

# Rooftop Package Series R410A

048-350 MBH



**Packaged Air Conditioning Units With Hermetic Compressor Tropical**

**50 Hz**

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## ABOUT THE COMPANY

Refrigeration Industries & Storage and Oil Services Company, occupies a leading position as one of the largest industrial companies in Kuwait which was established in 1973. It plays a proactive role in providing various services and diverse activities such as manufacturing, storage, and oil services to meet the needs of customers both inside and outside Kuwait.

Since its inception, RIC has been committed to excellence and advancing its progress, leading to the establishment of the brand (Coolex) in 1986, a true milestone in the Kuwaiti market as the first in the region in the sector of manufacturing air conditioning systems and cooling solutions.

Furthermore, the company has consistently empowered its workforce, enhanced safety and competitiveness, and utilized innovative technologies to launch new products that meet the needs of various sectors, contributing to company's expansion and supporting growth and prosperity.

To ensure the highest performance in the future, RIC harnesses its continuous research to enhance efficiency and quality, while continuing its efforts to manufacture products capable of adapting to climate, environmental, and energy challenges.



## Facts throughout the years

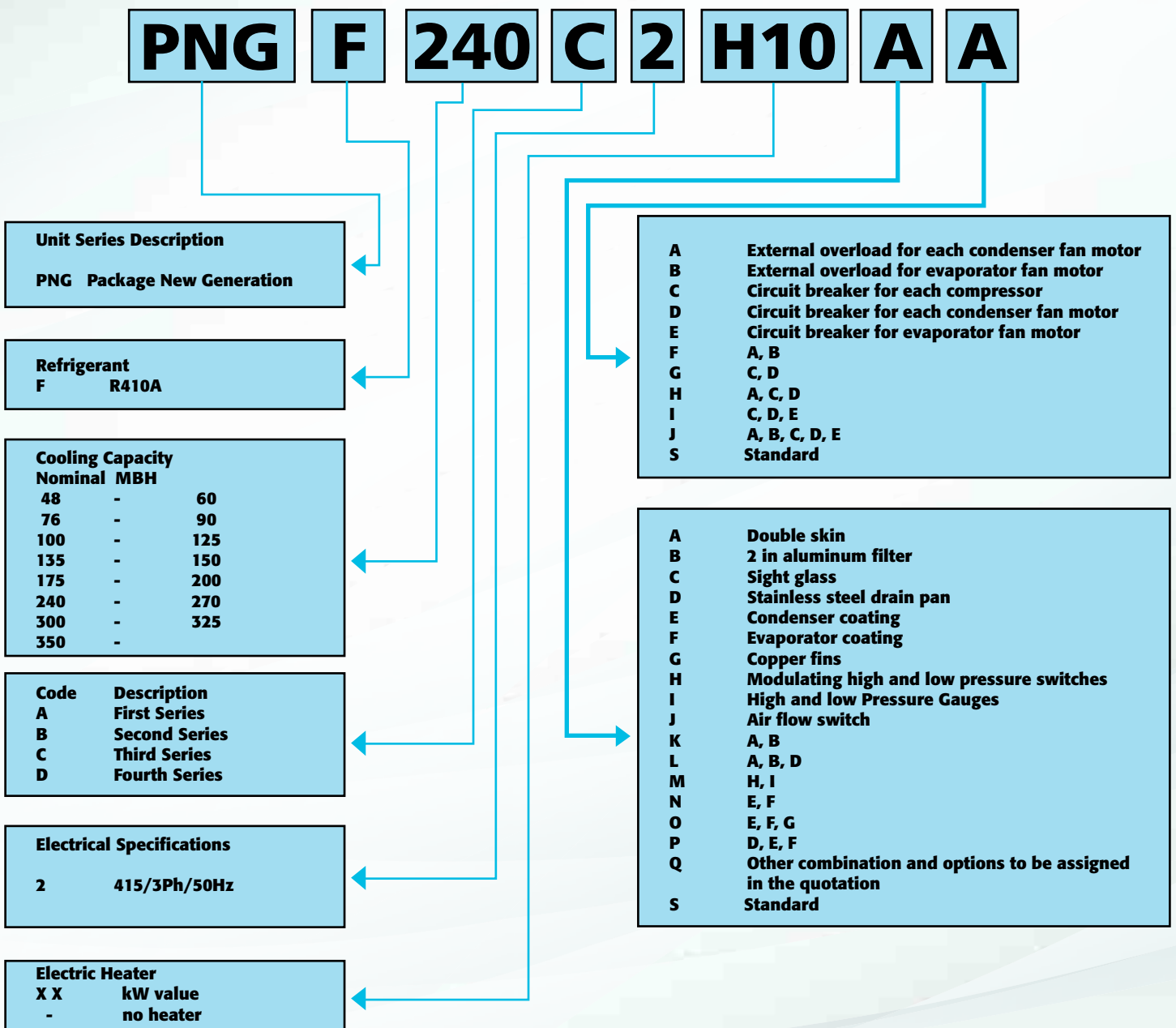
- 1973 Warehouses were established by Amiri Decree.
- 1979 RIC Constructed the Medical Cold Stores Complex, the world's largest at that time.
- 1980 RIC Air Conditioning manufacturing plant set up in Sulaibya.
- 1981 Production of Package & Mini-Split A/Cs started under York-Gulf.
- 1984 RIC was listed in Kuwait Stock Exchange.
- 1986 COOLEX brand Production Launched.
- 1991 RIC rebuilt the manufacturing plant destroyed during the war.
- 1997 Achieved ISO Certification ISO 9001:1994.
- 2002 ETL Designed testing lab became fully operational.
- 2004 Privatization of RIC.
- 2010 COOLEX becomes the first A/C Unit to Pass MEW's new regulations.
- 2010 RIC Factory Renovation and Expansion into neighboring countries.
- 2012 Achieved UL & AHRI Certification for Coolex Units.
- 2014 Achieved SASO Certification for Concealed Ducted Split Series.
- 2014 Achieved EUROVENT Certification for Air Handling Units AHU.
- 2014 Achieved UL Certification for Air Cooled Chillers.
- 2015 Achieved ISO 17025 Certification for Psychrometric Laboratory.
- 2016 Achieved Energy Efficiency Certification for Concealed Ducted Split Series & Rooftop Package units (Kingdom of Bahrain).
- 2016 Acquisition of Gulf Paramount for Electrical Services Company.
- 2021 Acquisition of Kuwait Pipes Industries & Oil Services factory, resulting in a change of the company's name from Refrigeration Industries & Storage Co. to Refrigeration Industries & Storage and Oil Services Co.

## INTRODUCTION

COOLEX UL listed, High Efficiency Commercial Package Units (PNGF) are designed specifically for tropical operation with high performance, low power consumption, easy installation and low noise operations. PNGF Commercial units are available from 048 to 350 nominal MBH at 50Hz.

Quality and Efficiency make COOLEX aircooled package units the preferred choice for DX cooling systems in commercial and industrial applications. Coolex Packaged Units can be used for cooling or heating with optional electric heater.

## NOMENCLATURE



## UNIT RATING SUMMARY

Model	Air Flow (MAX) (CFM)	Ambient temp 95°F				Ambient temp 115°F				Ambient temp 118.4°F			
		Cooling Capacity	Total Power	kW/Ton	EER	Cooling Capacity	Total Power	kW/Ton	EER	Cooling Capacity	Total Power	kW/Ton	EER
		(MBH)	(kW)			(MBH)	(kW)			(MBH)	(kW)		
PNGF-048 C2	1613	58.74	4.30	0.88	13.66	53.77	5.22	1.17	10.29	52.92	5.38	1.22	9.84
PNGF-060 C2	2004	68.14	4.96	0.87	13.7	61.90	6.01	1.17	10.30	60.84	6.19	1.22	9.83
PNGF-076 C2	2514	80.27	6.05	0.90	13.27	72.65	7.21	1.19	10.07	68.28	7.41	1.30	9.21
PNGF-090 C2	3014	100.10	7.83	0.94	12.8	91.02	9.27	1.22	9.82	87.72	9.61	1.31	9.13
PNGF-100 C2	3273	117.89	9.17	0.93	12.85	106.40	10.91	1.23	9.75	101.40	11.12	1.32	9.12
PNGF-125 C2	4172	133.05	10.57	0.95	12.6	120.97	12.29	1.22	9.85	118.92	12.58	1.27	9.45
PNGF-135 C2	4825	141.71	11.21	0.95	12.64	128.74	13.46	1.25	9.57	121.08	13.84	1.37	8.75
PNGF-150 C2	5077	162.85	13.30	0.98	12.2	147.94	14.98	1.22	9.87	142.56	15.42	1.30	9.25
PNGF-175 C2	6306	176.20	15.41	1.05	11.43	160.06	17.20	1.29	9.30	157.32	17.59	1.34	8.94
PNGF-200 C2	6747	193.14	15.63	0.97	12.36	176.78	18.49	1.25	9.56	171.24	18.97	1.33	9.03
PNGF-240 C2	7302	258.41	19.92	0.92	13.0	236.52	23.55	1.19	10.04	232.80	24.17	1.25	9.63
PNGF-270 C2	9578	297.04	23.11	0.93	12.85	278.23	29.75	1.28	9.35	269.64	30.82	1.37	8.75
PNGF-300 C2	9557	320.12	23.96	0.90	13.4	297.53	30.36	1.22	9.80	281.04	31.45	1.34	8.94
PNGF-325 C2	9598	336.68	26.99	0.96	12.48	315.37	32.46	1.24	9.72	298.32	33.39	1.34	8.93
PNGF-350 C2	10297	376.97	31.06	0.99	12.1	353.10	37.69	1.28	9.37	338.88	39.21	1.39	8.64

Rating Conditions: Indoor Temperature DB = 80° F (26.7° C)  
WB = 67° F (19.4° C)

## OUT STANDING FEATURES

### Superior Efficiency

- High EER (Energy Efficiency Ratio) exceeds the new ASHRAE 90.1 efficiency levels
- Low power consumption
- High volumetric efficiency scroll compressors
- Designed to operate at severe ambient temperature up to 52°C without tripping

### Quiet operation

- Low noise level compressors, condenser fans and evaporator blower
- Compact physical footprint
- Special designed refrigerant piping in addition to the insulation for the evaporator section

### Controls

- Microprocessor Controller
- Single point power supply
- Color coded wires
- Weather proof Control panel

### Quality Assurance

All units in the PNGF series are:

- Factory run tested.
- Produced in an ISO 9001-2000 listed manufacturing facility.
- Constructed in compliance with ASHRAE 15 safety requirements.
- AHRI certified cooling coils

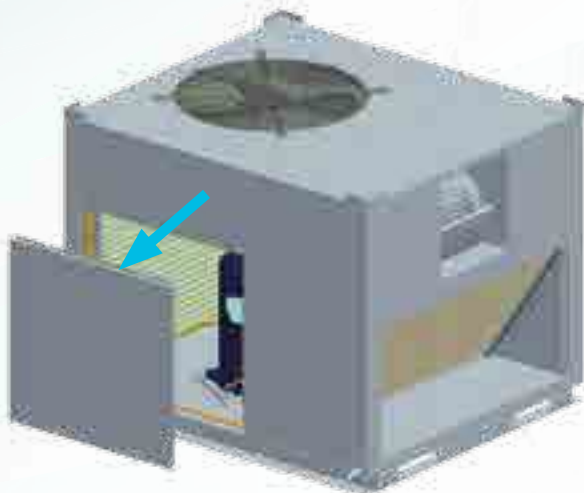
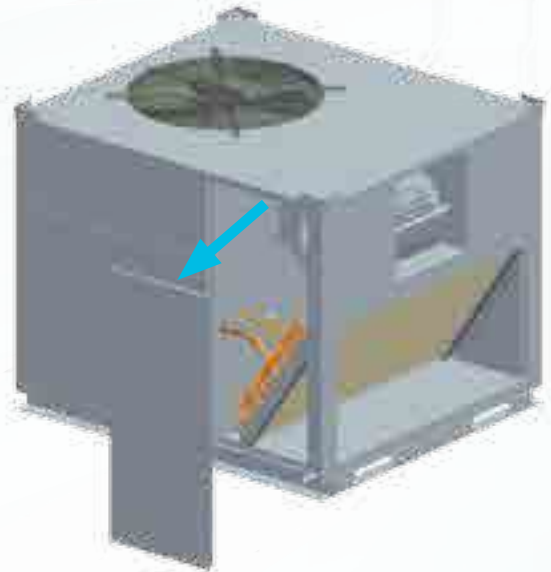
### Options & Accessories

- Totally Enclosed Fan cooled (TEFC) Blower Motor
- Intelligent air Quality System by Economizer control
- Ultra Violet (UV) lamps

## OUT STANDING FEATURES

### Evaporator's Side

- Easy access to the evaporator side with removable panel for maintenance purpose for the fan, motor, belt, pulleys, and expansion device
- Easy access to drain pan for cleaning

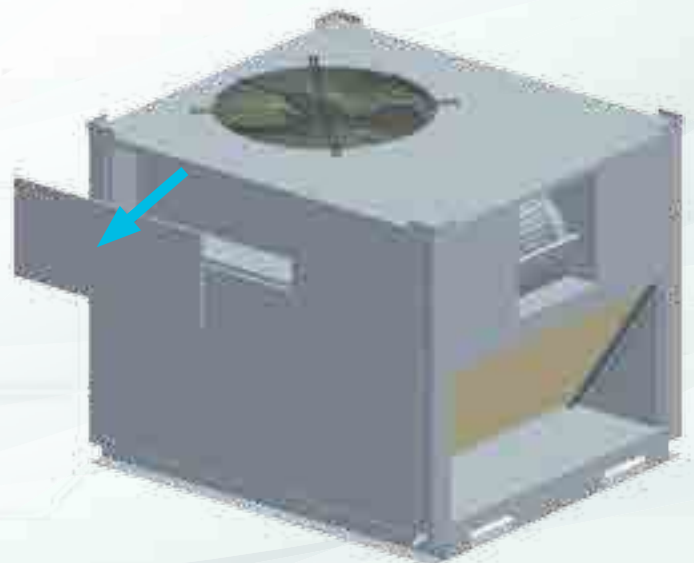


### Compressor's Side

- Easy access to the compressor side with removable panel for maintenance purpose for the compressor, and filter drier
- Easy access to condenser fans, and motors

### Electrical Panel

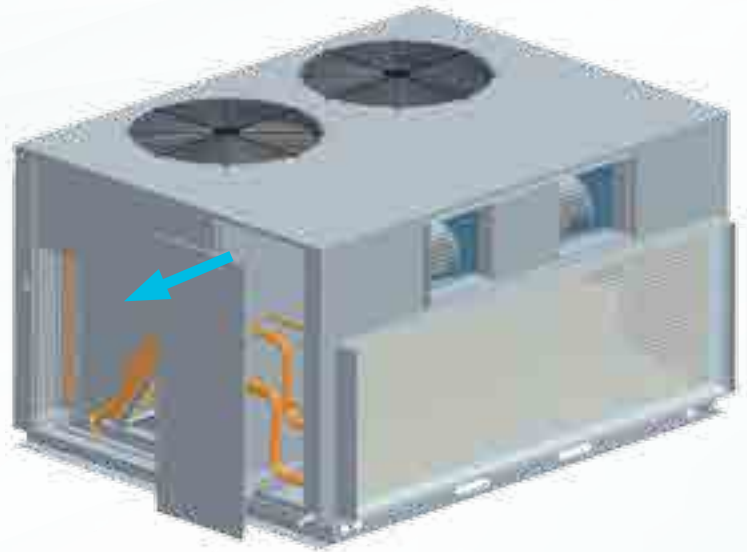
- Easy access to the electrical panel with removable panel for microprocessor access and electrical parts



## OUT STANDING FEATURES

### Evaporator's Side

- Easy access to the evaporator side with removable panel for maintenance purpose for the fan, motor, belt, pulleys and expansion valve
- Easy access for drain pan for cleaning



### Compressor's side

- Easy access to the compressor side for maintenance purpose for the compressors and the filter drier
- Easy access for the condenser fans and motors

### Electrical Panel

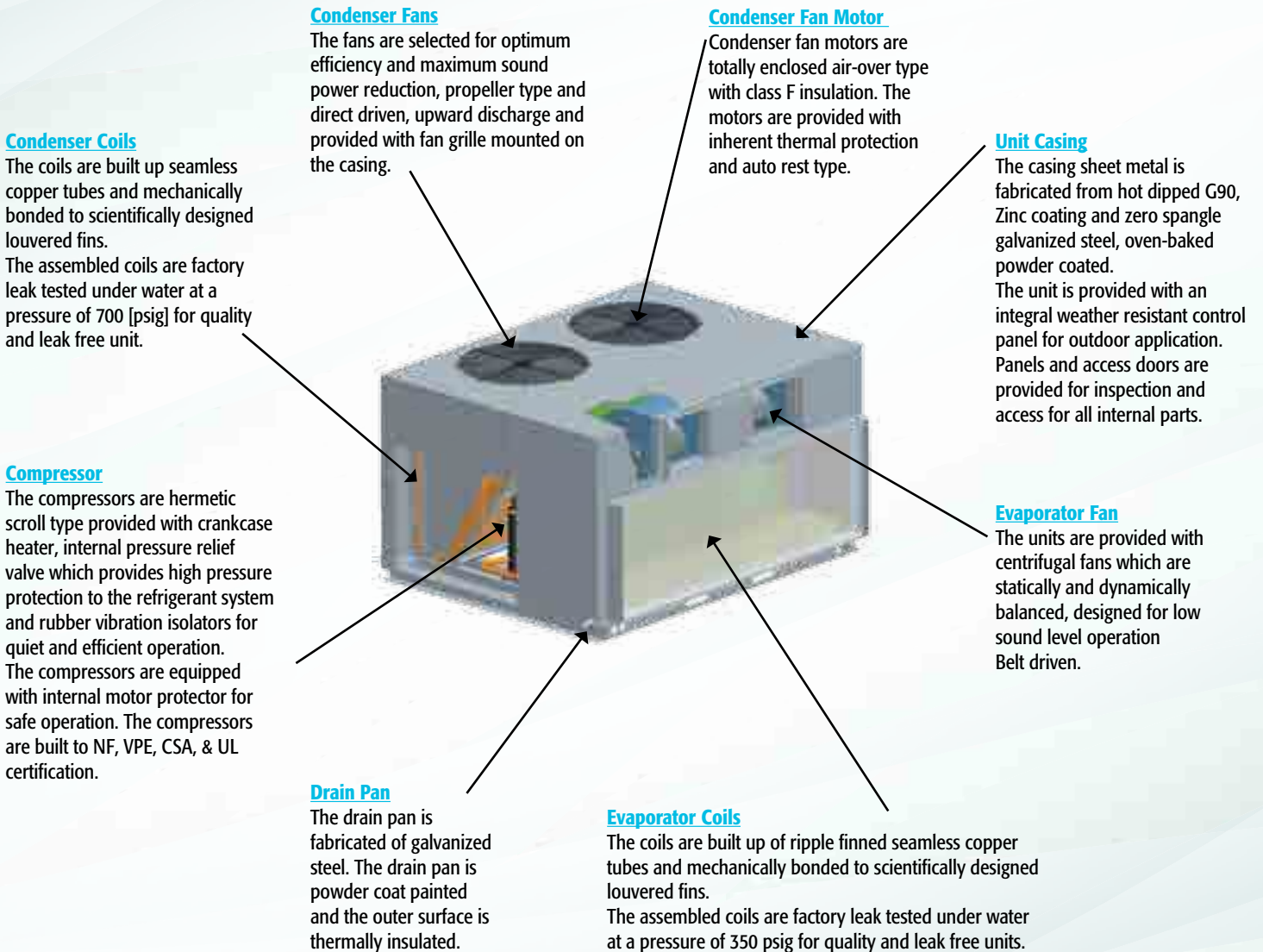
- Easy access to the electrical panel for microprocessor access and electrical parts



## STANDARD SPECIFICATIONS

### General

- The Package New Generation units (PNGF) are factory assembled cooling or combination of cooling and heating with electric heater, suitable for outdoor installation mounting on the roof or ground.
- The packaged unit consists of scroll compressors, cooling coil, condenser coil, fans, electric heater (optional), control wiring and interconnecting piping-all factory assembled.



## OPTIONAL SPECIFICATIONS

### Construction

- Double skin for evaporator side
- Coil protection materials:
  - a) Polyurethane pre-coat Aluminum fins with copper tubes
  - b) Tinned copper tubes with copper fins
- Condenser coil guard
- Mesh around perimeter of condenser sections
- Stainless steel drain pan
- Double side drain connections
- Other types of filter: synthetic fiber media for flat filter, 2" or 4" flat filter, bag filter
- Mixing box
- Vibration isolation for the unit :
  - a) Neoprene rubber pads
  - b) 1" spring isolator
- Lockable door for the control panel

Coolex App



### Electrical

- Electric heaters (open coil type)
- Electric heaters (fin type)
- Compressor circuit breaker
- Mild ambient (fan cycling) control
- Duct sensor
- Anti - ice thermostat
- Volt free contacts
- External overload
- Ultra violet light
- Dirty filter indication
- Fire alarm connection
- Economizer controller

### Refrigeration

- Pump down solenoid valve (PDS)
- Hot gas bypass valve
- Adjustable high pressure switch
- Adjustable low pressure switch
- Muffler
- Replaceable filter drier with mechanical shut-off valve

Typical Thermostat



Wi Fi Module



## MICROPROCESSOR BASED CONTROLLER

### Microprocessor Based Controller

The Package New Generation units are provided with technologically advanced Microprocessor based controller, incorporating the following benefits and features:

- ANTI-RECYCLE TIMER
- Compressor lock out function
- Balance loading of compressors
- Compressors lead-lag operation
- Pump down option.
- Fault diagnostics
- Indicator lights for high & low pressure Safeties

## SELECTION PROCEDURE

The below example illustrates the selection procedure to assist using this catalog to select the appropriate PNGF unit that meets the design requirements.

### Example :

#### Design requirements

- Total cooling capacity 138 [MBH]
- Sensible cooling capacity 93.7 [MBH]
- Design ambient temperature 118.4 [°F]
- Evaporator air flow 5000 [CFM]
- Evaporator entering temperature DB/WB 80/67 [°F/°F]
- External static pressure 0.5 [in.wg]
- Altitude 2000 [ft]
- Power supply 415V / 3Ph / 50Hz

Altitude [ft]	Correction factor
Sea level	1
1000	0.996
2000	0.990
3000	0.984
4000	0.980
5000	0.974
6000	0.965
7000	0.960

\*Using the correction factor table at the specified altitude, thereby the required capacity will be:

**Corrected capacity** = Required capacity / corr. factor

**Corrected total capacity** = 138 [MBH]/0.99  
= 139.39 MBH

**Corrected sensible capacity** = 93.7 [MBH]/0.99  
= 94.64 MBH

From the cooling capacity at performance data tables (page 13), the closest selection model to the required capacity is PNGF 150. From the performance table:

**Total capacity** = 142.56 [MBH]

**Sensible capacity** = 95.93 [MBH]

**GENERAL DATA**

Model		PNGF-048	PNGF-060	PNGF-076	PNGF-090	PNGF-100	PNGF-125	PNGF-135
Power supply [Volts/Phase/Hz]		415 V/3 Ph/50 Hz						
Compressor	Type	Scroll Hermetic						
	Quantity	1						
	Refrigerant	R410A						
	Refrigeration circuits	1						
	Expansion device type	Thermal expansion Valve						
Condenser Fan	Type	Propeller						
	Diameter, mm	610	762				610	
	No. of fans	1						2
	Motor Enclosure/Ins Class	Totally Enclosed Air Over, Class F						
	Nominal kW (HP)	0.56 (0.75)	0.75 (1)		1.12 (1.5)		2 x 0.56 (0.75)	
	RPM	900						
Condenser Coil	Type	Enhanced Fins & Tube						
	Number of Rows	2R/3R						
Evaporator Blower	Type	Centrifugal						
	Motor Enclosure/Ins Class	Open Drip-Proof, Class B						
	Nominal kW (HP)	0.56 (3/4)	0.75 (1)		1.5 (2)		2.2 (3)	
Evaporator Coil	Type	Enhanced Fins & Tube						
	Number of Rows	3R/4R						
Air filter	Type	Washable aluminum mesh						
	Thickness [inch]	0.5"		1"			2"	
Operating Weight	kg	190	196	260	361	369	385	540

Model		PNGF-150	PNGF-175	PNGF-200	PNGF-240	PNGF-270	PNGF-300	PNGF-325	PNGF-350
Power supply [Volts/Phase/Hz]		415 V/3 Ph/50 Hz							
Compressor	Type	Hermetic Scroll							
	Quantity	2							
	Refrigeration circuits	2							
	Refrigerant	R410A							
	Expansion device type	Thermal expansion							
Condenser Fan	Type	Propeller – Direct Drive							
	Diameter, mm	610	762				800		
	No. of fans	2							
	Motor Enclosure/Ins Class	Totally Enclosed Air Over, Class F							
	Nominal kW (HP)	2 x 0.56 (0.75)	2 x 1.10 (1.5)				2 x 1.25 (1.7)		
	RPM	900							
Condenser Coil	Type	Enhanced Fins & Tube							
	Number of Rows	2R/3R				3R/ 4R			
Evaporator Blower	Type	Centrifugal - Belt Driven							
	No. of fans	1	2						
	Motor Enclosure/Ins Class	Open Drip-Proof, Class F / Class B							
Evaporator Coil	Nominal kW (HP)	2.2(3)	3.7(5)			5.6(7.5)			
	Type	Enhanced Fins & Tube							
Air filter	Number of Rows	3R/ 4R							
	Type	Washable aluminum mesh							
Operating Weight	Thickness [inch]	2 "							
	kg	610	695	720	755	1005	1065	1225	1240

PERFORMANCE DATA TABLES

Model	Air On Evaporator			Condenser Ambient Temperature											
	Air Flow		Temp ° F	95° F			115° F			118.4° F			125° F		
	CFM	DB	WB	Capacity Btu/Hr		kw Input	Capacity Btu/Hr		kw Input	Capacity Btu/Hr		kw Input	Capacity Btu/Hr		kw Input
				Total	Sen.		Total	Sen.		Total	Sen.		Total	Sen.	
PNGF-048C2	1400	84.2	66.2	56,023	47,619	4.23	51,268	43,578	5.14	50,450	42,883	5.30	47,923	40,735	5.61
		80.0	67.0	57,166	42,173	4.23	52,314	40,841	5.14	51,480	34,594	5.30	48,901	38,990	5.61
		74.0	62.0	50,387	38,180	4.00	46,111	36,974	4.86	45,376	29,522	5.01	43,103	35,298	5.31
		68.0	57.0	43,786	34,113	3.87	40,069	33,035	4.66	39,430	24,752	4.77	37,455	31,538	5.09
	1500	84.2	66.2	56,967	50,701	4.26	52,133	46,398	5.17	51,301	45,657	5.33	48,732	43,371	5.65
		80.0	67.0	57,925	43,008	4.26	53,009	41,649	5.17	52,163	35,398	5.33	49,551	39,762	5.65
		74.0	62.0	51,052	38,972	4.05	46,719	37,742	4.92	45,974	30,170	5.07	43,672	36,031	5.37
		68.0	57.0	44,367	34,686	3.89	40,602	33,591	4.69	39,954	25,432	4.83	37,953	32,069	5.12
	1613	84.2	66.2	58,077	55,174	4.30	53,159	50,501	5.22	52,322	49,706	5.38	49,706	47,221	5.70
		80.0	67.0	58,741	43,810	4.30	53,766	42,439	5.22	52,920	36,186	5.38	50,274	40,518	5.70
		74.0	62.0	51,766	39,648	4.09	47,372	38,396	4.97	46,617	30,872	5.12	44,282	36,656	5.43
		68.0	57.0	44,991	35,432	3.91	41,172	34,313	4.74	40,515	25,893	4.87	38,486	32,758	5.17

PNGF-060C2	1800	84.2	66.2	64,987	55,239	4.88	59,024	50,171	5.92	58,000	49,300	6.09	55,096	46,831	6.46
		80.0	67.0	66,313	47,221	4.88	60,229	45,002	5.92	59,184	40,480	6.09	56,220	42,840	6.46
		74.0	62.0	58,450	42,749	4.61	53,088	40,741	5.59	52,166	34,613	5.76	49,554	38,784	6.10
		68.0	57.0	50,792	38,195	4.47	46,132	36,401	5.36	45,331	29,089	5.49	43,061	34,652	5.86
	1900	84.2	66.2	66,083	58,814	4.91	60,020	53,418	5.95	58,978	52,491	6.13	56,025	49,862	6.50
		80.0	67.0	67,194	48,155	4.91	61,029	45,893	5.95	59,970	41,363	6.13	56,967	43,688	6.50
		74.0	62.0	59,222	43,636	4.67	53,788	41,587	5.67	52,855	35,326	5.83	50,208	39,589	6.18
		68.0	57.0	51,467	38,838	4.49	46,745	37,014	5.40	45,933	29,834	5.56	43,633	35,235	5.90
	2004	84.2	66.2	67,371	64,003	4.96	61,202	58,142	6.01	60,153	57,145	6.19	57,145	54,288	6.56
		80.0	67.0	68,141	49,054	4.96	61,901	46,763	6.01	60,840	42,230	6.19	57,798	44,519	6.56
		74.0	62.0	60,049	44,393	4.72	54,540	42,308	5.72	53,593	36,097	5.89	50,909	40,276	6.24
		68.0	57.0	52,190	39,673	4.51	47,401	37,809	5.45	46,578	30,342	5.61	44,246	35,993	5.95

PNGF-076C2	2200	84.2	66.2	76,557	65,073	5.95	69,273	58,882	7.10	65,011	55,260	7.29	64,616	54,924	7.73
		80.0	67.0	78,119	53,238	5.95	70,687	50,120	7.10	66,338	45,462	7.29	65,935	47,607	7.73
		74.0	62.0	68,856	48,197	5.63	62,306	45,375	6.71	58,108	38,698	6.89	58,117	43,100	7.31
		68.0	57.0	59,835	43,062	5.45	54,142	40,541	6.44	50,091	32,321	6.57	50,502	38,508	7.01
	2350	84.2	66.2	77,848	69,285	5.99	70,442	62,693	7.14	66,147	58,871	7.34	65,706	58,479	7.78
		80.0	67.0	79,157	54,292	5.99	71,626	51,112	7.14	67,259	46,443	7.34	66,811	48,549	7.78
		74.0	62.0	69,765	49,197	5.70	63,128	46,317	6.80	58,915	39,489	6.98	58,883	43,994	7.40
		68.0	57.0	60,630	43,787	5.47	54,861	41,223	6.48	50,797	33,140	6.65	51,172	39,156	7.06
	2514	84.2	66.2	79,365	75,397	6.05	71,828	68,237	7.21	67,509	64,133	7.41	67,019	63,668	7.85
		80.0	67.0	80,272	55,304	6.05	72,649	52,082	7.21	68,280	47,406	7.41	67,785	49,473	7.85
		74.0	62.0	70,740	50,050	5.75	64,010	47,120	6.86	59,781	40,340	7.05	59,706	44,757	7.47
		68.0	57.0	61,482	44,728	5.50	55,632	42,110	6.54	51,554	33,707	6.71	51,891	39,998	7.12

PERFORMANCE DATA TABLES

Model	Air On Evaporator			Condenser Ambient Temperature											
	Air Flow		Temp ° F	95° F			115° F			118.4° F			125° F		
	CFM	DB	WB	Capacity Btu/Hr		kw Input	Capacity Btu/Hr		kw Input	Capacity Btu/Hr		kw Input	Capacity Btu/Hr		kw Input
				Total	Sen.		Total	Sen.		Total	Sen.		Total	Sen.	
PNGF-090C2	2600	84.2	66.2	95,471	81,150	7.70	86,790	73,771	9.12	83,677	71,126	9.36	81,026	68,872	9.92
		80.0	67.0	97,419	68,451	7.70	88,561	64,230	9.12	85,385	59,618	9.36	82,680	60,972	9.92
		74.0	62.0	85,867	61,970	7.28	78,060	58,149	8.62	75,064	50,926	8.85	72,876	55,200	9.38
		68.0	57.0	74,617	55,368	7.05	67,832	51,954	8.27	65,012	42,734	8.43	63,327	49,320	9.00
	2800	84.2	66.2	97,081	86,402	7.75	88,253	78,545	9.18	85,109	75,747	9.42	82,393	73,330	9.98
		80.0	67.0	98,713	69,806	7.75	89,737	65,502	9.18	86,540	60,875	9.42	83,778	62,180	9.98
		74.0	62.0	87,001	63,255	7.38	79,090	59,356	8.73	76,076	51,941	8.96	73,838	56,346	9.50
		68.0	57.0	75,608	56,299	7.08	68,733	52,829	8.32	65,897	43,789	8.54	64,168	50,149	9.06
	3014	84.2	66.2	98,973	94,024	7.83	89,990	85,490	9.27	86,828	82,487	9.61	84,040	79,838	10.08
		80.0	67.0	100,104	71,108	7.83	91,018	66,744	9.27	87,720	62,108	9.61	85,000	63,362	10.08
		74.0	62.0	88,216	64,352	7.45	80,195	60,386	8.82	77,162	53,033	9.05	74,869	57,323	9.59
		68.0	57.0	76,671	57,510	7.12	69,699	53,964	8.40	66,846	44,512	8.62	65,070	51,227	9.14

PNGF-100C2	2800	84.2	66.2	112,437	95,572	9.03	101,453	86,235	10.74	96,586	82,098	11.04	94,581	80,394	11.70
		80.0	67.0	114,732	75,593	9.03	103,523	71,503	10.74	98,557	66,387	11.04	96,511	67,976	11.70
		74.0	62.0	101,127	68,435	8.53	91,248	64,733	10.15	86,510	56,638	10.43	85,067	61,540	11.05
		68.0	57.0	87,878	61,144	8.26	79,293	57,837	9.74	74,776	47,447	9.93	73,921	54,984	10.60
	3000	84.2	66.2	114,334	101,757	9.09	103,164	91,816	10.81	98,254	87,446	11.10	96,176	85,597	11.77
		80.0	67.0	116,256	77,089	9.09	104,898	72,918	10.81	99,906	67,788	11.10	97,793	69,321	11.77
		74.0	62.0	102,463	69,855	8.65	92,453	66,077	10.29	87,332	57,280	10.57	86,190	62,818	11.20
		68.0	57.0	89,045	62,173	8.30	80,346	58,811	9.81	75,810	48,621	10.06	74,903	55,909	10.68
	3273	84.2	66.2	116,562	110,734	9.17	105,195	99,935	10.91	100,254	95,242	11.12	98,791	93,852	11.88
		80.0	67.0	117,894	78,527	9.17	106,397	74,301	10.91	101,400	69,163	11.12	99,220	70,640	11.88
		74.0	62.0	103,894	71,067	8.73	93,744	67,223	10.38	88,960	58,985	10.67	87,394	63,907	11.31
		68.0	57.0	90,297	63,510	8.34	81,475	60,075	9.90	76,918	49,429	10.16	75,955	57,111	10.78

PNGF-125C2	3200	84.2	66.2	126,889	107,856	10.39	115,352	98,049	12.09	113,369	96,364	12.37	107,692	91,538	13.12
		80.0	67.0	129,479	85,897	10.40	117,706	80,183	12.10	115,683	77,187	12.38	109,890	76,043	13.13
		74.0	62.0	114,126	77,764	9.83	103,749	72,591	11.43	101,966	66,141	11.70	96,860	68,843	12.41
		68.0	57.0	99,174	69,479	9.51	90,155	64,858	10.96	88,605	55,718	11.15	84,168	61,510	11.90
	3700	84.2	66.2	129,030	114,836	10.45	117,297	104,394	12.16	115,281	102,600	12.45	109,509	97,463	13.20
		80.0	67.0	131,199	87,597	10.46	119,269	81,770	12.17	117,219	78,755	12.46	111,350	77,549	13.21
		74.0	62.0	115,633	79,377	9.96	105,118	74,098	11.58	103,312	67,407	11.86	98,138	70,273	12.57
		68.0	57.0	100,491	70,648	9.56	91,353	65,950	11.04	89,783	57,043	11.29	85,286	62,545	11.98
	4172	84.2	66.2	131,545	124,968	10.56	119,606	113,626	12.28	117,577	111,698	12.57	111,698	106,113	13.32
		80.0	67.0	133,048	89,232	10.57	120,973	83,321	12.29	118,920	80,293	12.58	112,974	79,023	13.33
		74.0	62.0	117,248	80,754	10.05	106,587	75,383	11.69	104,755	68,771	11.97	99,509	71,491	12.69
		68.0	57.0	101,903	72,167	9.61	92,637	67,367	11.15	91,044	57,942	11.40	86,484	63,889	12.10

PERFORMANCE DATA TABLES

Model	Air On Evaporator			Condenser Ambient Temperature											
	Air Flow		Temp ° F	95° F			115° F			118.4° F			125° F		
	CFM	DB	WB	Capacity Btu/Hr		kw Input	Capacity Btu/Hr		kw Input	Capacity Btu/Hr		kw Input	Capacity Btu/Hr		kw Input
				Total	Sen.		Total	Sen.		Total	Sen.		Total	Sen.	
PNGF-135C2	4000	84.2	66.2	135,154	114,881	11.03	122,754	104,341	13.24	115,283	97,991	13.61	114,583	97,395	14.43
		80.0	67.0	137,912	88,709	11.04	125,259	86,221	13.25	117,636	82,180	13.62	116,921	82,366	14.44
		74.0	62.0	121,558	80,309	10.43	110,406	78,058	12.52	103,042	70,037	12.88	103,057	74,568	13.65
		68.0	57.0	105,633	71,754	10.10	95,940	69,742	12.01	88,826	58,582	12.26	89,554	66,625	13.09
	4400	84.2	66.2	137,433	122,316	11.09	124,823	111,093	13.32	117,298	104,395	13.70	116,515	103,698	14.52
		80.0	67.0	139,744	90,465	11.10	126,922	87,928	13.33	119,270	83,878	13.71	118,474	83,997	14.53
		74.0	62.0	123,163	81,975	10.57	111,864	79,678	12.68	104,473	71,407	13.04	104,417	76,116	13.83
		68.0	57.0	107,035	72,961	10.15	97,215	70,916	12.09	90,078	60,000	12.42	90,743	67,746	13.18
	4825	84.2	66.2	140,111	133,106	11.20	127,281	120,917	13.45	119,712	113,727	13.83	118,845	112,903	14.66
		80.0	67.0	141,712	92,152	11.21	128,735	89,595	13.46	121,080	85,544	13.84	120,203	85,594	14.67
		74.0	62.0	124,884	83,397	10.67	113,426	81,060	12.81	106,009	72,879	13.17	105,876	77,436	13.96
		68.0	57.0	108,540	74,529	10.20	98,581	72,441	12.21	91,420	60,980	12.54	92,018	69,202	13.31
PNGF-150C2	4200	84.2	66.2	155,308	132,012	13.09	141,070	119,910	14.74	135,830	115,455	15.01	131,682	111,929	15.91
		80.0	67.0	158,478	104,798	13.10	143,949	96,474	14.75	138,602	92,206	15.03	134,369	91,257	15.93
		74.0	62.0	139,686	94,875	12.38	126,881	87,340	13.94	121,830	78,829	14.21	118,436	82,617	15.06
		68.0	57.0	121,385	84,768	11.98	110,256	78,036	13.37	105,492	66,204	13.53	102,918	73,816	14.44
	4600	84.2	66.2	157,928	140,556	13.16	143,449	127,670	14.83	138,157	122,960	15.10	133,903	119,174	16.01
		80.0	67.0	160,583	106,872	13.17	145,861	98,384	14.84	140,480	94,087	15.12	136,154	93,064	16.03
		74.0	62.0	141,530	96,843	12.54	128,555	89,153	14.12	123,475	80,346	14.39	119,999	84,332	15.26
		68.0	57.0	122,997	86,194	12.04	111,721	79,349	13.46	106,932	67,786	13.71	104,285	75,058	14.54
	5077	84.2	66.2	161,006	152,956	13.29	146,273	138,959	14.97	140,949	133,902	15.40	136,579	129,750	16.17
		80.0	67.0	162,846	108,866	13.30	147,944	100,250	14.98	142,560	95,933	15.42	138,140	94,833	16.19
		74.0	62.0	143,508	98,523	12.66	130,351	90,699	14.26	125,240	81,980	14.53	121,675	85,795	15.40
		68.0	57.0	124,726	88,047	12.10	113,290	81,055	13.59	108,474	68,867	13.84	105,750	76,672	14.68
PNGF-175C2	5100	84.2	66.2	168,044	142,837	15.14	152,626	129,732	16.91	149,977	127,481	17.21	142,467	121,097	18.23
		80.0	67.0	171,473	122,393	15.17	155,741	112,663	16.94	153,038	111,003	17.24	145,374	106,569	18.27
		74.0	62.0	151,140	110,804	14.33	137,274	101,996	16.01	134,892	95,189	16.29	128,136	96,479	17.27
		68.0	57.0	131,338	99,000	13.94	119,288	91,131	15.35	117,216	80,253	15.52	111,347	86,202	16.56
	5700	84.2	66.2	170,877	152,081	15.23	155,200	138,128	17.01	152,506	135,730	17.31	144,869	128,934	18.34
		80.0	67.0	173,750	124,816	15.26	157,809	114,893	17.04	155,070	113,200	17.34	147,305	108,679	18.38
		74.0	62.0	153,135	113,103	14.52	139,086	104,113	16.21	136,672	96,959	16.50	129,827	98,483	17.49
		68.0	57.0	133,083	100,665	13.88	120,873	92,664	15.46	118,774	82,108	15.72	112,825	87,652	16.68
	6306	84.2	66.2	174,207	165,497	15.38	158,255	150,342	17.17	155,543	147,766	17.55	147,766	140,377	18.52
		80.0	67.0	176,198	127,144	15.41	160,063	117,072	17.20	157,320	115,356	17.59	149,454	110,746	18.56
		74.0	62.0	155,275	115,065	14.66	141,029	105,919	16.37	138,581	98,872	16.66	131,641	100,190	17.66
		68.0	57.0	134,953	102,829	14.01	122,571	94,657	15.61	120,442	83,367	15.87	114,410	89,536	16.84

PERFORMANCE DATA TABLES

Model	Air On Evaporator			Condenser Ambient Temperature											
	Air Flow		Temp ° F	95° F			115° F			118.4° F			125° F		
	CFM	DB	WB	Capacity Btu/Hr		kw Input	Capacity Btu/Hr		kw Input	Capacity Btu/Hr		kw Input	Capacity Btu/Hr		kw Input
				Total	Sen.		Total	Sen.		Total	Sen.		Total	Sen.	
PNGF-200C2	5700	84.2	66.2	184,201	156,571	15.36	168,567	143,282	18.16	163,174	138,698	18.64	157,571	133,936	19.76
		80.0	67.0	187,960	142,633	15.39	172,007	124,643	18.20	166,504	120,614	18.68	160,787	116,722	19.80
		74.0	62.0	165,672	129,127	14.54	151,612	112,841	17.20	146,434	103,846	17.65	141,722	105,671	18.71
		68.0	57.0	143,967	115,371	14.15	131,747	100,820	16.50	126,884	87,918	16.81	123,152	94,414	17.94
	6200	84.2	66.2	187,308	166,704	15.45	171,409	152,554	18.27	165,961	147,705	18.75	160,229	142,604	19.87
		80.0	67.0	190,457	145,455	15.48	174,291	127,110	18.31	168,751	122,495	18.79	162,923	119,033	19.91
		74.0	62.0	167,859	131,806	14.73	153,613	115,184	17.42	148,402	105,361	17.88	143,592	107,865	18.95
		68.0	57.0	145,879	117,312	14.08	133,497	102,517	16.61	128,607	89,503	17.03	124,788	96,003	18.07
	6747	84.2	66.2	190,958	181,410	15.60	174,784	166,045	18.45	169,305	160,840	18.93	163,433	155,261	20.07
		80.0	67.0	193,140	148,169	15.63	176,781	129,520	18.49	171,240	124,341	18.97	165,300	121,296	20.11
		74.0	62.0	170,205	134,092	14.87	155,759	117,182	17.59	150,514	106,984	18.05	145,598	109,735	19.13
		68.0	57.0	147,929	119,834	14.21	135,373	104,721	16.77	130,452	90,575	17.19	126,541	98,066	18.24
PNGF-240C2	6800	84.2	66.2	246,447	209,480	19.57	225,531	191,702	23.14	221,934	188,644	23.74	210,820	179,197	25.17
		80.0	67.0	251,477	178,593	19.61	230,134	156,067	23.19	226,463	135,272	23.79	215,122	146,149	25.22
		74.0	62.0	221,658	161,682	18.53	202,846	141,291	21.91	199,611	115,595	22.49	189,614	132,312	23.83
		68.0	57.0	192,618	144,457	17.93	176,268	126,239	21.02	173,455	97,071	21.42	164,769	118,218	22.86
	7000	84.2	66.2	250,605	223,038	19.68	229,334	204,108	23.27	225,676	200,852	23.89	214,376	190,795	25.32
		80.0	67.0	254,818	182,127	19.72	233,190	159,156	23.32	229,470	138,285	23.94	217,980	149,043	25.37
		74.0	62.0	224,584	165,036	18.77	205,523	144,223	22.20	202,245	118,024	22.78	192,116	135,059	24.15
		68.0	57.0	195,176	146,888	18.02	178,610	128,363	21.16	175,760	99,616	21.69	166,958	120,206	23.02
	7302	84.2	66.2	255,489	242,714	19.88	233,849	222,157	23.50	230,170	218,662	24.12	218,662	2077,28	25.57
		80.0	67.0	258,408	185,525	19.92	236,521	162,174	23.55	232,800	141,241	24.17	221,160	151,877	25.62
		74.0	62.0	227,722	167,899	18.95	208,395	146,725	22.41	205,070	120,654	23.00	194,800	137,401	24.38
		68.0	57.0	197,918	150,046	18.11	181,119	131,123	21.36	178,229	101,348	21.90	169,303	122,790	23.24
PNGF-270C2	8000	84.2	66.2	283,288	240,794	22.54	265,303	225,507	29.17	256,911	218,374	29.92	249,065	211,705	31.71
		80.0	67.0	289,069	206,159	22.63	270,717	185,482	29.29	262,154	177,386	30.04	254,148	174,689	31.84
		74.0	62.0	254,792	186,638	21.93	238,617	167,921	27.68	230,430	151,672	28.38	224,013	158,150	30.09
		68.0	57.0	221,411	166,755	21.01	207,352	150,032	26.55	199,529	127,403	27.04	194,660	141,303	28.86
	8500	84.2	66.2	288,066	256,379	22.80	269,776	240,100	29.35	261,313	232,568	30.10	253,267	225,408	31.90
		80.0	67.0	292,909	210,239	22.89	274,311	189,153	29.47	265,706	180,988	30.22	257,525	178,148	32.03
		74.0	62.0	258,156	190,510	22.03	241,766	171,406	28.04	233,542	154,576	28.75	226,968	161,433	30.48
		68.0	57.0	224,351	169,561	21.12	210,107	152,557	26.73	202,252	130,429	27.38	197,246	143,680	29.06
	9578	84.2	66.2	293,680	278,996	23.02	275,176	261,417	29.63	266,594	253,264	30.70	258,329	245,413	32.21
		80.0	67.0	297,036	214,161	23.11	278,230	192,741	29.75	269,640	184,521	30.82	261,281	181,535	32.34
		74.0	62.0	261,763	193,814	22.71	245,144	174,379	28.31	236,880	157,704	29.03	230,139	164,233	30.77
		68.0	57.0	227,504	173,205	21.38	213,059	155,837	26.99	205,169	132,500	27.64	200,017	146,769	29.34

PERFORMANCE DATA TABLES

Model	Air On Evaporator			Condenser Ambient Temperature											
	Air Flow		Temp ° F	95° F			115° F			118.4° F			125° F		
	CFM	DB	WB	Capacity Btu/Hr		kw Input	Capacity Btu/Hr		kw Input	Capacity Btu/Hr		kw Input	Capacity Btu/Hr		kw Input
				Total	Sen.		Total	Sen.		Total	Sen.		Total	Sen.	
PNGF-300C2	9000	84.2	66.2	305,302	259,507	23.50	283,703	241,148	29.77	267,585	227,447	30.84	265,958	226,065	32.69
		80.0	67.0	311,533	212,997	23.59	289,493	204,863	29.89	273,046	177,810	30.96	271,386	195,341	32.82
		74.0	62.0	274,592	192,828	22.29	255,167	185,467	28.25	239,171	151,133	29.26	239,206	176,847	31.01
		68.0	57.0	238,617	172,286	21.58	221,734	165,709	27.09	206,174	126,029	27.87	207,863	158,008	29.75
	9200	84.2	66.2	310,452	276,302	23.64	288,487	256,753	29.95	272,262	242,313	31.03	270,444	240,695	32.88
		80.0	67.0	315,671	217,212	23.73	293,337	208,918	30.07	276,839	181,837	31.15	274,991	199,209	33.01
		74.0	62.0	278,218	196,829	22.59	258,534	189,316	28.61	242,493	154,382	29.64	242,362	180,518	31.42
		68.0	57.0	241,786	175,185	21.69	224,680	168,498	27.28	209,082	129,389	28.23	210,624	160,666	29.95
	9557	84.2	66.2	316,503	300,677	23.86	294,167	279,458	30.24	277,865	263,972	31.32	275,851	262,059	33.21
		80.0	67.0	320,119	221,265	23.96	297,528	212,880	30.36	281,040	185,788	31.45	279,003	202,996	33.34
		74.0	62.0	282,105	200,243	22.80	262,147	192,600	28.89	246,058	157,878	29.93	245,748	183,648	31.72
		68.0	57.0	245,183	178,951	21.79	227,836	172,120	27.54	212,197	131,719	28.50	213,583	164,120	30.24

PNGF-325C2	9200	84.2	66.2	321,101	272,936	26.46	300,715	255,608	31.83	284,037	241,432	32.74	282,311	239,964	34.70
		80.0	67.0	327,654	233,656	26.57	306,852	212,951	31.96	289,834	177,627	32.87	288,072	201,054	34.84
		74.0	62.0	288,801	211,531	25.10	270,467	192,788	30.20	253,877	150,838	31.06	253,914	182,019	32.93
		68.0	57.0	250,964	188,996	24.30	235,029	172,250	28.97	218,851	125,651	29.59	220,643	162,629	31.58
	9400	84.2	66.2	326,517	290,600	26.61	305,785	272,149	32.02	289,002	257,212	32.94	287,073	255,495	34.91
		80.0	67.0	332,006	238,280	26.72	310,926	217,165	32.15	293,861	181,772	33.07	291,899	205,034	35.05
		74.0	62.0	292,614	215,920	25.43	274,037	196,790	30.59	257,403	154,182	31.47	257,264	185,798	33.36
		68.0	57.0	254,297	192,176	24.42	238,152	175,149	29.16	221,938	126,029	29.97	223,574	165,365	31.80
	9598	84.2	66.2	332,880	316,236	26.88	311,805	296,215	32.33	294,950	280,202	33.26	292,811	278,171	35.25
		80.0	67.0	336,684	242,726	26.99	315,368	221,284	32.46	298,320	185,839	33.39	296,157	208,933	35.39
		74.0	62.0	296,702	219,665	25.68	277,865	200,203	30.88	261,187	157,783	31.77	260,858	189,019	33.68
		68.0	57.0	257,871	196,308	24.54	241,497	178,915	29.44	225,244	131,507	30.25	226,715	168,920	32.11

PNGF-350C2	9400	84.2	66.2	359,522	305,594	30.45	336,697	286,192	36.96	32,2791	274,373	38.07	316,090	268,677	40.35
		80.0	67.0	366,859	260,274	30.57	343,568	239,195	37.11	329,379	193,938	38.22	322,541	226,188	40.51
		74.0	62.0	323,358	235,628	28.89	302,830	216,548	35.06	289,119	164,795	36.12	284,296	204,773	38.28
		68.0	57.0	280,994	210,526	27.96	263,152	193,479	33.64	249,902	137,419	34.40	247,045	182,960	36.72
	9800	84.2	66.2	365,586	325,371	30.63	342,374	304,713	37.18	328,367	292,246	38.29	321,422	286,066	40.59
		80.0	67.0	371,732	265,425	30.75	348,130	243,930	37.33	333,887	198,601	38.44	326,826	230,666	40.75
		74.0	62.0	327,627	240,517	29.27	306,827	221,043	35.52	293,068	168,556	36.59	288,047	209,025	38.78
		68.0	57.0	284,725	214,069	28.10	266,648	196,736	33.87	253,358	141,324	34.84	250,326	186,038	36.97
	10297	84.2	66.2	372,711	354,076	30.94	349,114	331,658	37.54	335,052	318,299	39.05	327,848	311,456	40.99
		80.0	67.0	376,970	270,377	31.06	353,103	248,556	37.69	338,880	203,176	39.21	331,594	235,052	41.15
		74.0	62.0	332,204	244,689	29.55	311,113	224,877	35.86	297,304	172,617	36.94	292,071	212,649	39.15
		68.0	57.0	288,726	218,670	28.24	270,394	200,965	34.19	257,060	144,019	35.17	253,842	190,037	37.33

**PERFORMANCE DATA TABLES****LEGEND:**

- CFM : Air flow rate ( Ft<sup>3</sup>/minute)  
DB : Dry bulb temperature (°F)  
WB : Wet bulb temperature (°F)  
P.I : Power input is Total Power (kW)

*Note: Capacity in kW= (Btu/hr/12000)\*3.517. Cooling capacities are gross ratings*

**UNIT ELECTRICAL DATA**

MODEL	POWER SUPPLY	VOLTAGE RANGE		FM	COMPRESSOR		BLOWER MOTOR		MCA	MOCP
	(V-PH-HZ)	MIN.	MAX.	FLA	RLA	LRA	HP	FLA		
PNGF-048	415/3/50	374	457	1.6	10.9	64	0.75	2.5	17.7	25
PNGF-060	415/3/50	374	457	1.6	12.5	75	1	3.3	20.5	30
PNGF-076	415/3/50	374	457	2.4	13.6	100	1	2.4	21.8	35
PNGF-090	415/3/50	374	457	2.4	14.5	101	2	4.3	24.8	35
PNGF-100	415/3/50	374	457	3	16.4	128	2	4.3	27.8	40
PNGF-125	415/3/50	374	457	3	18	139	2	4.3	29.8	45
PNGF-135	415/3/50	374	457	1.6(2)	20.8	144	3	4.6	33.8	50
PNGF-150	415/3/50	374	457	1.6(2)	13.6(2)	100	3	4.6	38.4	50
PNGF-175	415/3/50	374	457	3(2)	12.5	75	5	7.2	43.8	50
					14.5	101				
PNGF-200	415/3/50	374	457	3(2)	14.5(2)	101(2)	5	7.2	45.8	60
PNGF-240	415/3/50	374	457	3(2)	16.4	128	5	7.2	52.1	70
					18	139				
PNGF-270	415/3/50	374	457	3(2)	18	139	5	7.2	57.2	70
					20.8	144				
PNGF-300	415/3/50	374	457	3(2)	20.8(2)	144(2)	7.5	10.7	63.5	80
PNGF-325	415/3/50	374	457	3(2)	20.8	144	7.5	10.7	68.8	90
					25.0	140				
PNGF-350	415/3/50	374	457	3.8(2)	25.0	140	7.5	10.7	79.0	100
					28.6	174				

**LEGEND:**

- FLA - Full Load Amps
- HP - Horse Power
- LRA - Locked Rotor Amps
- RLA - Rated Load Amps
- MCA - Minimum Circuit Amps
- MOCP - Maximum Over Current Protection

**FAN PERFORMANCE**

**DIRECT DRIVEN MOTOR (CFM)**

MODEL	External Static Pressure [in.wg]					
	0.0	0.1	0.2	0.3	0.4	0.5
PNGF-048	1400	1361	1323	1287	-	-
	1500	1415	1325	1237	1143	-
	1613	1573	1481	1395	1295	1210
PNGF-060	1800	1692	1359	1240	-	-
	1900	1780	1661	1543	1415	-
	2004	1897	1771	1643	1499	1350

**BELT DRIVEN MOTOR**

Model	CFM	External Static Pressure [in.wg]																			
		0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80		0.90		1.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
PNGF-076	2200	770	0.55	810	0.60	848	0.64	886	0.70	923	0.75	-	-	-	-	-	-	-	-	-	-
	2350	775	0.60	813	0.66	850	0.71	887	0.76	922	0.82	-	-	-	-	-	-	-	-	-	-
	2514	780	0.67	818	0.72	854	0.78	889	0.83	93	0.88	-	-	-	-	-	-	-	-	-	-
PNGF-090	2600	784	0.71	821	0.76	856	0.82	891	0.87	925	0.92	958	1.00	991	1.04	1023	1.11	1055	1.17	1086	1.23
	2800	793	0.80	829	0.86	863	0.91	897	0.98	930	1.03	962	1.10	994	1.15	1025	1.22	1055	1.29	1085	1.35
	3014	803	0.90	838	0.97	872	1.03	905	1.09	937	1.15	968	1.22	999	1.27	1029	14.09	1058	1.41	1087	1.47
PNGF-100	2800	793	0.80	829	0.86	863	0.91	897	0.98	930	1.03	962	1.10	994	1.15	1025	1.22	1055	1.29	1085	1.35
	3000	803	0.90	838	0.97	872	1.03	905	1.09	937	1.15	968	1.22	999	1.27	1029	1.34	1058	1.41	1087	1.47
	3273	821	1.07	855	1.14	887	1.21	919	1.27	950	1.34	980	1.42	1009	1.49	1038	1.55	1067	1.62	1095	1.69

**BELT DRIVEN MOTOR**

Model	CFM	External Static Pressure [in.wg]																			
		0.30		0.40		0.60		0.80		1.00		1.20		1.40		1.60		1.80		2.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
PNGF-125	3200	708	0.84	738	1.00	798	1.15	857	1.34	-	-	-	-	-	-	-	-	-	-	-	-
	3700	714	1.10	743	1.18	799	1.35	853	1.53	905	1.72	956	1.90	1006	2.12	1055	2.33	-	-	-	-
	4172	725	1.34	753	1.40	806	1.58	857	1.77	906	1.96	954	2.16	1000	2.35	1046	2.57	1090	2.80	1134	3.03
PNGF-135	4000	721	1.23	749	1.34	803	1.49	855	1.68	905	1.86	953	2.05	1001	2.27	1048	2.48	1094	2.71	1139	2.94
	4400	731	1.45	758	1.53	810	1.72	860	1.90	908	2.09	955	2.29	1000	2.49	1044	2.72	1088	2.94	1130	3.18
	4825	744	1.69	770	1.78	821	1.97	869	2.17	916	2.37	960	2.59	1004	2.80	1046	3.02	1087	3.24	1128	3.47
PNGF-150	4200	726	1.34	753	1.42	806	1.60	857	1.78	906	1.97	954	2.17	1000	2.37	1045	2.59	1090	2.82	1134	3.04
	4600	737	1.55	764	1.65	815	1.84	864	2.02	911	2.23	957	2.43	1001	2.63	1045	2.86	1087	3.07	1129	3.31
	5077	752	1.85	778	1.96	828	2.14	875	2.36	921	2.56	965	2.77	1007	2.99	1049	3.22	1089	3.44	1129	3.69
PNGF-175	5100	859	1.80	892	1.90	954	2.10	1014	2.32	1071	2.52	1126	2.74	1179	2.94	1231	3.16	1281	3.38	1329	3.60
	5700	878	2.20	909	2.30	968	2.54	1025	2.78	1080	3.00	1133	3.24	1185	3.46	1235	3.70	1283	3.94	1330	4.18
	6306	902	2.66	931	2.78	987	3.04	1041	3.30	1093	3.54	1145	3.80	1194	4.06	1243	4.32	1289	4.58	1335	4.84

See Note on pg. 18

FAN PERFORMANCE

BELT DRIVEN MOTOR

Model	CFM	External Static Pressure [in.wg]																			
		0.30		0.40		0.60		0.80		1.00		1.20		1.40		1.60		1.80		2.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
PNGF-200	5700	878	2.20	909	2.30	968	2.54	1025	2.78	1080	3.00	1133	3.24	1185	3.46	1235	3.70	1283	3.94	1330	4.18
	6200	898	2.56	926	2.70	983	2.94	1038	3.20	1091	3.44	1142	3.70	1192	3.96	1241	4.20	1288	4.46	1334	4.72
	6747	915	2.90	950	3.18	1003	3.44	1055	3.72	1106	4.00	1155	4.26	1204	4.54	1251	4.82	1296	5.10	1341	5.36
PNGF-240	6800	879	2.54	910	2.66	970	2.94	1027	3.22	1081	3.50	1134	3.78	1186	4.08	1236	4.36	1284	4.66	1332	4.96
	7000	884	2.66	915	2.82	975	3.10	1031	3.38	1085	3.66	1137	3.96	1188	4.24	1237	4.54	1286	4.84	1333	5.16
	7302	893	2.88	923	3.04	982	3.32	1038	3.62	1091	3.92	1142	4.22	1192	4.46	1241	4.84	1288	5.14	1334	5.46
PNGF-270	8000	709	2.66	737	2.84	791	3.20	843	3.58	893	3.96	942	4.36	989	4.78	1035	5.20	1080	5.62	1124	6.08
	8500	715	2.94	742	3.12	795	3.28	845	3.88	894	4.28	941	4.64	987	5.12	1032	5.54	1076	6.00	1119	6.44
	9578	756	3.82	782	4.02	807	4.22	854	4.64	901	5.06	945	5.50	989	5.94	1031	6.40	1073	6.86	1114	7.34

BELT DRIVEN MOTOR

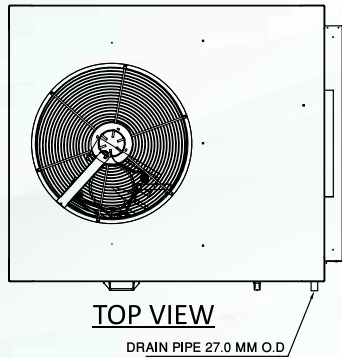
Model	CFM	External Static Pressure [in.wg]																			
		0.40		0.50		0.60		0.80		1.00		1.20		1.40		1.60		1.80		2.00	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
PNGF-300	9000	748	3.42	774	3.62	799	3.80	849	4.20	896	4.62	942	5.04	987	5.46	1031	5.92	1074	6.38	1116	6.84
	9200	751	3.54	776	3.74	802	3.94	850	4.34	897	4.76	943	5.18	988	5.62	1031	6.08	1073	6.54	1115	6.96
	9557	756	3.82	782	4.02	807	4.22	854	4.64	901	5.06	945	5.50	989	5.94	1031	6.40	1073	6.86	1114	7.34
PNGF-325	9200	751	3.54	776	3.74	802	3.94	850	4.34	897	4.76	943	5.18	988	5.62	1031	6.08	1073	6.54	1115	6.96
	9400	753	3.68	779	3.88	804	4.08	852	4.48	899	4.90	944	5.34	988	5.78	1031	6.24	1073	6.70	1114	7.18
	9598	756	3.82	782	4.02	807	4.22	854	4.64	901	5.06	945	5.50	989	5.94	1031	6.40	1073	6.86	1114	7.34
PNGF-350	9400	753	3.68	779	3.88	804	4.08	852	4.48	899	4.90	944	5.34	988	5.78	1031	6.24	1073	6.70	1114	7.18
	9800	759	3.96	785	4.16	809	4.36	857	4.78	902	5.22	947	5.66	990	6.10	1032	6.56	1073	7.04	1114	7.52
	10297	766	4.18	790	4.46	814	4.64	861	5.10	906	5.54	950	6.00	992	6.46	1034	6.92	1074	7.40	1114	7.90

LEGEND:

RPM : Fan Speed in revolution per minute  
 BHP : Fan absorbed power

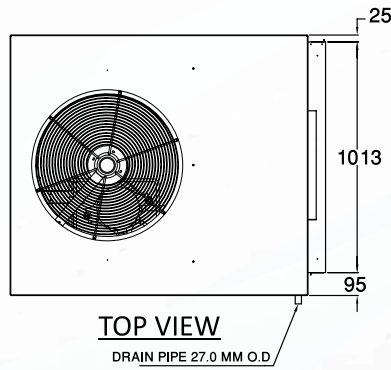
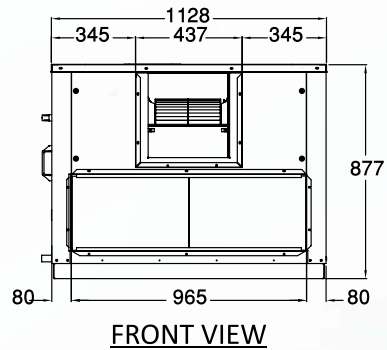
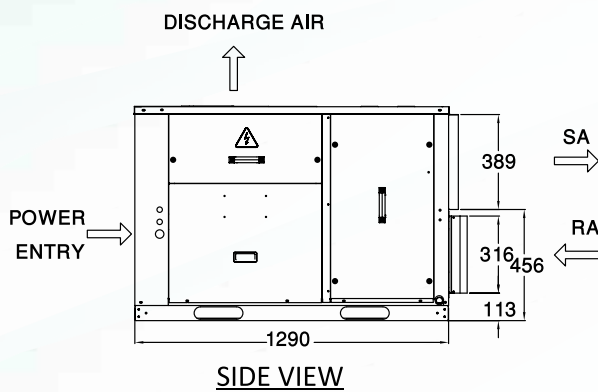
- Note:
1. Internal Static pressure is based on pressure drops through evaporator coil, fan casing and 2" washable filters.
  2. Blue shaded area indicates the operating range of a standard motor and drive combination.
  3. Green shaded area indicates the operating range of a standard motor with non standard drive combination.
  4. Gray shaded area indicates operating range using non standard motor and drive combination.
  5. To determine the power of motor to be installed, just multiply the value of the absorbed power indicated above by 1.2.

UNIT DIMENSIONS



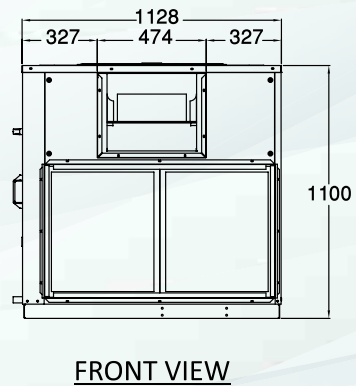
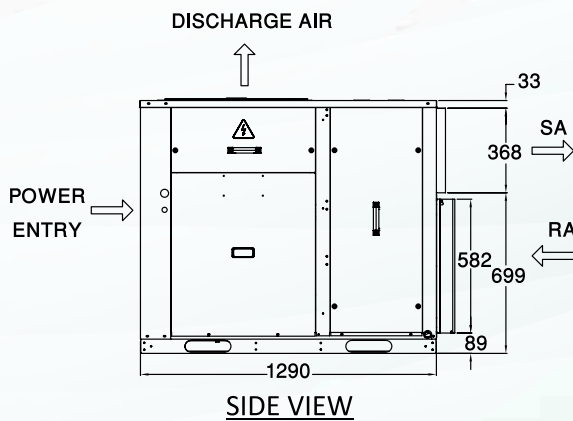
**PNGF-048**

ALL DIMENSIONS ARE IN MM

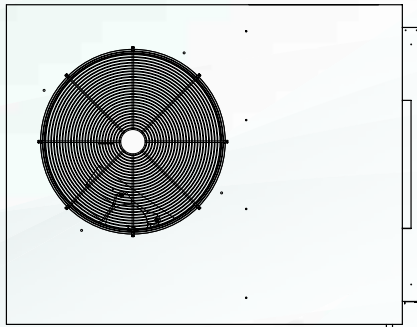


**PNGF-060**

ALL DIMENSIONS ARE IN MM



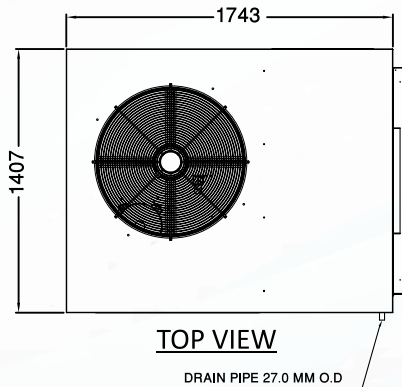
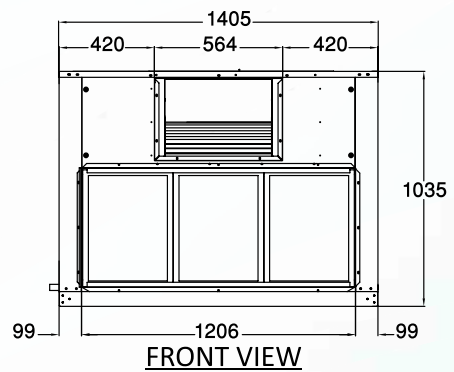
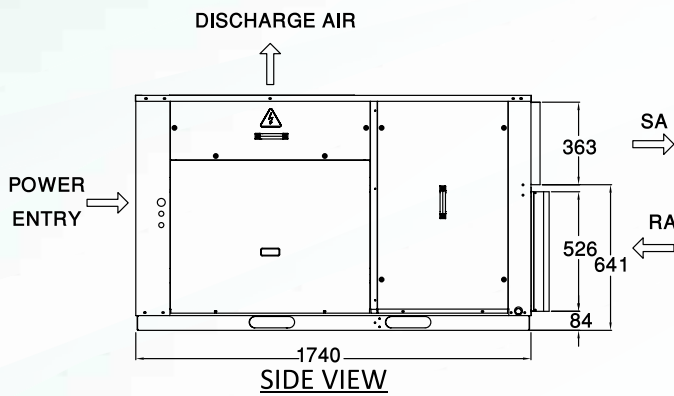
UNIT DIMENSIONS



TOP VIEW  
DRAIN PIPE 27.0 MM O.D.

**PNGF-076/090**

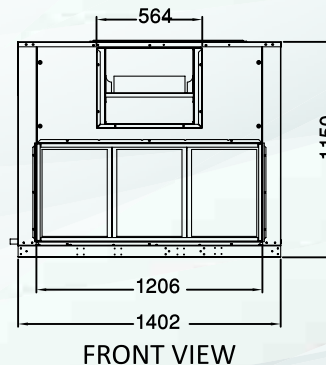
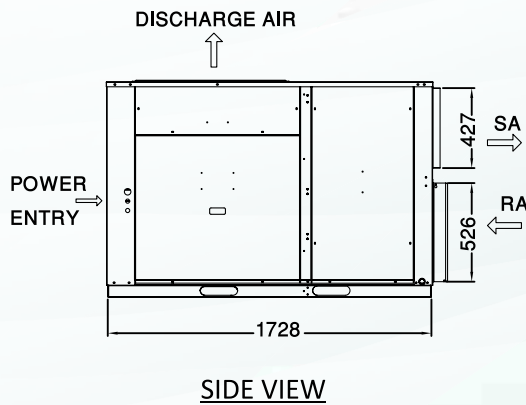
ALL DIMENSIONS ARE IN MM



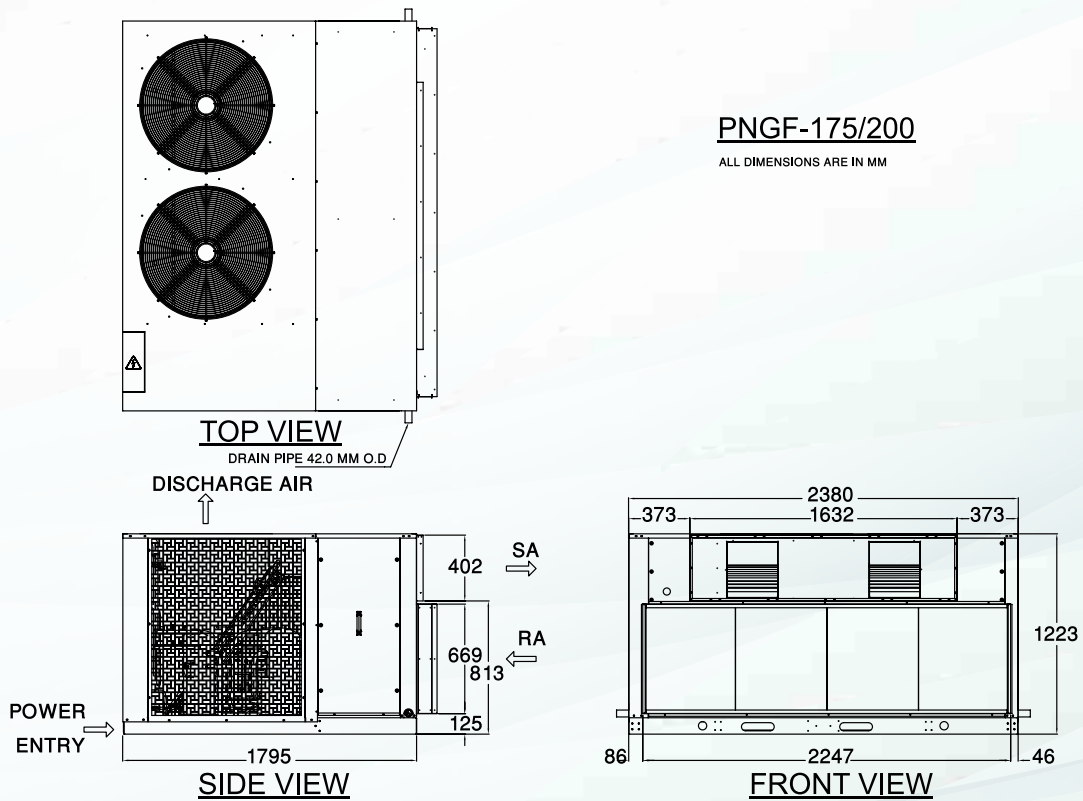
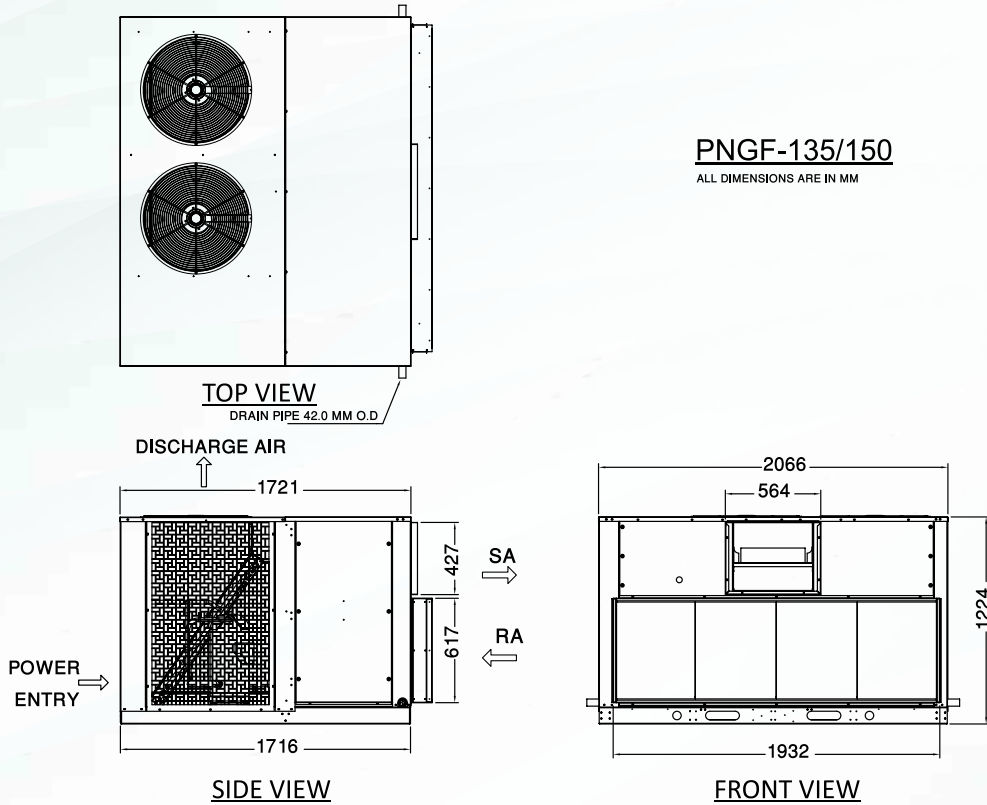
TOP VIEW  
DRAIN PIPE 27.0 MM O.D.

**PNGF-100/125**

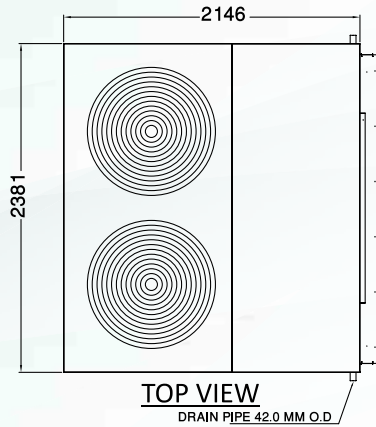
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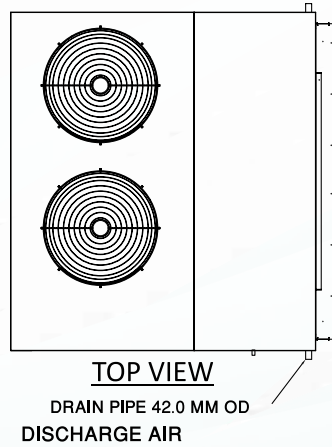
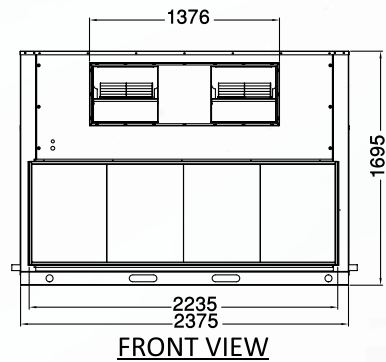
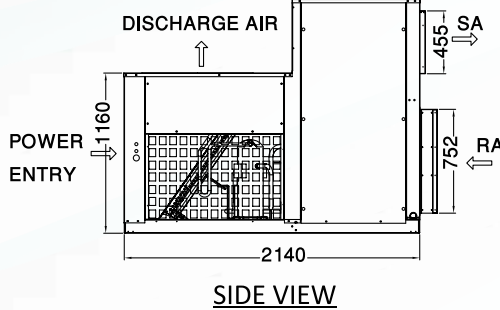
UNIT DIMENSIONS



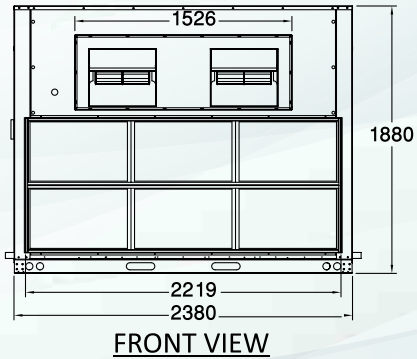
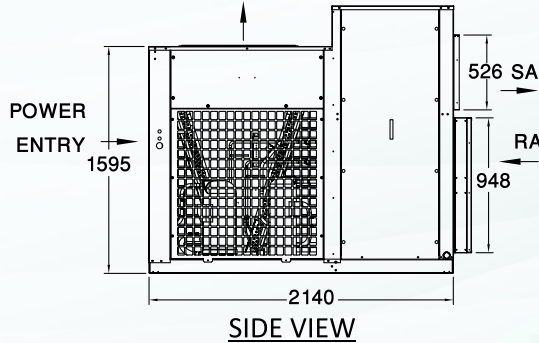
UNIT DIMENSIONS



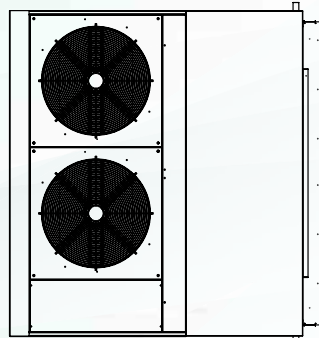
**PNGF-240**  
ALL DIMENSIONS ARE IN MM



**PNGF-270/300**  
ALL DIMENSIONS ARE IN MM



UNIT DIMENSIONS

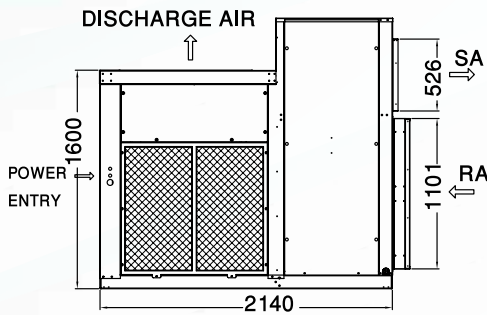


TOP VIEW

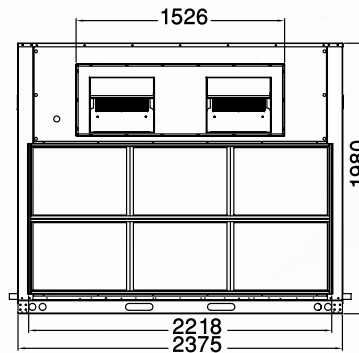
DRAIN PIPE 42.0 MM O.D.

**PNGF-325**

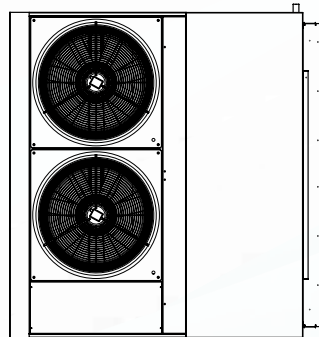
ALL DIMENSIONS ARE IN MM



SIDE VIEW



FRONT VIEW

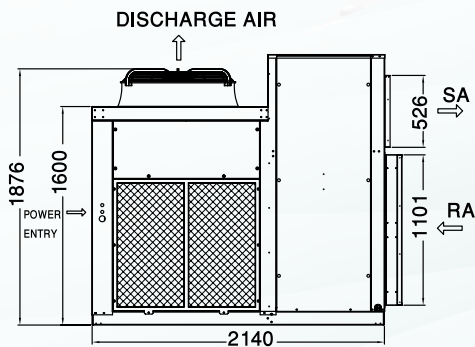


TOP VIEW

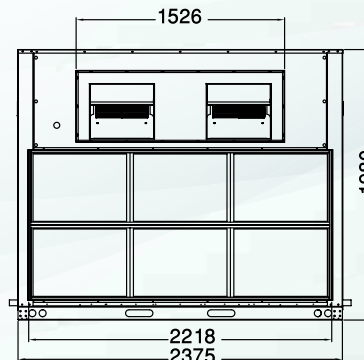
DRAIN PIPE 42.0 MM O.D.

**PNGF-350**

ALL DIMENSIONS ARE IN MM



SIDE VIEW



FRONT VIEW

**LOAD DISTRIBUTION**



MODEL	LOAD DISTRIBUTION		
	A (mm)	X1 (kg)	X2 (kg)
PNGF-048	75	50.0	45.0
PNGF-060	75	51.0	47.0
PNGF-076	75	67.5	60.5
PNGF-090	75	108.7	72.2
PNGF-100	75	110.7	73.8
PNGF-125	75	115.0	77.5

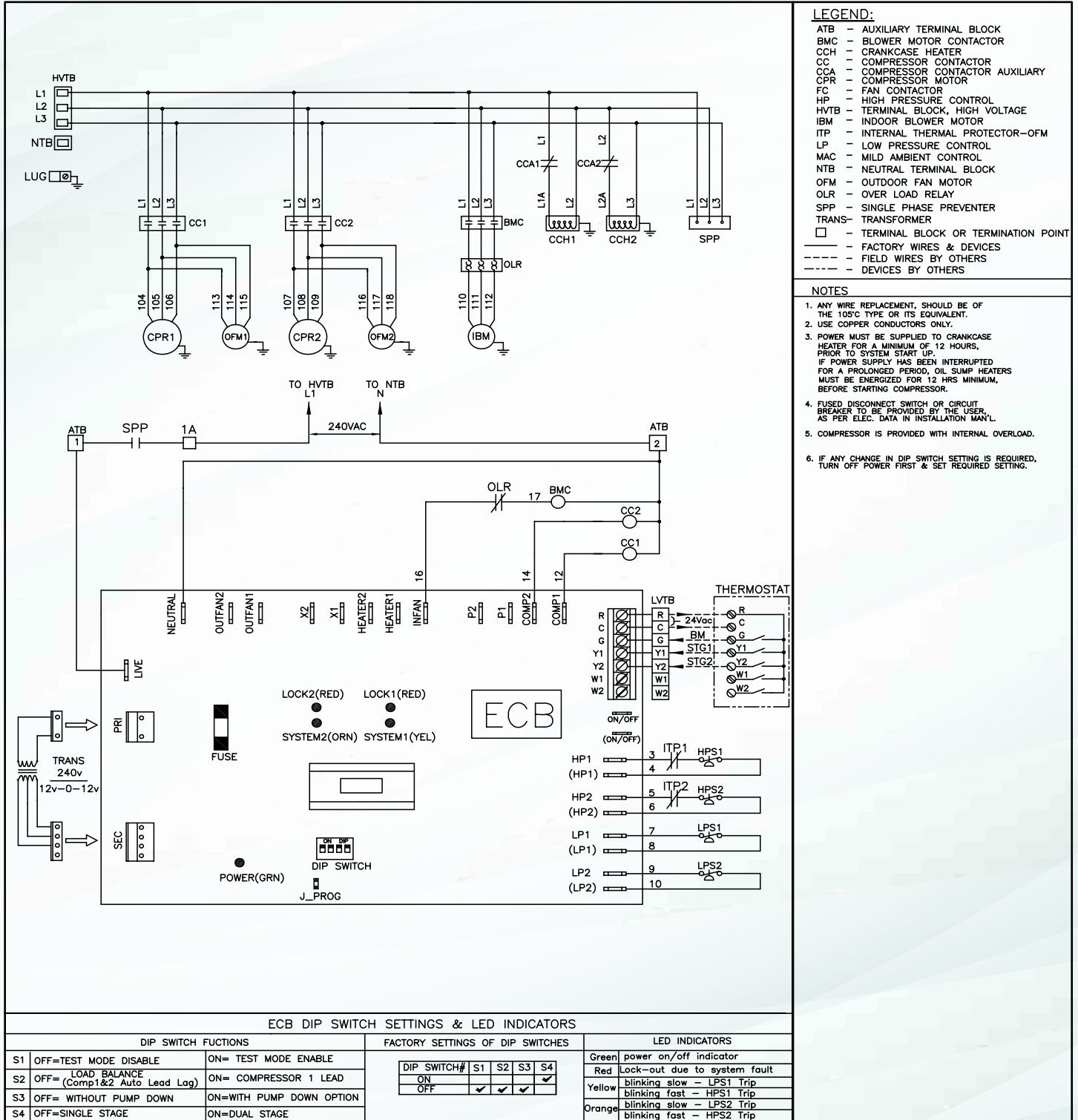
**LOAD DISTRIBUTION**



MODEL	LOAD DISTRIBUTION			
	A (mm)	B (mm)	X1 (kg)	X2 (kg)
PNGF-135	125	980	108.0	72.0
PNGF-150	125	980	122.0	81.3
PNGF-175	125	1075	150.6	81.1
PNGF-200	125	1075	156.0	84.0
PNGF-240	125	1075	163.8	88.1
PNGF-270	125	1075	217.8	118.2
PNGF-300	125	1075	230.8	124.3
PNGF-325	125	1075	265.4	142.9
PNGF-350	125	1075	268.7	144.7

TYPICAL WIRING DIAGRAMS

WITH MICROPROCESSOR BASED CONTROLLER (STANDARD)









## شركة صناعات التبريد والتخزين والخدمات النفطية

Refrigeration Industries & Storage and Oil Services Co. KSC



Ref no.: CPCF 23-5-000

# CONTACT US

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**T : +965 183 33 80**

**w : [www.coolex.com.kw](http://www.coolex.com.kw)**

**Sulaibiya Industrial, Block 1,  
Road 4, Plot No. 105.**