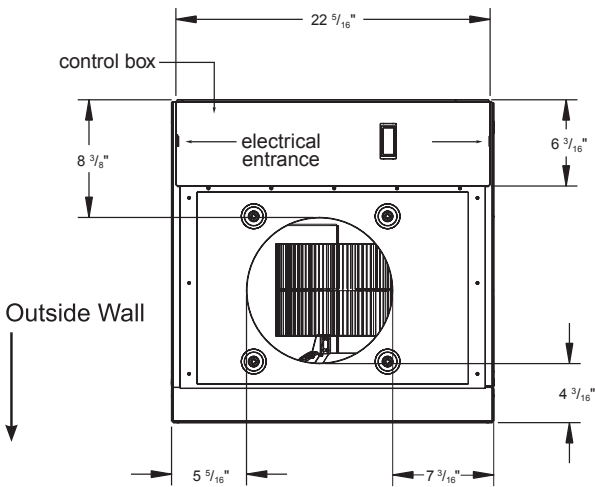
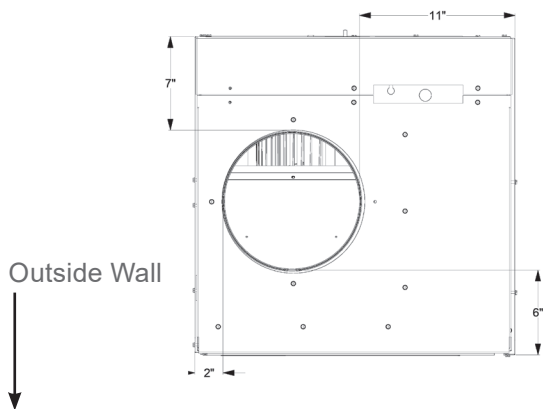


Applicable Models
VHA09K
VHA09R
VHA12K
VHA12R



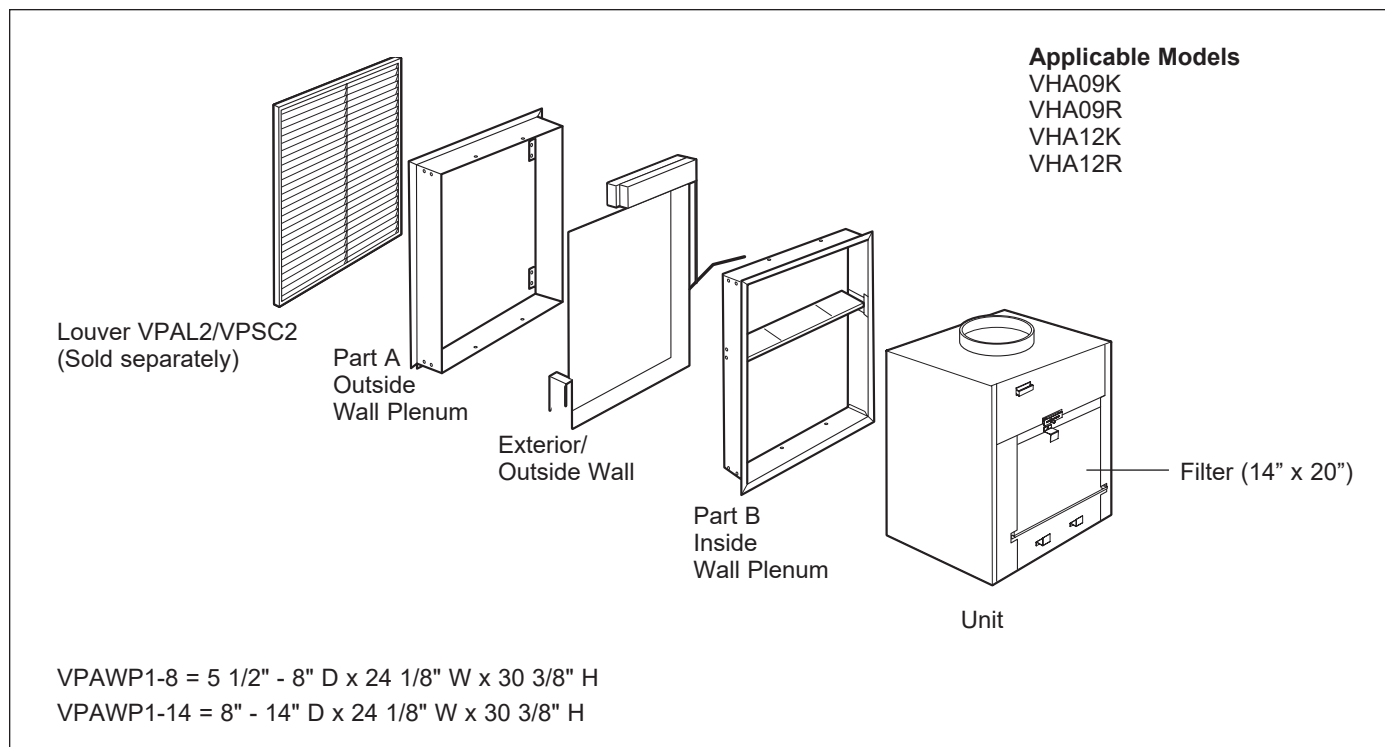
Applicable Models
VHA18K
VHA18R
VHA24K
VHA24R

UNIT TOP VIEW DIMENSIONS



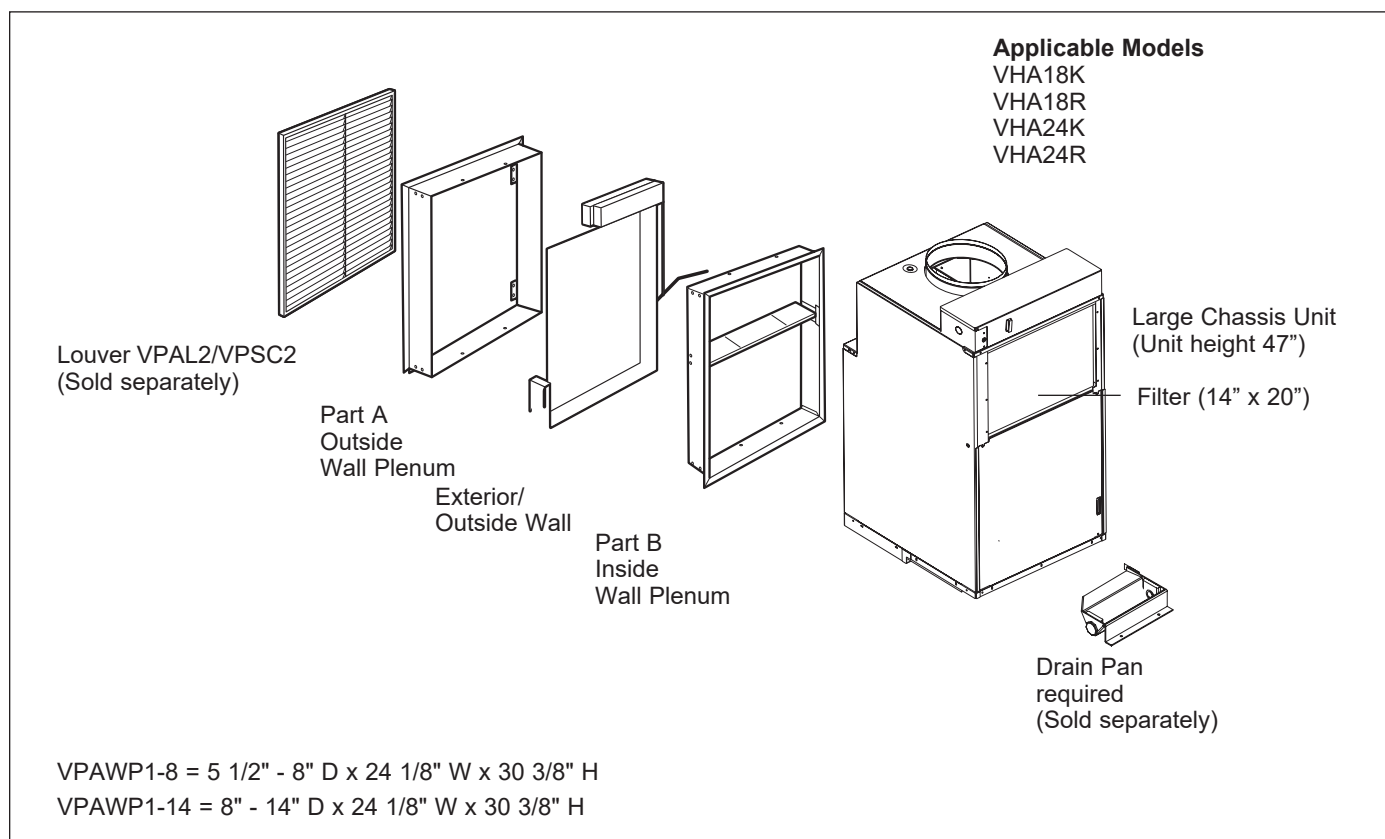
INSTALLATION OVERVIEW

Small chassis

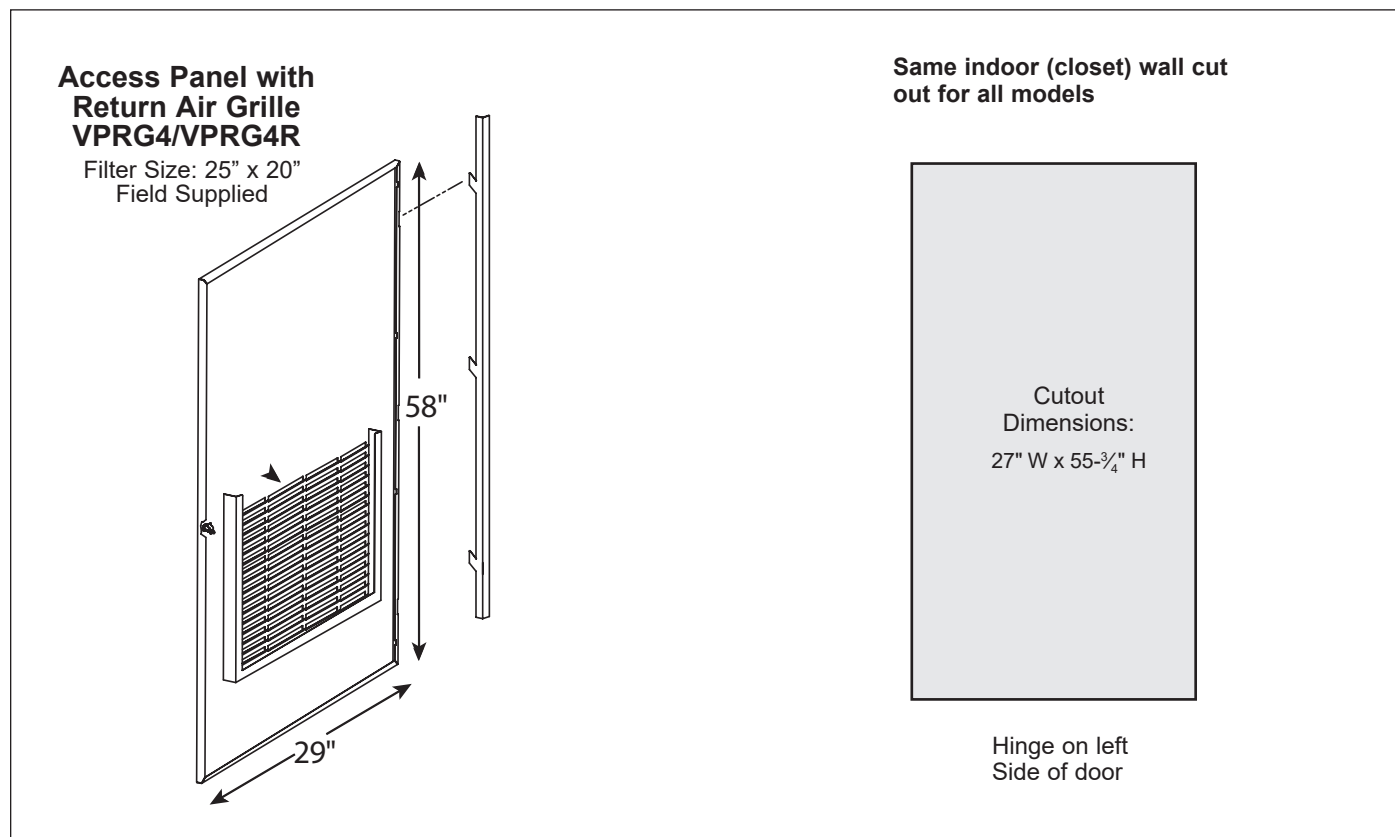
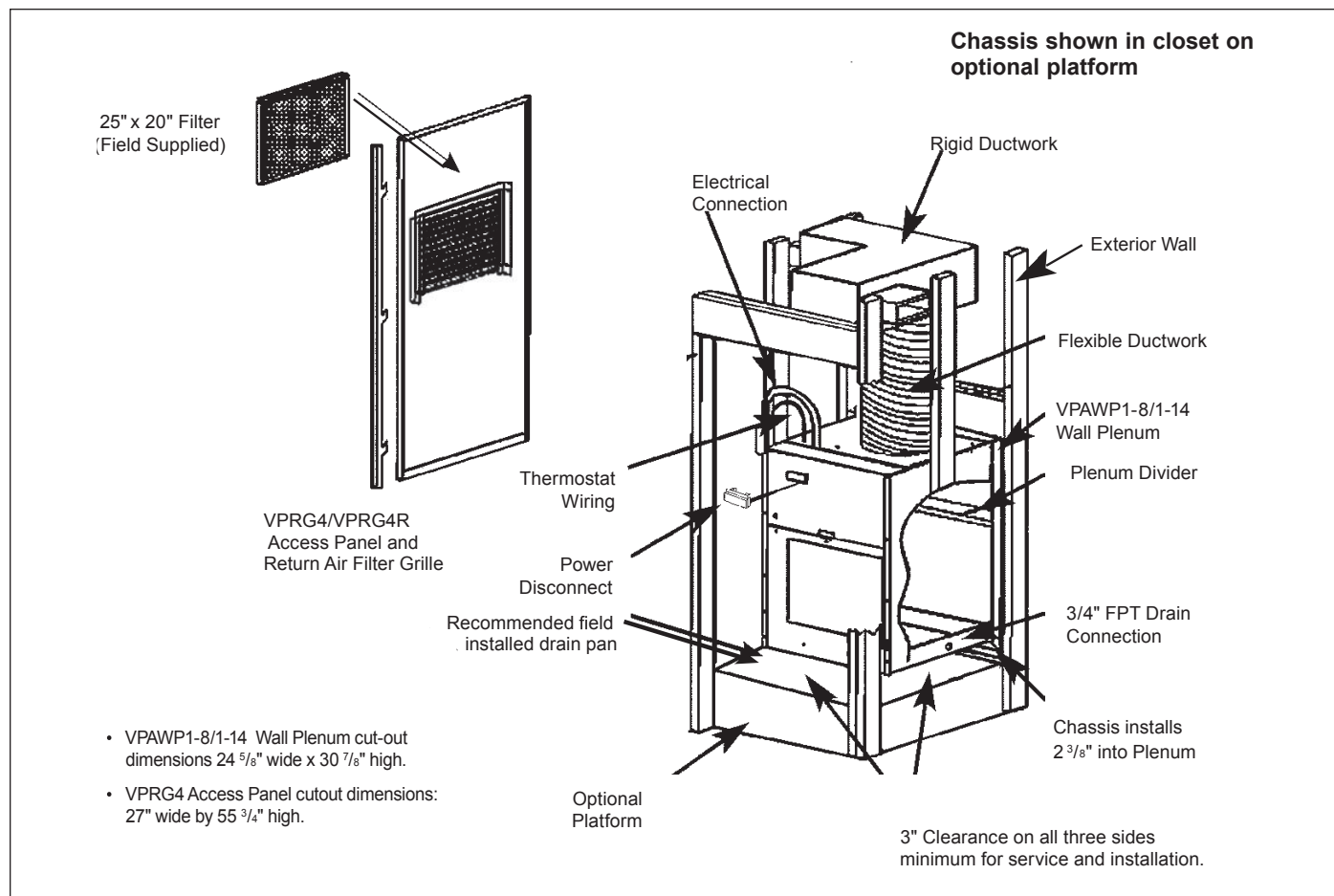


INSTALLATION OVERVIEW

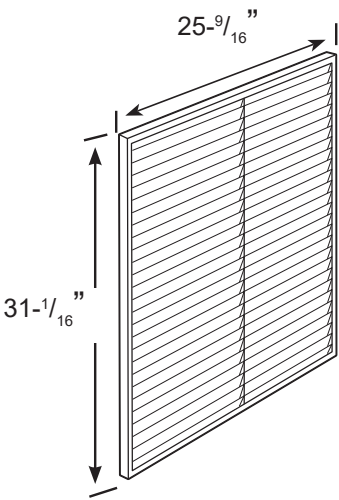
Large chassis



TYPICAL UTILITY CLOSET

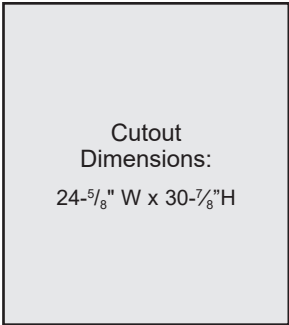
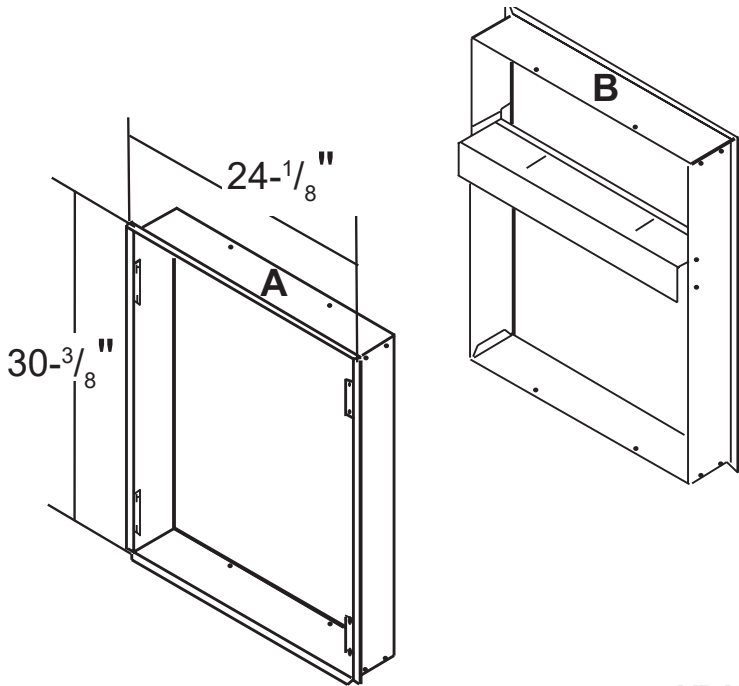


ACCESSORIES DIMENSIONS
VPAL2 / VPSC2 Louver



Architectural Louver
VPAL2/VPSC2

VPAWP1-8 Wall Plenum



Wall Plenum
VPAWP1-8 - telescopes from 5-1/2" to 8"
VPAWP1-14 - telescopes from 8" to 14"

EXTENDED COOLING PERFORMANCE

		OUTDOOR DRY BULB TEMP. (DEGREES F AT 40% R.H.)														
		75			85			95			105			110		
		INDOOR WET BULB TEMP. (DEGREES F AT 80 F D.B.)														
		72	67	62	72	67	62	72	67	62	72	67	62	72	67	62
VHA09K	BTUH	11054	10631	9842	10528	9926	9156	10114	9400	8319	9475	8413	7417	8954	7835	6914
	WATTS	738	750	758	805	813	823	905	905	905	978	977	980	1023	1022	1026
	AMPS	3.6	3.6	3.6	3.8	3.8	3.9	4.3	4.3	4.3	4.6	4.6	4.6	4.8	4.8	4.9
	SHR	0.53	0.72	0.96	0.54	0.74	0.98	0.54	0.77	0.99	0.55	0.81	0.99	0.57	0.84	0.99
VHA12K	BTUH	14347	13798	12773	13664	12883	11883	13127	12200	10797	12298	10919	9626	11621	10169	8973
	WATTS	996	1011	1022	1085	1096	1109	1220	1220	1220	1319	1318	1321	1379	1378	1383
	AMPS	4.7	4.7	4.8	5.1	5.1	5.1	5.7	5.7	5.7	6.1	6.1	6.2	6.4	6.4	6.4
	SHR	0.51	0.70	0.94	0.52	0.72	0.96	0.53	0.75	0.96	0.54	0.79	0.97	0.55	0.82	0.96
VHA18K	BTUH	21403	20584	19055	20384	19219	17727	19583	18200	16107	18346	16289	14360	17336	15170	13386
	WATTS	1489	1513	1529	1622	1639	1659	1825	1825	1825	1973	1971	1976	2062	2061	2069
	AMPS	7.1	7.2	7.2	7.7	7.7	7.7	8.6	8.6	8.6	9.3	9.3	9.3	9.7	9.7	9.7
	SHR	0.46	0.62	0.84	0.47	0.65	0.86	0.47	0.67	0.86	0.48	0.71	0.87	0.49	0.73	0.86
VHA24K	BTUH	27048	26013	24081	25760	24288	22402	24748	23000	20355	23184	20585	18147	21908	19171	16917
	WATTS	2062	2095	2118	2247	2269	2297	2527	2527	2527	2732	2729	2737	2856	2854	2864
	AMPS	9.0	9.1	9.2	9.7	9.8	9.8	10.8	10.9	11.0	11.7	11.7	11.8	12.3	12.3	12.3
	SHR	0.48	0.65	0.88	0.49	0.68	0.89	0.49	0.70	0.90	0.50	0.74	0.90	0.52	0.76	0.90
VHA09R	BTUH	11054	10631	9842	10528	9926	9156	10114	9400	8319	9475	8413	7417	8954	7835	6914
	WATTS	747	759	767	813	822	832	915	915	915	989	988	991	1034	1033	1037
	AMPS	2.9	2.9	2.9	3.1	3.1	3.2	3.5	3.5	3.5	3.8	3.8	3.8	3.9	3.9	4.0
	SHR	0.53	0.72	0.96	0.54	0.74	0.98	0.54	0.77	0.99	0.55	0.81	0.99	0.57	0.84	0.99
VHA12R	BTUH	14582	14024	12983	13888	13094	12078	13342	12400	10974	12499	11098	9784	11811	10335	9120
	WATTS	1012	1028	1039	1102	1114	1127	1240	1240	1240	1340	1339	1343	1401	1401	1406
	AMPS	4.2	4.2	4.3	4.5	4.6	4.6	5.1	5.1	5.1	5.5	5.5	5.5	5.7	5.7	5.8
	SHR	0.53	0.72	0.96	0.54	0.74	0.98	0.54	0.77	0.99	0.55	0.81	0.99	0.57	0.84	0.99
VHA18R	BTUH	21168	20358	18846	20160	19008	17532	19368	18000	15930	18144	16110	14202	17145	15003	13239
	WATTS	1481	1505	1521	1614	1630	1650	1815	1815	1815	1962	1960	1966	2051	2050	2057
	AMPS	6.3	6.3	6.4	6.8	6.8	6.8	7.6	7.6	7.6	8.2	8.2	8.2	8.6	8.6	8.6
	SHR	0.45	0.61	0.83	0.46	0.64	0.84	0.46	0.66	0.85	0.48	0.70	0.85	0.49	0.72	0.85
VHA24R	BTUH	26460	25448	23558	25200	23760	21915	24210	22500	19913	22680	20138	17753	21431	18754	16549
	WATTS	2020	2052	2074	2200	2223	2250	2475	2475	2475	2675	2673	2680	2797	2796	2805
	AMPS	8.0	8.1	8.2	8.6	8.7	8.7	9.7	9.7	9.7	10.4	10.4	10.5	10.9	10.9	11.0
	SHR	0.48	0.65	0.88	0.49	0.68	0.89	0.49	0.70	0.90	0.50	0.74	0.90	0.52	0.76	0.90

RATING
POINT
AHRI
390

SMALL CHASSIS ELECTRICAL DATA

ELECTRICAL DATA						
	VHA09K			VHA12K		
HEATER WATTS	2500/2050	3400/2780	5000/4090	2500/2050	3400/2780	5000/4090
VOLTAGE	230/208					
ELECTRIC HEATING BTU	8500/7000	11600/9500	17000/13900	8500/7000	11600/9500	17000/13900
HEAT CURRENT (AMPS)	10.9/9.9	14.8/13.4	21.7/19.7	10.9/9.9	14.8/13.4	21.7/19.7
HEATING AMPS HP	4.0/4.0	4.0/4.0	4.0/4.0	5.7/5.9	5.7/5.9	5.7/5.9
MINIMUM CIRCUIT AMPACITY	15	19.9	28.7	15	19.9	28.7
BRANCH CIRCUIT FUSE (AMPS)	15	20	30	15	20	30
LRA-COMPRESSOR (AMPS)	21	21	21	30	30	30
COOLING CURRENT (AMPS)	4.3/4.3	4.3/4.3	4.3/4.3	5.9/5.7	5.9/5.7	5.9/5.7
BASIC HEATER SIZE	2.5KW	3.4KW	5.0KW	2.5KW	3.4KW	5.0KW
POWER CONNECTION HARD WIRED	HARD WIRED					
RECOMMENDED BRANCH CIRCUIT WIRE SIZES *AWG- AMERICAN WIRE GAUGE	14	12	10	12	12	10

ELECTRICAL DATA						
	VHA09R			VHA12R		
HEATER WATTS	2500	3400	5000	2500	3400	5000
VOLTAGE	265					
ELECTRIC HEATING BTU	8500	11600	17000	8500	11600	17000
HEAT CURRENT (AMPS)	9.4	12.8	18.8	9.4	12.8	18.8
HEATING AMPS HP	3.2	3.2	3.2	4.5	4.5	4.5
MINIMUM CIRCUIT AMPACITY	13.14	17.38	24.93	13.14	17.38	24.93
BRANCH CIRCUIT FUSE (AMPS)	15	20	30	15	20	30
LRA-COMPRESSOR (AMPS)	21	21	21	30	30	30
COOLING CURRENT (AMPS)	3.5	3.5	3.5	5.1	5.1	5.1
BASIC HEATER SIZE	2.5KW	3.4KW	5.0KW	2.5KW	3.4KW	5.0KW
POWER CONNECTION HARD WIRED	HARD WIRED					
RECOMMENDED BRANCH CIRCUIT WIRE SIZES *AWG- AMERICAN WIRE GAUGE	14	12	10	12	12	10

LARGE CHASSIS ELECTRICAL DATA

ELECTRICAL DATA								
	VHA18K			VHA24K				
HEATER WATTS	2500/2050	3400/2780	5000/4090	2500/2050	3400/2780	5000/4090	7500/6135	10000/8180
VOLTAGE	230/208							
ELECTRIC HEATING BTU	8500/7000	11600/9500	17000/13900	8500/7000	11600/9500	17000/13900	25600/20900	34100/27900
HEAT CURRENT (AMPS)	10.9/9.9	14.8/13.4	21.7/19.7	10.9/9.9	14.8/13.4	21.7/19.7	32.6/29.5	43.5/39.3
HEATING AMPS HP	7.8/8.3	7.8/8.3	7.8/8.3	8.5/9.4	8.5/9.4	8.5/9.4	8.5/9.4	8.5/9.4
MINIMUM CIRCUIT AMPACITY	14.3	19.2	27.8	17.2	22.1	30.7	44.3	57.8
BRANCH CIRCUIT FUSE (AMPS)	15	20	30	25	25	35	45	60
LRA-COMPRESSOR (AMPS)	42	42	42	46	46	46	46	46
COOLING CURRENT (AMPS)	9.2/8.6	9.2/8.6	9.2/8.6	10.4/10.0	10.4/10.0	10.4/10.0	10.4/10.0	10.4/10.0
BASIC HEATER SIZE	2.5KW	3.4KW	5.0KW	2.5KW	3.4KW	5.0KW	7.5KW	10.0 KW
POWER CONNECTION HARD WIRED	HARD WIRED							
RECOMMENDED BRANCH CIRCUIT WIRE SIZES *AWG- AMERICAN WIRE GAUGE	14	12	10	10	10	10	6	4

ELECTRICAL DATA						
	VHA18R			VHA24R		
HEATER WATTS	2500	3400	5000	5000	7500	10000
VOLTAGE	265					
ELECTRIC HEATING BTU	8500	11600	17000	17000	25600	34100
HEAT CURRENT (AMPS)	9.4	12.8	18.9	18.9	28.3	37.7
HEATING AMPS HP	6.9	6.9	6.9	8.1	8.1	8.1
MINIMUM CIRCUIT AMPACITY	12.3	16.6	24.2	27.1	38.9	50.7
BRANCH CIRCUIT FUSE (AMPS)	15	20	30	30	40	55
LRA-COMPRESSOR (AMPS)	42	42	42	46	46	46
COOLING CURRENT (AMPS)	7.6	7.6	7.6	9.7	9.7	9.7
BASIC HEATER SIZE	2.5KW	3.4KW	5.0KW	5.0KW	7.5KW	10.0KW
POWER CONNECTION HARD WIRED	HARD WIRED					
RECOMMENDED BRANCH CIRCUIT WIRE SIZES *AWG- AMERICAN WIRE GAUGE	14	12	10	10	6	4

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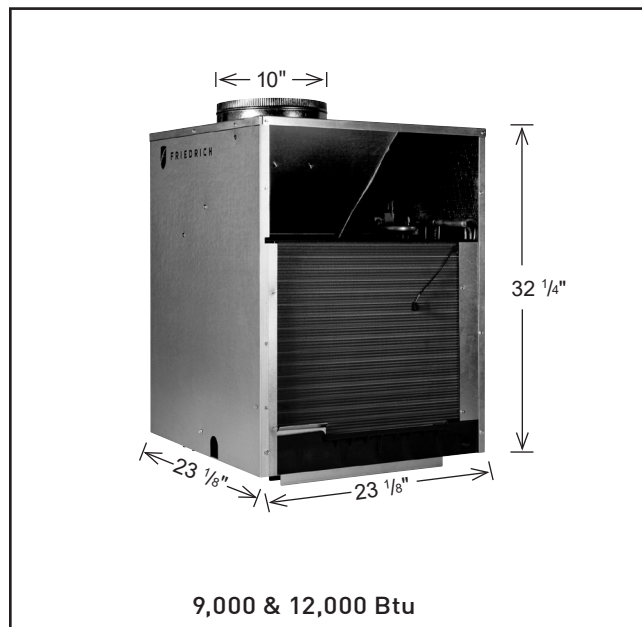
Application and Installation

Installation Guidelines

- Chassis is to be installed against an exterior wall. Wall cutout dimensions will be 24 5/8" w x 30 7/8" h.
- Closet should allow for a minimum of three inches on three sides of the unit for return air, drain connections and change outs.
- Minimum recommended access door rough-in measurements 27" wide by 55 3/4" high (for VPRG4/VPRG4R).
- Friedrich recommends the use of a platform between 24" and 36" above the floor, for ease of installation and serviceability.
- Duct outlet designed for external static pressures up to .3" on 9,000, 12,000, and 18,000 Btu models; and .4" on 24,000 Btu models.
- Wall plenum allows chassis to be inserted 2 3/8" into plenum, thereby minimizing closet dimensions.
- Quick connect drain coupling ships standard to make installation and removal easier.

Application and Accessories (All models)

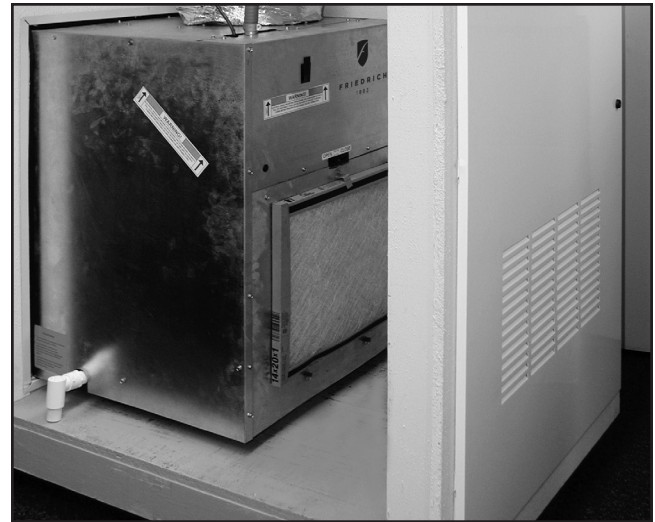
- The use of a Friedrich wall plenum is required for installation. Plenum opening is 3/4" above the floor for 9,000 & 12,000 models, and 1 1/2" for 18,000 & 24,000 Btu models. (VPAWP1-8 / VPAWP1-14).
- Return air is accommodated with a return air filter attached to the unit or through the use of a return air filter grille. (VPRG4/VPRG4R).
- Exterior louvers are available in anodized aluminum (VPAL2) or in custom painted colors (VPSC2).
- Unit is controlled by a remote wall-mounted thermostat. Friedrich model WRT1 wireless digital thermostat, RT6 wired digital thermostat, RT6P wired programmable thermostat, or EMRT1/EMWRT1 Energy Management Stats are recommended.
- Central desk control ready.



Typical Closet Arrangement

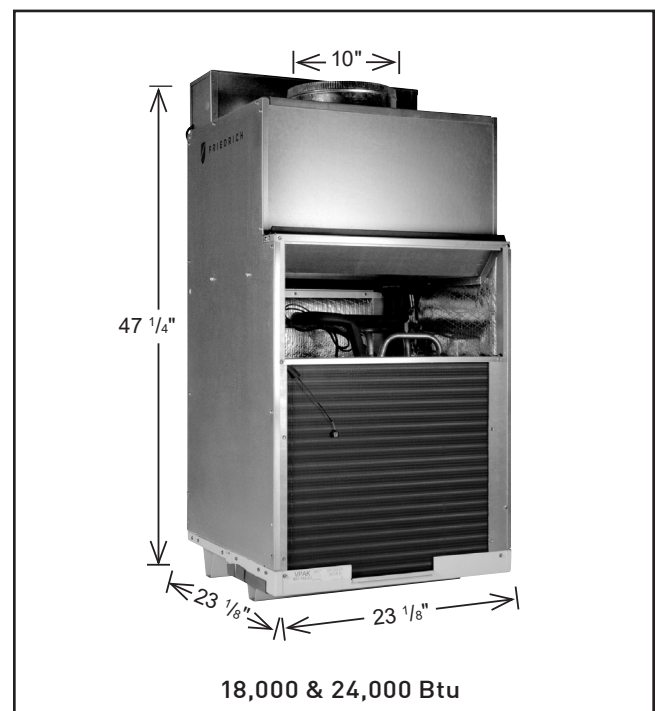
Cutaway of a typical closet shown with Vert-I-Pak® chassis installed in the wall sleeve. The unit has the thermostat, field wiring, internal drain and flex duct attached. VPRG4 return air filter holder and access panel are shown below.

The closet access panel may be installed in the front (as shown below) or to the left or right side of the unit. All three installation options will allow easy access to the unit for removal and replacement.



Application and Accessories (24K Models only)

- 18K and 24K utilize drain pan (VPDP1) that can be installed prior to chassis for simplified installation and removal.
- 18K and 24K utilize the same wall plenum as other units to give consistent exterior appearance. VHA24 plenum must be installed 1 1/2" above chassis platform.



ACCESSORIES

ARCHITECTURAL LOUVER

VPAL2 and VPSC2

Extruded aluminum grille that attaches to the outdoor section of the wall plenum. Takes in fresh air and returns condensed air. VPSC2 can be ordered in custom colors.

DIMENSIONS: 25 9/16" W x 31 1/16" H



VPAL2



VPAWP1-8

WALL PLENUM

VPAWP1-8, VPAWP1-14

Two-part sleeve that telescopes in and out. Sits inside the exterior wall penetration.

VPAWP1-8 telescopes from 5 1/2"–8"

VPAWP1-14 telescopes from 8"–14"

DIMENSIONS: 24 1/8" W x 30 3/8" H

CUTOUT DIMENSIONS: 24 5/8" W x 30 7/8" H

RETURN AIR GRILLE/ACCESS PANEL

VPRG4 / VPRG4R

Hinged panel allows access to unit and return air filter.

A field-supplied filter (25" x 20") should be mounted on the inside grille. Panel can be mounted with return air openings high or low on the door for optimum sound attenuation.

DIMENSIONS: 29" W x 58" H

CUTOUT DIMENSIONS: 27" W x 55 3/4" H

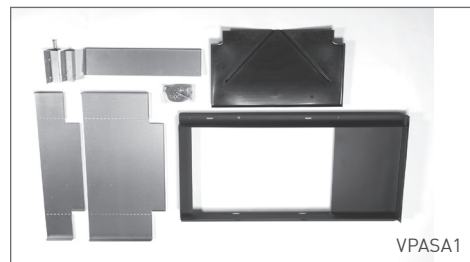


VPRG4

FIRST COMPANY SLEEVE ADAPTER

VPASA1

Single piece, welded adapter allows retrofit into existing First Company SPXR-series single package vertical unit wall sleeve and louver. Easy connection to Friedrich small chassis VERT-I-PAK.



VPASA1

SINGLE STAGE THERMOSTATS

RT6P

Wired, single stage, wall-mounted programmable thermostat has two fan speeds and backlight. Controls Friedrich VERT-I-PAK.

RT6

Wired, single stage, wall-mounted digital thermostat with two fan speeds and backlight for control of Friedrich VERT-I-PAK.

WRT1

Wireless, single stage, wall-mounted digital thermostat with two fan speeds and backlight for control of Friedrich VERT-I-PAK.



RT6, RT6P



WRT1

ENERGY MANAGEMENT THERMOSTATS

EMRT2

Wired thermostat with occupancy sensor.

EMWRT2

Wireless thermostat with occupancy sensor.

EMOCT

Online connection kit.

EMRAF

Remote access fee.

EMRHCF

Remote humidity control fee.

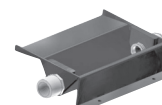


EMRT2, EMWRT2

DRAIN PAN

VPDP1

For VHA18 and VHA24 models. May be installed prior to chassis for easy installation/removal.



VPDP1

HVAC Engineering Specifications

A-Series Vertical Packaged Heat Pumps

Cooling: 9400 – 23000 Btu

Heating: 8400 – 20000 Btu (Heat Pump)

All units shall be factory assembled, piped, wired and fully charged with R-410A. All units shall be certified in accordance with ARI Standard 390 for Single Packaged Vertical Heat Pumps. Units shall be ETL listed and carry a ETL label. All units shall be factory run-tested to check operation and be manufactured by Friedrich or equivalent.

The basic unit shall not exceed 23 1/8" wide x 23 1/8" deep. Overall height of the unit from the bottom of the isolators to the top of the duct collar shall not exceed 32 1/4" for models up to 12,000 Btu and 47 1/4" for models up to 24,000 Btu. The unit shall be designed so that the unit will insert into a factory supplied wall plenum 2 3/8" to minimize room intrusion. Factory supplied wall plenums shall allow for installation through walls from 4 1/2" – 14" in thickness. Wall plenums will be adjustable to minimize installation clearances. Unit shall draw in ambient air through upper portion of an outside architectural louver measuring 25 9/16" wide x 31 1/16" high and shall exhaust heated air out through the lower portion of the louver. The unit shall be secured to the architectural louver by means of a two part, weather-resistant wall plenum. The unit shall be capable of left, right or straight-in installations into mechanical closet without field modifications.

REFRIGERATION SYSTEM – The refrigeration system shall be hermetically sealed and consist of a rotary compressor that is externally mounted on vibration isolators no smaller than 1 3/4" diameter x 1 1/2" high; condenser and evaporator coils constructed of copper tubes and aluminum plate fins; and capillaries as expansion devices. Unit shall have a fan slinger ring to increase efficiency and condensate disposal. A primary condensate removal system consisting of 3/4" FTP fittings on multiple locations shall exist. A secondary overflow from the primary drain pan shall expel water to the outside of the building through the wall plenum and louver in the event that the primary drain line clogs.

AIR HANDLING SECTION – The condenser fan shall be driven by a single, totally enclosed, ball bearing, permanently lubricated split capacitor fan motor for models up to 12,000 Btu. 18,000 and 24,000 Btu models shall utilize a separate motor for both the indoor and outdoor air sections. Airflow shall be directed vertically up through a standard 10" flex duct starter collar and into flexible or rigid ducts to be distributed into the conditioned area. Starter collar shall have both crimped edge to ease flex duct installation and a waistline to prevent duct from loosening.

The chassis shall have a built-in damper capable of providing at least 60 CFM of fresh air into the conditioned area. A fine mesh screen shall filter the incoming fresh air. The damper can be controlled by a slide lever located on the front of the unit.

CONTROLS – The unit shall be factory equipped with terminal strip for connection to a standard 24-volt single-stage heat/cool thermostat. A 24-volt transformer shall be included and factory wired. Low voltage inputs will include: C (common), R (24V power), Y (cooling), G (fan), W (heat) and B (reversing valve on VHA heat pumps only). The unit shall be hard-wired and have a quick-disconnect to disable power for control box service.

Friedrich Models: VHA – Heat Pump with electric heat

An emergency heat override switch must be available to allow operation of the resistance heater in the event of a compressor failure on heat pump models.

GENERAL CONSTRUCTION – The unit shall be constructed of 18-gauge galvanized zinc-coated steel. The unit shall feature 1/2" foil backed insulation for sound and thermal efficiency.

The wall plenum (required factory accessory) shall be shipped separately and constructed of 20-gauge galvanized zinc-coated steel; pretreated with zinc-phosphate and sealed with a chromate rinse, then powder-coated for maximum coverage and protection. The plenum shall be black in color for minimal visibility of unit from exterior of building. The plenum shall be shipped with a protective weatherboard for use prior to final installation of the louver and chassis.

The architectural louver (required factory accessory) shall be shipped separately and fabricated from extruded anodized aluminum with louvers in the horizontal plane.

The unit shall include vibration isolators mounted under the chassis and a nonrigid plenum-to-chassis connection to isolate vibrations to the building.

The unit shall have a plastic fan, fan shroud, and drain pan; and aluminum outdoor coil endplates for corrosion protection and to help prevent rust on the side of the building below the outdoor louver.

The unit shall be shipped with return air filter brackets and a 14" x 20" filter affixed directly on to the unit chassis. Optional return air grilles and access panels shall be available as factory accessories for installation in the wall or door of the mechanical closet.

CORROSION PROTECTION – The unit shall feature corrosion-resistant materials and finish to help prevent deterioration.

The outdoor coil shall have Diamonblue advanced corrosion protection consisting of hydrophilic-coated fins to prolong the life of the coil in all applications including seacoast protection.

ACCESSORY ACCESS PANEL – An optional factory-supplied access panel shall be available to provide access to the unit and adequate return air. The panel shall feature a filter holder to accept a field supplied 25" x 20" x 1" filter. Kit shall contain a hinge bracket for mounting the door with the return air openings high or low on the door for optimal sound attenuation. For 9,000 and 12,000 Btu models it is recommended to install the door with the hinge on the right side and the return air openings high on the door. For 18,000 and 24,000 Btu models it is recommended to install the hinge on the left with the openings low on the door.

WARRANTY – The warranty is one year on all parts and labor and 5 years on the sealed system, parts and labor, including compressor, indoor and outdoor coils and refrigerant tubing.

PURCHASER	P.O. #	DATE
PROJECT	LOCATION	
ENGINEER	ARCHITECT	
SUBMITTED BY	FOR APPROVAL	FOR REFERENCE

ITEM	PLAN DESIGNATION	QUANTITY	COOLING Btu	VOLTAGE	FRIEDRICH MODEL

A-SERIES ACCESSORIES (Wall Plenum and Outdoor Louver are required)

VPAWP1-8 Adjustable Wall Plenum (5 ½"- 8")	Qty	
VPAWP1-14 Adjustable Wall Plenum (8"-14")	Qty	
VPAL2 Architectural Louver	Qty	
VPSC2 Architectural Louver (color matched)	Qty	
VPASA1 Sleeve adapter for exact fit in existing First Company SPXR-series	Qty	
VPRG4 Return Air Grille/Access Panel	Qty	
VPDP1 Drain Pan for all A Series 18,000 and 24,000 Btu	Qty	

RT6 Wired Digital Wall Thermostat	Qty	
RT6P Wired Programmable Wall Thermostat	Qty	
WRT1 Wireless Digital Wall Thermostat	Qty	
EMRT2 Wired Thermostat with Occupancy Sensor	Qty	
EMWRT2 Wireless Thermostat with Occupancy Sensor	Qty	
EMOCT Online Connection Kit	Qty	
EMRAF Remote Access Fee	Qty	
EMRHCF Energy Management Remote Humidity Control Fee	Qty	

MODEL IDENTIFICATION GUIDE

MODEL NUMBER	V	H	A	09	K	34	RT	N
Series VHA=Vertical Heat Pump								Marketing Model
Nominal Capacity <u>A Series [Btu]</u> 09 = 9,000 18 = 18,000 12 = 12,000 24 = 24,000								Options RT = Standard Remote Operation
Voltage K = 208/230V-1Ph-60Hz R = 265V-2Ph-60Hz								Electric Heater Size <u>A Series</u> 25 = 2.5 KW 34 = 3.4 KW 50 = 5.0 KW 75 = 7.5 KW* 10 = 10 KW* Refer to electrical data chart for heater/unit compatibility. * 24000 Btu only.



Friedrich Air Conditioning Company
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800.541.6645
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VERT-I-PAK® A SERIES SINGLE PACKAGE VERTICAL AIR CONDITIONERS LIMITED WARRANTY

SAVE THIS CERTIFICATE. It gives you specific rights. You may also have other rights which may vary from state to state and province to province.

In the event that your unit needs servicing, contact your nearest authorized service center. If you do not know the nearest service center, ask the company that installed your unit or contact us - see address and telephone number above. To obtain service and/or warranty parts replacement, you must notify an authorized FRIEDRICH Air Conditioning Co. service center, distributor, dealer, or contractor of any defect within the applicable warranty period.

When requesting service: please have the **model** and **serial number** from your unit readily available.

Unless specified otherwise herein, the following applies:
FRIEDRICH VERT-I-PAK A SERIES HEAT PUMPS & AIR CONDITIONERS

LIMITED WARRANTY - FIRST YEAR (Twelve (12) months from the date of installation). Any part found to be defective in the material or workmanship will be repaired or replaced free of charge by our authorized service center during the normal working hours; and

LIMITED WARRANTY - SECOND THROUGH FIFTH YEAR (Sixty (60) months from the date of installation). ON THE SEALED REFRIGERATION SYSTEM. Any part of the sealed refrigeration system that is defective in material or workmanship will be repaired or replaced free of charge (excluding freight charges) by our authorized service center during normal working hours. The sealed refrigeration system consists of the compressor, metering device, evaporator, condenser, reversing valve, check valve, and the interconnecting tubing.

These warranties apply only while the unit remains at the original site and only to units installed inside the continental United States, Alaska, Hawaii, Puerto Rico, Mexico and Canada. The warranty applies only if the unit is installed and operated in accordance with the printed instructions and in compliance with applicable local installation and building codes and good trade practices. For international warranty information, contact the Friedrich Air Conditioning Company - International Division.

Any defective part to be replaced must be made available to **FRIEDRICH** in exchange for the replacement part. Reasonable proof must be presented to establish the date of install, otherwise the beginning date of this certificate will be considered to be our shipment date plus sixty days. Replacement parts can be new or re-manufactured. Replacement parts and labor are only warranted for any unused portion of the unit's warranty.

We will not be responsible for and the user will pay for:

1. Service calls to:
A) Instruct on unit operation. B) Replace house fuses or correct house wiring. C) Clean or replace air filters. D) Remove the unit from its installed location when not accessible for service required. E) Correct improper installations.
2. Parts or labor provided by anyone other than an authorized service center.
3. Damage caused by:
A) Accident, abuse, negligence, misuse, riot, fire flood or acts of God. B) Operating the unit where there is a corrosive atmosphere containing chlorine, fluorine, or any damaging chemicals (other than in a normal residential environment). C) Unauthorized alteration or repair of the unit, which in turn affects its stability or performance. D) Failing to provide proper maintenance and service. E) Using and incorrect power source. F) Faulty installation or application of the unit.

We shall not be liable for any incidental, consequential, or special damages or expenses in connection with any use or failure of this unit. We have not made and do not make any representation or warranty of fitness for a particular use or purpose and there is no implied condition of fitness for a particular use or purpose. We make no expressed warranties except as stated in this certification. No one is authorized to change this certificate or to create for us any other obligation or liability in connection with this unit. Any implied warranties shall last for one year after the original purchase date. Some states and provinces do not allow limitations on how long an implied warranty or condition lasts, so the above limitation or exclusions may not apply to you. The provisions of this warranty are in addition to and not a modification of or subtraction from the statutory warranties and other rights and remedies provided by law.

Performance of Friedrich's Warranty obligation is limited to one of the following methods:

1. Repair of the unit
2. A refund to the customer for the prorated value of the unit based upon the remaining warranty period of the unit.
3. Providing a replacement unit of equal value

The method of fulfillment of the warranty obligation is at the sole discretion of Friedrich Air Conditioning.

In case of any questions regarding the provisions of this warranty, the English version will govern.



Friedrich Air Conditioning Co. | 10001 Reunion Place, Suite 500 | San Antonio, TX 78216 | 877.599.5665 | www.friedrich.com