

DYNAPACK™ S SERIES

Vertical Packaged Air Conditioner with Gas Heat **Suggested Bid Specification for Product and Application**

The supplier will provide vertical packaged gas heat /electric air conditioner of the sizes and capacities shown on the schedule and listed in the specifications. Each unit shall consist of a primary unit, wall sleeve, and outside grille. Units shall be ETL listed, and/or CSA design certified and shall be Suburban Manufacturing Company DynaPack models, or equivalents. The units shall be located as shown on the drawings.

Unit's steady state efficiency shall be rated at 82% nominal and the EER of the air conditioner shall not be less than 10.0 EER.

Units shall be designed to operate on 208/230 volts, 60 Hz, single phase power.

Units shall not exceed 28 3/8" wide and 24 3/8" deep. The wall opening shall not be larger than 28 9/16" wide and 28 3/4" tall for units up to 24,000 BTU in cooling capacity, and 28 9/16" wide and 32 3/4" tall for units larger than 24,000 BTU in cooling capacity.

Units shall be designed to operate on Natural or LP gas for the heating cycle.

CABINET:

Unit cabinet shall be a standard product of the manufacturer and shall be packed to prevent damages when reasonable care is exercised during shipment. Warnings on packaging shall alert handlers to the hazards of improper handling or stacking.

Each cabinet shall consist of the following system and components:

- Each unit cabinet shall be constructed of 20-gauge steel with a protective baked-on enamel finish.
- Refrigeration system constructed to isolate the hermetically sealed compressor from external vibration. The system shall include copper/aluminum condenser and evaporator coils with expansion valve refrigerant control. (NOTE: 1 ton unit uses fixed orifice restrictor)
- Air flow system consists of a five speed room air motor to allow the airflow to be matched to the duct system. A separate condenser fan operates in the A/C cycle only.
- Condenser coil and evaporator coil shall be constructed of copper tubes/aluminum fins and shall be bonded to tubes to prevent electrolytic action.
- Indoor and outdoor airflow will match the coil capacity for efficient transfer of heat. Design of the unit shall prevent water blow-off on the indoor evaporator coil.
- Unit to contain a permanent return air filter, constructed of washable media, that installs and removes easily.

- Factory-installed, gas-fired heat exchanger with electronic controlled, spark ignition system and a "draw-through" negative draft combustion air system. Gas ignition shall occur by energizing hot spark electrode, which lights the burner on each thermostatically controlled heating cycle.

WALL SLEEVE:

Wall sleeve shall be constructed of 20-gauge galvanized steel. Base drain pan shall be 18-gauge galvanized steel. Sleeves shall be installed through exterior walls where shown on the plans and shall be level from side to side. Sleeve shall be secured to the wall at both sides as shown in installation instructions. In no instance shall fasteners be used through the base pan so as to protect the water integrity of the base pan.

OUTSIDE GRILLE:

Special grilles to be supplied by Suburban Manufacturing Company only.

GAS TYPE:

Natural gas units shall be equipped with a gas valve having a built-in regulator set to operate at the gas inlet supply pressure, minimum 5" W. C., maximum 10" W. C. Units burning LP gas shall be equipped with a gas valve having a built-in regulator set to operate at gas inlet supply pressures of 11" W. C. minimum and 13" W. C. maximum.

SERVICE:

Bidders shall submit complete information regarding service availability, including address(es) and phone number(s), along with complete information of manufacturer address and phone number to cover service information pertinent to installed equipment.

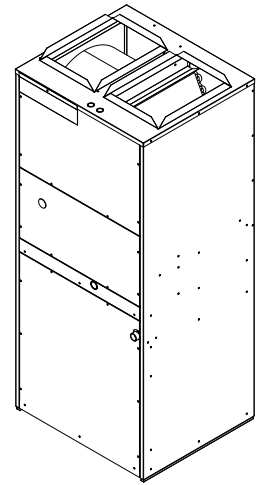
RESPONSIBILITY FOR INSTALLATION, START-UP, TESTING, DEMONSTRATION:

Units shall be installed in full accordance to the manufacturer's recommendation. The manufacturer shall not be liable for unit failure resulting from improper installation, which invalidates the warranty. Bidders shall specify their responsibilities for the initial starting of units, performing necessary tests and adjustments to place units in proper operating condition and demonstrating heating and cooling operations to the owner or the owner's representative.

WARRANTY:

There shall be a one-year limited warranty on parts and labor and a five-year limited warranty on the compressor and heat exchanger.

S SERIES MODELS	HEATING			COOLING				Sound Pressure Levels	
	Input Btuh	Output Btuh	Thermal Efficiencies	Btuh	SEER ¹	EER ²	Refrigerant	Indoor (dBA)	Outdoor (dBA)
DYPA12AC1A036	35,500	28,400	82%	12,000	11	10.2	R-410A	64	69
DYPA12AC1A048	47,500	38,000							
DYPA18AC1A036	35,500	28,400	82%	17,000	12	10.6	R-410A	64	69
DYPA18AC1A048	47,500	38,000							
DYPA18AC1A060	59,000	47,200							
DYPA24AC1A036	35,500	28,400	82%	25,200	12.1	10.6	R-410A	64	69
DYPA24AC1A048	47,500	38,000							
DYPA24AC1A060	59,000	47,200							
DYPA30AC1A036	35,500	28,400	82%	30,200	12.35	10.7	R-410A	64	74
DYPA30AC1A048	47,500	38,000							
DYPA30AC1A060	59,000	47,200							
DYPA36AC1A036	35,500	28,400	82%	34,800	11.5	10	R-410A	64	74
DYPA36AC1A048	47,500	38,000							
DYPA36AC1A060	59,000	47,200							



MODEL	Dimensions In Inches	
	A	B
DYPA12	60-1/2	23-7/8
DYPA18	60-1/2	23-7/8
DYPA24	60-1/2	23-7/8
DYPA30	64-1/2	27-7/8
DYPA36	64-1/2	27-7/8

¹ - The official energy descriptor recognized by Department of Energy for this type of unit is EER.

² - Unit tested to ANSI / AHRI Standard 390

ELECTRICAL DATA	DYPA12	DYPA18	DYPA24	DYPA30	DYPA36
Volts/Phase/Cycle	208/230-1-60				
Minimum circuit ampacity	11.5	13.2	16.9	20.7	25.2
Maximum fuse/HACR breaker size	15	20	25	30	40

COMPRESSOR	DYPA12	DYPA18	DYPA24	DYPA30	DYPA36
Type	Rotary	Reciprocating			
Refrigerant type (HCFC)	R410A				
Unit refrigerant charge ounces	35 oz.	40 oz.	85 oz.	96 oz.	96 oz.
Rated load amps	5.2	8.3	10.9	13.1	16
Locked rotor amps	25	43	54	74	88
Maximum continuous current	7.9	13	17	20.5	25.2

GAS CONTROLS AND ADDITIONAL DATA	DYPA12	DYPA18	DYPA24	DYPA30	DYPA36
Gas (specify)	Natural				
Ignition System: solid state	Direct Spark				
Gas connection size	1/2 inch NPT				
Condensate connection size	3/4 inch NPT				

MOTORS	DYPA12	DYPA18	DYPA24	DYPA30	DYPA36
Indoor motor (ECM) FLA/HP/RPM	4.0 / .50 / 1050				
Condenser motor FLA/HP/RPM	0.9 / .125 / 1075		1.3 / .25 / 1075		
Combustion motor FLA	0.9				

Specifications subject to change without notice.

