



Packaged Units
PGY (R-410A) Series
PGY036 - PGY360
3 TR thru 30 TR
10 kW thru 105 kW

Higher quality of indoor living

Company Business

Zamil Air Conditioners (ZAC), a sector business of Zamil Industrial, is the largest supplier of air conditioners in the Middle East. It manufactures and markets a whole range of air conditioners from room air conditioners to packaged units to large capacity chillers for residential, commercial and industrial applications. Zamil Air Conditioners was founded in 1974 as one of the first air conditioning companies to be established in Saudi Arabia and today is a leading international manufacturer of air conditioning systems & service solutions and is Number One in the Middle East. ZAC's operations are structured into four companies supporting seven in-house brands and twelve products and service units as well as a number of international brands under the OEM Sales. The seven in-house brands are Zamil Air Conditioners, Classic, Zamil, Cooline, CoolCare, Climatech and Geoclimate.

The four companies are:

1. Zamil Air Conditioners & Home Appliances Co. (L.L.C.), supporting Zamil, Classic, Cooline, GE and OEM brands for consumers.
2. Zamil Central Air Conditioners Co. (L.L.C.), supporting Zamil Air Conditioners, Cooline and Climatech for commercial and industrial customers.
3. Zamil Air Conditioning and Refrigeration Services Co. (L.L.C.), providing electromechanical engineering, construction and project management services, HVAC Operation & Maintenance, Retrofit Services, Spare Parts, Fire Protection, Controls, Electrical Services, Coils, Ducting and Coating.
4. Geoclimate srl is an independent business supporting other three companies for their requirements of Chillers and Double Skin AHU's.

The first three Companies- direct their business operations from the First and Second Industrial Cities in Dammam, Saudi Arabia and have a product design center in Austria.

GEOCLIMATE has its engineering and production departments located at Monfalcone, Italy.

All the four companies, while operating independently, supplement each other's activities in a way that makes synergy work at its best and achieves ZAC's goals of maximizing customer value and satisfaction.

OEM Sales - Private Labeling

Zamil Air Conditioners produces branded air conditioners under OEM agreements for several leading international brands. Such relationships are testimony to the excellence of ZAC's engineering and production processes. Most of the units produced under the private labeling agreements are for window and mini-split systems. However, ZAC is expanding its OEM offerings to include residential and light commercial units. Some of the OEM brands manufactured at Zamil Air Conditioners are: Supra, Sanyo and Blue Star.

Joint Venture

Middle East Air Conditioners - Joint Venture with General Electric.

Zamil Air Conditioners partners with GE Appliances - Europe since 1997, in a joint venture called Middle East Air Conditioners (MEAC), for manufacturing and marketing of GE branded air conditioners.

MEAC was awarded the license to manufacture Window, Mini Splits and Ducted Split types under the brand names GE, Hotpoint and RCA. Today, MEAC enjoys extensive coverage in Saudi Arabia, GCC and the African market. In an ever-changing market, MEAC continually strives to acquire new technologies and stylish integrated design with optimum performance and reliability that bring greater value to customers.

Factories and Production

Zamil Air Conditioners has two prime manufacturing plants in Dammam, Saudi Arabia and a production facility in Italy operated by GEOCLIMATE and a product design center in Austria. ZAC can produce up to 900,000 room air conditioners, 300,000 mini-split systems and 65,000 central air-conditioning systems per annum and supplies air conditioning products to over 55 countries across the world - the major markets being GCC, Middle East, North Africa, Europe and Asia.

Quality & Product Certificates

The Quality systems and policies at Zamil Air Conditioners comply with the required ISO 9001:2008 certification.

ZAC's products are certified with:

1. CE (Council of European Community).
2. UL (Underwriters Laboratory).
3. Eurovent (Certified Performance).
4. ISO 9001-2008 (International Organization for Standardization).
5. AHRI (Air-Conditioning, Heating and Refrigeration Institute).

Other awards include the prestigious Engineering Excellence Award of General Electric and the inaugural Prince Mohammed bin Fahd Al Saud Award for Factory Safety.

Our Products & Service Units

In addition to consumer products such as the Room Air Conditioners (RAC) and the Mini Splits, Zamil Air Conditioners manufactures a host of residential, commercial and industrial air conditioners. This broad product range extends from the concealed units up to 5 TR, the ducted splits up to 30 TR, the packaged units up to 100 TR, the single and double skin air handling units up to 138,316 CFM, the water chillers up to 590 TR and the centrifugal chillers up to 5,000 TR cooling capacity.

Our products and services include, in addition to Maintenance, Retrofit & Operations (MRO), complete integrated suite of solutions like:

- **Zamil Projects:** Providing EPC for electromechanical works for Industrial, Utility and Oil & Gas customers.
- **Zamil Controls:** Design, assembly, integration and commissioning of low current & low voltage systems.
- **Zamil Fire Protection:** Design, integration and commissioning of active fire protection systems.
- **Zamil Electrical:** Design, integration and commissioning of LV/MV (low voltage/middle voltage) systems.
- **Coil & Coating:** Coil replacement, anti-corrosion coating, water proofing & reflective coating and passive fire protection solutions.
- **Zamil Ducting:** Facilities designs and manufactures high quality duct systems and other HVAC industry related products, utilizing state of the art automated duct lines, Plasma Cutting, CNC Turret punch press and other specific machinery through two duct factories located in Saudi Arabia western province (Yanbu) and Eastern province (Dammam).

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*CONTINUING RESEARCH RESULTS IN STEADY IMPROVEMENTS.
THEREFORE, THESE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.*

MODEL DECODING

MODELS: PGY036 - PGY060 (DIRECT DRIVE MOTOR)

1, 2 & 3 BASIC (SERIES)	4, 5 & 6 NOMINAL COOLING CAPACITY (MBH)	7 ELECTRICAL SUPPLY (V-Ph-Hz)	8 BLOWER MOTOR	9 DRIVE OPTIONS	10 HEATER OPTIONS (kW/STAGE)	11 EVAPORATOR COIL	12 CONDENSER COIL	13 PDS OPTION	14 ELECTRICAL OPTIONS	15 ACCESSORIES	16 FILTER OPTIONS	17 THERMOSTAT OPTION
PGY PACKAGED UNIT (R-410A)	036	C : 230-1-60*	U : 0.5 HP (DIRECT DRIVE)	N : DIRECT DRIVE	N : NO HEATER	J : ALUMINUM FIN	J : ALUMINUM FIN	N : STD. UNIT	N : STD. UNIT	N : STANDARD UNIT	A : 1" THICK ALUMINUM	S : UNIT WITH THERMOSTAT
	048 060	H : 230-3-60 M : 380/400-3-60 (4 WIRE) F : 460-3-60	W : 0.75 HP (DIRECT DRIVE)		A : 5/1 C : 7.5/1 D : 10/2**	K : COATED ALUMINUM FIN L : COPPER FIN M : ALUMINUM FINS WITH RTC. N : COPPER FINS WITH RTC.	K : COATED ALUMINUM FIN L : COPPER FIN M : ALUMINUM FINS WITH RTC. N : COPPER FINS WITH RTC.	P : STD. UNIT WITH PDS S : SIGHT GLASS G : PDS & SIGHT GLASS H : PDS, SIGHT GLASS & CORE FILTER DRYER	I : ANTI-ICE U : UVM V : VOLT FREE CON- TACTS*** A : I & U B : I & V C : U & V D : I, U & V	S : SS DRAIN PAN I : INNER SKIN M : METALLIC COIL GUARD G : S & I H : S & M J : I & M L : S, I & M	A : 1" THICK ALUMINUM B : 2" THICK ALUMINUM	D : UNIT WITHOUT THERMOSTAT

NOTE: * – Applicable for PGY036 & PGY048 models only.

** – Applicable for PGY060 model only.

*** – Volt free contact option is available as: A) Unit ON/TRIP indication, B) Compressor RUN/TRIP indication, C) Blower motor RUN/TRIP indication.

MODELS: PGY075 - PGY360 (BELT DRIVEN MOTOR)

1, 2 & 3 BASIC (SERIES)	4, 5 & 6 NOMINAL COOLING CAPACITY (MBH)	7 ELECTRICAL SUPPLY (V-Ph-Hz)	8 BLOWER MOTOR	9 DRIVE OPTIONS	10 HEATER OPTIONS (kW/STAGE)	11 EVAPORATOR COIL	12 CONDENSER COIL	13 PDS OPTION	14 ELECTRICAL OPTIONS	15 ACCESSORIES	16 FILTER OPTIONS	17 THERMOSTAT OPTION
PGY PACKAGED UNIT (R-410A)	075	H : 230-3-60 M : 380/400-3-60 (4 WIRE)	R : 1.5 HP ODP Z : 2 HP ODP	J : ALT. I K : ALT. II	N : NO HEATER	J : ALUMINUM FIN	J : ALUMINUM FIN	N : STD. UNIT	N : STD. UNIT	N : STANDARD UNIT	A : 1" THICK ALUMINUM	S : UNIT WITH THERMOSTAT
	090 100	F : 460-3-60	Z : 2 HP ODP E : 3 HP ODP		B : 6/1 C : 7.5/1 D : 10/2 E : 12/2 F : 15/2 G : 20/2 (For PGY090 -150) H : 25/2 (For PGY090 -150)	K : COATED ALUMINUM FIN L : COPPER FIN M : ALUMINUM FINS WITH RTC. N : COPPER FINS WITH RTC.	K : COATED ALUMINUM FIN L : COPPER FIN M : ALUMINUM FINS WITH RTC. N : COPPER FINS WITH RTC.	P : STD. UNIT WITH PDS S : SIGHT GLASS G : PDS & SIGHT GLASS H : PDS, SIGHT GLASS & CORE FILTER DRYER	I : ANTI-ICE U : UVM V : VOLT FREE CONTACTS*	A : ECONOMIZER B : ECONOMIZER W/- ENTHALPY SENSOR C : MANUAL DAMPER S : SS DRAIN PAN I : INNER SKIN M : METALLIC COIL GUARD D : C & S E : C & I F : C & M G : S & I H : S & M J : I & M L : S, I & M K : C, S, I & M	B : 2" THICK ALUMINUM C : BAG FILTER WITH 1" ALU- MINUM PRE- FILTER	D : UNIT WITHOUT THERMOSTAT
	120		E : 3 HP ODP						A : I & U B : I & V C : U & V D : I, U & V			
	150		E : 3 HP ODP G : 5 HP ODP									
	180 210		G : 5 HP ODP J : 7.5 HP ODP		N : NO HEATER							
	240		J : 7.5 HP ODP		F : 15/2 G : 20/2 H : 25/2 J : 30/2 K : 35/2 L : 40/2 (For PGY240 -360)							
	300		J : 7.5 HP ODP L : 10 HP ODP									
	360		L : 10 HP ODP M : 15 HP ODP									

NOTE: * Volt free contact option is available as: A) Unit ON/TRIP indication, B) Compressor RUN/TRIP indication, C) Blower motor RUN/TRIP indication.

BLOWER DRIVE OPTIONS

MODEL NUMBER	OPTION	MOTOR			BLOWER			APPROX. SPEED CHANGE PER PULLEY TURN (RPM)
		HP (kW)	RPM	PULLEY PITCH DIA. (INCH)	SPEED RANGE (RPM)		PULLEY PITCH DIA. (INCH)	
					MINIMUM	MAXIMUM		
PGY075	ALT. I	1.5 (1.1)	1750	2.7 - 3.7	685	938	6.9	42
	ALT. II	2 (1.5)	1750	2.7 - 3.7	927	1270	5.1	57
PGY090	ALT. I	2 (1.5)	1750	2.7 - 3.7	685	938	6.9	42
	ALT. II	3 (2.2)	1750	2.7 - 3.7	927	1270	5.1	57
PGY100	ALT. I	2 (1.5)	1750	2.7 - 3.7	685	938	6.9	42
	ALT. II	3 (2.2)	1750	2.7 - 3.7	927	1270	5.1	57
PGY120	ALT. I	3 (2.2)	1750	2.7 - 3.7	685	938	6.9	42
	ALT. II		1750	2.7 - 3.7	927	1270	5.1	57
PGY150	ALT. I	3 (2.2)	1750	3.1 - 4.1	577	763	9.4	31
	ALT. II	5 (3.7)	1750	3.7 - 4.7	752	956	8.6	39
PGY180	ALT. I	5 (3.7)	1750	3.7 - 4.7	689	875	9.4	31
	ALT. II	7.5 (5.6)	1750	4.3 - 5.5	836	1070	9	39
PGY210	ALT. I	5 (3.7)	1750	3.7 - 4.7	589	748	11	27
	ALT. II	7.5 (5.6)	1750	3.7 - 4.7	719	914	9	33
PGY240	ALT. I	7.5 (5.6)	1750	4.3 - 5.5	684	875	11	32
	ALT. II		1750	4.3 - 5.5	801	1024	9.4	37
PGY300	ALT. I	7.5 (5.6)	1750	4.3 - 5.5	684	875	11	32
	ALT. II	10 (7.5)	1750	4.3 - 5.5	801	1024	9.4	37
PGY360	ALT. I	10 (7.5)	1750	4.3 - 5.5	684	875	11	32
	ALT. II	15 (11.2)	1750	4.3 - 5.5	801	1024	9.4	37

STANDARD SPECIFICATIONS

A. General

Packaged cooling or combination heating and cooling units suitable for mounting on the roof or ground. The packaged unit consists of scroll compressors, cooling coil, condenser coil, control wiring and interconnecting piping - all factory assembled and mounted on heavy gauge G-90 galvanized steel sheet press formed base, ready for field connection to utilities and ducts. The packaged unit is of rigid construction with holes provided in the base rails for overhead rigging. The unit is provided with an integral weather resistant control panel. These units will be supplied as horizontal discharge as standard.

These units are tested in accordance with AHRI standards 210/240 and AHRI 340/360 with environment friendly R-410A refrigerant.

B. Unit Enclosure

Panels are of heavy gauge, G-90 galvanized steel sheet with removable access panels, completely weatherized for outdoor installation and properly reinforced and brazed. Panels and access doors are provided for inspection and access for all internal parts. Enclosures are provided with adequately reinforced points of support for setting the unit. Steel sheet panels are zinc-coated and galvanized by the hot dip process of lock forming quality conforming to ASTM A 653 commercial weight G-90, followed by baked on electrostatic polyester dry powder coat paint, on all external panels.

C. Compressor

Compressors are hermetic scroll for all models. They are provided with all the standard controls and accessories necessary for safe operation. These are equipped with internal motor protector and rubber vibration isolator for quiet and efficient operation.

D. Air Cooled Condensing Section

1. The air-cooled condensing section is enclosed within the unit housing and consists of condenser coil, fan(s), electric motor(s) and inherently protected compressor(s). Inner grooved copper tubes with wall thickness of 0.023 inches (0.5842 mm), mechanically bonded to enhanced aluminum fins are standard for all condenser coils. Return bends have 0.022 inch thickness (0.56 mm). **As an option, corrugated copper fins or enhanced coated aluminum fins may be provided.** Tube support sheets are galvanized steel, formed to provide structural strength.
2. Fans are propeller type, direct driven, upward discharge and provided with fan grille mounted on the casing.
3. Motors are totally enclosed air-over type with class 'F' insulation & IP55 ratings. Inherent thermal protection is automatic reset type.

E. Evaporator Coil Section

1. All cooling coils are of enhanced louvered fins and inner grooved copper tubes with wall thickness of 0.0175 inches (0.445mm), mechanically bonded to aluminum fins . Return bend has 0.022 inch thickness (0.56 mm)**As an option, enhanced coated aluminum fins or corrugated copper fins may be provided.** Tube support sheets are galvanized steel, formed to provide structural strength.
2. **Drain Pan:** An insulated drain Pan made of G-90 galvanized steel is provided.
3. **Insulation:** Insulation is supplied in adequate density and thickness for all units to prevent condensation from forming on the unit casing. Insulation meets the requirements of NFPA 90A and is protected against deterioration and erosion from air currents.

F. Evaporator Fan

PGY036 - PGY060: Evaporator fan is of a centrifugal forward-curved blade design and sized to meet system airflow/pressure using direct drive motors. These fans are statically / dynamically balanced in the fan housing during final assembly. Fan motors have ball bearings and conform to NEMA MG standards. Motor starters are magnetic contactor, across-the-line type.

PGY075 - PGY360: Evaporator fan is of centrifugal forward-curved blade design capable of handling total required CFM and static pressure in the low and the medium ranges. Casings are made of galvanized steel. Blower motors are of the open drip proof type (**totally enclosed types are optional**) and conform to NEMA MG standards. Fan drive is through adjustable pitch pulleys and belt driven. Blower motor is mounted on adjustable base and secured by locking device. Fan wheels shafts and bearing are selected to operate at 25% below first critical speed. Pillow block bearings are selected for at 200,000 hours average life at design operating conditions. Shaft is turned, ground and polished from solid steel. Fans and pulleys are keyed to shaft and designed for continuous operation at maximum motor horse power and fan speed. All rotating components and assemblies are statically and dynamically balanced and every unit is vibration tested before shipment from the factory.

G. Microprocessor Controller

These Packaged units are provided with a microprocessor control board incorporating the following features:

- **BALANCE LOADING OF COMPRESSORS:** The unit's electronic control automatically operates lead/lag sequence of compressors. This is to load the compressors evenly over long periods of operation. If required however, compressor-1 can also be set to always lead. In this case, compressor-1 always starts first and stops last. (Selectable through dip switch setting on control board).
- **PUMP DOWN FUNCTION:** In units equipped with pump down system, the controller provides the time delay between solenoid's opening and compressor starting to equalize the pressure in the system necessary for compressor to start-up. (Selectable through dip switch setting on control board).
- **COMPRESSOR ANTI-RECYCLING PROTECTION:** The controller has a built-in 3 minutes minimum off timer for compressor. This is for compressor protection in case of accidental manual re-set or immediate re-cycling of thermostat due to load demand.
- **COMPRESSOR LOCK-OUT FUNCTION:** If any of the unit's safety control trips due to abnormal conditions, the electronic controls locks out the compressor after a pre-determined timing preventing a re-start unless attended by a qualified service technician. The unit can be re-started through thermostat re-set after ensuring safe system conditions.
- **FAULT DIAGNOSTICS:** In case of system fault, LED's on the board emits a flashing signal indicating where the fault is. This is to guide the service technician in identifying the fault.
- **DIGITAL I/O's:** The unit's control board is compatible to operate with a DDC controller or any standard 24V a.c. thermostat commercially available.
- **SEQUENTIAL CONTROL:** With input signals from the thermostat, the motors in the equipment is started in sequential order: supply fan – condenser fan – compressor; at a pre-determined timings.

OPTIONS AND ACCESSORIES

A. Electric Heaters

Electric heaters are of the resistance open coil type and conform to the requirements of UL 573 or equivalent. Electrical characteristics, kW capacities and number of stages are as indicated. Airflow switches, fusible links and overheat limit thermostats are provided to shut-off power in case of airflow failure/overheat. Electric heater kit is installed as an externally mounted kit at the supply opening.

B. UV Flow™ Light Emitters:

The damp & dark environment inside the unit could contribute for the growth and development of hazardous bacteria and fungi. The UV flow™ concept uses emitter of Ultra Violet to simulate the effect of healthy sun radiation. This will inhibit the growth of these microorganism reducing in this manner mold related allergies and diseases. Breath safely with UV flow™.

To order UV flow™ use the kit number in tables below:

MODEL No.	PGY036	PGY048/060	PGY075	PGY090	PGY100/120	PGY150/180	PGY210/240	PGY300/360
KIT PART No.	700-391-30	700-391-23	700-391-24	700-391-25	700-391-26	700-391-27	700-391-28	700-391-31

C. Economizer

This can be provided as an option to be ordered separately, if required. Economizer utilizes cool outside air to satisfy cooling load to minimize energy consumption by maintaining poise between outside air intake and compressor operation when required as per load demand.

The Economizer is operative either by a dry bulb Outdoor Air Thermostat (OAT) or a Solid State Enthalpy Controller (EC) to sense the outdoor air temperature. The unit is equipped with an electronic control board, the **PsychroTroll™** with a sensitive feedback system carefully modulating the damper to allow correct percentage of fresh air and return air. The **PsychroTroll™** is designed to match with a separate Zamil electronic controller & thermostat.

D. Electronic Thermostat

General information: Electronic thermostat shall control one or two stage heating and cooling applications. The thermostat normally displays room temperature and mode of operation.

The temperature can be set by up/down buttons for both cooling and heating cycles. The thermostat also allows you to select continuous fan operation, or have the fan on intermittent operation with the equipment.

The thermostat is best located about 1500 mm (5 Ft.) above floor level, on a **partition wall** (not an outside wall), and should not be exposed to direct light from lamps, sun etc. It should be in return air stream, away from supply air registers/diffusers.

- Single/dual stage - Cooling & heating.
- Low voltage control - 24 VAC (nominal).
- Room temperature display - in °C or °F.
- Mode of operation - FAN/COOL/HEAT/AUTO.
- Fan mode - ON: Continuous fan operation; AUTO: Fan operates ON/OFF with compressor.
- Heating & cooling setpoint is permissible.
- Temperature set button - Up for increasing & down for decreasing temperature.
- Built-in compressor fault & clogged filter indication led lights.
- Remote sensing function as an option. Duct sensor is provided with the thermostat.

TYPICAL THERMOSTAT

Part No.	Heating Stages	Cooling Stages	Selector Switch Positions	
			Mode Switch	Fan Switch
800-652-64	1 & 2	1	OFF-HEAT/COOL	ON - AUTO
800-652-66	1 & 2	2	OFF-HEAT/COOL	ON - AUTO

E. Under Voltage Monitors (UVM)

UVM combines voltage monitoring, phase loss, reversal and imbalance. When the voltage drops below safe limits, the control relays turn off the equipment. When the device sensed such faults, it will cut-off the supply in the control circuit thereby cutting off power to the motors. The voltage monitor will re-set automatically when power is brought back to it's normal conditions.

LINE VOLTAGE RANGE	TRIP & RE-SET VOLTAGE (% OF SET POINT)					
	UNDER VOLTAGE		OVER VOLTAGE		PHASE IMBALANCE	
	TRIP	RE-SET	TRIP	RE-SET	TRIP	RE-SET
190 - 480 VAC	90%	93%	110%	107%	6%	4.5%

STANDARD FEATURES/OPTIONS/ACCESSORIES

DESCRIPTION	STANDARD FEATURES	OPTION (FACTORY INSTALLED)	ACCESSORY (FIELD INSTALLED)
Horizontal discharge	■		
Evaporator fan—belt driven ⁽¹⁾	■		
Evaporator fan motor – ODP type (TEFC type optional) ⁽²⁾	■	■	
Condenser fan – direct drive, propeller type	■		
Condenser fan motor – totally enclosed air-over type	■		
Electric heaters		■	■
Filter drier	■		
Filter, aluminum	■		
Bag filter*		■	
Compressor overload protection	■		
Low pressure switch	■		
High pressure switch	■		
Cooling & heating thermostat		■	
Condenser fan guard	■		
Condenser coil guard	■		
Manual outside air damper ⁽³⁾		■	■
Economizer		■	■
Enthalpy sensor			■

NOTES:

(1) Direct drive motors for PGY036 to PGY060.

(2) TEFC motors are available for PGY075 to PGY360.

(3) Manual outside air damper is available for PGY075 to PGY360.

* Unit specific - Check with factory.

PHYSICAL DATA

(DIRECT DRIVE MOTOR)

MODEL NUMBER		PGY036	PGY048	PGY060
GROSS CAPACITY, TONS (kW)		3 (10.5)	4.5 (15.9)	5.3 (18.6)
EER		9.8	9.8	9.6
COMPRESSOR	Quantity	1	1	1
	Oil (oz)	42	42	42
	Refrigerant	R-410A		
CONDENSER FAN	Type/Drive	Propeller/Direct		
	Quantity - Diameter (inch)	1 - 24	1 - 26	1 - 26
	Nominal CFM (L/S)	3000 (1415)	5000 (2360)	5000 (2360)
	Motor HP - RPM	1/3 - 1075	1/3 - 850	1/3 - 850
CONDENSER COIL	Type	Inner Grooved Tubes and Enhanced Fins		
	Tube dia. - Rows - Fins per inch	3/8-2-16	3/8-2-16	3/8-2-16
	Total face area, Sq. ft. (Sq. m.)	11.55 (1.1)	16 (1.5)	16 (1.5)
EVAPORATOR BLOWER	Type	Centrifugal		
	Size (inch)	10 x 8	10 x 10	10 x 10
	Drive type	Direct Drive		
	Nominal CFM (L/S)	1000 (472)	1500 (708)	1650 (779)
	Motor HP (Standard)	0.5	0.75	0.75
EVAPORATOR COIL	Type	Inner Grooved Tubes and Enhanced Fins		
	Tube dia. - Rows - Fins per inch	3/8-3-14	3/8-3-14	3/8-3-14
	Total face area, Sq. ft. (Sq. m.)	5.4 (0.5)	7 (0.65)	7 (0.65)
HIGH PRESSURE SWITCH	Open	650 ± 10 PSIG		
	Close	500 ± 22 PSIG		
LOW PRESSURE SWITCH	Open	50 ± 7 PSIG		
	Close	90 ± 7 PSIG		
RETURN AIR FILTERS	Quantity	2	4	4
	Size (inch)	16 x 25	16.5 x 18-3/8	16.5 x 18-3/8
SHIPPING WEIGHT	Kgs.	213	328	328

NOTE: Direct drive motors have single speed connection only. Factory set at medium speed.

PHYSICAL DATA

MODEL NUMBER		PGY075	PGY090	PGY100	PGY120	PGY150	PGY180	PGY210	PGY240	PGY300	PGY360
GROSS CAPACITY, TONS (kW)		6.5(22.9)	7.8(27.2)	9.1(31.9)	10.8(37.7)	12.9(45.2)	15.6(54.5)	18.5(65)	22.3(78.3)	26.2(91.7)	31.5(110.4)
EER		10.1	9.6	10.1	10.2	10.3	9.6	10.1	10	10	9.8
COMPRESSOR	Quantity	1	2	2	2	2	2	2	2	2	2
	Oil (oz)	60	42 x 2	42 x 2	42 x 2	60 x 2	60 x 2	110 x 2	110 x 2	110 x 2	110 x 2
	Refrigerant	R-410A									
CONDENSER FAN	Type/Drive	Propeller/Direct									
	Qty. - Diameter (inch)	1 - 26				2 - 26	2 - 26	2 - 30	2 - 30	2 - 32	2 - 32
	Nominal CFM (L/S)	6000 (2834)	6600 (3117)			11000(5190)	11000(5190)	15000(7080)	15000(7080)	16000(7558)	16000(7558)
	Motor HP - RPM	3/4 - 1140						1.5 - 1140		2.7 - 1100	
CONDENSER COIL	Type	Inner Grooved Tubes and Enhanced Fins									
	Tube dia. - Rows - Fins per inch	3/8-2-16			3/8-3-16	3/8-2-14	3/8-3-14	3/8-2-14	3/8-3-14	3/8-3-14	3/8-3-14
	Total face area, Sq. ft. (Sq. m.)	16 (1.5)	20 (1.86)			30 (2.78)		38 (3.53)		48 (4)	
EVAPORATOR BLOWER	Type	Centrifugal									
	Size (inch)	12 x 12	15 x 15					18 x 18		20 x 18	
	Drive type	Belt									
	Nominal CFM (L/S)	1900 (897)	2400 (1134)	2700 (1275)	3200 (1511)	3800 (1795)	4800 (2267)	5800 (2740)	6000 (2834)	8000 (3779)	9600 (4535)
	Motor HP - Std. / Alt	1.5/2	2/3	2/3	3	3/5	5/7.5	5/7.5	7.5	7.5/10	10/15
	Motor Frame (NEMA) Std./Alt.	56/56				56/184T	184T/213T		213T/215T		215T/254T
	Fan RPM range	650-1270	600-1160	630-1210	650-1220	540-1075	600-1110	530-1020	570-1030	610-1020	610-990
	Factory setting full turns open	3	3	3	3	3	3	3	3	3	3
EVAPORATOR COIL	Type	Inner Grooved Tubes and Enhanced Fins									
	Tube dia. - Rows - Fins per inch	3/8-3-14			3/8-4-14	3/8-3-14		3/8-4-14		3/8-4-14	
	Total face area, Sq. ft. (Sq. m.)	9(0.84)	10(0.93)	12.5(1.16)	12.5(1.16)	16(1.5)	19.5(1.81)	22 (2.04)	22(2.04)	27(2.5)	27(2.5)
HIGH PRESSURE SWITCH	Open	650 ± 10 PSIG									
	Close	500 ± 22 PSIG									
LOW PRESSURE SWITCH	Open	50 ± 7 PSIG									
	Close	90 ± 7 PSIG									
RETURN AIR FILTERS	Qty.	4	4			6		8			
	Size (inch)	16.5 x 18-3/8	18 x 24			18 x 18 (1) 18 x 24 (3) 24 x 24 (2)		12 x 24 (2) 24 x 24 (6)			
SHIPPING WEIGHT	Kgs.	344	441	445	450	800	840	975	1025	1076	1325

SELECTION PROCEDURE

1. Determine cooling and heating capacity requirements at design conditions

Data:

Condenser entering air temperature	: 95°F
Evaporator entering air temperature	: 80°F DB / 67°F WB
Evaporator airflow	: 6000 CFM
Required cooling capacity	: 225,000 BTUH
Sensible heat capacity	: 148,000 BTUH
Required heating capacity	: 20 kW
External static pressure	: 1.23 INCH WG.
Power supply (V-Ph-Hz)	: 230-3-60

2. Unit selection based on required cooling capacity

Enter cooling capacity performance data at condenser entering air temp. at 95°F and evaporator entering air temp. 80°F DB, 67°F WB, 6000 CFM airflow. The PGY240 unit will give 268,500 BTUH cooling capacity (gross) and 178,930 BTUH sensible heat capacity (gross).

3. Electric heater selection

Heating capacity required = 20 kW.

Enter electric heating table for PGY240 at 230-3-60 power supply.
20 kW heater at 230 volts satisfies the required heating.

4. Determine fan speed and power requirements at design conditions

Before entering the fan performance tables, calculate the summation of external static pressure for the required components as follows.

External static pressure	: 1.23 INCH WG.
Electric heater	: 0.17 INCH WG.
	<u>1.40 INCH WG.</u>

Enter fan performance table for PGY240 model. For 6000 CFM and external static pressure of 1.4 INCH WG, it requires 878 RPM and 3.49 brake horse power (BHP) wherein the standard motor will meet job requirements.

5. Determine input power to motor

Use fan motor efficiency table.

$$\text{Blower motor watts} = \frac{\text{BHP} \times 746 \text{ watts}}{\text{Motor efficiency}} = \frac{3.49 \times 746}{0.81} = 3214 \text{ watts.}$$

6. Determine net capacities

Above capacities are gross and do not include blower motor heat gain.

Determine net capacities as follows:

$$\begin{aligned}\text{Net cooling capacity} &= \text{Gross cooling capacity} - \text{blower motor heat} \\ &= 268,500 - (3214 \text{ WATTS} \times 3.413 \text{ BTUH/WATTS}) = 257,531 \text{ BTUH} \\ \text{Net sensible capacity} &= 178,930 - (3214 \text{ WATTS} \times 3.413 \text{ BTUH/WATTS}) = 167,961 \text{ BTUH}\end{aligned}$$

7. Altitude correction factors for cooling capacity

ALTITUDE, FT.		2000	4000	6000	8000	10000
FACTOR	Total capacity	0.98	0.96	0.93	0.90	0.88
	Sensible capacity	0.93	0.86	0.80	0.75	0.70

COOLING CAPACITIES

Model No.: PGY036

CONDENSER ENTERING AIR TEMP. (°F)		EVAPORATOR AIRFLOW, CFM/DR								
		750/0.078			875/0.087			1000/0.096		
		EVAPORATOR ENTERING AIR, WBE (°F)								
		62	67	72	62	67	72	62	67	72
85	TC	35.58	38.72	42.1	36.73	39.93	43.25	37.7	40.92	44.1
	SC	27.23	23	19.14	29.35	24.56	20.06	31.46	26.04	20.88
	kW	3.2	3.23	3.25	3.21	3.24	3.25	3.22	3.24	3.27
95	TC	33.72	36.64	39.79	34.75	37.73	40.77	35.61	38.62	41.56
	SC	26.31	22.17	18.22	28.43	23.64	19.14	30.54	25.12	19.96
	kW	3.44	3.58	3.61	3.56	3.59	3.62	3.57	3.61	3.63
105	TC	31.74	34.48	37.39	32.65	35.47	38.26	33.44	36.24	38.91
	SC	25.39	21.25	17.3	27.51	22.72	18.22	29.62	24.2	19.04
	kW	3.68	3.74	3.83	3.74	3.84	3.97	3.82	3.94	4.03
115	TC	29.05	31.58	34.17	29.87	32.41	34.91	30.54	33.09	35.46
	SC	24.47	20.33	16.38	26.59	21.8	17.3	28.7	23.28	18.12
	kW	3.87	3.9	3.92	3.88	3.91	3.93	3.88	3.92	3.94
125	TC	26.95	29.34	31.65	27.67	30.05	32.26	28.28	30.59	32.69
	SC	23.55	19.41	15.46	25.67	20.88	16.38	26.59	22.36	17.2
	kW	4.11	4.24	4.35	4.16	4.26	4.34	4.29	4.37	4.38

Model No.: PGY048

CONDENSER ENTERING AIR TEMP. (°F)		EVAPORATOR AIRFLOW, CFM/DR								
		1350/0.1			1500/0.111			1650/0.119		
		EVAPORATOR ENTERING AIR, WBE (°F)								
		62	67	72	62	67	72	62	67	72
85	TC	51.88	56.56	61.64	52.97	57.74	62.73	53.97	58.74	63.7
	SC	43.34	35.99	29.2	45.85	37.85	30.32	48.36	39.62	31.43
	kW	4.84	4.86	4.89	4.85	4.93	5.18	4.95	5.08	5.25
95	TC	49.52	53.97	58.68	50.54	55.06	59.69	51.43	55.94	60.43
	SC	42.32	34.97	28.18	44.83	36.83	29.2	47.24	38.5	30.23
	kW	4.92	5.09	5.12	5.02	5.19	5.27	5.07	5.28	5.36
105	TC	46.8	51.05	55.37	47.72	52	56.13	48.55	52.78	56.8
	SC	41.11	33.85	26.97	43.62	35.62	27.99	46.04	37.39	29.02
	kW	5.25	5.36	5.42	5.35	5.47	5.53	5.44	5.56	5.64
115	TC	43.82	47.78	51.55	44.65	48.56	52.15	45.37	49.28	52.69
	SC	39.8	32.55	25.67	42.32	34.32	26.69	42.22	36.08	27.71
	kW	5.54	5.65	5.85	5.65	5.76	5.96	5.76	5.85	6.06
125	TC	40.46	44.11	47.28	41.19	44.74	47.72	41.86	45.29	48.02
	SC	38.32	31.16	24.18	38.32	32.92	25.2	38.97	34.6	26.13
	kW	5.72	5.85	5.97	5.89	5.99	6.09	5.96	6.08	6.18

Model No.: PGY060

CONDENSER ENTERING AIR TEMP. (°F)		EVAPORATOR AIRFLOW, CFM/DR								
		1450/0.1			1650/0.119			1875/0.132		
		EVAPORATOR ENTERING AIR, WBE (°F)								
		62	67	72	62	67	72	62	67	72
85	TC	60.68	65.86	71.73	62.29	67.65	73.53	63.9	69.31	75.24
	SC	49.69	41.61	34.11	53.11	44.08	35.63	56.91	46.74	37.24
	kW	5.39	5.42	5.47	5.4	5.43	5.48	5.41	5.45	5.49
95	TC	57.46	62.47	68.05	58.98	64.07	69.63	60.45	65.64	71.13
	SC	48.17	40.19	32.68	51.59	42.56	34.2	55.39	45.32	35.82
	kW	5.68	5.73	5.78	5.69	5.74	5.79	5.7	5.75	5.8
105	TC	54.12	58.9	64.07	55.52	60.43	65.44	56.85	61.82	66.69
	SC	46.65	38.67	31.16	50.07	41.14	32.68	53.77	43.8	34.3
	kW	6.04	6.09	6.13	6.05	6.11	6.14	6.07	6.12	6.15
115	TC	50.72	55.19	59.78	52	56.5	60.92	53.17	57.67	61.86
	SC	45.13	37.15	29.64	48.55	39.62	31.07	50.54	42.28	32.68
	kW	6.46	6.51	6.55	6.52	6.62	6.7	6.61	6.71	6.79
125	TC	47.12	51.2	55.13	48.2	52.22	55.9	49.25	53.14	56.63
	SC	43.51	35.63	28.03	45.79	38	29.36	46.74	40.47	30.88
	kW	6.71	6.92	7.01	6.82	6.99	7.12	6.93	7.08	7.25

TC – Total Capacity (1000 Btu/h) Gross

kW – Total unit power input

DBE – Dry Bulb Temp. (°F) of Air Entering Coil

DBL – Dry Bulb Temp. (°F) of Air Leaving Coil

SC – Sensible Heat Capacity (1000 Btu/h) Gross

DR – Wet Bulb depression ratio

WBE – Wet Bulb Temp. (°F) of Air Entering Coil

WBL – Wet Bulb Temp. (°F) of Air Leaving Coil

NOTES: 1. Direct interpolation is permissible – Do not extrapolate.

2. Capacities above are based on DBE = 80°F. For higher or lower DBE, add following Correction Factor to Sensible Capacity = 1.08 x CFM (1 – DR) (DBE – 80).

3. To calculate leaving conditions, follow this procedure: DBL = DBE – (Sensible Capacity (Btu/h) / 1.08 x CFM); WBL = WBE + [DR (DBE – WBE)].

4. Total unit power input at 0.15 ESP for PGY036/PGY048 & 0.2 ESP for PGY060.

COOLING CAPACITIES

Model No.: PGY075

CONDENSER ENTERING AIR TEMP. (°F)		EVAPORATOR AIRFLOW, CFM/DR								
		1500/0.09			1900/0.11			2400/0.131		
		EVAPORATOR ENTERING AIR, WBE (°F)								
		62	67	72	62	67	72	62	67	72
85	TC	72.94	79.2	86.4	76.68	82.94	90.58	80.16	87.01	94.34
	SC	58.01	49.1	40.89	65.34	54.15	44.06	74.05	60.59	48.02
	kW	6.31	6.39	6.49	6.35	6.44	6.57	6.4	6.5	6.64
95	TC	69.11	74.94	82.15	72.58	79.03	85.86	75.83	82.39	89.02
	SC	56.13	47.22	39.11	63.46	52.57	42.37	72.07	58.71	46.13
	kW	6.88	6.97	7.09	6.93	7.04	7.14	6.98	7.09	7.19
105	TC	65.29	71.19	77.65	68.57	74.63	80.89	71.51	77.66	83.38
	SC	54.25	45.54	37.42	61.58	50.79	40.49	68.71	56.93	44.15
	kW	7.41	7.51	7.65	7.59	7.7	7.79	7.64	7.75	7.81
115	TC	61.46	67.05	72.88	64.39	70.05	75.44	67.07	72.62	77.32
	SC	52.47	43.76	35.54	59.7	48.91	38.51	64.45	55.04	42.08
	kW	8.09	8.21	8.4	8.36	8.46	8.52	8.41	8.49	8.59
125	TC	57.56	62.59	67.65	60.13	65.15	69.57	62.42	67.15	70.84
	SC	50.69	41.88	33.56	57.92	47.03	36.43	59.99	52.97	39.9
	kW	8.85	8.97	9.04	9.21	9.31	9.34	9.25	9.33	9.42

Model No.: PGY090

CONDENSER ENTERING AIR TEMP. (°F)		EVAPORATOR AIRFLOW, CFM/DR								
		1900/0.09			2400/0.108			3000/0.128		
		EVAPORATOR ENTERING AIR, WBE (°F)								
		62	67	72	62	67	72	62	67	72
85	TC	86.64	94.35	103.16	91.1	99.23	107.95	95.06	103.48	111.98
	SC	70.7	59.5	49.2	79.8	66.1	53.2	90.1	73.6	57.8
	kW	8.03	8.08	8.15	8.05	8.11	8.2	8.08	8.15	8.25
95	TC	82.16	89.65	97.98	86.29	94.02	102.24	90	97.9	105.78
	SC	68.5	57.4	47.2	77.6	64	51.1	88	71.4	55.6
	kW	8.84	8.91	8.99	8.87	8.95	9.02	8.9	8.99	9.05
105	TC	77.52	84.61	92.39	81.28	88.62	96.12	84.67	92.07	99.18
	SC	66.3	55.3	45	75.4	61.8	48.9	81.3	69.2	53.4
	kW	9.42	9.58	9.64	9.83	9.91	9.96	9.87	9.93	9.97
115	TC	72.54	79.32	86.54	75.95	82.78	89.79	78.94	85.83	92.2
	SC	64	53.1	42.8	73	59.5	46.7	75.8	66.8	51
	kW	10.21	10.42	10.6	10.72	10.78	10.82	10.75	10.8	10.95
125	TC	67.3	73.68	80.27	70.3	76.73	82.83	73.06	79.33	84.81
	SC	61.6	50.8	40.5	67.5	57.1	44.3	70.2	64.4	48.6
	kW	11.01	11.15	11.27	11.32	11.64	11.89	11.64	11.81	12.15

Model No.: PGY100

CONDENSER ENTERING AIR TEMP. (°F)		EVAPORATOR AIRFLOW, CFM/DR								
		2200/0.09			2700/0.109			3400/0.13		
		EVAPORATOR ENTERING AIR, WBE (°F)								
		62	67	72	62	67	72	62	67	72
85	TC	101.99	111.11	121.41	106.51	115.98	126.23	111.39	121	130.87
	SC	82.4	69.4	57.4	91.6	76	61.4	103.9	84.8	66.7
	kW	9.14	9.21	9.26	9.17	9.24	9.28	9.2	9.26	9.28
95	TC	97.06	105.9	115.45	101.3	110.31	119.75	105.75	114.93	123.63
	SC	80	67.1	55	89.2	73.7	59	101.5	82.5	64.2
	kW	9.79	10.09	10.23	10.02	10.2	10.29	10.16	10.38	10.56
105	TC	91.63	100	108.81	95.37	103.93	112.32	99.49	107.94	115.47
	SC	77.5	64.7	52.5	86.5	71.1	56.4	94.7	79.8	61.4
	kW	9.92	10.32	10.72	10.62	10.92	11.14	11.22	11.31	11.35
115	TC	85.51	93.33	101.29	88.94	96.81	104.05	92.47	100.05	106.42
	SC	74.6	61.9	49.7	83.8	68.3	53.5	88	76.8	58.4
	kW	10.54	10.8	10.98	10.78	11.02	11.36	11.34	11.56	11.82
125	TC	78.8	85.95	92.69	81.79	88.86	94.7	84.84	91.39	96.01
	SC	71.6	58.9	46.6	77.8	65.3	50.2	80.7	73.6	55
	kW	11.15	11.46	11.76	11.67	11.89	12.18	11.82	12.15	12.47

TC – Total Capacity (1000 Btu/h) Gross
SC – Sensible Heat Capacity (1000 Btu/h) Gross

kW – Total unit power input
DR – Wet Bulb depression ratio

DBE – Dry Bulb Temp. (°F) of Air Entering Coil
WBE – Wet Bulb Temp. (°F) of Air Entering Coil

DBL – Dry Bulb Temp. (°F) of Air Leaving Coil
WBL – Wet Bulb Temp. (°F) of Air Leaving Coil

NOTES: 1. Direct interpolation is permissible – Do not extrapolate.

2. Capacities above are based on DBE = 80°F. For higher or lower DBE, add following Correction Factor to Sensible Capacity = 1.08 x CFM (1 – DR) (DBE – 80).

3. To calculate leaving conditions, follow this procedure: DBL = DBE – (Sensible Capacity (Btu/h) / 1.08 x CFM); WBL = DBE – DR (DBE – WBE).

4. Total unit power input based on nominal CFM & 0.25 ESP.

COOLING CAPACITIES

Model No.: PGY120

CONDENSER ENTERING AIR TEMP. (°F)		EVAPORATOR AIRFLOW, CFM/DR								
		2600/0.092			3200/0.105			4000/0.124		
		EVAPORATOR ENTERING AIR, WBE (°F)								
		62	67	72	62	67	72	62	67	72
85	TC	121.35	131.56	143.12	126.86	137.62	148.98	132.52	143.35	154.3
	SC	100.09	84.25	69.7	111.47	92.57	74.65	126.13	102.86	80.88
	kW	10.39	10.56	10.76	10.47	10.66	10.88	10.56	10.76	10.99
95	TC	114.74	124.64	135.35	119.82	129.93	140.24	125.1	135.11	144.57
	SC	96.82	81.18	66.53	108.11	89.2	71.28	122.86	99.59	77.42
	kW	11.47	11.67	11.89	11.56	11.77	11.98	11.66	11.88	12.06
105	TC	107.89	117.17	126.81	112.5	121.82	130.96	117.16	126.19	134.16
	SC	93.46	77.91	63.16	104.74	85.83	67.91	114.84	96.03	73.76
	kW	12.15	12.43	12.81	12.86	13.07	13.22	12.95	13.15	13.23
115	TC	102.75	111.45	119.98	106.89	115.45	123.15	110.9	119.1	125.21
	SC	91.81	75.95	60.8	103.22	84.03	65.45	108.68	94.23	71.21
	kW	12.9	13.06	13.15	12.97	13.11	13.18	13.04	13.15	13.2
125	TC	94.97	102.8	109.8	98.58	105.93	111.87	101.93	108.77	113.02
	SC	88.17	72.32	56.96	96.66	80.19	61.41	99.89	90.29	67.06
	kW	13.78	14.11	14.52	14.28	14.48	14.9	14.52	14.98	15.48

Model No.: PGY150

CONDENSER ENTERING AIR TEMP. (°F)		EVAPORATOR AIRFLOW, CFM/DR								
		3000/0.098			3800/0.119			4800/0.143		
		EVAPORATOR ENTERING AIR, WBE (°F)								
		62	67	72	62	67	72	62	67	72
85	TC	145.66	157.37	171.12	152.26	164.73	179.09	158.51	171.45	186.63
	SC	118.56	99.08	81.32	133.75	110.1	88.28	151.94	123.16	96.73
	kW	12.02	12.26	12.52	12.13	12.39	12.68	12.25	12.53	12.84
95	TC	137.32	148.64	161.88	143.52	155.3	169	149.31	161.6	175.92
	SC	114.49	95.44	77.79	129.79	106.36	84.64	142.31	119.41	92.98
	kW	13.12	13.37	13.62	13.24	13.5	13.74	13.36	13.61	13.83
105	TC	128.69	139.49	151.91	134.23	145.52	158.02	139.43	151.07	164.55
	SC	110.53	91.59	74.04	125.73	102.51	80.79	132.89	115.45	89.24
	kW	14.04	14.35	14.65	14.51	14.74	14.92	14.61	14.84	14.97
115	TC	119.49	129.61	141.38	124.4	135	147.2	129.06	139.63	152.71
	SC	106.36	87.53	70.19	118.56	98.44	77.04	123.05	111.28	85.28
	kW	15.18	15.67	15.94	15.92	16.14	16.29	16.02	16.21	16.33
125	TC	109.71	119.32	130.3	114.02	123.95	135.31	118.02	128.41	140.2
	SC	102.08	83.46	66.23	108.71	94.16	72.97	112.46	107.21	81.21
	kW	16.58	16.85	17.42	17.48	17.7	17.91	17.56	17.78	17.98

Model No.: PGY180

CONDENSER ENTERING AIR TEMP. (°F)		EVAPORATOR AIRFLOW, CFM/DR								
		3800/0.135			4800/0.177			6000/0.22		
		EVAPORATOR ENTERING AIR, WBE (°F)								
		62	67	72	62	67	72	62	67	72
85	TC	177	190.38	206.66	184.96	199.31	216.31	192.27	207.48	225.01
	SC	145.86	121.99	100.47	163.81	135.05	108.63	184.52	150.04	118.12
	kW	16.48	16.74	17.02	16.62	16.89	17.2	16.74	17.03	17.35
95	TC	167.54	180.31	195.47	174.72	188.27	204.07	181.34	195.54	212.09
	SC	141.17	117.5	95.98	159.02	130.46	104.04	179.72	145.35	113.53
	kW	17.89	18.18	18.49	18.04	18.34	18.66	18.16	18.49	18.82
105	TC	157.23	169.38	183.95	163.84	176.59	191.83	169.87	183.33	199.17
	SC	136.17	112.81	91.49	154.12	125.66	99.65	166.46	140.56	109.14
	kW	18.82	19.21	19.53	19.66	19.98	20.32	19.79	20.13	20.48
115	TC	146.43	158.12	172.08	152.32	164.71	179.17	157.6	170.6	185.71
	SC	131.07	108.02	86.9	148.92	120.87	95.06	154.43	135.66	104.45
	kW	20.52	20.83	21.16	21.48	21.82	22.18	21.62	21.97	22.33
125	TC	134.95	146.52	160.05	140.37	152.61	166.5	145.33	157.87	172.52
	SC	125.77	103.22	82.52	137.6	116.18	90.58	142.39	130.87	99.96
	kW	21.83	22.16	22.49	22.39	22.72	23.08	23.64	24.01	24.38

TC – Total Capacity (1000 Btuh) Gross

kW – Total unit power input

DBE – Dry Bulb Temp. (°F) of Air Entering Coil

DBL – Dry Bulb Temp. (°F) of Air Leaving Coil

SC – Sensible Heat Capacity (1000 Btuh) Gross

DR – Wet Bulb depression ratio

WBE – Wet Bulb Temp. (°F) of Air Entering Coil

WBL – Wet Bulb Temp. (°F) of Air Leaving Coil

NOTES: 1. Direct interpolation is permissible – Do not extrapolate.

2. Capacities above are based on DBE = 80°F. For higher or lower DBE, add following Correction Factor to Sensible Capacity = 1.08 x CFM (1 – DR) (DBE – 80).

3. To calculate leaving conditions, follow this procedure: DBL = DBE – (Sensible Capacity (Btuh) / 1.08 x CFM); WBL = DBE – DR (DBE – WBE).

4. Total unit power input based on nominal CFM & 0.35 ESP.

COOLING CAPACITIES

Model No.: PGY210

CONDENSER ENTERING AIR TEMP. (°F)		EVAPORATOR AIRFLOW, CFM/DR								
		4800/0.099			5800/0.117			7000/0.136		
		EVAPORATOR ENTERING AIR, WBE (°F)								
		62	67	72	62	67	72	62	67	72
85	TC	212.51	228.54	246.8	219.73	236.4	255.06	226.49	243.65	262.64
	SC	179.11	148.51	120.36	197.88	162.08	128.72	219.81	177.68	138.52
	kW	17.99	18.37	18.77	18.14	18.53	18.94	18.28	18.69	19.1
95	TC	199.68	214.91	232.81	206.33	222.28	240.76	212.53	228.81	247.89
	SC	172.99	142.7	114.95	191.86	156.37	123.52	204.31	171.97	133.42
	kW	19.65	20.07	20.51	19.81	20.24	20.7	19.96	20.41	20.88
105	TC	186.41	201.05	218.18	192.39	207.64	225.42	197.94	213.67	232.21
	SC	166.87	136.99	109.55	185.74	150.55	118.12	190.23	166.16	128.01
	kW	20.36	20.76	21.19	21.31	21.75	22.19	21.89	22.34	22.78
115	TC	172.71	186.56	202.48	177.93	192.2	208.78	182.72	197.57	214.64
	SC	160.65	131.17	103.84	171.05	144.53	112.3	175.64	160.14	122.09
	kW	21.47	21.86	22.17	21.6	21.98	22.26	21.73	22.08	22.32
125	TC	158.35	170.97	185.27	162.96	175.99	190.32	167.17	180.52	194.86
	SC	154.33	124.95	97.72	156.67	138.41	106.08	160.65	154.02	115.67
	kW	22.67	23.51	24.16	23.78	24.03	24.78	24.58	25.12	26.02

Model No.: PGY240

CONDENSER ENTERING AIR TEMP. (°F)		EVAPORATOR AIRFLOW, CFM/DR								
		5000/0.084			6000/0.095			7500/0.112		
		EVAPORATOR ENTERING AIR, WBE (°F)								
		62	67	72	62	67	72	62	67	72
85	TC	255.76	275.02	298.1	265.02	285.23	309.53	276.06	297.7	323.12
	SC	205.11	171.61	141.3	224.72	185.82	150.41	253.45	206.7	163.66
	kW	22.33	22.71	23.13	22.5	22.9	23.33	22.7	23.11	23.56
95	TC	240.08	258.95	280.96	248.78	268.5	291.48	258.96	279.63	303.74
	SC	197.48	164.62	134.51	217.19	178.93	143.74	246.03	199.7	156.88
	kW	24.31	24.7	25.15	24.46	24.89	25.37	24.66	25.12	25.63
105	TC	223.7	241.47	262.4	231.4	250.07	271.46	240.44	259.78	282.24
	SC	189.63	157.2	127.52	209.35	171.51	136.42	229.17	191.97	149.46
	kW	25.82	26.22	26.69	26.74	27.19	27.73	26.94	27.42	28.02
115	TC	206.13	222.81	241.96	212.87	230.22	249.76	220.5	238.51	258.99
	SC	181.58	149.57	119.89	201.19	163.66	128.68	210.09	183.91	141.62
	kW	26.54	26.92	27.42	26.67	27.1	27.65	26.83	27.32	27.94
125	TC	187.13	202.25	219.65	192.92	208.39	226.36	199.48	215.48	233.98
	SC	173.1	141.19	111.83	183.91	155.18	120.63	190.06	175.43	133.35
	kW	28.6	29	29.53	29.3	29.75	30.37	29.45	29.97	30.68

Model No.: PGY300

CONDENSER ENTERING AIR TEMP. (°F)		EVAPORATOR AIRFLOW, CFM/DR								
		7000/0.099			8000/0.117			9600/0.135		
		EVAPORATOR ENTERING AIR, WBE (°F)								
		62	67	72	62	67	72	62	67	72
85	TC	305.40	327.64	353.47	312.33	335.23	361.49	321.38	344.94	372.15
	SC	257.16	211.36	169.28	276.34	225.14	177.87	298.07	246.56	191.44
	KW	24.61	25.92	27.53	25.55	27.16	27.67	26.81	28.18	29.79
95	TC	286.27	307.60	333.54	292.42	314.63	341.41	300.78	323.96	352.22
	SC	248.68	203.41	162.18	267.65	217.30	170.98	278.99	238.82	184.86
	KW	26.55	27.88	29.39	27.55	29.15	29.46	28.85	30.16	31.58
105	TC	266.46	287.54	313.60	272.12	294.04	321.33	279.70	302.98	331.83
	SC	240.09	195.68	155.29	252.39	209.46	164.19	259.38	231.19	178.08
	KW	28.70	30.02	31.55	29.72	31.35	31.60	31.10	32.40	33.87
115	TC	250.36	272.27	299.25	255.92	278.74	307.01	263.23	287.52	317.47
	SC	237.73	193.37	152.71	239.80	207.75	162.08	246.67	230.21	176.58
	KW	29.26	30.56	32.22	30.30	31.93	33.03	31.67	33.02	34.74
125	TC	229.84	252.20	279.30	235.25	258.18	286.57	241.77	266.65	296.72
	SC	215.38	185.74	145.95	220.40	200.12	155.33	226.50	222.80	170.04
	KW	31.62	33.10	35.22	32.73	34.62	35.46	34.21	35.89	38.31

TC – Total Capacity (1000 Btuh) Gross

kW – Total unit power input

DBE – Dry Bulb Temp. (°F) of Air Entering Coil

DBL – Dry Bulb Temp. (°F) of Air Leaving Coil

SC – Sensible Heat Capacity (1000 Btuh) Gross

DR – Wet Bulb depression ratio

WBE – Wet Bulb Temp. (°F) of Air Entering Coil

WBL – Wet Bulb Temp. (°F) of Air Leaving Coil

NOTES: 1. Direct interpolation is permissible – Do not extrapolate.

2. Capacities above are based on DBE = 80°F. For higher or lower DBE, add following Correction Factor to Sensible Capacity = 1.08 x CFM (1 – DR) (DBE – 80).

3. To calculate leaving conditions, follow this procedure: DBL = DBE – (Sensible Capacity (Btuh) / 1.08 x CFM); WBL = DBE – DR (DBE – WBE).

4. Total unit power input based on nominal CFM & 0.4 ESP.

COOLING CAPACITIES

Model No.: PGY360

CONDENSER ENTERING AIR TEMP. (°F)		EVAPORATOR AIRFLOW, CFM/DR								
		8200/0.054			9600/0.066			11250/0.078		
		EVAPORATOR ENTERING AIR, WBE (°F)								
		62	67	72	62	67	72	62	67	72
85	TC	366.3	391.82	423.79	376.39	403.33	436.96	386.62	414.71	450.2
	SC	291.89	240.58	194.22	316.84	258.66	205.94	345.82	279.57	219.57
	kW	32.82	33.7	34.68	33.13	34.04	35.09	33.43	34.39	35.49
95	TC	343.11	367.97	398.9	352.46	378.6	411.03	361.81	388.95	422.99
	SC	281.69	231.29	185.54	306.74	249.47	197.25	325.52	270.18	210.69
	kW	35.46	36.35	37.29	35.76	36.68	37.64	36.05	36.99	37.97
105	TC	319.53	343.33	372.08	328.08	352.97	382.35	335.93	362.13	392.59
	SC	271.69	221.9	176.35	296.84	240.08	187.76	302.29	260.78	200.99
	kW	38.4	39.27	40.14	38.68	39.56	40.42	38.94	39.84	40.68
115	TC	318.88	342.66	369.29	327.04	351.15	377.68	334.83	359.26	386.05
	SC	269.05	218.19	170.98	280.07	236.6	182.31	286.73	257.61	195.52
	kW	41.61	42.43	43.17	41.86	42.67	43.39	42.1	42.9	43.58
125	TC	291.68	311.35	328.49	298.17	316.97	331.89	304.5	320.11	334.69
	SC	249.81	207.38	158.39	255.42	225.16	168.58	260.83	227.66	180.54
	kW	45.08	45.8	46.37	45.29	45.98	46.49	45.48	46.02	46.58

TC – Total Capacity (1000 Btuh) Gross

SC – Sensible Heat Capacity (1000 Btuh) Gross

kW – Total unit power input

DR – Wet Bulb depression ratio

DBE – Dry Bulb Temp. (°F) of Air Entering Coil

WBE – Wet Bulb Temp. (°F) of Air Entering Coil

DBL – Dry Bulb Temp. (°F) of Air Leaving Coil

WBL – Wet Bulb Temp. (°F) of Air Leaving Coil

NOTES: 1. Direct interpolation is permissible – Do not extrapolate.

2. Capacities above are based on DBE = 80°F. For higher or lower DBE, add following Correction Factor to Sensible Capacity = 1.08 x CFM (1 – DR) (DBE – 80).

3. To calculate leaving conditions, follow this procedure: DBL = DBE – (Sensible Capacity (Btuh) / 1.08 x CFM); WBL = DBL – DR (DBE – WBE).

4. Total unit power input based on nominal CFM & 0.45 ESP.

ELECTRICAL DATA

MODEL No.: PGY036

POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		FM	COMPRES-SOR		BLOWER MOTOR		ELECTRIC HEATER		MCA	MOCP
	MIN.	MAX.	FLA	RLA	LRA	HP	FLA	kW	FLA		
230-1-60	207	253	1.6	20	112	0.5	1.8	—	—	28.4	50
								5	21.7	28.4	50
								7.5	32.6	43	50
								10*	43.5	56.6	60
230-3-60	207	253	1.6	15.1	88	0.5	1.8	—	—	22.3	35
								5	12.6	22.3	35
								7.5	18.8	25.8	35
								10*	25.1	33.6	35
380/400-3-60** (4 WIRE)	342	418	1.6	8.5	51.8	0.5	1.8	—	—	14	20
								5	7.6	14	20
								7.5	11.4	16.5	20
								10*	15.2	21.3	25
460-3-60	414	506	0.8	6.6	44	0.5	0.9	—	—	9.9	15
								5	6.3	9.9	15
								7.5	9.4	12.8	15
								10*	12.6	16.8	20

MODEL No.: PGY048

POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		FM	COMPRES-SOR		BLOWER MOTOR		ELECTRIC HEATER		MCA	MOCP
	MIN.	MAX.	FLA	RLA	LRA	HP	FLA	kW	FLA		
230-1-60	207	253	3.6	27.9	134	0.75	4.2	—	—	42.7	70
								5	21.7	42.7	70
								7.5	32.6	46.6	70
								10*	43.5	60.3	70
230-3-60	207	253	3.6	17.7	110	0.75	4.2	—	—	29.9	45
								5	12.6	29.9	45
								7.5	18.8	29.9	45
								10*	25.1	37.3	45
380/400-3-60** (4 WIRE)	342	418	3.6	8.9	66	0.75	4.2	—	—	18.9	25
								5	7.6	18.9	25
								7.5	11.4	19.5	25
								10*	15.2	24.3	25
460-3-60	414	506	1.3	7.9	52	0.75	2.8	—	—	14	20
								5	6.3	14	20
								7.5	9.4	15.3	20
								10*	12.6	19.2	25

MODEL No.: PGY060

POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		FM	COMPRES-SOR		BLOWER MOTOR		ELECTRIC HEATER		MCA	MOCP
	MIN.	MAX.	FLA	RLA	LRA	HP	FLA	kW	FLA		
230-3-60	207	253	3.6	21.9	136	0.75	4.2	—	—	35.2	60
								5	12.6	35.2	60
								7.5	18.8	35.2	60
								10*	25.1	36.7	60
380/400-3-60** (4 WIRE)	342	418	3.6	11.4	83	0.75	4.2	—	—	22.1	30
								5	7.6	22.1	30
								7.5	11.4	22.1	30
								10*	15.2	24.3	30
460-3-60	414	506	1.3	9.1	66.1	0.75	2.8	—	—	15.5	25
								5	6.3	15.5	25
								7.5	9.4	15.5	25
								10*	12.6	19.2	25

LEGEND:

FM - Fan Motor

HP - Horse Power

FLA - Full Load Amps

RLA - Rated Load Amps

LRA - Locked Rotor Amps

MCA - Minimum Circuit Amps

MOCP - Maximum Over Current Protection

* Combination of 2 heater modules

** The equipment is guaranteed to operate within the voltage range mentioned in the electrical data, while further voltage tolerances can be supported with special orders.

ELECTRICAL DATA

MODELS: PGY075 & PGY090

DESCRIPTION				MODEL NUMBER															
				PGY075								PGY090							
POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		FM	COMPR- ESSOR		BM		ELECTRIC HEATER		MCA	MOCP	COMPR- ESSOR (each)		BM		ELECTRIC HEATER		MCA	MOCP
	Min.	Max.	FLA	RLA	LRA	HP	FLA	Nom. kW	FLA			RLA	LRA	HP	FLA		FLA		
230-3-60	207	253	2.6	25.9	164	1.5 (STD)	4.3	—	—	39.3	70	15.3	83.1	2 (STD)	5.7	—	—	42.7	60
								5/6	12.6/15.1	39.3/39.3	70/70					5/6	12.6/15.1	42.7/42.7	60/60
								7.5/10	18.8/25.1	39.3/39.3	70/70					7.5/10	18.8/25.1	42.7/42.7	60/60
								10*/12*	25.1/30.1	39.3/43	70/70					10*/12*	25.1/30.1	42.7/44.8	60/60
								15*	37.7	52.5	70					15*/20*	37.7/50.2	54.2/69.9	60/80
								15*	37.7	52.5	70					25*/30*	62.8/75.3	85.6/101.3	90/110
						2 (ALT.)	5.7	—	—	40.7	70	15.3	83.1	3 (ALT.)	8.4	—	—	45.4	60
								5/6	12.6/15.1	40.7/40.7	70/70					5/6	12.6/15.1	45.4/45.4	60/60
								7.5/10	18.8/25.1	40.7/40.7	70/70					7.5/10	18.8/25.1	45.4/45.4	60/60
								10*/12*	25.1/30.1	40.7/44.8	70/70					10*/12*	25.1/30.1	45.4/48.2	60/60
								15*	37.7	54.2	70					15*/20*	37.7/50.2	57.6/73.3	60/80
								15*	37.7	54.2	70					25*/30*	62.8/75.3	89.1/104.7	100/110
380/400-3-60** (4 WIRE)	342	418	1.6	13.6	73	1.5 (STD)	2.6	—	—	21.2	35	9.9	64	2 (STD)	3.3	—	—	27.2	35
								5/6	7.6/9.1	21.2/21.2	35/35					5/6	7.6/9.1	27.2/27.2	35/35
								7.5/10	11.4/15.2	21.2/22.6	35/35					7.5/10	11.4/15.2	27.2/27.2	35/35
								10*/12*	15.2/18.2	22.6/26	35/35					10*/12*	15.2/18.2	27.2/27.2	35/35
								15*	22.8	31.8	35					15*/20*	22.8/30.4	32.6/42.1	35/45
								15*	22.8	31.8	35					25*/30*	38/45.6	51.6/61.2	60/70
						2 (ALT.)	3.3	—	—	21.9	35	9.9	64	3 (ALT.)	4.9	—	—	28.8	35
								5/6	7.6/9.1	21.9/21.9	35/35					5/6	7.6/9.1	28.8/28.8	35/35
								7.5/10	11.4/15.2	21.9/23.1	35/35					7.5/10	11.4/15.2	28.8/28.8	35/35
								10*/12*	15.2/18.2	23.1/27	35/35					10*/12*	15.2/18.2	28.8/29	35/35
								15*	22.8	32.7	35					15*/20*	22.8/30.4	34.6/44.1	40/45
								15*	22.8	32.7	35					25*/30*	38/45.6	53.6/63.1	60/70
460-3-60	414	506	1.9	12.5	75	1.5 (STD)	2.2	—	—	19.7	30	6.9	41	2 (STD)	3	—	—	20.4	25
								5/6	6.3/7.5	19.7/19.7	30/30					5/6	6.3/7.5	20.4/20.4	25/25
								7.5/10	9.4/12.6	19.7/19.7	30/30					7.5/10	9.4/12.6	20.4/20.4	25/25
								10*/12*	12.6/15.1	19.7/21.6	30/30					10*/12*	12.6/15.1	20.4/22.6	25/25
								15*	18.8	26.3	30					15*/20*	18.8/25.1	27.3/35.1	30/40
								15*	18.8	26.3	30					25*/30*	31.4/37.7	43/50.8	45/60
						2 (ALT.)	3	—	—	20.5	30	6.9	41	3 (ALT.)	4.7	—	—	21.6	30
								5/6	6.3/7.5	20.5/20.5	30/30					5/6	6.3/7.5	21.6/21.6	30/30
								7.5/10	9.4/12.6	20.5/20.5	30/30					7.5/10	9.4/12.6	21.6/21.6	30/30
								10*/12*	12.6/15.1	20.5/22.6	30/30					10*/12*	12.6/15.1	21.6/24.7	30/30
								15*	18.8	27.3	30					15*/20*	18.8/25.1	29.4/37.2	35/40
								15*	18.8	27.3	30					25*/30*	31.4/37.7	45.1/53	45/60

LEGEND:

FM - Fan Motor

HP - Horse Power

FLA - Full Load Amps

RLA - Rated Load Amps

LRA - Locked Rotor Amps

MCA - Minimum Circuit Amps

MOCP - Maximum Over Current Protection

* Combination of 2 heater modules

** The equipment is guaranteed to operate within the voltage range mentioned in the electrical data, while further voltage tolerances can be supported with special orders.

ELECTRICAL DATA

MODELS: PGY100 & PGY120

DESCRIPTION					MODEL NUMBER														
					PGY100								PGY120						
POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		FM	COMPR- ESSOR (each)		BM		ELECTRIC HEATER		MCA	MOCP	COMPR- ESSOR (each)		BM		ELECTRIC HEATER		MCA	MOCP
	Min.	Max.	FLA	RLA	LRA	HP	FLA	Nom. kW	FLA			RLA	LRA	HP	FLA	Nom. kW	FLA		
230-3-60	207	253	2.6	17.7	110	2 (STD)	5.7	—	—	48.1	70	21.9	136	3 (STD)	8.4	—	—	60.3	80
								5/6	12.6/15.1	48.1/48.1	70/70					5/6	12.6/15.1	60.3/60.3	80/80
								7.5/10	18.8/25.1	48.1/48.1	70/70					7.5/10	18.8/25.1	60.3/60.3	80/80
								10 [*] /12 [*]	25.1/30.1	48.1/48.1	70/70					10 [*] /12 [*]	25.1/30.1	60.3/60.3	80/80
								15 [*] /20 [*]	37.7/50.2	54.2/70	70/80					15 [*] /20 [*]	37.7/50.2	60.3/73.3	80/80
								25 [*] /30 [*]	62.8/75.3	85.6/101.3	90/110					25 [*] /30 [*]	62.8/75.3	89/104.7	100/110
						3 (ALT.)	8.4	—	—	50.8	70	21.9	136	3 (STD)	8.4	10 [*] /12 [*]	25.1/30.1	60.3/60.3	80/80
								5/6	12.6/15.1	50.8/50.8	70/70					15 [*] /20 [*]	37.7/50.2	60.3/73.3	80/80
								7.5/10	18.8/25.1	50.8/50.8	70/70					25 [*] /30 [*]	62.8/75.3	89/104.7	100/110
								10 [*] /12 [*]	25.1/30.1	50.8/50.8	70/70								
								15 [*] /20 [*]	37.7/50.2	57.6/73.3	70/80								
								25 [*] /30 [*]	62.8/75.3	89/104.7	100/110								
380/400-3-60** (4 WIRE)	342	418	1.6	8.9	66	2 (STD)	3.3	—	—	24.9	35	11.4	83	3 (STD)	4.9	—	—	32.1	40
								5/6	7.6/9.1	24.9/24.9	35/35					5/6	7.6/9.1	32.1/32.1	40/40
								7.5/10	11.4/15.2	24.9/24.9	35/35					7.5/10	11.4/15.2	32.1/32.1	40/40
								10 [*] /12 [*]	15.2/18.2	24.9/27	35/35					10 [*] /12 [*]	15.2/18.2	32.1/32.1	40/40
								15 [*] /20 [*]	22.8/30.4	32.6/42.1	35/45					15 [*] /20 [*]	22.8/30.4	34.6/44.1	45/45
								25 [*] /30 [*]	38/45.6	51.6/61.2	60/70					25 [*] /30 [*]	38/45.6	53.6/63.2	60/70
						3 (ALT.)	4.9	—	—	26.5	35	11.4	83	3 (STD)	4.9	10 [*] /12 [*]	15.2/18.2	32.1/32.1	40/40
								5/6	7.6/9.1	26.5/26.5	35/35					15 [*] /20 [*]	22.8/30.4	34.6/44.1	45/45
								7.5/10	11.4/15.2	26.5/26.5	35/35					25 [*] /30 [*]	38/45.6	53.6/63.2	60/70
								10 [*] /12 [*]	15.2/18.2	26.5/29	35/35								
								15 [*] /20 [*]	22.8/30.4	34.6/44.1	40/45								
								25 [*] /30 [*]	38/45.6	53.6/63.2	60/70								
460-3-60	414	506	1.9	7.9	52	2 (STD)	3	—	—	22.7	30	9.1	66.1	3 (STD)	4.7	—	—	27.1	35
								5/6	6.3/7.5	22.7/22.7	30/30					5/6	6.3/7.5	27.1/27.1	35/35
								7.5/10	9.4/12.6	22.7/22.7	30/30					7.5/10	9.4/12.6	27.1/27.1	35/35
								10 [*] /12 [*]	12.6/15.1	22.7/22.7	30/30					10 [*] /12 [*]	12.6/15.1	27.1/27.1	35/35
								15 [*] /20 [*]	18.8/25.1	27.3/35.1	30/40					15 [*] /20 [*]	18.8/25.1	29.4/37.2	35/40
								25 [*] /30 [*]	31.4/37.7	43/50.8	45/60					25 [*] /30 [*]	31.4/37.7	45.1/53	45/60
						3 (ALT.)	4.7	—	—	24.4	30	9.1	66.1	3 (STD)	4.7	10 [*] /12 [*]	12.6/15.1	27.1/27.1	35/35
								5/6	6.3/7.5	24.4/24.4	30/30					15 [*] /20 [*]	18.8/25.1	29.4/37.2	35/40
								7.5/10	9.4/12.6	24.4/24.4	30/30					25 [*] /30 [*]	31.4/37.7	45.1/53	45/60
								10 [*] /12 [*]	12.6/15.1	24.4/24.7	30/30								
								15 [*] /20 [*]	18.8/25.1	29.4/37.3	30/40								
								25 [*] /30 [*]	31.4/37.7	45.1/53	45/60								

LEGEND:

FM - Fan Motor

HP - Horse Power

FLA - Full Load Amps

RLA - Rated Load Amps

LRA - Locked Rotor Amps

MCA - Minimum Circuit Amps

MOCP - Maximum Over Current Protection

* Combination of 2 heater modules

** The equipment is guaranteed to operate within the voltage range mentioned in the electrical data, while further voltage tolerances can be supported with special orders.

ELECTRICAL DATA

MODELS: PGY150 & PGY180

DESCRIPTION				MODEL NUMBER															
				PGY150								PGY180							
POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		FM (each)	COMPR- ESSOR (each)		BM		ELECTRIC HEATER		MCA	MOCP	COMPR- ESSOR (each)		BM		ELECTRIC HEATER		MCA	MOCP
	Min.	Max.	FLA	RLA	LRA	HP	FLA	Nom. kW	FLA			RLA	LRA	HP	FLA	Nom. kW	FLA		
230-3-60	207	253	2.6	25	149	3 (STD)	8.4	—	—	69.9	90	30.7	191	5 (STD)	13.6	—	—	87.9	110
								5/6	12.6/15.1	69.9/69.9	90/90					10*/12*	25.1/30.1	87.9/87.9	110/110
								7.5/10	18.8/25.1	69.9/69.9	90/90					15*/20*	37.7/50.2	87.9/87.9	110/110
								10*/12*	25.1/30.1	69.9/69.9	90/90					25*/30*	62.8/75.3	95.5/111.2	120/120
								15*/20*	37.7/50.2	69.9/73.3	90/90								
						5 (ALT.)	14.7	—	—	76.2	90	7.5 (ALT.)	21.6	—	—	95.9	125		
								5/6	12.6/15.1	76.2/76.2	90/90			10*/12*	25.1/30.1	95.9/95.9	125/125		
								7.5/10	18.8/25.1	76.2/76.2	90/90			15*/20*	37.7/50.2	95.9/95.9	125/125		
								10*/12*	25.1/30.1	76.2/81.2	90/100			25*/30*	62.8/75.3	105.5/121.2	125/125		
								15*/20*	37.7/50.2	76.2/81.2	90/100								
380/400-3-60** (4 WIRE)	342	418	1.6	12.2	88	3 (STD)	4.9	—	—	35.6	50	17.2	123	5 (STD)	8.4	—	—	50.5	65
								5/6	7.6/9.1	35.6/35.6	50/50					10*/12*	15.2/18.2	50.5/50.5	65/65
								7.5/10	11.4/15.2	35.6/35.6	50/50					15*/20*	22.8/30.4	50.5/50.5	65/65
								10*/12*	15.2/18.2	35.6/35.6	50/50					25*/30*	38/45.6	58/67.5	65/70
								15*/20*	22.8/30.4	35.6/44.5	50/50								
						5 (ALT.)	8.5	—	—	39.2	50	7.5 (ALT.)	12.1	—	—	54	70		
								5/6	7.6/9.1	39.2/39.2	50/50			10*/12*	15.2/18.2	54/54	70/70		
								7.5/10	11.4/15.2	39.2/39.2	50/50			15*/20*	22.8/30.4	54/54	70/70		
								10*/12*	15.2/18.2	39.2/39.2	50/50			25*/30*	38/45.6	62.6/72.1	70/80		
								15*/20*	22.8/30.4	39.2/48.5	50/50								
460-3-60	414	506	1.9	11.8	75	3 (STD)	4.7	—	—	35	40	14.3	100	5 (STD)	6.9	—	—	42.9	50
								5/6	6.3/7.5	35/35	40/40					10*/12*	12.6/15.1	42.9/42.9	50/50
								7.5/10	9.4/12.6	35/35	40/40					15*/20*	18.8/25.1	42.9/42.9	50/50
								10*/12*	12.6/15.1	35/35	40/40					25*/30*	31.4/37.7	47.9/55.7	50/60
								15*/20*	18.8/25.1	35/37.3	40/40								
						5 (ALT.)	7.8	—	—	38.2	45	7.5 (ALT.)	10.8	—	—	46.8	60		
								5/6	6.3/7.5	38.2/38.2	45/45			10*/12*	12.6/15.1	46.8/46.8	60/60		
								7.5/10	9.4/12.6	38.2/38.2	45/45			15*/20*	18.8/25.1	46.8/46.8	60/60		
								10*/12*	12.6/15.1	38.2/38.2	45/45			25*/30*	31.4/37.7	52.7/60.6	60/70		
								15*/20*	18.8/25.1	38.2/41.1	45/45								

LEGEND:

FM - Fan Motor

HP - Horse Power

FLA - Full Load Amps

RLA - Rated Load Amps

LRA - Locked Rotor Amps

MCA - Minimum Circuit Amps

MOCP - Maximum Over Current Protection

* Combination of 2 heater modules

** The equipment is guaranteed to operate within the voltage range mentioned in the electrical data, while further voltage tolerances can be supported with special orders.

ELECTRICAL DATA

MODELS: PGY210 & PGY240

DESCRIPTION				MODEL NUMBER																			
				PGY210								PGY240											
POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		FM (each)	COMPR- ESSOR (each)		BM		ELECTRIC HEATER		MCA	MOCP	COMPR- ESSOR (each)		BM		ELECTRIC HEATER		MCA	MOCP				
	Min.	Max.	FLA	RLA	LRA	HP	FLA	Nom. kW	FLA			RLA	LRA	HP	FLA	Nom. kW	FLA						
230-3-60	207	253	5.2	33.6	225	5 (STD)	13.6	—	—	99.6	125	37.1	239	7.5 (STD)	21.6	—	—	115.5	150				
								10 [*] /12 [*]	25.1/30.1	99.6/99.6	125/125					10 [*] /12 [*]	25.1/30.1	115.5/115.5	150/150				
								15 [*] /20 [*]	37.7/50.2	99.6/99.6	125/125					15 [*] /20 [*]	37.7/50.2	115.5/115.5	150/150				
								25 [*] /30 [*]	62.8/75.3	99.6/111.2	125/125					25 [*] /30 [*]	62.8/75.3	115.5/115.5	150/150				
								—	—	107.6	135					15 [*] /20 [*]	37.7/50.2	115.5/115.5	150/150				
								10 [*] /12 [*]	25.1/30.1	107.6/107.6	135/135					25 [*] /30 [*]	62.8/75.3	115.5/121.2	150/150				
						7.5 (ALT.)	21.6	10 [*] /12 [*]	25.1/30.1	107.6/107.6	135/135					25 [*] /30 [*]	62.8/75.3	115.5/121.2	150/150	35 [*] /40 [*]	87.9/100.4	137/152.6	150/175
								15 [*] /20 [*]	37.7/50.2	107.6/107.6	135/135					—	—	62.5	80	10 [*] /12 [*]	15.2/18.2	77.5	100
								15 [*] /20 [*]	22.8/30.4	62.5/62.5	80/80					15 [*] /20 [*]	22.8/30.4	77.5/77.5	100/100	10 [*] /12 [*]	15.2/18.2	77.5/77.5	100/100
								25 [*] /30 [*]	38/45.6	62.5/67.5	80/80					25 [*] /30 [*]	38/45.6	77.5/77.5	100/100	25 [*] /30 [*]	38/45.6	77.5/77.5	100/100
								—	—	66.2	80					35 [*] /40 [*]	53.2/60.8	81.7/91.2	100/100	—	—	61.6	80
								10 [*] /12 [*]	15.2/18.2	66.2/66.2	80/80					10 [*] /12 [*]	12.6/15.1	54.5/54.5	70/70	10 [*] /12 [*]	12.6/15.1	61.6/61.6	80/80
380/400-3-60** (4 WIRE)	342	418	3	21.4	140	5 (STD)	8.4	10 [*] /12 [*]	15.2/18.2	62.5/62.5	80/80	26.4	145	7.5 (STD)	12.1	10 [*] /12 [*]	15.2/18.2	77.5/77.5	100/100				
								15 [*] /20 [*]	22.8/30.4	62.5/62.5	80/80					15 [*] /20 [*]	22.8/30.4	77.5/77.5	100/100				
								25 [*] /30 [*]	38/45.6	62.5/67.5	80/80					25 [*] /30 [*]	38/45.6	77.5/77.5	100/100				
								—	—	66.2	80					35 [*] /40 [*]	53.2/60.8	81.7/91.2	100/100				
								10 [*] /12 [*]	15.2/18.2	66.2/66.2	80/80					—	—	62.5	80	10 [*] /12 [*]	12.6/15.1	54.5/54.5	70/70
								15 [*] /20 [*]	22.8/30.4	66.2/66.2	80/80					15 [*] /20 [*]	18.8/25.1	54.5/54.5	70/70	15 [*] /20 [*]	18.8/25.1	61.6/61.6	80/80
						7.5 (ALT.)	12.1	15 [*] /20 [*]	22.8/30.4	66.2/66.2	80/80					25 [*] /30 [*]	38/45.6	66.2/72.1	80/80	25 [*] /30 [*]	31.4/37.7	61.6/61.6	80/80
								25 [*] /30 [*]	38/45.6	66.2/72.1	80/80					35 [*] /40 [*]	53.2/60.8	81.7/91.2	100/100	35 [*] /40 [*]	43.9/50.2	68.4/76.3	80/80
								—	—	54.5	70					—	—	61.6	80	—	—	61.6	80
								10 [*] /12 [*]	12.6/15.1	54.5/54.5	70/70					10 [*] /12 [*]	12.6/15.1	61.6/61.6	80/80	10 [*] /12 [*]	12.6/15.1	61.6/61.6	80/80
								15 [*] /20 [*]	18.8/25.1	54.5/54.5	70/70					15 [*] /20 [*]	18.8/25.1	61.6/61.6	80/80	15 [*] /20 [*]	18.8/25.1	61.6/61.6	80/80
								25 [*] /30 [*]	31.4/37.7	54.5/55.7	70/70					25 [*] /30 [*]	31.4/37.7	61.6/61.6	80/80	25 [*] /30 [*]	31.4/37.7	61.6/61.6	80/80
460-3-60	414	506	2.9	18.6	114	5 (STD)	6.9	—	—	54.5	70	20	125	7.5 (STD)	10.8	—	—	61.6	80				
								10 [*] /12 [*]	12.6/15.1	54.5/54.5	70/70					10 [*] /12 [*]	12.6/15.1	61.6/61.6	80/80				
								15 [*] /20 [*]	18.8/25.1	54.5/54.5	70/70					15 [*] /20 [*]	18.8/25.1	61.6/61.6	80/80				
								25 [*] /30 [*]	31.4/37.7	54.5/55.7	70/70					25 [*] /30 [*]	31.4/37.7	61.6/61.6	80/80				
								—	—	58.4	70					35 [*] /40 [*]	43.9/50.2	68.4/76.3	80/80				
								10 [*] /12 [*]	12.6/15.1	58.4/58.4	70/70					10 [*] /12 [*]	12.6/15.1	61.6/61.6	80/80				
						7.5 (ALT.)	10.8	10 [*] /12 [*]	12.6/15.1	58.4/58.4	70/70					15 [*] /20 [*]	18.8/25.1	58.4/58.4	70/70	15 [*] /20 [*]	18.8/25.1	61.6/61.6	80/80
								15 [*] /20 [*]	18.8/25.1	58.4/58.4	70/70					25 [*] /30 [*]	31.4/37.7	61.6/61.6	80/80	25 [*] /30 [*]	31.4/37.7	61.6/61.6	80/80
								25 [*] /30 [*]	31.4/37.7	58.4/60.6	70/70					35 [*] /40 [*]	43.9/50.2	68.4/76.3	80/80	35 [*] /40 [*]	43.9/50.2	68.4/76.3	80/80
								—	—	58.4	70					—	—	61.6	80	—	—	61.6	80
								10 [*] /12 [*]	12.6/15.1	58.4/58.4	70/70					10 [*] /12 [*]	12.6/15.1	61.6/61.6	80/80	10 [*] /12 [*]	12.6/15.1	61.6/61.6	80/80
								15 [*] /20 [*]	18.8/25.1	58.4/58.4	70/70					15 [*] /20 [*]	18.8/25.1	61.6/61.6	80/80	15 [*] /20 [*]	18.8/25.1	61.6/61.6	80/80

LEGEND:

FM - Fan Motor

HP - Horse Power

FLA - Full Load Amps

RLA - Rated Load Amps

LRA - Locked Rotor Amps

MCA - Minimum Circuit Amps

MOCP - Maximum Over Current Protection

* Combination of 2 heater modules

** The equipment is guaranteed to operate within the voltage range mentioned in the electrical data, while further voltage tolerances can be supported with special orders.

ELECTRICAL DATA

MODELS: PGY300 & PGY360

DESCRIPTION				MODEL NUMBER															
				PGY300								PGY360							
POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		FM (each)	COMPR-ESSOR (each)		BM		ELECTRIC HEATER		MCA	MOCP	COMPR-ESSOR (each)		BM		ELECTRIC HEATER		MCA	MOCP
	Min.	Max.	FLA	RLA	LRA	HP	FLA	Nom. kW	FLA			RLA	LRA	HP	FLA	Nom. kW	FLA		
230-3-60	207	253	6.8	53.6	245	7.5 (STD)	21.6	-	-	155.8	200	62.1	340	10 (STD)	28	-	-	181.3	240
								10*/12*	25.1/30.1	155.8/155.8	200/200					10*/12*	25.1/30.1	181.3/181.3	240/240
								15*/20*	37.7/50.2	155.8/155.8	200/200					15*/20*	37.7/50.2	181.3/181.3	240/240
								25*/30*	62.8/75.3	155.8/155.8	200/200					25*/30*	62.8/75.3	181.3/181.3	240/240
								35*/40*	87.9/100.4	155.8/155.8	200/200					35*/40*	87.9/100.4	181.3/181.3	240/240
						10 (ALT.)	28	-	-	162.2	220			15 (ALT.)	40.6	-	-	193.9	250
								10*/12*	25.1/30.1	162.2/162.2	220/220					10*/12*	25.1/30.1	193.9/193.9	250/250
								15*/20*	37.7/50.2	162.2/162.2	220/220					15*/20*	37.7/50.2	193.9/193.9	250/250
								25*/30*	62.8/75.3	162.2/162.2	220/220					25*/30*	62.8/75.3	193.9/193.9	250/250
								35*/40*	87.9/100.4	162.2/162.2	220/220					35*/40*	87.9/100.4	193.9/193.9	250/250
380/400-3-60** (4 WIRE)	342	418	3.9	26.4	145	7.5 (STD)	12.1	-	-	79.3	110	37.9	196	10 (STD)	17.5	-	-	110.5	140
								10*/12*	15.2/18.2	79.3/79.3	110/110					10*/12*	15.2/18.2	110.5/110.5	140/140
								15*/20*	22.8/30.4	79.3/79.3	110/110					15*/20*	22.8/30.4	110.5/110.5	140/140
								25*/30*	38/45.6	79.3/79.3	110/110					25*/30*	38/45.6	110.5/110.5	140/140
								35*/40*	53.2/60.8	81.7/91.2	110/110					35*/40*	53.2/60.8	110.5/110.5	140/140
						10 (ALT.)	17.5	-	-	84.7	100			15 (ALT.)	24.5	-	-	117.6	150
								10*/12*	15.2/18.2	84.7/84.7	100/100					10*/12*	15.2/18.2	117.6/117.6	150/150
								15*/20*	22.8/30.4	84.7/84.7	100/100					15*/20*	22.8/30.4	117.6/117.6	150/150
								25*/30*	38/45.6	84.7/84.7	100/100					25*/30*	38/45.6	117.6/117.6	150/150
								35*/40*	53.2/60.8	88.4/97.9	100/100					35*/40*	53.2/60.8	117.6/117.6	150/150
460-3-60	414	506	3.8	20.7	125	7.5 (STD)	10.8	-	-	65	80	30	173	10 (STD)	14	-	-	89.1	120
								10*/12*	12.6/15.1	65/65	80/80					10*/12*	12.6/15.1	89.1/89.1	120/120
								15*/20*	18.8/25.1	65/65	80/80					15*/20*	18.8/25.1	89.1/89.1	120/120
								25*/30*	31.4/37.7	65/65	80/80					25*/30*	31.4/37.7	89.1/89.1	120/120
								35*/40*	43.9/50.2	68.5/76.3	80/80					35*/40*	43.9/50.2	89.1/89.1	120/120
						10 (ALT.)	14	-	-	68.2	90			15 (ALT.)	20.3	-	-	95.4	125
								10*/12*	12.6/15.1	68.2/68.2	90/90					10*/12*	12.6/15.1	95.4/95.4	125/125
								15*/20*	18.8/25.1	68.2/68.2	90/90					15*/20*	18.8/25.1	95.4/95.4	125/125
								25*/30*	31.4/37.7	68.2/68.2	90/90					25*/30*	31.4/37.7	95.4/95.4	125/125
								35*/40*	43.9/50.2	72.5/80.3	90/90					35*/40*	43.9/50.2	95.4/95.4	125/125

LEGEND:

FM - Fan Motor

HP - Horse Power

FLA - Full Load Amps

RLA - Rated Load Amps

LRA - Locked Rotor Amps

MCA - Minimum Circuit Amps

MOCP - Maximum Over Current Protection

* Combination of 2 heater modules

** The equipment is guaranteed to operate within the voltage range mentioned in the electrical data, while further voltage tolerances can be supported with special orders.

FAN PERFORMANCE DATA

(DIRECT DRIVE MOTOR)

Model No.: PGY036

BLOWER MOTOR SPEED	EXTERNAL STATIC PRESSURE (inch wg.)						
		0.1	0.2	0.3	0.4	0.5	0.6
HIGH	CFM	1200	1125	1050	950	875	770
	BHP	0.44	0.43	0.43	0.42	0.41	0.40
MEDIUM	CFM	1050	950	875	840	810	780
	BHP	0.36	0.35	0.35	0.34	0.34	0.33
LOW	CFM	900	850	800	750	710	650
	BHP	0.3	0.29	0.29	0.28	0.28	0.27

Model No.: PGY048

BLOWER MOTOR SPEED	EXTERNAL STATIC PRESSURE (inch wg.)										
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
HIGH	CFM	1875	1830	1750	1680	1650	1590	1500	1410	1280	1200
	BHP	0.95	0.93	0.90	0.85	0.82	0.78	0.73	0.70	0.65	0.60
MEDIUM	CFM	1540	1475	1450	1410	1370	1320	1250	1200	1110	1025
	BHP	0.78	0.75	0.71	0.68	0.65	0.62	0.60	0.59	0.57	0.55
LOW	CFM	1395	1325	1305	1254	1214	1169	1104	1052	964	919
	BHP	0.68	0.66	0.62	0.59	0.57	0.54	0.52	0.49	0.47	0.44

Model No.: PGY060

BLOWER MOTOR SPEED	EXTERNAL STATIC PRESSURE (inch wg.)										
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
HIGH	CFM	2005	1980	1860	1840	1710	1650	1570	1490	1370	1265
	BHP	0.98	0.97	0.95	0.93	0.91	0.91	0.89	0.87	0.82	0.80
MEDIUM	CFM	1710	1640	1590	1570	1520	1465	1380	1290	1220	1150
	BHP	0.82	0.80	0.78	0.73	0.71	0.69	0.69	0.61	0.58	0.54
LOW	CFM	1540	1475	1450	1410	1370	1320	1250	1200	1110	1025
	BHP	0.78	0.75	0.71	0.68	0.65	0.62	0.60	0.59	0.57	0.55

NOTES: 1. Values include losses for dry coil, 1" thick filters & unit casing.
2. Direct drive motors have single speed connection only. Factory set at medium speed. Thermostats are also single speed type only. Refer to the unit wiring diagram for connecting to other motor speeds.

FAN PERFORMANCE DATA

Model No.: PGY075

Airflow, CFM (L/S)	External Static Pressure (inch wg.)															
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500 (708)	654*	0.44*	731	0.45	822	0.49	917	0.55	993	0.67	1066	0.77	1135	0.87	1192	1.22
1600 (755)	672*	0.46*	755	0.49	846	0.54	934	0.64	1011	0.76	1082	0.86	1150	0.99	1208	1.28
1800 (849)	690	0.49	780	0.54	870	0.59	954	0.74	1030	0.85	1098	0.95	1166	1.11	1223	1.35
2000 (944)	710	0.53	808	0.61	892	0.65	972	0.85	1048	0.93	1114	1.04	1181	1.24	1239	1.41
2200 (1038)	736	0.59	830	0.69	914	0.78	990	0.98	1064	1.02	1130	1.18	1195	1.38	1255	1.54
2400 (1133)	766	0.65	852	0.78	933	0.91	1008	1.05	1079	1.19	1146	1.34	1210	1.50	1270*	1.66*

- Notes:** 1. Values include losses for filters, unit casing and wet coils.
2. Standard 1.5 HP motor to be used for the unshaded portion.
3. Alt. 2 HP motor to be used for the shaded portion.
4. Bordered regions indicate alternative drives I & II.
* For bold figures, consult your nearest Zamil representative for proper selection of drives. Drives shall be field supplied & in stalled.

Model No.: PGY090

Airflow, CFM (L/S)	External Static Pressure (inch wg.)																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1900 (897)	610*	0.58*	670*	0.59*	734	0.61	821	0.84	875	0.91	948	1.02	1000	1.06	1050	1.18	1100	1.26	1143	1.41
2000 (944)	622*	0.61*	681*	0.63*	744	0.67	827	0.89	881	0.97	951	1.09	1002	1.16	1053	1.28	1103	1.39	1146	1.54
2200 (1038)	635*	0.64*	693	0.68	754	0.74	832	0.95	888	1.04	954	1.17	1005	1.27	1056	1.39	1107	1.52	1149	1.67
2400 (1133)	648*	0.67*	705	0.73	765	0.81	838	1.01	895	1.11	957	1.25	1008	1.38	1059	1.51	1110	1.66	1153	1.81
2600 (1227)	661*	0.70*	714	0.78	776	0.89	843	1.07	902	1.19	960	1.34	1011	1.49	1062	1.63	1113	1.80	1158	1.95
2800 (1321)	674*	0.74*	725	0.82	788	0.96	849	1.12	906	1.29	962	1.43	1013	1.59	1065	1.76	1115	1.94	1161	2.11
3000 (1416)	690	0.78	737	0.93	800	1.08	854	1.17	910	1.39	964	1.54	1015	1.71	1067	1.89	1117	2.11	1163	2.15

- Notes:** 1. Values include losses for filters, unit casing and wet coils.
2. Standard 2 HP motor to be used for the unshaded portion.
3. Alt. 3 HP motor to be used for the shaded portion.
4. Bordered regions indicate alternative drives I & II.
* For bold figures, consult your nearest Zamil representative for proper selection of drives. Drives shall be field supplied & in stalled.

Model No.: PGY100

Airflow, CFM (L/S)	External Static Pressure (inch wg.)																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2200 (1038)	635*	0.64*	719	0.73	768	0.69	837	0.86	893	1.01	960	1.08	1023	1.37	1086	1.79	1136	2.11	1170	2.21
2400 (1133)	641*	0.66*	723	0.78	778	0.78	846	0.96	902	1.1	969	1.19	1030	1.47	1090	1.85	1141	2.14	1177	2.25
2600 (1227)	649*	0.68*	728	0.83	788	0.88	855	1.07	911	1.2	979	1.3	1037	1.57	1095	1.9	1147	2.19	1185	2.31
2800 (1321)	656*	0.69*	733	0.88	798	0.99	865	1.19	920	1.31	989	1.42	1045	1.68	1102	1.96	1153	2.24	1193	2.38
3000 (1416)	668*	0.72*	745	0.95	810	1.10	875	1.31	929	1.42	999	1.55	1053	1.79	1109	2.05	1159	2.29	1201	2.45
3200 (1510)	680*	0.81*	753	1.01	822	1.22	886	1.44	938	1.56	1006	1.69	1061	1.93	1114	2.17	1165	2.35	1210	2.51
3400 (1605)	699	0.92	768	1.13	834	1.35	897	1.57	946	1.71	1013	1.85	1068	2.10	1120	2.30	1170	2.41	1213	2.55

- Notes:** 1. Values include losses for filters, unit casing and wet coils.
2. Standard 2 HP motor to be used for the unshaded portion.
3. Alt. 3 HP motor to be used for the shaded portion.
4. Bordered regions indicate alternative drives I & II.
* For bold figures, consult your nearest Zamil representative for proper selection of drives. Drives shall be field supplied & in stalled.

FAN PERFORMANCE DATA

Model No.: PGY120

Airflow, CFM (L/S)	External Static Pressure (inch wg.)															
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2600 (1227)	649*	0.67*	728	0.83	788	0.88	855	1.07	911	1.2	979	1.3	1037	1.57	1095	1.9
2800 (1321)	656*	0.69*	733	0.88	798	0.99	865	1.19	920	1.31	989	1.42	1045	1.68	1105	1.96
3000 (1416)	665*	0.72*	745	0.95	810	1.10	875	1.31	929	1.42	999	1.55	1053	1.79	1109	2.05
3200 (1510)	685*	0.82*	755	1.01	824	1.20	885	1.41	939	1.52	1002	1.68	1058	1.91	1112	2.12
3400 (1605)	699	0.93	770	1.14	835	1.31	894	1.55	945	1.69	1011	1.83	1066	2.06	1118	2.24
3600 (1699)	719	1.06	783	1.25	847	1.45	906	1.71	956	1.84	1021	1.99	1072	2.22	1125	2.38
3800 (1793)	733	1.17	797	1.39	859	1.63	918	1.87	965	2.01	1029	2.18	1081	2.35	1131	2.48
4000 (1888)	749	1.31	812	1.54	872	1.78	929	2.03	974	2.19	1037	2.36	1088	2.46	1137	2.54

Notes: 1. Values include losses for filters, unit casing and wet coils.

2. Standard 3 HP motor to be used.

3. Bordered regions indicate alternative drives I & II.

* For bold figures, consult your nearest Zamil representative for proper selection of drives. Drives shall be field supplied & in stalled.

Model No.: PGY150

Airflow, CFM (L/S)	External Static Pressure (inch wg.)															
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000 (1416)	541*	0.64*	596	0.82	662	0.93	705	1.13	710	1.25	805	1.48	881	1.75	928	1.79
3200 (1510)	548*	0.69*	605	0.89	668	1.01	712	1.22	719	1.32	810	1.56	885	1.79	931	1.85
3400 (1605)	556*	0.75*	615	0.94	675	1.10	718	1.31	729	1.41	818	1.65	890	1.84	936	1.93
3600 (1699)	564*	0.82*	625	1.02	682	1.20	724	1.41	741	1.50	826	1.75	895	1.90	941	2.02
3800 (1793)	570*	0.9*	635	1.10	690	1.30	730	1.52	753	1.60	834	1.85	901	1.95	946	2.12
4000 (1888)	577	0.98	645	1.18	698	1.42	735	1.63	768	1.67	842	1.95	905	2.01	950	2.22
4200 (1982)	592	1.06	654	1.27	706	1.53	742	1.74	780	1.79	851	2.11	910	2.12	955	2.38
4400 (2076)	612	1.18	670	1.39	713	1.65	749	1.89	794	1.95	860	2.26	915	2.24	959*	2.56*
4600 (2170)	630	1.32	692	1.54	720	1.80	756	2.03	810	2.11	871	2.41	922	2.39	965*	2.74*
4800 (2265)	652	1.47	711	1.69	728	1.93	763	2.18	826	2.25	880	2.53	928	2.57	970*	2.92*

Notes: 1. Values include losses for filters, unit casing and wet coils.

2. Standard 3 HP motor to be used for the unshaded portion.

3. Alt. 5 HP motor to be used for the shaded portion.

4. Bordered regions indicate alternative drives I & II.

* For bold figures, consult your nearest Zamil representative for proper selection of drives. Drives shall be field supplied & in stalled.

Model No.: PGY180

Airflow, CFM (L/S)	External Static Pressure (inch wg.)															
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3800 (1793)	601*	1.02*	651*	1.28*	699	1.81	751	1.85	805	1.95	859	2.35	899	2.45	961	2.76
4000 (1888)	609*	1.12*	658*	1.35*	708	1.85	758	1.92	810	2.00	864	2.42	905	2.54	969	2.84
4200 (1982)	618*	1.24*	667*	1.44*	717	1.91	766	1.99	818	2.08	871	2.51	910	2.62	975	2.94
4400 (2076)	628*	1.34*	676*	1.52*	726	1.98	774	2.05	825	2.13	877	2.61	915	2.71	982	3.05
4600 (2170)	638*	1.45*	686*	1.61*	736	2.05	784	2.12	832	2.18	882	2.70	922	2.80	990	3.15
4800 (2265)	648*	1.55*	696	1.71	746	2.12	792	2.19	841	2.25	888	2.80	928	2.89	994	3.28
5000 (2360)	658*	1.64*	705	1.80	756	2.25	802	2.35	850	2.40	895	2.91	934	3.01	1001	3.54
5200 (2454)	669*	1.74*	716	1.92	765	2.48	811	2.54	859	2.62	903	3.06	942	3.15	1008	3.72
5400 (2548)	682*	1.86*	729	2.08	777	2.61	822	2.68	869	2.81	911	3.24	951	3.34	1015	3.89
5600 (2643)	696	2.02	743	2.26	791	2.75	833	2.82	880	3.04	919	3.42	962	3.54	1023	4.09
5800 (2737)	709	2.21	759	2.46	805	2.90	845	3.01	892	3.30	927	3.62	973	3.80	1031	4.28
6000 (2832)	725	2.42	774	2.68	826	3.00	857	3.30	901	3.60	935	3.80	982	4.20	1039	4.60

Notes: 1. Values include losses for filters, unit casing and wet coils.

2. Standard 5 HP motor to be used for the unshaded portion.

3. Alt. 7.5 HP motor to be used for the shaded portion.

4. Bordered regions indicate alternative drives I & II.

* For bold figures, consult your nearest Zamil representative for proper selection of drives. Drives shall be field supplied & in stalled.

FAN PERFORMANCE DATA

Model No.: PGY210

Airflow, CFM (L/S)	External Static Pressure (inch wg.)																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4800 (2265)	527*	1.55*	545*	1.56*	563	1.69	707	1.80	761	1.98	806	2.51	851	2.65	912	2.74	955*	3.14*	991*	3.63*
5000 (2360)	534*	1.59*	550*	1.62*	568	1.76	712	1.87	765	2.08	811	2.55	855	2.71	914	2.82	957*	3.24*	993*	3.72*
5200 (2454)	542*	1.65*	557*	1.71*	563	1.84	717	1.95	770	2.18	816	2.63	861	2.79	917*	2.92*	959*	3.36*	996*	3.84*
5400 (2548)	550*	1.73*	564*	1.81*	669	1.93	723	2.03	775	2.29	822	2.72	867	2.83	919*	3.03*	961*	3.46*	999*	3.93*
5600 (2643)	559*	1.81*	572*	1.91*	675	2.02	729	2.12	780	2.40	827	2.81	872	2.92	921*	3.13*	963*	3.58*	1001*	4.02*
5800 (2737)	568*	1.91*	578*	2.01*	682	2.12	735	2.24	785	2.52	832	2.91	877	2.97	923*	3.26*	965*	3.70*	1004*	4.12*
6000 (2832)	577*	2.03*	586	2.13	689	2.24	741	2.36	790	2.68	837	3.02	882	3.12	926*	3.48*	967*	3.84*	1006*	4.22*
6200 (2926)	589	2.15	642	2.25	695	2.36	746	2.49	795	2.83	841	3.17	886	3.28	928*	3.64*	969*	4.01*	1009*	4.39*
6400 (3020)	595	2.27	649	2.24	701	2.5	751	2.63	799	2.98	845	3.33	889	3.44	931*	3.81*	972*	4.19*	1011*	4.58*
6600 (3115)	605	2.39	657	2.51	708	2.64	757	2.78	804	3.13	850	3.49	893	3.61	935*	3.99*	975*	4.38*	1014*	4.77*
6800 (3209)	614	2.52	665	2.64	715	2.78	763	2.93	809	3.29	854	3.66	897	3.79	938*	4.17*	978*	4.57*	1016*	4.97*
7000 (3303)	623	2.66	673	2.78	721	2.93	768	3.09	814	3.46	858	3.83	900	3.97	941*	4.36*	981*	4.76*	1019*	5.17*

- Notes:**
1. Values include losses for filters, unit casing and wet coils.
 2. Standard 5 HP motor to be used for the unshaded portion.
 3. Alt. 7.5 HP motor to be used for the shaded portion.
 4. Bordered regions indicate alternative drives I & II.

* For bold figures, consult your nearest Zamil representative for proper selection of drives. Drives shall be field supplied & in stalled.

Model No.: PGY240

Airflow, CFM (L/S)	External Static Pressure (inch wg.)																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5000 (2360)	569*	2.04*	627*	2.41*	663*	2.49*	713	2.58	760	2.79	808	3.21	858	3.16	892	3.69	935	3.81	968	3.81
5200 (2454)	575*	2.09*	631*	2.46*	668*	2.53*	716	2.61	764	2.83	812	3.24	862	3.21	898	3.74	941	3.88	973	3.89
5400 (2548)	580*	2.13*	635*	2.50*	673*	2.58*	720	2.66	769	2.88	818	3.28	866	3.26	905	3.80	946	3.93	979	3.98
5600 (2643)	586*	2.18*	640*	2.55*	679*	2.63*	725	2.72	773	2.93	823	3.33	870	3.33	910	3.86	950	3.99	984	4.08
5800 (2737)	592*	2.23*	645*	2.61*	685	2.69	730	2.78	778	2.99	828	3.39	874	3.42	915	3.92	954	4.06	991	4.18
6000 (2832)	598*	2.28*	650*	2.68*	691	2.75	735	2.84	783	3.05	833	3.45	878	3.49	920	3.99	958	4.12	996	4.31
6200 (2926)	604*	2.34*	655*	2.75*	697	2.83	740	2.91	788	3.13	838	3.51	881	3.57	925	4.08	962	4.18	1001	4.44
6400 (3020)	610*	2.42*	660*	2.82*	703	2.89	746	2.99	793	3.22	842	3.58	885	3.71	929	4.17	965	4.32	1005	4.60
6600 (3115)	616*	2.51*	666*	2.91*	710	2.97	753	3.08	798	3.37	846	3.68	889	3.85	933	4.29	968	4.48	1008	4.78
6800 (3209)	622*	2.60*	673*	2.99*	717	3.06	759	3.19	805	3.49	850	3.79	893	3.97	936	4.41	972	4.64	1011	4.96
7000 (3303)	629*	2.71*	679*	3.08*	723	3.16	766	3.31	811	3.62	855	3.91	897	4.11	940	4.54	976	4.82	1014	5.16
7200 (3398)	636*	2.82*	686	3.18	729	3.27	773	3.44	817	3.76	860	4.05	901	4.26	944	4.68	981	5.01	1018	5.36
7400 (3492)	644*	2.94*	693	3.29	736	3.39	780	3.58	823	3.91	865	4.23	906	4.42	948	4.84	985	5.19	1022	5.58
7500 (3542)	652*	3.09*	700	3.40	743	3.51	786	3.74	829	4.05	870	4.41	911	4.59	952	5.02	989	5.39	1026*	5.80*

- Notes:**
1. Values include losses for filters, unit casing and wet coils.
 2. Standard 7.5 HP motor to be used for the unshaded portion.
 3. Alt. 10 HP motor to be used for the shaded portion.
 4. Bordered regions indicate alternative drives I & II.

* For bold figures, consult your nearest Zamil representative for proper selection of drives. Drives shall be field supplied & in stalled.

FAN PERFORMANCE DATA

Model No.: PGY300

Airflow, CFM (L/S)	External Static Pressure (inch wg.)																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7000 (3303)	608*	3.02*	644*	3.21*	688	3.29	730	3.50	770	3.85	816	4.24	859	4.41	891	4.61	926	5.28	965	5.71
7200 (3398)	613*	3.10*	649*	3.29*	693	3.38	735	3.61	775	3.98	821	4.36	862	4.53	895	4.85	931	5.41	969	5.84
7400 (3492)	618*	3.20*	655*	3.40*	699	3.51	742	3.71	781	4.11	825	4.51	866	4.69	899	5.02	935	5.55	973	5.99
7600 (3587)	624*	3.32*	662*	3.50*	706	3.64	748	3.85	787	4.25	830	4.65	870	4.84	905	5.16	940	5.69	977	6.13
7800 (3681)	630*	3.45*	670*	3.61*	712	3.80	754	4.01	793	4.41	835	4.82	874	5.01	910	5.35	945	5.85	981	6.31
8000 (3775)	637*	3.60*	678*	3.73*	719	3.97	760	4.18	799	4.60	838	5.02	878	5.19	915	5.59	950	6.05	985	6.51
8200 (3870)	645*	3.79*	686	3.89	726	4.17	766	4.37	805	4.81	843	5.25	882	5.38	920	5.85	955	6.31	988	6.76
8400 (3964)	655*	3.98*	695	4.15	733	4.38	772	4.61	810	5.04	847	5.46	886	5.68	924	6.10	959	6.55	992	6.98
8600 (4058)	663*	4.18*	703	4.35	741	4.60	779	4.83	816	5.27	853	5.69	891	5.89	929	6.35	964	6.81	996	7.29
8800 (4152)	672*	4.38*	711	4.56	748	4.82	785	5.04	822	5.50	858	5.95	895	6.15	934	6.61	968	7.11	999	7.55
9000 (4247)	681*	4.60*	719	4.80	755	5.05	791	5.28	827	5.76	864	6.19	899	6.39	938	6.88	973	7.37	1003	7.86
9200 (4341)	689	4.73	727	4.95	764	5.17	798	5.52	831	6.00	869	6.45	905	6.68	942	7.15	978	7.65	1007	8.16
9400 (4436)	698	4.84	735	5.09	772	5.32	806	5.80	838	6.26	875	6.72	910	6.95	947	7.44	982	7.92	1012	8.45
9600 (4530)	707	5.05	742	5.41	778	5.57	812	6.05	846	6.54	881	6.99	915	7.25	951	7.73	987	8.25	1016	8.79

Notes: 1. Values include losses for filters, unit casing and wet coils.

2. Standard 7.5 HP motor to be used for the unshaded portion.

3. Alt. 10 HP motor to be used for the shaded portion.

4. Bordered regions indicate alternative drives I & II.

* For bold figures, consult your nearest Zamil representative for proper selection of drives. Drives shall be field supplied & in stalled.

Model No.: PGY360

Airflow, CFM (L/S)	External Static Pressure (inch wg.)																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8200 (3870)	610*	4.20*	605*	4.51*	635*	4.90*	660*	5.31*	690	5.80	720	6.20	750	6.71	780	7.20	810	7.60	840	8.00
8400 (3964)	615*	4.35*	615*	4.65*	645*	5.05*	670*	5.45*	700	5.95	730	6.35	765	6.85	790	7.35	820	7.75	850	8.20
8600 (4058)	620*	4.50*	625*	4.80*	655*	5.20*	680*	5.60*	710	6.10	740	6.50	775	7.00	800	7.50	830	7.90	860	8.40
8800 (4152)	625*	4.65*	635*	4.95*	665*	5.35*	690	5.75	720	6.25	750	6.65	785	7.15	810	7.65	840	8.05	870	8.60
9000 (4247)	630*	4.80*	645*	5.10*	675*	5.50*	700	5.90	730	6.40	760	6.80	795	7.30	820	7.80	850	8.20	880	8.80
9200 (4341)	635*	5.00*	655*	5.30*	685	5.70	710	6.10	740	6.60	770	7.00	805	7.50	830	8.00	860	8.40	890	9.00
9400 (4436)	640*	5.20*	665*	5.50*	695	5.90	720	6.30	750	6.80	780	7.20	815	7.70	840	8.20	870	8.60	900	9.20
9600 (4530)	645*	5.40*	675*	5.70*	705	6.10	730	6.50	760	7.00	790	7.40	825	7.90	850	8.40	880	8.80	910	9.40
9800 (4624)	655*	5.60*	684*	5.90*	715	6.30	740	6.70	770	7.20	800	7.60	835	8.10	860	8.60	890	9.00	920	9.60
10000 (4719)	665*	5.80*	695	6.10	725	6.50	750	6.90	780	7.40	810	7.80	845	8.30	870	8.80	900	9.20	930	9.80
10200 (4813)	675*	6.00*	705	6.30	735	6.70	760	7.10	790	7.60	820	8.00	855	8.50	880	9.00	910	9.40	940	10.00
10400 (4907)	685	6.20	715	6.50	745	6.90	770	7.30	800	7.80	830	8.20	865	8.70	890	9.20	920	9.60	950	10.20
10600 (5002)	695	6.40	725	6.70	755	7.10	780	7.50	810	8.00	840	8.40	875	8.90	900	9.40	930	9.80	960	10.40
10800 (5096)	705	6.60	735	6.90	765	7.30	790	7.70	820	8.20	850	8.60	885	9.10	910	9.60	940	10.00	970	10.60
11000 (5191)	715	6.80	745	7.10	775	7.50	800	7.90	830	8.40	860	8.80	895	9.30	920	9.80	950	10.20	980	10.80
11250 (5286)	725	7.00	755	7.30	785	7.70	810	8.10	840	8.60	870	9.00	905	9.50	930	10.00	960	10.40	990	11.00

Notes: 1. Values include losses for filters, unit casing and wet coils.

2. Standard 10 HP motor to be used for the unshaded portion.

3. Alt. 15 HP motor to be used for the shaded portion.

4. Bordered regions indicate alternative drives I & II.

* For bold figures, consult your nearest Zamil representative for proper selection of drives. Drives shall be field supplied & in stalled.

SOUND LEVEL DATA

To obtain Sound Pressure Level measured 5 ft. (1.6 m) directly opposite the center of blower inlet:

1. From performance table at operating conditions, find BHP, RPM & Static Efficiency (SE).

$$SE = (CFM \times TSP) / 6362 \times BHP \text{ (see step 4 \& table below).}$$

2. Read dBA level from respective graph at operating BHP & SE(%).

3. Knowing RPM, select proper row from sound power factor table and add dBA level to each values in the row to obtain Sound Power Level (dB re 10¹² watts).

4. Calculate TSP (Total Static Pressure) as follows:

$$TSP = ISP + ESP$$

ESP (External Static Pressure) from Job Specification.

ISP (Internal Static Pressure) Calculate from table below.

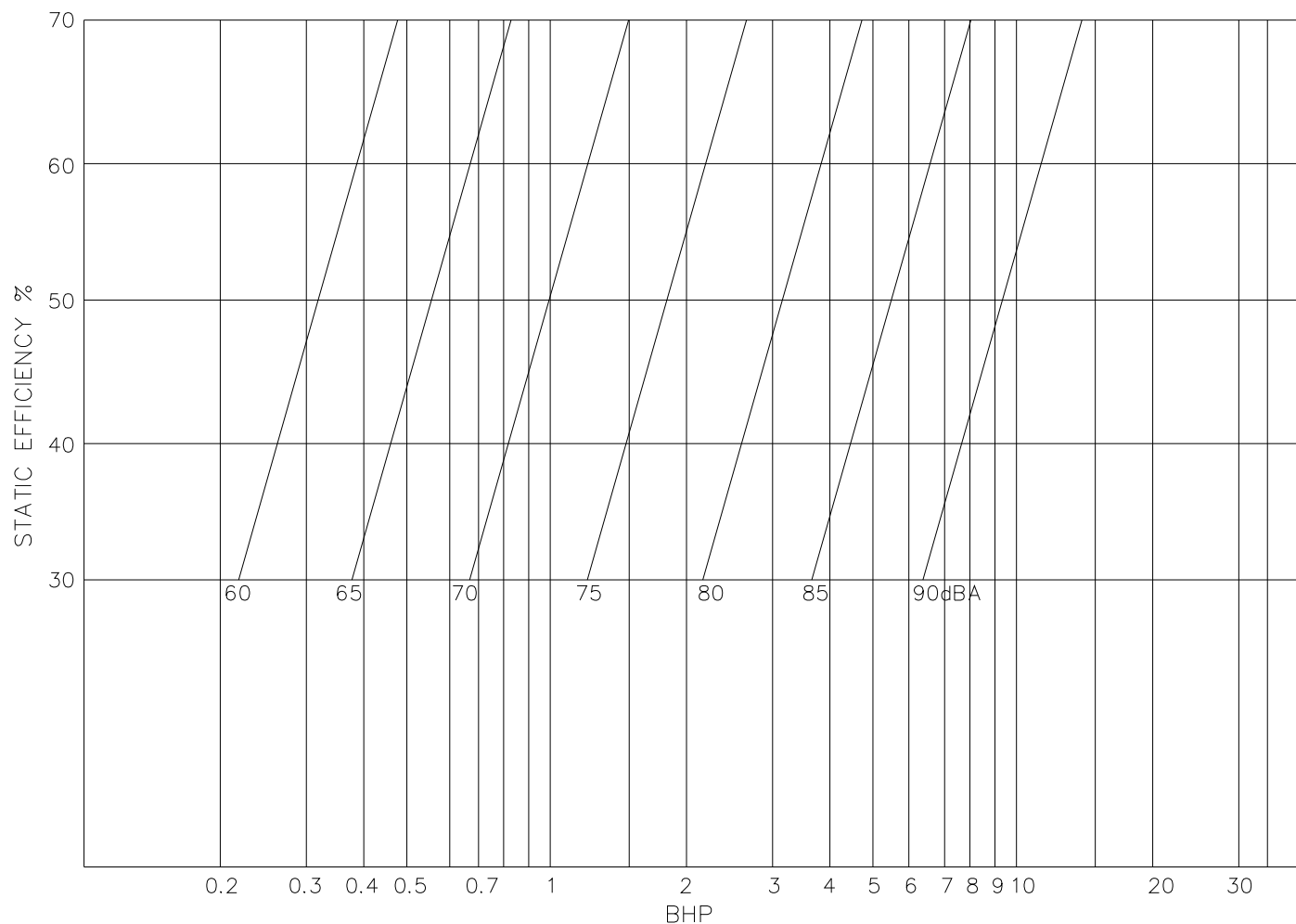
FACE VELOCITY (FPM)	INTERNAL STATIC PRESSURE (inch wg.)		
	2 ROW	3 ROW	4 ROW
200	0.42	0.44	0.47
300	0.67	0.73	0.78
400	0.88	0.95	1.05
450	1.02	1.13	1.23
500	1.16	1.29	1.49

NOTE:

Pressure drop across filter, coil and casing are included in ISP.

SOUND LEVEL DATA

MODELS: PGY036 - PGY048



SOUND POWER FACTOR TABLE

VALUES GIVE TO SOUND POWER								
Octave Band Center Frequency – Hz	63	125	250	500	1000	2000	4000	8000
493-887 RPM	– 7.5	+ 0.5	+ 7.5	+ 10.5	+ 5.5	+ 2	– 1	– 6.5
887-1750 RPM	– 8	+ 0.5	+ 7	+ 7	+ 8	+ 1.5	– 1.5	– 6.5
1750-2500 RPM	– 8	+ 0.5	+ 7	+ 7	+ 5	+ 4.5	– 1.5	– 6.5

To obtain Sound Pressure Level measured 5 ft. (1.6 m) directly opposite the center of blower inlet:

1. From performance table at operating conditions, find BHP, RPM & Static Efficiency (SE).

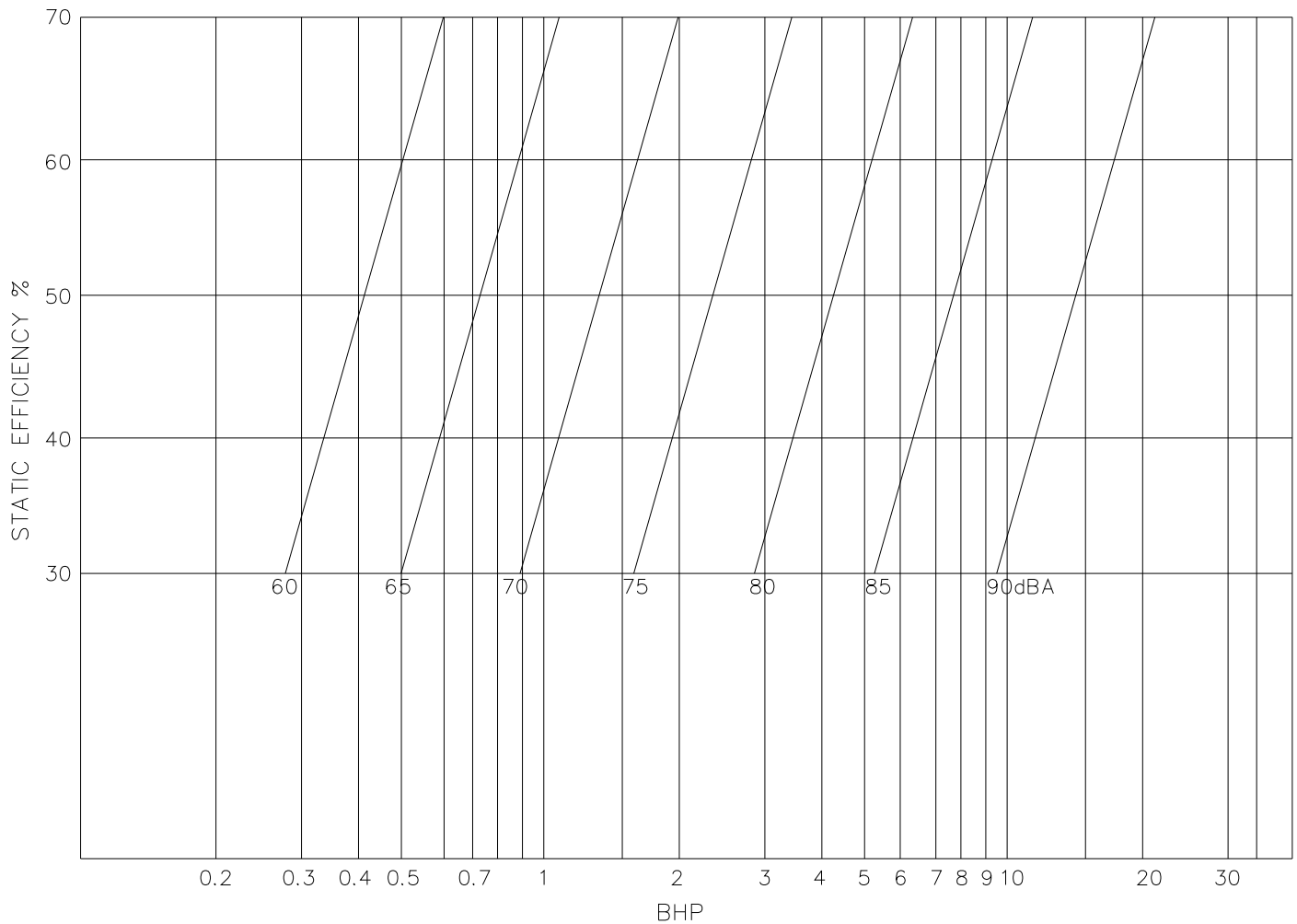
$$SE = (CFM \times TSP) / 6362 \times BHP$$

2. Read dBA level from above graph at operating BHP & SE(%).

3. Knowing RPM, select proper row from above table and add dBA level to each values in the row to obtain Sound Power Level (dB re 10^{-12} watts).

SOUND LEVEL DATA

MODEL: PGY060



SOUND POWER FACTOR TABLE

VALUES GIVE TO SOUND POWER								
Octave Band Center Frequency – Hz	63	125	250	500	1000	2000	4000	8000
493-887 RPM	– 7.5	+ 0.5	+ 7.5	+ 10.5	+ 5.5	+ 2	– 1	– 6.5
887-1750 RPM	– 8	+ 0.5	+ 7	+ 7	+ 8	+ 1.5	– 1.5	– 6.5
1750-2500 RPM	– 8	+ 0.5	+ 7	+ 7	+ 5	+ 4.5	– 1.5	– 6.5

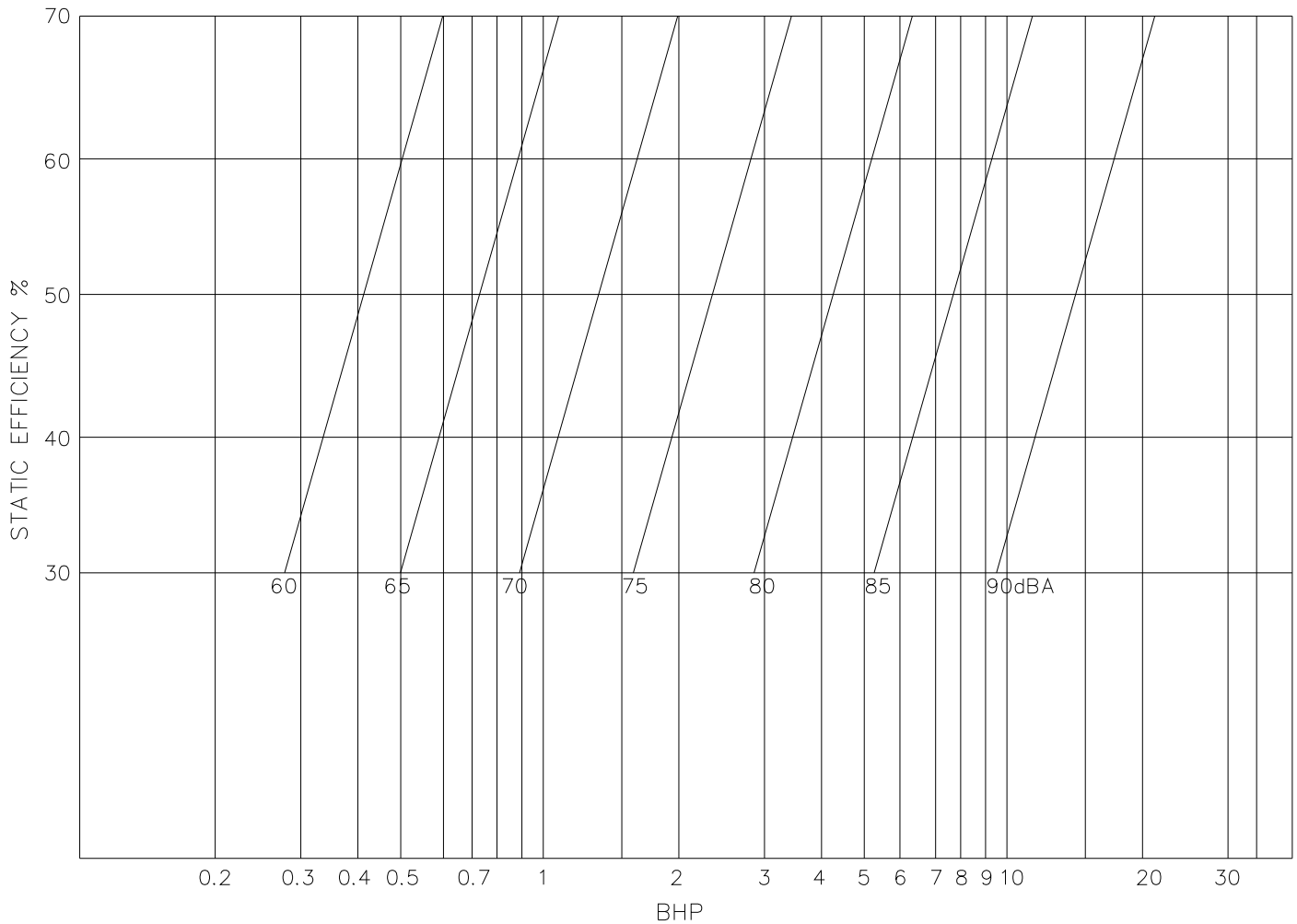
To obtain Sound Pressure Level measured 5 ft. (1.6 m) directly opposite the center of blower inlet:

- From performance table at operating conditions, find BHP, RPM & Static Efficiency (SE).

$$SE = (CFM \times TSP) / 6362 \times BHP$$
- Read dBA level from above graph at operating BHP & SE(%).
- Knowing RPM, select proper row from above table and add dBA level to each values in the row to obtain Sound Power Level (dB re 10^{-12} watts).

SOUND LEVEL DATA

MODEL: PGY075



SOUND POWER FACTOR TABLE

VALUES GIVE TO SOUND POWER								
Octave Band Center Frequency – Hz	63	125	250	500	1000	2000	4000	8000
251-495 RPM	– 6	+ 2	+ 11.5	+ 8	+ 5.5	+ 2	– 1	– 6.5
495-990 RPM	– 6.5	+ 1.5	+ 8	+ 10.5	+ 5	+ 1.5	– 1.5	– 7
990-1953 RPM	– 7	+ 1.5	+ 8	+ 7	+ 8	+ 1.5	– 2	– 7.5
1953-2050 RPM	– 7	+ 1.5	+ 8	+ 7	+ 5	+ 4.5	– 2	– 7.5

To obtain Sound Pressure Level measured 5 ft. (1.6 m) directly opposite the center of blower inlet:

1. From performance table at operating conditions, find BHP, RPM & Static Efficiency (SE).

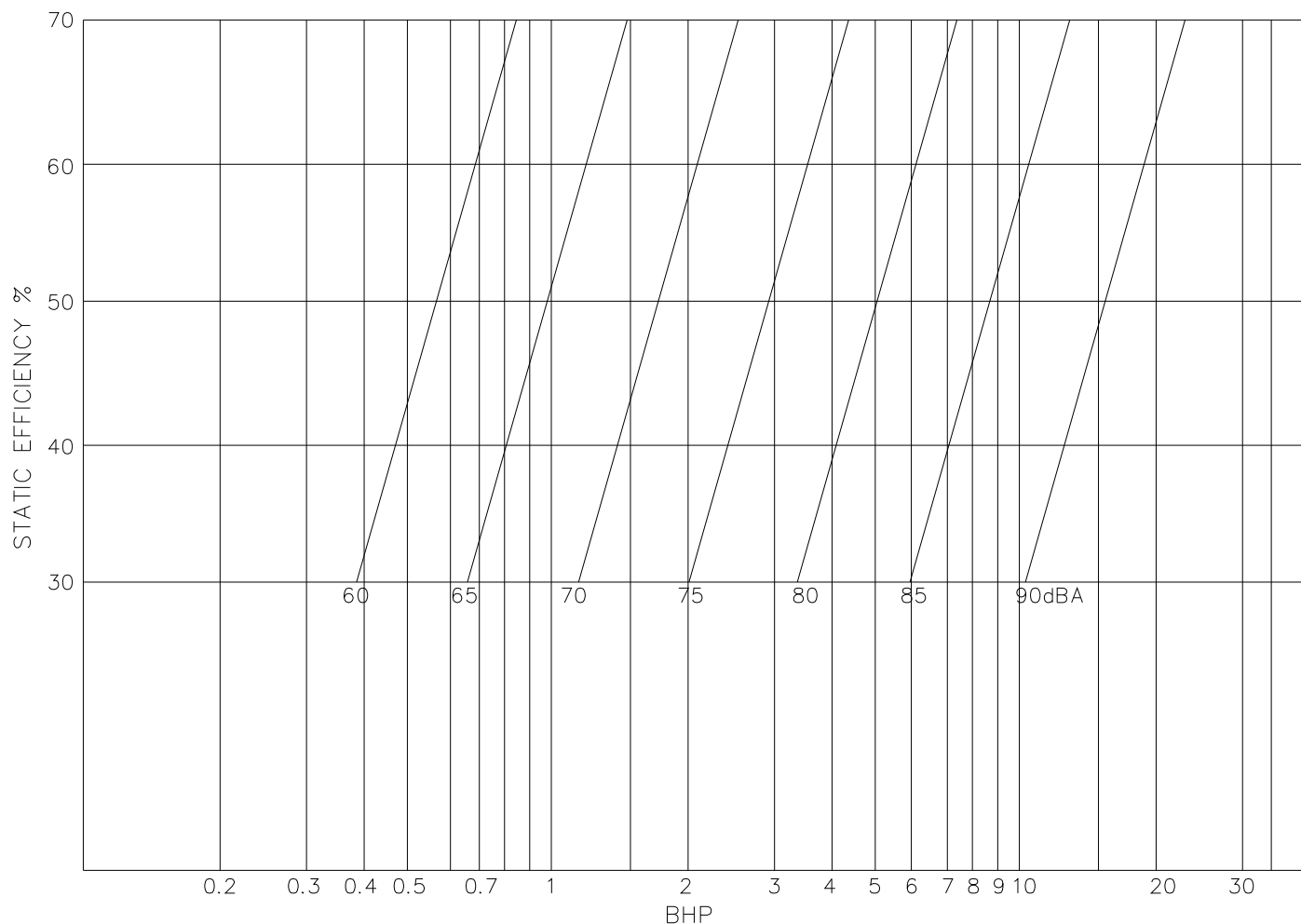
$$SE = (CFM \times TSP) / 6362 \times BHP$$

2. Read dBA level from above graph at operating BHP & SE(%).

3. Knowing RPM, select proper row from above table and add dBA level to each values in the row to obtain Sound Power Level (dB re 10^{-12} watts).

SOUND LEVEL DATA

MODELS: PGY090 - PGY180



SOUND POWER FACTOR TABLE

VALUES GIVE TO SOUND POWER								
Octave Band Center Frequency – Hz	63	125	250	500	1000	2000	4000	8000
211-417 RPM	– 4.5	+ 3	+ 12	+ 8	+ 5	+ 2	– 1.5	– 7
417-835 RPM	– 5.5	+ 2.5	+ 8.5	+ 10.5	+ 4.5	+ 1.5	– 2	– 7.5
835-1647 RPM	– 5.5	+ 2.5	+ 8	+ 7	+ 7	+ 1	– 2.5	– 7.5

To obtain Sound Pressure Level measured 5 ft. (1.6 m) directly opposite the center of blower inlet:

1. From performance table at operating conditions, find BHP, RPM & Static Efficiency (SE).

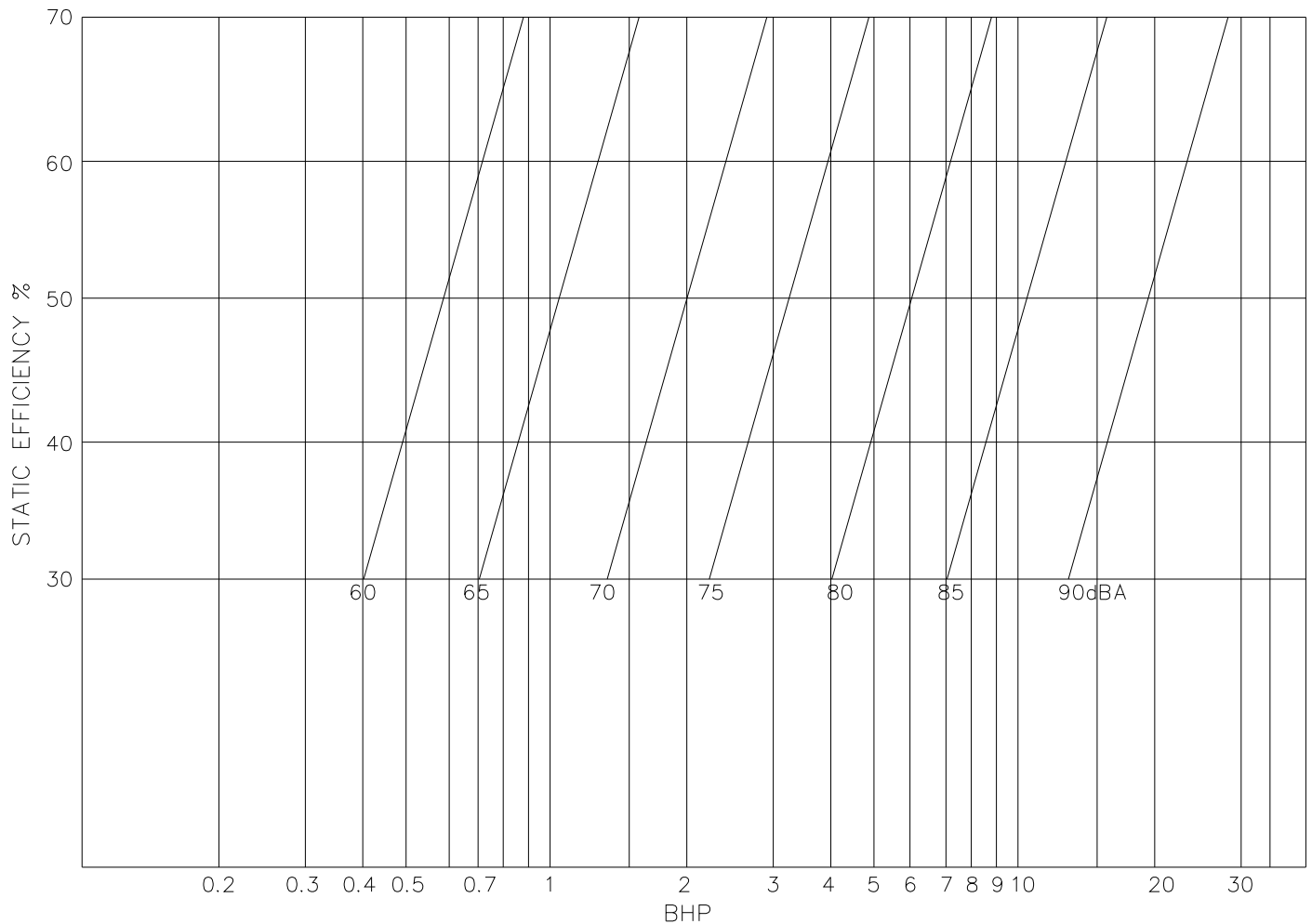
$$SE = \frac{CFM \times TSP}{6362 \times BHP}$$

2. Read dBA level from above graph at operating BHP & SE(%).

3. Knowing RPM, select proper row from above table and add dBA level to each values in the row to obtain Sound Power Level (dB re 10^{-12} watts).

SOUND LEVEL DATA

MODELS: PGY210 - PGY240



SOUND POWER FACTOR TABLE

VALUES GIVE TO SOUND POWER								
Octave Band Center Frequency – Hz	63	125	250	500	1000	2000	4000	8000
255-443 RPM	– 3.5	+ 4	+ 12.5	+ 8	+ 4.5	+ 1.5	– 2	– 7.5
443-887 RPM	– 4	+ 3.5	+ 9	+ 10	+ 4	+ 1	– 2.5	– 8
887-1750 RPM	– 4	+ 3.5	+ 8.5	+ 7	+ 7	+ 0.5	– 3	– 8

To obtain Sound Pressure Level measured 5 ft. (1.6 m) directly opposite the center of blower inlet:

1. From performance table at operating conditions, find BHP, RPM & Static Efficiency (SE).

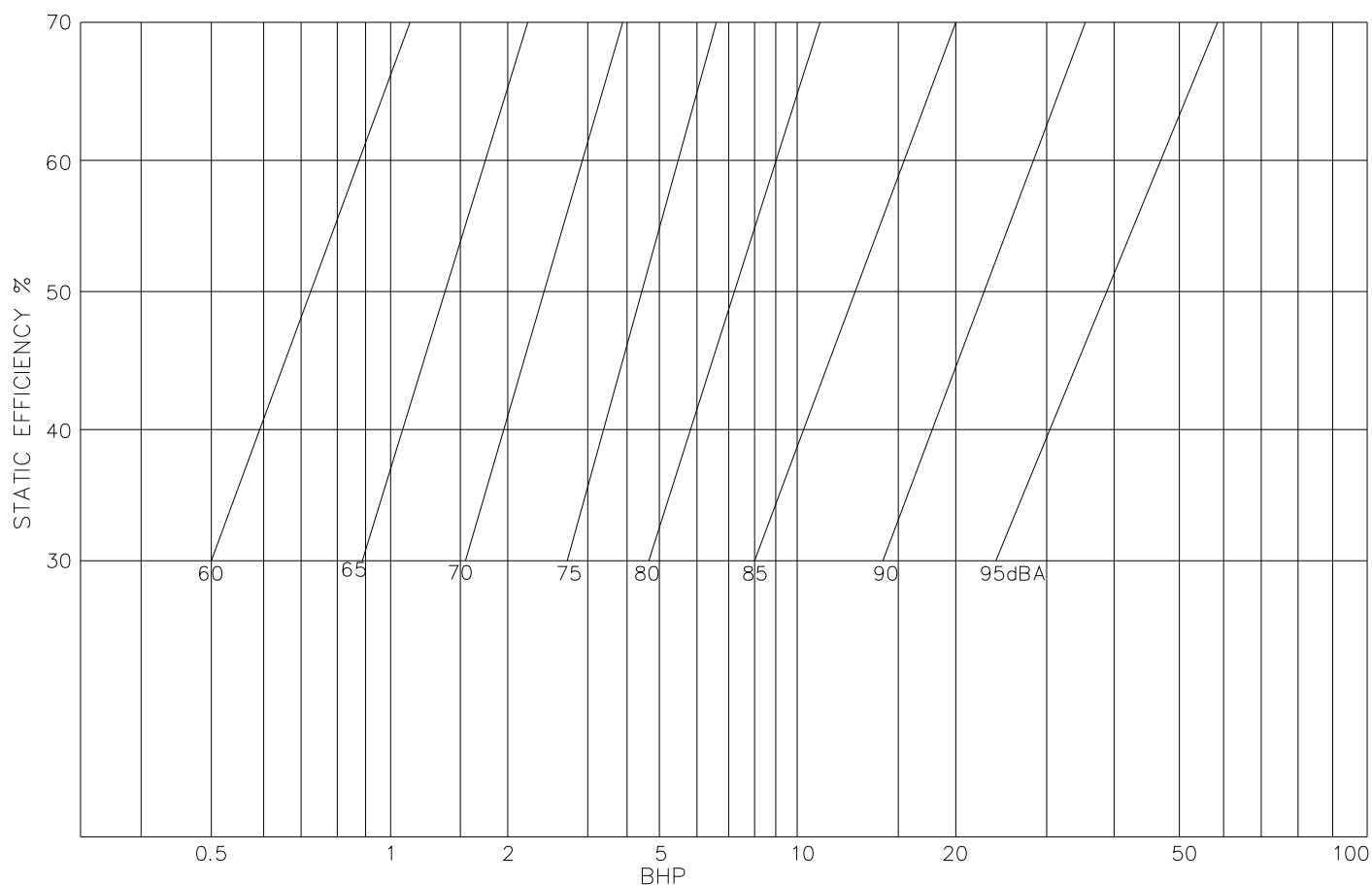
$$SE = (CFM \times TSP) / 6362 \times BHP$$

2. Read dBA level from above graph at operating BHP & SE(%).

3. Knowing RPM, select proper row from above table and add dBA level to each values in the row to obtain Sound Power Level (dB re 10^{-12} watts).

SOUND LEVEL DATA

MODELS: PGY300 - PGY360



SOUND POWER FACTOR TABLE

VALUES GIVE TO SOUND POWER								
Octave Band Center Frequency – Hz	63	125	250	500	1000	2000	4000	8000
267-507 RPM	– 3	+ 4.5	+ 12.5	+ 7.5	+ 4.5	+ 1.5	– 2	– 7.5
507-1014 RPM	– 3.5	+ 3.5	+ 9	+ 10	+ 4	+ 0.5	– 2.5	– 8
1014-2000 RPM	– 4	+ 3.5	+ 8.5	+ 7	+ 6.5	+ 0.5	– 3	– 8

To obtain Sound Pressure Level measured 5 ft. (1.6 m) directly opposite to the center of blower inlet:

1. From performance table at operating conditions, find BHP, RPM & Static Efficiency (SE).

$$SE = (CFM \times TSP) / 6362 \times BHP$$

2. Read dBA level from above graph at operating BHP & SE(%).

3. Knowing RPM, select proper row from above table and add dBA level to each values in the row to obtain Sound Power Level (dB re 10^{-12} watts).

STATIC PRESSURE DROP (inch wg.)

MODELS: PGY036 - PGY060

COMPONENT	CFM					
	900	1200	1400	1600	1800	2000
1 HEATER MODULE	0.12	0.12	0.12	0.13	0.14	0.15
2 HEATER MODULE	0.19	0.19	0.19	0.20	0.21	0.21

MODELS: PGY075 - PGY090

COMPONENT	CFM										
	1600	1800	2000	2200	2400	2600	3000	3200	3400	3600	3800
1 HEATER MODULE	0.11	0.12	0.13	0.13	0.14	0.15	0.16	0.16	0.17	0.18	0.18
2 HEATER MODULE	0.18	0.19	0.19	0.19	0.20	0.20	0.21	0.21	0.22	0.23	0.23

MODELS: PGY100 - PGY150

COMPONENT	CFM									
	2600	2800	3000	3400	3800	4000	4200	4800	5200	5800
1 HEATER MODULE	0.04	0.04	0.05	0.08	0.10	0.11	0.12	0.14	0.16	0.18
2 HEATER MODULE	0.06	0.06	0.07	0.10	0.12	0.14	0.15	0.18	0.20	0.22

MODELS: PGY180 - PGY210

COMPONENT	CFM										
	4800	5200	5600	6000	6200	6800	7000	7400	7600	7800	8200
1 HEATER MODULE	0.08	0.08	0.08	0.08	0.08	0.09	0.10	0.10	0.10	0.11	0.11
2 HEATER MODULE	0.14	0.14	0.14	0.14	0.14	0.16	0.16	0.16	0.16	0.17	0.17

MODELS: PGY240 - PGY360

COMPONENT	CFM										
	6000	6600	7200	7800	8400	9000	9600	10200	10800	11400	12000
1 HEATER MODULE	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15
2 HEATER MODULE	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24

BLOWER MOTOR EFFICIENCY

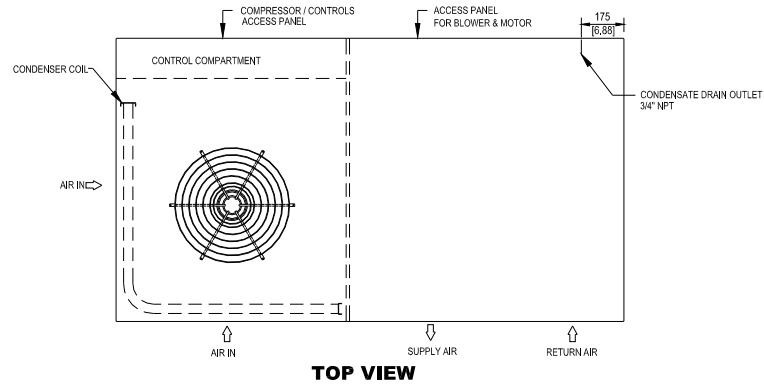
MOTOR HP	0.75	1.0	1.5	2.0	3.0	5.0	7.5	10.0
EFFICIENCY (%)	0.81	0.81	0.80	0.81	0.81	0.80	0.81	0.80

NOTE: Convert BHP to watts using following formula

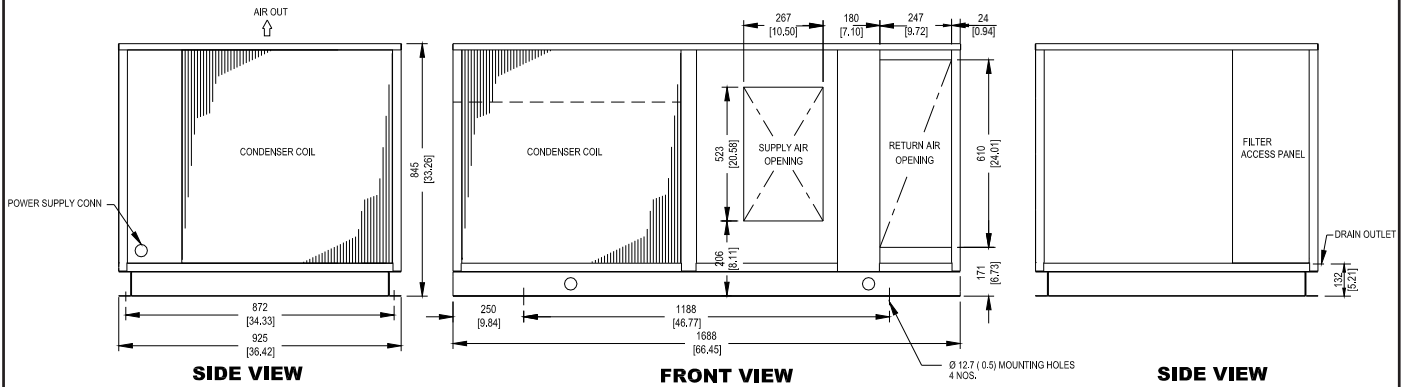
$$\text{Watts} = \frac{746 \times \text{BHP}}{\text{Motor Efficiency}}$$

UNIT DIMENSIONS

PGY036



TOP VIEW



SIDE VIEW

FRONT VIEW

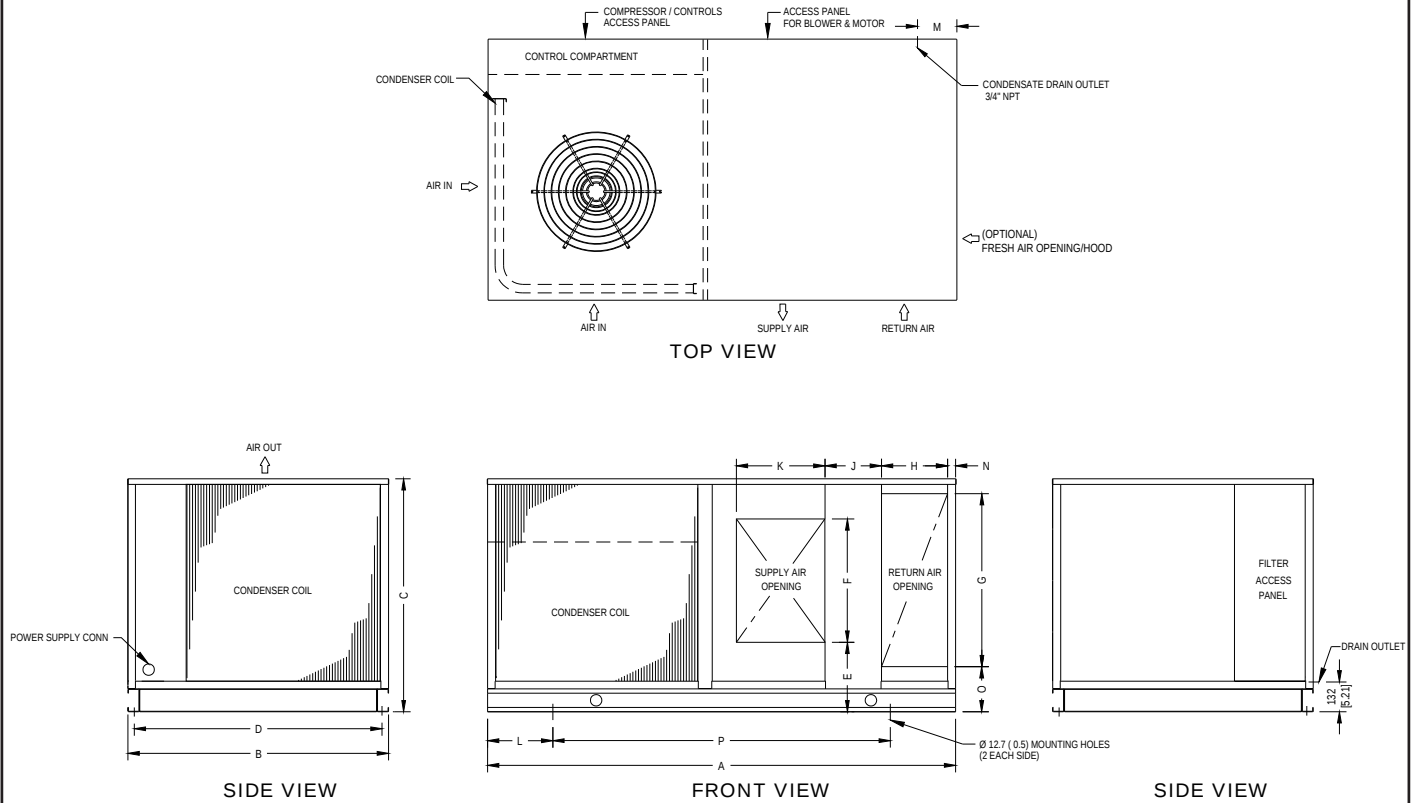
SIDE VIEW

NOTE:

1. All dimensions are in mm (dimensions in brackets are in inches).

UNIT DIMENSIONS

PGY048 - PGY120



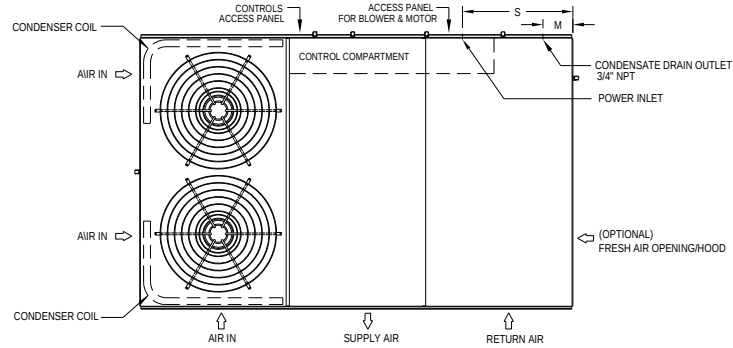
MODEL	DIMENSIONS														
	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P
PGY048-PGY075	2080(81.89)	1162(45.75)	1034(40.71)	1114(43.86)	308(12.15)	550(21.64)	798(31.4)	300(11.81)	251(9.87)	396(15.59)	152(5.98)	175(6.88)	24(0.94)	171(6.73)	1775(69.88)
PGY090-PGY120	2212(87.1)	1408(55.43)	1085(42.72)	1372(54)	255(10.03)	707(27.84)	790(31.1)	367(14.46)	190(7.48)	476(18.74)	150(5.91)	145(5.71)	48(1.89)	200(7.87)	1907(75.08)

NOTE:

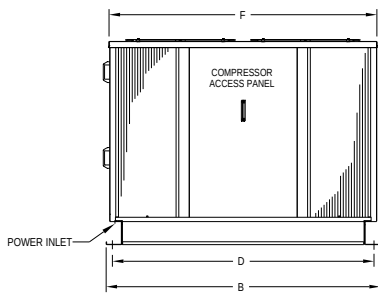
1. All dimensions are in mm (dimensions in brackets are in inches).

UNIT DIMENSIONS

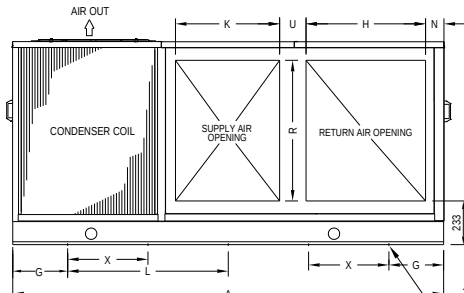
PGY150 - PGY360



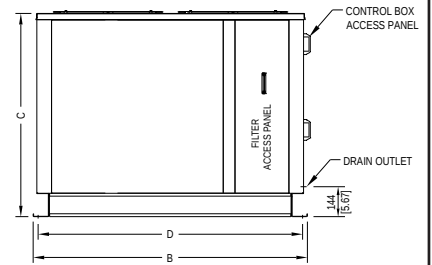
TOP VIEW



SIDE VIEW



FRONT VIEW



SIDE VIEW

MODEL	DIMENSIONS														
	A	B	C	D	F	G	H	K	L	N	R	S	M	U	X
PGY150-PGY180	2794(110)	1778(70)	1266(49.83)	1715(67.52)	1737(68.37)	197(7.75)	817(32.17)	720(28.35)	1200(47.25)	83(3.27)	912(35.9)	666(26.22)	194(7.64)	171(6.73)	-
PGY210-PGY240	3048(120)	2135(84)	1446(56.94)	2075(81.7)	2152(84.72)	324(12.76)	915(36.02)	740(29.13)	1200(47.25)	84(3.31)	1050(41.34)	666(26.22)	289(11.38)	194(7.64)	-
PGY300-PGY360	3683(145)	2184(86)	1446(56.94)	2125(83.66)	2184(86)	42(1.65)	938(36.93)	527(20.75)	-	97(3.83)	1000(39.37)	680(26.77)	254(10)	372(14.65)	1125(44.29)

NOTE:

1. All dimensions are in mm (dimensions in brackets are in inches).

CONTROLS & SEQUENCE OF OPERATION

Scroll compressors are designed to operate in single direction only. Hence, care has to be taken to ensure correct rotation when the system is operated. Verification of correct rotation is by observing that the suction pressure drops and discharge pressure rises when compressor run. Reverse rotation results in abnormal sound, as well as, substantially low current draw and by interchanging power supply wire L1 & L3 will correct this problem.

The operation of the air conditioning unit is controlled by a 24VAC electronic control board.

GENERAL

The thermostat normally displays room temperature and mode of operation. The five buttons on the front of the unit allow complete control of the thermostat. The thermostat also allows to select continuous fan operation (useful when using an air cleaner) or have the fan come on with the compressor.

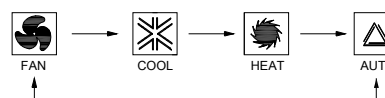
SWITCH FUNCTION

- On/Off Key : Switch the system On or Off.
- Up Key : To increases the set temperature.
- Down Key : To decreases the set temperature.
- Mode Key : Changes the mode to Fan, Cool, Heat or Auto.
- Fan Key : Changes the Fan Operation to Auto or Continuous.
- °C/°F selection : By pressing Mode & UP key together, toggles between °C to °F or vice versa.

USER CONTROLS

Mode:

Select the desired mode of operation by pressing of the mode button:



Fan: In this mode of operation, the compressor will be in inactive state. Display shows room temperature. Fan will be running.

Cool: In this mode of operation, the compressor will be ON after a delay depending on the differential of room temperature & Set temperature.

Heat: In this mode of operation, Fan is ON.

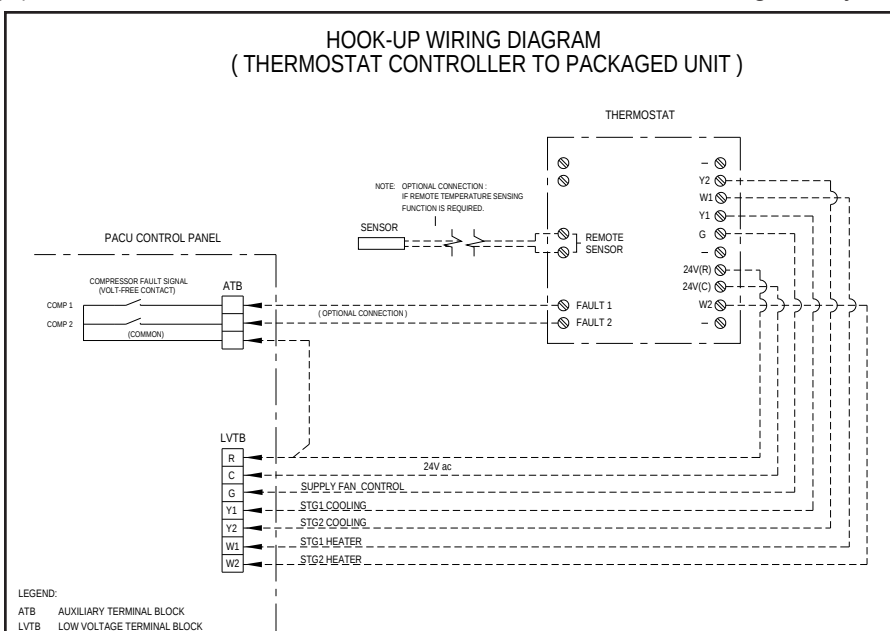
Auto: In auto mode, thermostat provide automatic changeover from heating to cooling mode & vice versa. Thermostat automatically switches to maintain the desired temperature.

DIP SWITCH OPTIONS AND FUNCTIONS

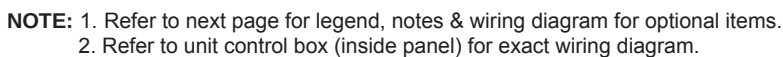
There are 4 small DIP (Dual in line package) switches on the back of the circuit board which must be configured by the installer.

DIP SWITCH SELECTION		
SWITCH	ON	OFF
1	N. A.	-
2	N. A.	-
3	N. A.	-
4	INDOOR SENSOR	REMOTE SENSOR

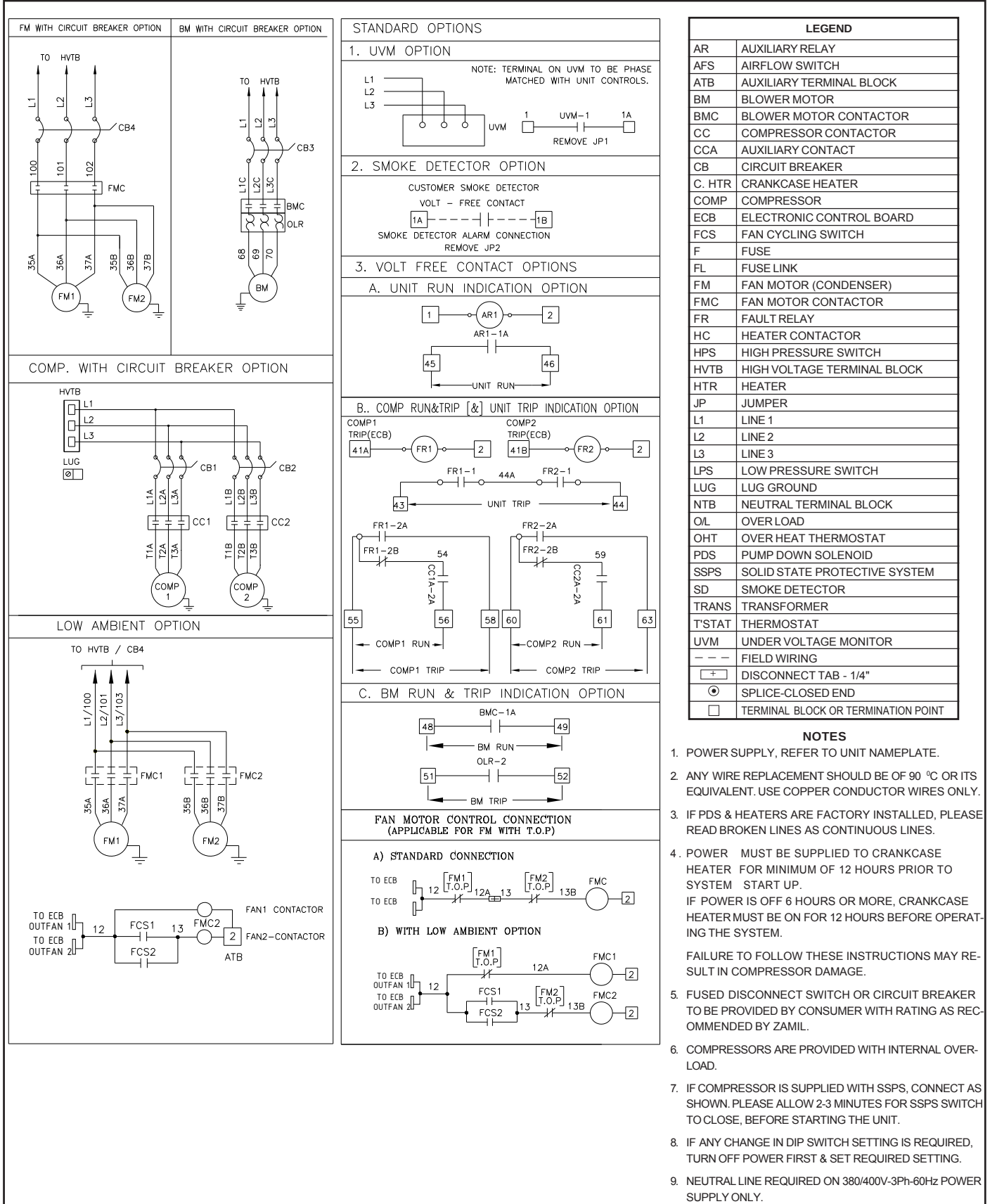
Note: Keep DIP SWITCH 1, 2 & 3 in OFF position only.



REFER TO UNIT
NAME PLATE
FOR POWER
SUPPLY



TYPICAL SCHEMATIC WIRING DIAGRAM



Zamil Air Conditioners (ZAC), a wholly owned company of Zamil Industrial, is the largest supplier of air conditioners in the Middle East. ZAC manufactures and markets a comprehensive line of air conditioners ranging from room air conditioners to Centrifugal Chillers for residential, commercial and industrial applications. Zamil Air Conditioners was founded in 1974 as one of the first air conditioning companies to be established in Saudi Arabia. Today it is not only the leading international manufacturers of air conditioning systems and service solutions; it is also number one in the Middle East.

ZAC's head office and principal manufacturing plants are located in Dammam, Saudi Arabia as well as a production facility in Italy. Zamil Air Conditioners produces over 900,000 air conditioners per annum and supplies air conditioning products to over 55 countries around the world - the major markets comprising of the GCC, the Middle East, North Africa, Europe and Asia.

Zamil Air Conditioners is an ISO 9001: 2008 certified company. It is the first Middle Eastern company to have received the prestigious AHRI (Air-Conditioning, Heating and Refrigeration Institute, USA) and Eurovent certifications for many of its products. ZAC is proud of its state-of-the-art testing facility Ikhtebareh which is a third party air conditioners testing facility built by Intertek Testing Services (ITS), certified by Electrical Testing Laboratories (ETL) and accredited by the Saudi Accreditation Committee (SASO) for compliance with international testing standards. Zamil Air Conditioners is the only manufacturer in the region capable of guaranteeing product performance in compliance with local, regional and international specifications and standards for operating performance, cooling capacity, energy efficiency, airflow, noise level and durability.

Zamil Air Conditioners has embarked upon an ambitious growth path. In addition to expanding its product lines through the two acquisitions made by Zamil Industrial in Europe, ClimaTech and Geoclima, Zamil Air Conditioners has been vigorously moving into newer markets, seeking strategic alliances and investing heavily in Research & Development.

For more information, please visit our website www.zamilac.com



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