



Westinghouse



Roof Top Packaged Air Conditioners

Technical Catalogue

Refrigerant: R410A

Cooling Capacity Range : 3.5 to 45.6 Ton

High efficiency



www.westinghousemea.com
E mail: info@westinghousemea.com

Ver. 0522-T3-PG410a-001

CONTENTS

Nomenclature	2
General Features	3
Component Features	4
1. Compressors	
2. Condensers	
3. Refrigeration Circuit	
4. Condenser Fans	
5. Evaporators	
6. Evaporators Fan and Drive	
7. Casing/Structure	
8. Electrical Control Panel	
9. System Protection	
Technical Data	8
ESMA Performance Data	9
Performance Data	10
Extended Capacity	11
Extended Fan Performance Data	20
Internal Pressure Drop Data	26
Sound Power Level Data	28
Electrical Wiring Diagram	29
Dimensional Drawing	34
Space Dimension	39
Engineering Guide Specification	42
Spare Parts List	44

NOMENCLATURE

1	2	3/4/5	6	7	8	9	10	11	12	13	14	15	16	17
W	P	040	R	T	U	GM	3	5	C	A	J	J	A	T

No.	Description	Options
1	Brand	W - Westinghouse
2	Type	P - Rooftop Packaged Unit
3/4/5	Nom. Cap. (MBH)	040 / 055 / 065 / 070 / 080 / 090 / 100 / 120 / 160 / 180 / 200 / 240 / 275 / 340 / 380 / 450 / 540
6	Power Supply (V/Ph/Hz)	R: 380/3/50 S: 380/3/60
7	Climate Condition	N: T1 T: T3 K: T4
8	COO	U: UAE B: Bahrain
9	Factory Design Code	GM / A
10	Refrigerant	2: R407C 3: R410A
11	Compressor Type	1: Scroll Inverter 2: Dual Scroll Inverter 5: Scroll Fixed 7: Dual Scroll Fixed 9: Quad Scroll Fixed
12	Mode	C: Cool Only E: Electric Heater
13	Blower Motor Drive Option	A : Standard Motor B: Upsized Motor
14	Evaporator Coil	J : Aluminium Fins K : Hydrophilic Al Fins L : Heresite Coated Al Fins M : Copper Fins N : Heresite Coated Copper Fins
15	Condenser Coil	J : Aluminium Fins K : Hydrophilic Al Fins L : Heresite Coated Al Fins M : Copper Fins N : Heresite Coated Copper Fins
16	Filter Option	A: 1" Thick B: 2" Thick
17	Thermostat Option	N: Without Thermostat T: With Thermostat

GENERAL FEATURES

Westinghouse Packaged air conditioners are designed and manufactured with the following characteristics.

- Operating efficiently with refrigerant R410A.
- Operating up to 52°C ambient temperature due to efficient size of condenser coil.
- Easy maintenance as access is provided for all the operating items.
- Operating at low noise and vibration level.
- Evaporator side has 10 mm thick, closed cell rubber type with aluminum foil insulation.
- Adjustable evaporator fan drive set for easy air flow adjustment.
- Easily accessible sight glass at the refrigeration circuits indicates the proper refrigerant charge and operation.
- Filter drier for moisture removal with ball valve for easy replacement.
- Thermostatic expansion valve as standard for all the models, to ensure efficient operation even at variable load conditions.
- The evaporator fan motor and the pulleys are set for minimum AHRI. Data are provided for different ESP's.

COMPONENT FEATURES

1. Compressors

The compressors are hermetic scroll. Scroll compressors have the following characteristics

- High efficiency.
- Low sound levels.
- Limited wear due to few moving parts and suction as motor cooling.
- Fewer moving parts.
- Compact design.
- Suction gas cooled motor.
- UL Recognized.
- Crank case heater as standard feature to prevent liquid migration.
- Internal motor protection.



2. Condensers

The condensers are manufactured of inner grooved seamless copper tubes 3/8" O.D and 0.4 mm thickness to handle the high pressure of R410A (60% more than R22 and R407C). The tubes are mechanically bonded to louvered aluminum fins to ensure optimum heat transfer.

All the condensers are designed for the unit operation up to 52°C ambient temperature.

The coils are pressure leak tested by high pressure 49 bar (710 psig) under water.



Optional features:

- Condenser coil with Hydrophilic aluminum fins.
- Condenser Coil with heresite Coated Aluminum fins.
- Condenser Coil with Copper Fins.
- Condenser Coil with heresite Coated Copper Fins.
- Condenser Coil Guard: to protect the coil from vandalism.

3. Refrigeration Circuit

Refrigeration circuit is designed for optimum pressure drop ensuring proper oil circulation and is equipped with filter drier with ball valve, thermostatic expansion valve, sight glass and easily accessible service ports.

Optional features:

- Discharge line ball valve.
- Suction and discharge pressure gauges.
- Suction line ball valve.
- Solenoid Valve in the liquid line.

4. Condenser Fans

The condenser fans are axial type directly driven by external rotor motors. The motors are 6 poles, with class F insulation and IP 54 protection, cold rolled steel blades with high strength and designed for optimum air flow and low noise operation. The combination of an external rotor motor and axial fan, on rubber isolators, with a properly dynamically balanced impeller, gives an efficient, quiet and reliable operation.

The motors are factory wired to the control panel, to a separate contactor with overload for each fan.



5. Evaporators

The evaporators are manufactured of inner grooved seamless copper tubes 3/8" O.D mechanically bonded to louvered aluminum fins to ensure optimum heat transfer.

Seamless copper tube suction headers and properly sized distributor at the refrigerant inlet along with the thermostatic expansion valve ensures smooth and reliable operation.

All the evaporators are rated as per AHRI 410 standard. The coils are leak pressure tested by dry air pressure 35 bar (508 psig) under water.

Optional features:

- DX coil with copper fins.
- DX coil with Hydrophilic aluminum fins.
- DX Coil with heresite Coated Aluminum Fins.
- DX Coil with heresite Coated copper Fins.



6. Evaporator Fan and Drive

The evaporator fan is forward curved centrifugal DIDW, statically and dynamically balanced, complete with shaft, self-aligning and permanently lubricated ball bearings.

The fan is driven by a single speed, 4 pole through adjustable V belt drive, insulation class F and IP55 protection motor, rated for continuous operation at the rated conditions.



The motor is factory wired to the control panel where a dedicated contactor is located and is protected by an overload relay. The group of fan and motor is located on a rigid base which is isolated from the rest of the unit by rubber vibration isolators.

Optional features:

- Spring vibration isolators with fan flexible connection on models with two compressors.

7. Casing / Structure

The unit casing is made of zinc coated galvanized steel sheets conforming to ASTM A653, electrostatic powder coated with approximate 75 microns coat, to ensure more than 1000 hours endurance at salt spray test as per ASTM B117.

The drain pan of the unit is also manufactured with the same way as standard.

The evaporator side of the unit is insulated with closed cell rubber type 10 mm thickness insulation. The insulation meets the fire requirements of NFPA90A & 90B. The structure permits easy access to all the working parts of the unit, so the maintenance of the unit is very easy.

Optional features:

- Evaporator section with double skin 10 mm insulation.
- Flat filter with ASHRAE 52.2 STANDARD CLASSIFICATIONS.
- Electrical heater with complete control for winter heating only.
- Mixing Box section with fresh and return air damper.
- F. Air economizer for 100% fresh or 100% return air.
- Stainless steel drain pan grade 304 or 316.
- Spring vibration isolator for the unit base frame to be installed in the site.

8. Electrical Control Panel

The electrical panel enclosure is made from galvanized sheet metal electrostatic powder coated. The panel is located at the evaporator side of the unit and is being cooled by the unit cool air. Access to the panel can be made while the unit is working without any disturbance in the operation of the unit.

Unit operation and fault diagnostics are monitored and controlled by advanced PCB which provides both intelligent monitoring and easy diagnostics as featured below.

- The HP and LP are monitored independently for each circuit (Automatic reset is standard; HP reset Manual upon request).
- Compressor overload
- Condenser Fan overload
- Evaporator Fan overload
- Phase loss
- Loss of Refrigeration charge
- Lock of compressor to prevent failure

Optional features:

- Single or Two stages Cooling and Heating Thermostats.
- Voltage Monitoring Module as per DEWA.
- Run Hour Meter.
- Heater battery Thyristor controller.
- Starter Panel Control.
- Air Flow Switch

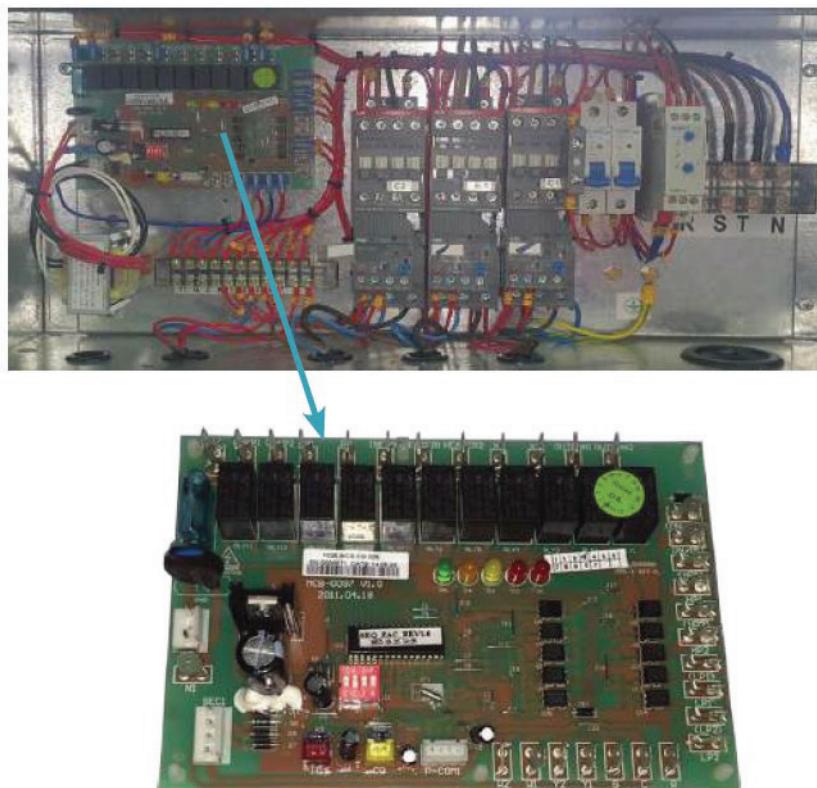
- Solenoid valve for pump down control in the control panel the following are included:
- Separate contactor with overload relay for each compressor.
- One contactor the condenser fan(s). Each condenser fan is separately protected with overload switch.
- Separate contactor with overload relay for the evaporator fan motor.
- Phase loss and phase rotation protection device.
- Power and control terminal blocks. Overcurrent protected main switch is field installed.
- The external thermostat should be powered by 24 V AC which should be taken from the unit and need to provide 24 V AC output for the system and the evaporator fan, which can operate in AUTO (controlled by the temperature) or ON (continuous on) mode.

9. System Protection

The safety features which are standard for our units and factory installed are:

- Low suction pressure switch.
- High pressure switch.
- Compressor (s) overload.
- Condenser fan (s) overload.
- Evaporator fan overload.
- Phase loss in the power supply.

All the above safety switches are controlled with the PCB to ensure proper, reliable and safe operation of the unit.



TECHNICAL DATA

MODELS	WP040	WP055	WP065	WP070	WP080	WP090	WP100	WP120	WP160	
EVAPORATOR										
AIR FLOW (m³/h)	2250	3100	3900	4400	4700	5100	5300	7200	8300	
NOMINAL ESP (pa)	50	50	50	75	75	75	75	75	75	
FAN TYPE	N/9-9	N/9-9	N/9-9	N/12-12	N/12-12	N/12-12	N/12-12	N/12-12	N/15-15	
MOTOR (kW)	0.55	0.55	1.1	1.1	1.1	1.1	1.1	2.2	2.2	
EVAPORATOR COIL AREA (M2)	0.24	0.384	0.48	0.52	0.469	0.675	0.675	0.765	0.931	
ROWS	3	3	3	3	3	3	3	3	3	
FPI	14	14	14	14	14	14	14	14	14	
CONDENSER										
AIR FLOW (m³/h)	7687	8671	9004	14873	15260	15593	15482	14291	21954	
FAN TYPE	AXIAL D630	AXIAL D630	AXIAL D630	AXIAL D710	AXIAL D800					
FAN RPM	900	900	900	900	900	900	900	900	900	
MOTOR (kW)	0.44	0.44	0.44	1.44	1.44	1.44	1.44	1.44	1.44	
NO. FANS	1	1	1	1	1	1	1	1	1	
CONDENSER COIL AREA (M2)	0.84	1.28	1.62	1.62	1.8	2	2	1.8	2.2	
ROWS	2	2	2	2	2	2	2	3	4	
FPI	14	14	14	14	14	14	14	14	14	
NO. OF COILS	1	1	1	1	1	1	1	1	2	
COMPRESSOR TYPE										
NO. COMPRESSORS	1	1	1	1	1	1	1	1	2	
REFR.CHARGE (R410A)	KGR	4.5	6.4	7.1	7.2	7.4	8.7	8.9	10.9	8.2 x 2
DIMENSIONS	LENGTH (mm)	1450	1450	1500	1725	1725	1725	1725	1750	2244
WIDTH (mm)	1000	1000	1170	1250	1250	1350	1350	1450	2000	
HEIGHT (mm)	770	970	970	1070	1070	1070	1070	1070	1135	
WEIGHT (kg.)	252	315	360	390	430	465	474	582	820	

MODELS	WP180	WP200	WP240	WP275	WP340	WP380	WP450	WP540	
EVAPORATOR									
AIR FLOW (m³/h)	10400	10500	13500	15300	17800	18500	20500	22500	
NOMINAL ESP (pa)	100	100	100	100	125	150	150	150	
FAN TYPE	N/15-15	N/15-15	N/18-18	N/18-18	N/22-22	N/22-22	N/22-22	N/22-22	
MOTOR (kW)	3	3	4	5.5	5.5	5.5	7.5	7.5	
EVAPORATOR COIL AREA (M2)	1.15	1.32	1.44	1.69	1.95	2.25	2.25	2.4	
ROWS	4	3	3	3	3	4	4	4	
FPI	14	14	14	14	14	14	14	14	
CONDENSER									
AIR FLOW (m³/h)	20861	23274	26355	35835	37208	57030	57030	67715	
FAN TYPE	AXIAL D800	AXIAL D710	AXIAL D710	AXIAL D710	AXIAL D710	AXIAL D800	AXIAL D800	AXIAL D800	
FAN RPM	900	900	900	900	900	900	900	900	
MOTOR (kW)	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	
NO. FANS	1	2	2	3	3	3	3	4	
CONDENSER COIL AREA (M2)	2.64	2.86	3.38	4.2	4.48	6.112	6.112	6.6	
ROWS	4	4	4	4	4	4	4	4	
FPI	14	14	14	14	14	14	14	14	
NO. OF COILS	2	2	2	2	2	2	2	2	
COMPRESSOR TYPE									
NO. COMPRESSORS	2	2	2	2	2	2	2	2	
REFR.CHARGE (R410A)	KGR	9.9 x 2	11.7 x 2	12.4 x 2	15.4 x 2	16.5 x 2	21 x 2	21.8 x 2	23.4 x 2
DIMENSIONS	LENGTH (mm)	2344	2244	2700	3200	3494	3585	3585	3830
WIDTH (mm)	2000	2000	2250	2250	2250	2250	2250	2250	
HEIGHT (mm)	1235	1435	1435	1535	1535	1735	1735	1800	
WEIGHT (Kg.)	845	905	985	1075	1200	1370	1520	1580	

ESMA PERFORMANCE DATA

MODEL	EER Values meeting ESMA requirements			
	<i>Coil Air on: 29/19 °C, Ambient Condition: 46 °C</i>			EER (Btu.hr/W)
	CMH	TKW	Total PI kW	
WP040	2250	11.02	4.45	8.4
WP055	3100	14.03	5.62	8.5
WP065	3900	16.35	6.28	8.9
WP070	4400	18.08	7.35	8.4
WP080	4700	20.84	8.35	8.5
WP090	5100	23.38	8.97	8.9
WP100	5300	25.93	10.20	8.7
WP120	7200	31.18	12.54	8.5
WP160	8300	41.18	16.32	8.6
WP180	10400	47.99	19.07	8.6
WP200	10500	51.67	20.93	8.4
WP240	13500	61.59	24.50	8.6
WP275	15300	70.46	28.18	8.5
WP340	17800	88.63	35.34	8.6
WP380	18500	97.85	36.53	9.1
WP450	20500	117.64	47.25	8.5
WP540	22500	140.66	59.26	8.1

PERFORMANCE DATA

	MODELS	WP040	WP055	WP065	WP070	WP080	WP090	WP100	WP120	WP160
COOLING CAPACITY (On Coil Temperature 26.7/19.4°C DB/WB)	TkW	12.36	15.75	18.35	20.94	23.16	26.2	29.19	35.28	46.07
	SkW	9.39	11.81	14.69	16.43	17.77	20.04	21.78	27.74	33.94
	EkW	2.83	3.57	3.89	4.48	5.15	5.72	6.59	7.71	10.36
	BTU/H	42172	53739	62610	71447	79022	89394	99596	120375	157191
	RT	3.51	4.48	5.22	5.95	6.59	7.45	8.30	10.03	13.10
	SHF	0.76	0.75	0.80	0.78	0.77	0.76	0.75	0.79	0.74
	EER	11.7	11.7	11.9	11.7	11.4	11.9	11.8	11.6	11.7
COOLING CAPACITY (On Coil Temperature 26.7/19.4°C DB/WB)	Comp. PI (kW)	2.83	3.57	3.89	4.48	5.15	5.72	6.59	7.71	10.36
	TkW	11.16	14.26	16.41	18.87	21.02	23.61	26.3	31.48	41.79
	SkW	8.9	11.22	13.91	15.6	16.92	19	20.63	26.19	32.23
	EKw	3.69	4.62	4.92	5.74	6.59	7.21	8.36	9.86	13.26
	BTU/H	38078	48655	55991	64384	71720	80557	89736	107410	142587
	RT	3.17	4.05	4.67	5.37	5.98	6.71	7.48	8.95	11.88
	SHF	0.80	0.79	0.85	0.83	0.80	0.80	0.78	0.83	0.77
COOLING CAPACITY (On Coil Temperature 26.7/19.4°C DB/WB)	Comp. PI (kW)	3.69	4.62	4.92	5.74	6.59	7.21	8.36	9.86	13.26
	TkW	10.42	13.31	15.2	17.57	19.73	21.87	24.45	29.02	39.19
	SkW	8.59	10.85	13.41	15.07	16.39	18.29	19.87	25.15	31.17
	EKw	4.25	5.3	5.61	6.58	7.57	8.28	9.56	11.31	15.23
	BTU/H	35553	45414	51862	59949	67319	74620	83423	99016	133716
	RT	2.96	3.78	4.32	5.00	5.61	6.22	6.95	8.25	11.14
	SHF	0.82	0.82	0.88	0.86	0.83	0.84	0.81	0.87	0.80
POWER INPUT (kW)	Comp. PI (kW)	4.25	5.3	5.61	6.58	7.57	8.28	9.56	11.31	15.23
	TkW	3.6	4.6	5.3	6.1	6.9	7.5	8.5	10.4	13.4
	COMPRESSOR (kW)	2.8	3.6	3.9	4.5	5.2	5.7	6.6	7.7	10.4
	EVAP.FAN (kW)	0.29	0.53	0.88	0.64	0.79	0.79	0.88	1.72	1.39
	COND.FAN (kW)	0.48	0.48	0.48	0.98	0.98	0.98	0.98	0.98	1.7
	POWER INPUT (kW)	4.5	5.6	6.3	7.4	8.4	9.0	10.2	12.6	16.3
	COMPRESSOR (kW)	3.7	4.6	4.9	5.7	6.6	7.2	8.4	9.9	13.3
POWER INPUT (kW)	EVAP.FAN (kW)	0.29	0.53	0.88	0.64	0.79	0.79	0.88	1.72	1.39
	COND.FAN (kW)	0.48	0.48	0.48	0.98	0.98	0.98	0.98	0.98	1.7
	POWER INPUT (kW)	5.0	6.3	7.0	8.2	9.3	10.1	11.4	14.0	18.3
	COMPRESSOR (kW)	4.25	5.3	5.61	6.58	7.57	8.28	9.56	11.31	15.23
	EVAP.FAN (kW)	0.29	0.53	0.88	0.64	0.79	0.79	0.88	1.72	1.39
	COND.FAN (kW)	0.48	0.48	0.48	0.98	0.98	0.98	0.98	0.98	1.7

	MODELS	WP180	WP200	WP240	WP275	WP340	WP380	WP450	WP540
COOLING CAPACITY (On Coil Temperature 26.7/19.4°C DB/WB)	TkW	53.98	58.1	71.2	79.78	99.76	109.67	131.67	160.53
	SkW	42.05	42.96	55.05	60.21	73.63	80.69	93.83	112.05
	EKw	11.75	13.06	15.28	16.56	23.57	22.02	29.33	37.33
	BTU/H	184180	198237	242934	272209	340381	374194	449258	547728
	RT	15.35	16.52	20.24	22.68	28.37	31.18	37.44	45.64
	SHF	0.78	0.74	0.77	0.75	0.74	0.74	0.71	0.70
	EER	11.5	11.4	11.9	11.6	11.4	12.0	11.3	10.9
COOLING CAPACITY (On Coil Temperature 26.7/19.4°C DB/WB)	Comp. PI (kW)	11.75	13.06	15.28	16.56	23.57	22.02	29.33	37.33
	TkW	48.24	52.43	63.56	71.49	89.8	99.13	119.31	145.15
	SkW	39.73	40.71	51.93	56.89	69.65	76.43	88.88	105.82
	EKw	14.76	16.58	19.54	21.31	29.17	27.4	36.83	46.46
	BTU/H	164595	178891	216867	243924	306398	338232	407086	495252
	RT	13.72	14.91	18.07	20.33	25.53	28.19	33.92	41.27
	SHF	0.82	0.78	0.82	0.80	0.78	0.77	0.74	0.73
POWER INPUT (kW)	Comp. PI (kW)	14.76	16.58	19.54	21.31	29.17	27.4	36.83	46.46
	TkW	44.55	48.84	58.64	66.1	83.59	92.41	112.09	135.74
	SkW	38.21	39.24	49.87	54.66	67.09	73.66	85.93	101.92
	EKw	16.94	18.96	22.43	24.59	32.8	30.77	42.15	52.52
	BTU/H	152005	166642	200080	225533	285209	315303	382451	463145
	RT	12.67	13.89	16.67	18.79	23.77	26.28	31.87	38.60
	SHF	0.86	0.80	0.85	0.83	0.80	0.80	0.77	0.75
POWER INPUT (kW)	Comp. PI (kW)	16.94	18.96	22.43	24.59	32.8	30.77	42.15	52.52
	TkW	16.1	17.5	20.3	23.5	29.8	31.2	39.9	50.4
	SkW	11.8	13.1	15.3	16.6	23.6	22.0	29.3	37.3
	EKw	2.63	2.43	3.10	3.97	3.33	4.10	5.45	6.30
	BTU/H	1.7	1.96	1.96	2.94	2.94	5.1	5.1	6.8
	RT	19.1	21.0	24.6	28.2	35.4	36.6	47.4	59.6
	SHF	14.8	16.6	19.5	21.3	29.2	27.4	36.8	46.5
POWER INPUT (kW)	Comp. PI (kW)	2.63	2.43	3.10	3.97	3.33	4.10	5.45	6.30
	TkW	1.7	1.96	1.96	2.94	2.94	5.1	5.1	6.8
	SkW	21.3	23.4	27.5	31.5	39.1	40.0	52.7	65.6
	EKw	16.94	18.96	22.43	24.59	32.8	30.77	42.15	52.52
	BTU/H	2.63	2.43	3.10	3.97	3.33	4.10	5.45	6.30
	RT	1.7	1.96	1.96	2.94	2.94	5.1	5.1	6.8
	SHF	1.7	1.96	1.96	2.94	2.94	5.1	5.1	6.8

EXTENDED CAPACITY

Selection Procedure:

Determine cooling at design conditions

Example:

Ambient temperature: 46°C Air flow rate: 4900 m³/h

Air entering condition: 26.6°C DBT / 64.1% RH Required Cooling capacity: 26.5 Kw

Selection Steps:

1. Enter extended capacity ratings tables
2. Follow air flow rate column till you reach to the design air flow rate 4900 m³/h, the suitable unit is GPU-10-C-T3-D
3. Based on the design air flow rate select the design air entering condition from Db and RH columns 26.6°C DBT / 64.1 % RH
4. After you defined the design air flow rate and entering air condition for GPU-10-C-T3-D, move horizontally until you reach 46°C Ambient Temperature table, the given cooling capacity 27.14 Kw and sensible capacity 16.86 Kw

WP040																	
Face Velocity(m/s) AIR FLOW (m ³ /h)	on coil		AMBIENT TEMPERATURE °C														
	T°CJ	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
1.91 1650 m ³ /h	24.4	48.8	11.39	8.47	2.48	10.97	8.27	2.8	9.91	7.76	3.65	9.7	7.66	3.83	9.25	7.43	4.22
	26.6	38.75	11.42	9.51	2.48	11	9.31	2.8	9.94	8.8	3.65	9.73	8.69	3.83	9.28	8.47	4.22
	26.6	51.2	12.3	8.43	2.5	11.81	8.2	2.82	10.56	7.65	3.67	10.34	7.56	3.85	9.88	7.37	4.24
	26.6	64.09	12.99	7.23	2.51	12.51	7.05	2.83	11.35	6.59	3.69	11.12	6.51	3.87	10.62	6.34	4.26
	27	47	12.14	8.83	2.49	11.68	8.61	2.81	10.41	8	3.67	10.21	7.92	3.85	9.75	7.74	4.23
2.14 1850 m ³ /h	24.4	48.8	11.68	8.92	2.48	11.24	8.71	2.81	10.13	8.17	3.66	9.91	8.06	3.84	9.43	7.83	4.23
	26.6	38.75	11.72	10.07	2.49	11.28	9.86	2.81	10.16	9.32	3.66	9.94	9.21	3.84	9.41	8.94	4.22
	26.6	51.2	12.52	8.82	2.5	11.93	8.55	2.82	10.79	8.08	3.68	10.56	7.99	3.86	10.09	7.79	4.24
	26.6	64.09	13.3	7.6	2.52	12.81	7.41	2.84	11.59	6.96	3.7	11.34	6.86	3.88	10.82	6.64	4.27
	27	47	12.4	9.25	2.5	11.87	9.02	2.82	10.65	8.5	3.67	10.43	8.4	3.85	9.96	8.21	4.24
2.37 2050 m ³ /h	24.4	48.8	11.93	9.34	2.49	11.46	9.12	2.81	10.28	8.54	3.66	10.03	8.42	3.84	9.48	8.15	4.23
	26.6	38.75	11.97	10.6	2.49	11.49	10.38	2.81	10.28	9.77	3.66	10.01	9.64	3.84	9.51	9.42	4.23
	26.6	51.2	12.65	9.18	2.5	12.16	8.98	2.82	10.99	8.5	3.68	10.75	8.4	3.86	10.27	8.2	4.25
	26.6	64.09	13.57	7.96	2.52	13.06	7.76	2.84	11.78	7.23	3.7	11.53	7.12	3.88	10.96	6.88	4.27
	27	47	12.52	9.65	2.5	12.01	9.44	2.82	10.84	8.96	3.68	10.61	8.86	3.86	10.13	8.66	4.25
2.6 2250 m ³ /h	24.4	48.8	12.13	9.73	2.49	11.65	9.5	2.81	10.35	8.89	3.66	10.08	8.76	3.84	9.61	8.57	4.23
	26.6	38.75	12.17	11.1	2.49	11.69	10.87	2.81	10.35	10.23	3.66	10.15	10.13	3.84	9.73	9.73	4.23
	26.6	51.2	12.86	9.59	2.51	12.36	9.39	2.83	11.16	8.9	3.69	10.92	8.8	3.87	10.42	8.59	4.25
	26.6	64.09	13.8	8.24	2.53	13.27	8.03	2.85	11.9	7.46	3.71	11.61	7.35	3.89	11.1	7.18	4.28
	27	47	12.7	10.09	2.5	12.2	9.89	2.83	11.01	9.4	3.68	10.77	9.3	3.86	10.28	9.09	4.25
kWf	TOTAL CAPACITY(KW)					kWs	SENSIBLE CAPACITY(KW)										
kWe	COMPRESSOR POWER INPUT(KW)																

WP055																	
Face Velocity(m/s) AIR FLOW (m³/h)	on coil		AMBIENT TEMPERATURE °C														
	[°C]	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
1.81 2500 m³/h	24.4	48.8	14.87	11.07	3.14	14.32	10.82	3.53	12.86	10.14	4.58	12.54	10	4.79	11.93	9.75	5.26
	26.6	38.75	14.89	12.59	3.14	14.34	12.33	3.54	12.87	11.65	4.58	12.56	11.51	4.8	11.88	11.23	5.25
	26.6	51.2	15.97	11	3.17	15.18	10.66	3.55	13.75	10.09	4.6	13.46	9.97	4.82	12.84	9.73	5.29
	26.6	64.09	16.96	9.4	3.19	16.35	9.16	3.58	14.88	8.58	4.63	14.57	8.46	4.85	13.84	8.16	5.32
	27	47	15.77	11.55	3.16	15.12	11.3	3.55	13.55	10.64	4.6	13.26	10.52	4.82	12.64	10.27	5.28
1.95 2700 m³/h	24.4	48.8	15.11	11.46	3.15	14.53	11.19	3.54	13.01	10.53	4.58	12.73	10.43	4.8	11.97	10.08	5.26
	26.6	38.75	15.13	13.08	3.15	14.55	12.81	3.54	13.03	12.17	4.58	12.7	12.01	4.8	12.03	11.64	5.26
	26.6	51.2	15.98	11.28	3.17	15.39	11.05	3.56	13.94	10.48	4.61	13.64	10.36	4.83	13.02	10.11	5.29
	26.6	64.09	17.21	9.67	3.19	16.59	9.43	3.59	15.02	8.81	4.64	14.66	8.68	4.86	13.99	8.45	5.32
	27	47	15.92	11.96	3.16	15.15	11.62	3.55	13.73	11.07	4.6	13.44	10.95	4.82	12.81	10.7	5.28
2.1 2900 m³/h	24.4	48.8	15.32	11.83	3.15	14.65	11.52	3.54	13.15	10.92	4.59	12.78	10.75	4.8	12.06	10.45	5.26
	26.6	38.75	15.34	13.56	3.15	14.66	13.25	3.54	13.08	12.61	4.58	12.81	12.38	4.8	12.2	12.2	5.26
	26.6	51.2	16.18	11.67	3.17	15.58	11.44	3.56	14.11	10.85	4.61	13.81	10.73	4.83	13.17	10.48	5.3
	26.6	64.09	17.43	9.93	3.2	16.8	9.69	3.59	15.13	9.07	4.64	14.82	8.96	4.86	14.14	8.74	5.33
	27	47	15.93	12.28	3.16	15.36	12.07	3.56	13.9	11.49	4.61	13.6	11.37	4.83	12.97	11.11	5.29
2.24 3100 m³/h	24.4	48.8	15.4	12.15	3.15	14.79	11.91	3.55	13.17	11.23	4.59	12.8	11.07	4.8	12.18	10.83	5.26
	26.6	38.75	15.41	13.98	3.15	14.81	13.74	3.55	13.29	12.99	4.59	12.97	12.97	4.81	12.43	12.43	5.27
	26.6	51.2	16.36	12.05	3.17	15.75	11.81	3.57	14.26	11.22	4.62	13.96	11.1	4.84	13.31	10.84	5.3
	26.6	64.09	17.64	10.19	3.2	16.92	9.91	3.6	15.28	9.35	4.64	14.96	9.25	4.86	14.27	9.01	5.33
	27	47	16.14	12.72	3.17	15.53	12.48	3.56	14.05	11.89	4.61	13.75	11.77	4.83	13.1	11.52	5.29
kWf	TOTAL CAPACITY(KW)					kWf	SENSIBLE CAPACITY(KW)										
kWe	COMPRESSOR POWER INPUT(KW)																

WP065																	
Face Velocity(m/s) AIR FLOW (m³/h)	on coil		AMBIENT TEMPERATURE °C														
	[°C]	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
1.91 3300 m³/h	24.4	48.8	17.44	13.9	3.49	16.71	13.6	3.88	14.82	12.78	4.91	14.47	12.63	5.13	13.73	12.33	5.6
	26.6	38.75	17.47	15.95	3.49	16.67	15.59	3.88	14.94	14.77	4.91	14.64	14.61	5.13	13.93	13.93	5.6
	26.6	51.2	18.59	13.81	3.5	17.88	13.53	3.89	16.05	12.79	4.92	15.68	12.63	5.14	14.88	12.3	5.61
	26.6	64.09	19.94	11.72	3.5	19.18	11.42	3.89	17.13	10.66	4.93	16.68	10.49	5.14	15.76	10.15	5.62
	27	47	18.34	14.55	3.49	17.64	14.28	3.88	15.85	13.56	4.92	15.47	13.4	5.14	14.68	13.07	5.61
2.03 3500 m³/h	24.4	48.8	17.56	14.3	3.49	16.76	13.94	3.88	14.95	13.19	4.91	14.6	13.04	5.13	13.85	12.73	5.6
	26.6	38.75	17.53	16.41	3.49	16.71	16.04	3.88	15.1	15.1	4.91	14.79	14.79	5.13	14.15	14.15	5.6
	26.6	51.2	18.77	14.21	3.5	18.05	13.93	3.89	16.18	13.17	4.92	15.8	13.01	5.14	15	12.68	5.61
	26.6	64.09	20.13	11.98	3.51	19.25	11.64	3.89	17.17	10.9	4.93	16.71	10.73	5.15	15.9	10.45	5.62
	27	47	18.52	15	3.49	17.81	14.72	3.88	15.98	13.98	4.92	15.6	13.82	5.14	14.8	13.49	5.61
2.14 3700 m³/h	24.4	48.8	17.63	14.64	3.49	16.82	14.29	3.88	15.07	13.59	4.91	14.71	13.44	5.13	13.96	13.13	5.6
	26.6	38.75	17.57	16.84	3.49	16.94	16.53	3.88	15.32	14.7	4.91	15.01	15.01	5.13	14.35	14.35	5.6
	26.6	51.2	18.94	14.6	3.5	18.21	14.32	3.89	16.3	13.54	4.92	15.92	13.38	5.14	15.1	13.04	5.61
	26.6	64.09	20.18	12.19	3.51	19.39	11.93	3.89	17.21	11.14	4.93	16.84	11.02	5.15	16.01	10.74	5.62
	27	47	18.68	15.44	3.5	17.96	15.15	3.89	16.1	14.4	4.92	15.71	14.24	5.14	14.9	13.9	5.61
2.26 3900 m³/h	24.4	48.8	17.66	14.97	3.49	16.97	14.7	3.88	15.18	13.98	4.91	14.82	13.83	5.13	14.06	13.51	5.6
	26.6	38.75	17.79	17.31	3.49	17.17	16.99	3.88	15.53	15.53	4.91	15.21	15.21	5.13	14.55	14.55	5.6
	26.6	51.2	19.09	14.99	3.5	18.35	14.69	3.89	16.41	13.9	4.92	16.02	13.74	5.14	15.2	13.4	5.61
	26.6	64.09	20.3 3	12.49	3.51	19.56	12.24	3.9	17.35	11.44	4.93	16.95	11.31	5.15	16.11	11.02	5.62
	27	47	18.83	15.86	3.5	18.11	15.58	3.89	16.2	14.8	4.92	15.81	14.64	5.14	15	14.31	5.61
kWf	TOTAL CAPACITY(KW)					kWf	SENSIBLE CAPACITY(KW)										
kWe	COMPRESSOR POWER INPUT(KW)																

WP070

Face Velocity(m/s) AIR FLOW (m ³ /h)	on coil		AMBIENT TEMPERATURE °C														
	[°C]	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
2.03 3800 m³/h	24.4	48.8	20.06	15.76	3.96	19.23	15.41	4.42	17.09	14.5	5.66	16.73	14.36	5.93	15.95	14.04	6.5
	26.6	38.75	20.08	18.09	3.96	19.26	17.75	4.42	17.32	16.75	5.67	16.94	16.62	5.94	16.23	16.23	6.52
	26.6	51.2	21.28	15.61	4.01	20.48	15.29	4.47	18.5	14.5	5.72	18.11	14.34	5.99	17.26	13.99	6.57
	26.6	64.09	22.91	13.23	4.06	22.01	12.88	4.52	19.74	12.07	5.77	19.34	11.94	6.04	18.3	11.56	6.62
	27	47	20.99	16.46	4	20.2	16.15	4.46	18.24	15.37	5.71	17.86	15.21	5.98	17.04	14.88	6.56
2.14 4000 m³/h	24.4	48.8	20.17	16.13	3.97	19.4	15.83	4.43	17.24	14.89	5.67	16.85	14.75	5.93	16.06	14.43	6.51
	26.6	38.75	20.2	18.59	3.97	19.38	18.26	4.43	17.47	17.47	5.68	17.14	17.14	5.95	16.45	16.45	6.53
	26.6	51.2	21.46	16	4.01	20.64	15.68	4.47	18.64	14.88	5.73	18.24	14.71	6	17.37	14.36	6.57
	26.6	64.09	23.07	13.47	4.07	22.06	13.09	4.52	19.92	12.38	5.78	19.39	12.19	6.05	18.31	11.79	6.62
	27	47	21.17	16.9	4	20.36	16.58	4.46	18.38	15.79	5.72	17.99	15.63	5.98	17.15	15.29	6.56
2.24 4200 m³/h	24.4	48.8	20.33	16.55	3.97	19.48	16.2	4.43	17.34	15.3	5.67	16.96	15.14	5.94	16.16	14.82	6.51
	26.6	38.75	20.38	19.12	3.97	19.46	18.54	4.43	17.68	17.68	5.69	17.35	17.35	5.96	16.65	16.65	6.54
	26.6	51.2	21.62	16.38	4.02	20.8	16.06	4.48	18.77	15.25	5.73	18.35	15.07	6	17.47	14.72	6.58
	26.6	64.09	23.11	13.69	4.07	22.21	13.39	4.53	19.93	12.61	5.78	19.41	12.4	6.05	18.39	12.05	6.62
	27	47	21.33	17.33	4.01	20.51	17.01	4.47	18.51	16.2	5.72	18.11	16.04	5.99	17.25	15.69	6.57
kWf	TOTAL CAPACITY(KW)					kWs	SENSIBLE CAPACITY(KW)										
kWe	COMPRESSOR POWER INPUT(KW)																

WP080

Face Velocity(m/s) AIR FLOW (m ³ /h)	on coil		AMBIENT TEMPERATURE °C														
	[°C]	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
2.5 4100 m³/h	24.4	48.8	22.37	17.32	4.53	21.54	16.94	5.06	19.39	16.01	6.5	18.89	15.78	6.8	17.87	15.32	7.46
	26.6	38.75	22.41	19.79	4.53	21.56	19.4	5.06	19.3	18.4	6.49	18.86	18.08	6.8	18.13	17.74	7.48
	26.6	51.2	23.62	17.05	4.59	22.77	16.72	5.13	20.68	15.88	6.57	20.27	15.71	6.88	19.42	15.37	7.55
	26.6	64.09	25.4	14.56	4.68	24.52	14.22	5.22	22.13	13.27	6.66	21.68	13.12	6.97	20.76	12.81	7.63
	27	47	23.27	17.93	4.57	22.47	17.62	5.11	20.39	16.79	6.56	19.99	16.63	6.87	19.14	16.28	7.53
2.63 4300 m³/h	24.4	48.8	22.56	17.7	4.54	21.58	17.24	5.06	19.4	16.33	6.5	18.91	16.1	6.8	18.02	15.74	7.47
	26.6	38.75	22.59	20.26	4.54	21.61	19.81	5.07	19.44	18.74	6.5	19.08	18.58	6.81	18.27	18.27	7.48
	26.6	51.2	23.81	17.44	4.6	22.95	17.1	5.14	20.84	16.26	6.58	20.42	16.09	6.89	19.56	15.74	7.56
	26.6	64.09	25.61	14.82	4.7	24.73	14.48	5.23	22.28	13.57	6.67	21.83	13.42	6.98	20.91	13.11	7.64
	27	47	23.49	18.39	4.58	22.64	18.05	5.12	20.55	17.21	6.57	20.13	17.04	6.88	19.28	16.7	7.54
2.75 4500 m³/h	24.4	48.8	22.62	17.98	4.54	21.73	17.63	5.07	19.42	16.65	6.5	18.95	16.45	6.81	18.14	16.13	7.48
	26.6	38.75	22.64	20.64	4.54	21.77	20.32	5.07	19.66	19.22	6.51	19.21	19.21	6.82	18.48	18.48	7.5
	26.6	51.2	23.98	17.82	4.61	23.12	17.48	5.15	20.98	16.63	6.59	20.56	16.46	6.9	19.69	16.1	7.57
	26.6	64.09	25.81	15.08	4.71	24.83	14.69	5.24	22.42	13.86	6.68	21.97	13.7	6.98	21	13.36	7.65
	27	47	23.67	18.81	4.59	22.81	18.47	5.13	20.69	17.63	6.57	20.27	17.46	6.88	19.41	17.1	7.55
2.87 4700 m³/h	24.4	48.8	22.73	18.37	4.54	21.88	18.03	5.08	19.48	17	6.5	19.09	16.85	6.81	18.25	16.5	7.48
	26.6	38.75	22.78	21.16	4.55	21.93	20.83	5.08	19.78	19.78	6.52	19.43	19.43	6.83	18.69	18.69	7.51
	26.6	51.2	24.15	18.2	4.62	23.27	17.86	5.15	21.12	16.99	6.6	20.7	16.82	6.91	19.81	16.46	7.58
	26.6	64.09	25.94	15.29	4.71	24.86	14.91	5.24	22.56	14.14	6.68	22.12	14	6.99	21.01	13.57	7.65
	27	47	23.83	19.23	4.6	22.96	18.89	5.14	20.82	18.03	6.58	20.4	17.86	6.89	19.53	17.51	7.56
kWf	TOTAL CAPACITY(KW)					kWs	SENSIBLE CAPACITY(KW)										
kWe	COMPRESSOR POWER INPUT(KW)																

WP090																	
Face Velocity(m/s) AIR FLOW (m ³ /h)	on coil		AMBIENT TEMPERATURE °C														
	[°C]	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
1.85 4500 m³/h	24.4	48.8	25.17	19.5	5.08	24.2	19.05	5.61	21.55	17.89	7.1	20.96	17.62	7.43	19.92	17.21	8.18
	26.6	38.75	25.21	22.3	5.08	24.23	21.85	5.61	21.55	20.59	7.1	21.11	20.38	7.44	20.16	20.01	8.19
	26.6	51.2	26.66	19.24	5.16	25.68	18.86	5.69	23.19	17.86	7.19	22.68	17.65	7.52	21.53	17.18	8.26
	26.6	64.09	28.64	16.42	5.27	27.55	15.98	5.8	24.7	14.88	7.27	24.15	14.7	7.61	22.89	14.25	8.33
	27	47	26.31	20.26	5.14	25.34	19.88	5.67	22.88	18.89	7.17	22.37	18.69	7.5	21.26	18.23	8.24
1.93 4700 m³/h	24.4	48.8	25.36	19.89	5.09	24.28	19.39	5.62	21.59	18.22	7.1	21.12	18.05	7.44	20.05	17.61	8.18
	26.6	38.75	25.38	22.78	5.09	24.31	22.3	5.62	21.78	21.08	7.11	21.34	20.85	7.45	20.32	20.32	8.2
	26.6	51.2	26.86	19.65	5.17	25.86	19.26	5.7	23.35	18.25	7.19	22.81	18.03	7.53	21.65	17.55	8.27
	26.6	64.09	28.83	16.68	5.28	27.74	16.25	5.81	24.85	15.19	7.28	24.33	15.02	7.62	22.91	14.49	8.34
	27	47	26.5	20.71	5.15	25.52	20.33	5.68	23.03	19.33	7.18	22.51	19.12	7.51	21.38	18.65	8.25
2.02 4900 m³/h	24.4	48.8	25.43	20.21	5.1	24.45	19.81	5.63	21.75	18.65	7.11	21.24	18.45	7.44	20.16	18.01	8.19
	26.6	38.75	25.46	23.23	5.1	24.45	22.82	5.63	22.01	21.55	7.12	21.48	21.48	7.46	20.53	20.53	8.21
	26.6	51.2	27.04	20.05	5.18	26.03	19.65	5.71	23.48	18.63	7.2	22.94	18.4	7.53	21.77	17.92	8.27
	26.6	64.09	29.02	16.93	5.29	27.83	16.47	5.82	25.03	15.51	7.29	24.36	15.25	7.62	22.93	14.72	8.34
	27	47	26.68	21.15	5.16	25.69	20.76	5.69	23.17	19.76	7.18	22.65	19.55	7.52	21.49	19.07	8.26
kWf	TOTAL CAPACITY(KW)					kWs	SENSIBLE CAPACITY(KW)										
kWe	COMPRESSOR POWER INPUT(KW)																

WP100																	
Face Velocity(m/s) AIR FLOW (m ³ /h)	on coil		AMBIENT TEMPERATURE °C														
	[°C]	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
1.93 4700 m³/h	24.4	48.8	28.06	21.38	5.84	26.98	20.88	6.49	24.15	19.53	8.25	23.59	19.29	8.63	22.22	18.66	9.43
	26.6	38.75	28.12	24.28	5.84	27.04	23.78	6.49	24.19	22.42	8.25	23.53	22.11	8.62	22.25	21.54	9.44
	26.6	51.2	29.69	20.99	5.91	28.6	20.57	6.56	25.79	19.44	8.33	25.23	19.21	8.71	24.04	18.72	9.53
	26.6	64.09	31.88	18.13	6	30.71	17.68	6.66	27.66	16.45	8.43	27.06	16.21	8.81	25.62	15.62	9.62
	27	47	29.45	22.13	5.9	28.23	21.62	6.54	25.45	20.5	8.32	24.89	20.27	8.7	23.71	19.79	9.51
2.02 4900 m³/h	24.4	48.8	28.27	21.77	5.85	27.18	21.26	6.5	24.3	19.94	8.26	23.64	19.63	8.63	22.34	19.06	9.44
	26.6	38.75	28.33	24.78	5.85	27.24	24.27	6.5	24.23	22.86	8.25	23.57	22.55	8.63	22.47	22.04	9.45
	26.6	51.2	29.93	21.42	5.92	28.81	20.98	6.57	25.97	19.84	8.34	25.4	19.61	8.72	24.19	19.11	9.54
	26.6	64.09	32.12	18.42	6.01	30.93	17.95	6.67	27.82	16.72	8.44	27.12	16.42	8.82	25.78	15.93	9.63
	27	47	29.5	22.48	5.9	28.43	22.08	6.55	25.62	20.95	8.32	25.06	20.71	8.7	23.86	20.22	9.52
2.1 5100 m³/h	24.4	48.8	28.47	22.15	5.86	27.36	21.64	6.51	24.34	20.28	8.26	23.68	19.97	8.63	22.48	19.47	9.45
	26.6	38.75	28.53	25.27	5.86	27.43	24.76	6.51	24.27	23.3	8.26	23.73	23.05	8.63	22.7	22.51	9.46
	26.6	51.2	30.14	21.83	5.93	29	21.38	6.58	26.14	20.23	8.35	25.56	20	8.73	24.33	19.49	9.55
	26.6	64.09	32.36	18.7	6.02	31.12	18.21	6.68	27.87	16.9	8.44	27.22	16.67	8.82	25.95	16.25	9.64
	27	47	29.75	22.97	5.91	28.63	22.53	6.56	25.79	21.39	8.33	25.22	21.15	8.71	24.01	20.65	9.53
2.18 5300 m³/h	24.4	48.8	28.65	22.53	5.86	27.49	21.98	6.51	24.38	20.61	8.26	23.77	20.34	8.64	22.6	19.88	9.46
	26.6	38.75	28.72	25.76	5.87	27.52	25.18	6.51	24.45	23.78	8.26	23.96	23.52	8.65	22.84	22.82	9.47
	26.6	51.2	30.33	22.23	5.93	29.19	21.78	6.59	26.3	20.62	8.36	25.72	20.38	8.74	24.45	19.86	9.56
	26.6	64.09	32.57	18.97	6.03	31.31	18.47	6.68	28	17.18	8.45	27.38	16.97	8.83	25.98	16.48	9.64
	27	47	29.94	23.41	5.92	28.81	22.97	6.57	25.94	21.82	8.34	25.37	21.58	8.72	24.15	21.08	9.54
kWf	TOTAL CAPACITY(KW)					kWs	SENSIBLE CAPACITY(KW)										
kWe	COMPRESSOR POWER INPUT(KW)																

WP120																	
Face Velocity(m/s) AIR FLOW (m ³ /h)	on coil		AMBIENT TEMPERATURE °C														
	I°CJ	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
2.40 6600 m ³ /h	24.4	48.8	34.24	27.52	6.79	32.67	26.77	7.57	28.83	25.09	9.71	28.11	24.79	10.17	26.6	24.16	11.17
	26.6	38.75	34.31	31.5	6.79	32.73	30.74	7.58	29.02	29.02	9.72	28.39	28.39	10.19	26.92	26.92	11.19
	26.6	51.2	36.24	27.17	6.89	34.81	26.6	7.68	31.13	25.1	9.84	30.35	24.77	10.3	28.71	24.08	11.29
	26.6	64.09	38.77	23.09	7.03	37.22	22.48	7.81	33.06	20.9	9.95	32.21	20.59	10.41	30.27	19.84	11.39
	27	47	35.79	28.63	6.87	34.37	28.07	7.66	30.72	26.58	9.81	29.98	26.27	10.28	28.36	25.59	11.27
2.47 6800 m ³ /h	24.4	48.8	34.31	27.81	6.79	32.81	27.17	7.58	28.95	25.49	9.72	28.23	25.19	10.18	26.71	24.55	11.18
	26.6	38.75	34.36	31.88	6.8	32.78	31.19	7.58	29.23	29.23	9.73	28.47	28.47	10.19	27.13	27.13	11.2
	26.6	51.2	36.42	27.56	6.9	34.97	26.99	7.69	31.25	25.47	9.84	30.47	25.14	10.3	28.82	24.44	11.3
	26.6	64.09	38.94	23.34	7.03	37.37	22.75	7.82	33.19	21.19	9.96	32.25	20.82	10.41	30.36	20.1	11.39
	27	47	35.96	29.06	6.88	34.53	28.5	7.67	30.85	27	9.82	30.1	26.69	10.28	28.47	25.99	11.28
2.54 7000 m ³ /h	24.4	48.8	34.37	28.14	6.8	32.92	27.54	7.58	29.07	25.88	9.72	28.34	25.58	10.18	26.82	24.94	11.18
	26.6	38.75	34.46	32.36	6.8	32.82	31.62	7.58	29.35	29.35	9.74	28.65	28.65	10.2	27.32	27.32	11.21
	26.6	51.2	36.58	27.94	6.91	35.13	27.37	7.7	31.37	25.83	9.85	30.58	25.5	10.31	28.92	24.8	11.31
	26.6	64.09	39.11	23.59	7.04	37.4	22.91	7.82	33.22	21.42	9.96	32.28	21.05	10.41	30.49	20.39	11.4
	27	47	36.13	29.49	6.88	34.68	28.92	7.67	30.98	27.41	9.83	30.21	27.09	10.29	28.57	26.39	11.28
kWf	TOTAL CAPACITY(KW)					kWs	SENSIBLE CAPACITY(KW)										
kWe	COMPRESSOR POWER INPUT(KW)																

WP160																	
Face Velocity(m/s) AIR FLOW (m ³ /h)	on coil		AMBIENT TEMPERATURE °C														
	I°CJ	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
2.12 7100 m ³ /h	24.4	48.8	43.88	32.79	9.07	42.31	32.07	10.14	38.26	30.15	13.05	37.41	29.73	13.67	35.65	28.96	15.01
	26.6	38.75	43.98	37.16	9.07	42.39	36.42	10.15	38.36	34.52	13.05	37.47	34.08	13.67	35.55	33.17	15
	26.6	51.2	46.83	32.37	9.23	44.76	31.48	10.28	40.7	29.85	13.2	39.89	29.52	13.82	38.2	28.83	15.17
	26.6	64.09	49.92	27.9	9.4	48.18	27.22	10.48	43.82	25.47	13.39	42.93	25.11	14.01	41.11	24.37	15.36
	27	47	46.44	34.05	9.2	44.47	33.23	10.27	40.14	31.44	13.16	39.33	31.11	13.78	37.66	30.42	15.13
2.24 7500 m ³ /h	24.4	48.8	44.38	33.6	9.09	42.73	32.84	10.17	38.47	30.8	13.06	37.61	30.44	13.68	35.75	29.62	15.01
	26.6	38.75	44.47	38.18	9.1	42.82	37.41	10.17	38.56	35.4	13.06	37.63	34.98	13.68	35.63	34.06	15
	26.6	51.2	46.91	32.97	9.23	45.26	32.33	10.31	41.09	30.66	13.22	40.27	30.32	13.84	38.55	29.62	15.19
	26.6	64.09	50.45	28.48	9.43	48.69	27.79	10.51	44.21	25.99	13.42	43.33	25.64	14.04	41.24	24.78	15.37
	27	47	46.7	34.87	9.22	44.61	33.96	10.27	40.52	32.34	13.18	39.71	32	13.81	38.01	31.3	15.16
2.36 7900 m ³ /h	24.4	48.8	44.82	34.38	9.12	43.12	33.59	10.19	38.78	31.64	13.08	37.85	31.21	13.69	35.83	30.29	15.02
	26.6	38.75	44.91	39.17	9.12	43.21	38.38	10.19	38.7	36.3	13.07	37.71	35.85	13.68	36.06	35.05	15.03
	26.6	51.2	47.4	33.82	9.26	45.68	33.14	10.33	41.45	31.45	13.24	40.62	31.11	13.87	38.88	30.4	15.21
	26.6	64.09	50.94	29.04	9.46	49.15	28.34	10.53	44.53	26.49	13.44	43.48	26.06	14.05	41.51	25.35	15.39
	27	47	46.76	35.55	9.22	45.08	34.89	10.3	40.88	33.21	13.21	40.05	32.87	13.83	38.33	32.16	15.18
2.48 8300 m ³ /h	24.4	48.8	45.2	35.13	9.14	43.49	34.33	10.21	38.91	32.32	13.09	37.92	31.86	13.7	36.13	31.12	15.04
	26.6	38.75	45.29	40.13	9.14	43.54	39.32	10.21	38.76	37.16	13.08	38	36.75	13.7	36.52	35.99	15.06
	26.6	51.2	47.81	34.62	9.28	46.07	33.94	10.36	41.79	32.22	13.26	40.94	31.87	13.89	39.19	31.16	15.23
	26.6	64.09	51.4	29.58	9.48	49.57	28.87	10.56	44.61	26.89	13.44	43.69	26.58	14.06	41.82	25.96	15.41
	27	47	47.19	36.45	9.25	45.46	35.77	10.32	41.21	34.06	13.23	40.37	33.72	13.85	38.63	33.01	15.2
kWf	TOTAL CAPACITY(KW)					kWs	SENSIBLE CAPACITY(KW)										
kWe	COMPRESSOR POWER INPUT(KW)																

WP180

Face Velocity(m/s) AIR FLOW (m ³ /h)	on coil		AMBIENT TEMPERATURE °C														
	°CJ	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
2.22 9200 m³/h	24.4	48.8	51.94	40.85	10.42	49.45	39.66	11.47	44.13	37.42	14.5	43.06	37.01	15.19	40.79	36.07	16.71
	26.6	38.75	51.82	46.7	10.41	49.29	45.45	11.46	44.47	43.17	14.52	43.54	42.63	15.21	41.38	41.38	16.74
	26.6	51.2	55.15	40.42	10.61	53.02	39.58	11.69	47.5	37.35	14.71	46.35	36.88	15.39	43.89	35.87	16.9
	26.6	64.09	58.96	34.23	10.84	56.64	33.32	11.92	50.24	30.91	14.9	48.87	30.4	15.56	46.39	29.58	17.06
	27	47	54.42	42.61	10.56	52.32	41.78	11.64	46.93	39.6	14.68	45.79	39.13	15.35	43.34	38.13	16.86
2.32 9600 m³/h	24.4	48.8	51.98	41.46	10.42	49.56	40.39	11.48	44.39	38.3	14.52	43.32	37.87	15.2	41.03	36.93	16.72
	26.6	38.75	51.78	47.47	10.41	49.59	46.55	11.48	44.93	44.53	14.55	43.84	43.84	15.23	41.83	41.83	16.77
	26.6	51.2	55.54	41.27	10.63	53.38	40.43	11.71	47.76	38.16	14.73	46.6	37.68	15.41	44.12	36.66	16.91
	26.6	64.09	59.34	34.78	10.86	56.83	33.76	11.93	50.31	31.42	14.9	49.17	31.05	15.58	46.63	30.2	17.07
	27	47	54.8	43.55	10.59	52.68	42.71	11.67	47.19	40.5	14.69	46.04	40.03	15.37	43.57	39.02	16.88
2.42 10000 m³/h	24.4	48.8	52.05	42.18	10.43	49.81	41.24	11.49	44.64	39.16	14.53	43.57	38.72	15.22	41.26	37.77	16.74
	26.6	38.75	51.89	48.41	10.42	50.01	47.59	11.5	45.24	45.24	14.57	44.3	44.3	15.26	42.27	42.27	16.8
	26.6	51.2	55.9	42.11	10.65	53.7	41.25	11.73	48.01	38.95	14.75	46.84	38.47	15.42	44.34	37.44	16.92
	26.6	64.09	59.6	35.28	10.88	57.05	34.35	11.95	50.62	32.07	14.92	49.42	31.67	15.6	46.86	30.8	17.09
	27	47	55.16	44.48	10.61	53.01	43.64	11.69	47.43	41.39	14.71	46.27	40.91	15.39	43.79	39.89	16.89
2.51 10400 m³/h	24.4	48.8	52.13	42.89	10.43	50.11	42.11	11.51	44.88	40	14.55	43.8	39.56	15.23	41.47	38.6	16.75
	26.6	38.75	52.35	49.51	10.44	50.51	48.53	11.53	45.69	45.69	14.6	44.74	44.74	15.29	42.69	42.69	16.82
	26.6	51.2	56.24	42.94	10.67	53.98	42.05	11.75	48.24	39.73	14.76	47.07	39.25	15.44	44.55	38.21	16.94
	26.6	64.09	59.73	35.77	10.89	57.27	34.94	11.96	50.86	32.69	14.94	49.65	32.28	15.61	47.08	31.4	17.1
	27	47	55.5	45.41	10.63	53.32	44.55	11.71	47.66	42.27	14.72	46.49	41.79	15.4	43.99	40.76	16.9
kWf	TOTAL CAPACITY(KW)					kWs	SENSIBLE CAPACITY(KW)										
kWe	COMPRESSOR POWER INPUT(KW)																

WP200

Face Velocity(m/s) AIR FLOW (m ³ /h)	on coil		AMBIENT TEMPERATURE °C														
	°CJ	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
1.96 9300 m³/h	24.4	48.8	55.87	42.16	11.58	53.76	41.18	12.87	48.18	38.56	16.36	47.06	38.09	17.12	44.45	36.92	18.73
	26.6	38.75	55.96	47.93	11.59	53.84	46.95	12.87	48.27	44.34	16.37	47.05	43.78	17.11	44.39	42.48	18.73
	26.6	51.2	59.03	41.36	11.71	56.91	40.54	13.01	51.42	38.34	16.53	50.3	37.89	17.28	47.96	36.93	18.92
	26.6	64.09	63.44	35.69	11.89	61.17	34.81	13.2	55.22	32.42	16.73	54.03	31.95	17.48	51.17	30.82	19.09
	27	47	58.79	43.75	11.7	56.09	42.58	12.97	50.72	40.45	16.49	49.61	40	17.25	47.28	39.05	18.88
2.04 9700 m³/h	24.4	48.8	56.3	42.94	11.6	54.15	41.94	12.89	48.5	39.4	16.38	47.28	38.85	17.13	44.53	37.59	18.73
	26.6	38.75	56.38	48.92	11.6	54.24	47.93	12.89	48.44	45.27	16.38	47.12	44.66	17.12	44.87	43.51	18.75
	26.6	51.2	59.52	42.21	11.73	57.33	41.36	13.03	51.78	39.14	16.55	50.65	38.68	17.3	48.28	37.72	18.93
	26.6	64.09	63.94	36.26	11.91	61.63	35.37	13.22	55.52	32.9	16.74	54.13	32.34	17.49	51.5	31.43	19.11
	27	47	58.84	44.43	11.7	56.58	43.53	12.99	51.07	41.34	16.51	49.95	40.88	17.27	47.6	39.93	18.9
2.13 10100 m³/h	24.4	48.8	56.69	43.7	11.61	54.54	42.7	12.9	48.68	40.13	16.39	47.35	39.52	17.13	44.85	38.45	18.75
	26.6	38.75	56.78	49.9	11.62	54.63	48.92	12.91	48.5	46.14	16.38	47.36	45.46	17.13	45.33	44.46	18.77
	26.6	51.2	59.94	43.03	11.75	57.73	42.17	13.04	52.11	39.92	16.56	50.98	39.46	17.32	48.58	38.48	18.95
	26.6	64.09	64.4	36.81	11.93	62.04	35.89	13.24	55.62	33.35	16.75	54.36	32.89	17.5	51.83	32.06	19.13
	27	47	59.14	45.27	11.71	56.97	44.43	13.01	51.4	42.21	16.53	50.27	41.75	17.28	47.9	40.78	18.91
2.21 10500 m³/h	24.4	48.8	57.06	44.44	11.63	54.77	43.38	12.91	48.73	40.82	16.39	47.41	40.17	17.13	45.1	39.26	18.76
	26.6	38.75	57.15	50.87	11.63	54.82	49.8	12.91	48.8	46.92	16.39	47.83	46.46	17.15	45.56	45.56	18.79
	26.6	51.2	60.34	43.83	11.76	58.1	42.96	13.06	52.43	40.7	16.58	51.28	40.23	17.34	48.84	39.23	18.96
	26.6	64.09	64.84	37.35	11.94	62.41	36.4	13.25	55.9	33.91	16.76	54.67	33.5	17.52	52.01	32.6	19.14
	27	47	59.55	46.17	11.73	57.33	45.31	13.03	51.71	43.07	16.54	50.58	42.6	17.3	48.18	41.63	18.93
kWf	TOTAL CAPACITY(KW)					kWs	SENSIBLE CAPACITY(KW)										
kWe	COMPRESSOR POWER INPUT(KW)																

WP240																	
Face Velocity(m/s) AIR FLOW (m ³ /h)	on coil		AMBIENT TEMPERATURE °C														
	T°C	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
2.37 12300 m ³ /h	24.4	48.8	68.9	54.46	13.46	66.12	53.17	15.03	58.13	49.51	19.26	56.7	48.92	20.18	53.69	47.67	22.16
	26.6	38.75	69.05	62.19	13.47	66.28	60.93	15.04	58.37	57.18	19.27	57.1	56.49	20.2	54.22	54.22	22.19
	26.6	51.2	73.01	53.73	13.66	70.15	52.61	15.23	62.78	49.61	19.5	61.23	48.96	20.42	57.96	47.58	22.39
	26.6	64.09	78.13	45.91	13.92	75.02	44.68	15.48	66.71	41.36	19.72	65.14	40.82	20.63	61.22	39.31	22.58
	27	47	721	56.55	13.62	69.26	55.43	15.18	61.96	52.47	19.46	60.48	51.85	20.37	57.24	50.49	22.35
2.45 12700 m ³ /h	24.4	48.8	69.27	55.25	13.48	66.3	53.83	15.04	58.41	50.36	19.27	56.96	49.77	20.19	53.93	48.5	22.17
	26.6	38.75	69.44	63.22	13.49	66.2	61.61	15.03	58.83	58.14	19.3	57.56	57.43	20.22	54.63	54.63	22.21
	26.6	51.2	73.4	54.57	13.68	70.51	53.43	15.25	63.05	50.39	19.52	61.49	49.74	20.43	58.2	48.35	22.4
	26.6	64.09	78.51	46.45	13.94	75.38	45.21	15.5	67.1	42.04	19.74	65.21	41.31	20.64	61.34	39.82	22.59
	27	47	72.48	57.48	13.63	69.62	56.35	15.2	62.26	53.36	19.47	60.75	52.73	20.39	57.48	51.35	22.36
2.53 13100 m ³ /h	24.4	48.8	69.58	56.01	13.49	66.44	54.55	15.05	58.67	51.2	19.29	57.22	50.6	20.2	54.16	49.32	22.18
	26.6	38.75	69.76	64.24	13.5	66.23	62.49	15.04	59.29	59.08	19.32	57.92	57.56	20.24	55.07	55.07	22.23
	26.6	51.2	73.77	55.39	13.7	70.86	54.25	15.26	63.31	51.17	19.53	61.74	50.5	20.44	58.43	49.11	22.42
	26.6	64.09	78.87	46.97	13.96	75.76	45.75	15.52	67.16	42.52	19.74	65.27	41.79	20.64	61.65	40.45	22.6
	27	47	72.84	58.39	13.65	69.96	57.25	15.22	62.55	54.24	19.49	61	53.59	20.4	57.71	52.2	22.38
kWf	TOTAL CAPACITY(KW)					kWs	SENSIBLE CAPACITY(KW)										
kWe	COMPRESSOR POWER INPUT(KW)																

WP275																	
Face Velocity(m/s) AIR FLOW (m ³ /h)	on coil		AMBIENT TEMPERATURE °C														
	T°C	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
2.32 14100 m ³ /h	24.4	48.8	77.47	60	14.66	74.34	58.56	16.35	65.62	54.73	21.05	63.72	53.86	22.07	60.45	52.56	24.3
	26.6	38.75	77.58	68.61	14.67	74.4	67.15	16.35	65.64	63.02	21.05	64.25	62.35	22.09	61.02	61.02	24.33
	26.6	51.2	81.91	59.13	14.84	78.74	57.89	16.52	70.62	54.62	21.27	68.96	53.94	22.31	65.42	52.48	24.55
	26.6	64.09	87.99	50.46	15.09	84.56	49.11	16.77	75.21	45.49	21.49	73.44	44.9	22.53	69.52	43.52	24.77
	27	47	80.85	62.28	14.79	77.71	61.04	16.48	69.65	57.8	21.23	68.02	57.12	22.26	64.56	55.7	24.51
2.38 14500 m ³ /h	24.4	48.8	77.84	60.77	14.68	74.45	59.18	16.35	65.68	55.37	21.05	64.04	54.7	22.08	60.7	53.34	24.31
	26.6	38.75	77.97	69.59	14.68	74.51	67.98	16.35	66.09	64.01	21.07	64.69	63.28	22.11	61.47	61.47	24.35
	26.6	51.2	82.3	59.93	14.85	79.1	58.67	16.54	70.92	55.38	21.29	69.25	54.7	22.32	65.65	53.21	24.56
	26.6	64.09	88.41	50.99	15.11	84.92	49.61	16.78	75.52	46.1	21.51	73.72	45.5	22.54	69.57	43.97	24.77
	27	47	81.23	63.15	14.81	78.07	61.91	16.49	69.95	58.64	21.24	68.3	57.96	22.28	64.82	56.54	24.52
2.45 14900 m ³ /h	24.4	48.8	78.13	61.44	14.69	74.6	59.84	16.36	65.85	56.11	21.06	64.31	55.51	22.09	60.93	54.12	24.32
	26.6	38.75	78.18	70.42	14.69	74.74	68.92	16.36	66.54	64.95	21.09	65.12	64.21	22.13	61.9	61.9	24.37
	26.6	51.2	82.67	60.71	14.87	79.45	59.45	16.55	71.21	56.13	21.3	69.53	55.44	22.34	65.88	53.93	24.58
	26.6	64.09	88.8	51.5	15.13	85.32	50.14	16.8	75.79	46.68	21.52	74.11	46.13	22.56	69.61	44.42	24.77
	27	47	81.59	64.02	14.82	78.41	62.77	16.51	70.24	59.48	21.26	68.58	58.8	22.29	65.06	57.35	24.53
2.51 15300 m ³ /h	24.4	48.8	78.23	62.06	14.69	74.94	60.69	16.37	66.16	56.95	21.07	64.54	56.3	22.1	61.15	54.9	24.33
	26.6	38.75	78.28	71.25	14.69	75.13	70	16.38	66.97	65.87	21.11	65.26	65.26	22.13	62.31	62.31	24.39
	26.6	51.2	83.02	61.48	14.88	79.78	60.21	16.56	71.49	56.87	21.31	69.79	56.18	22.35	66.1	54.65	24.59
	26.6	64.09	89.15	52	15.14	85.39	50.52	16.8	76.11	47.28	21.53	74.15	46.57	22.56	69.65	44.86	24.77
	27	47	81.94	64.88	14.84	78.73	63.62	16.52	70.51	60.31	21.27	68.84	59.62	22.3	65.27	58.15	24.54
kWf	TOTAL CAPACITY(KW)					kWs	SENSIBLE CAPACITY(KW)										
kWe	COMPRESSOR POWER INPUT(KW)																

WP340																	
Face Velocity(m/s) AIR FLOW (m ³ /h)	on coil		AMBIENT TEMPERATURE °C														
	T°CJ	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
2.36 16600 m ³ /h	24.4	48.8	96.96	74.16	20.96	93.23	72.43	23.14	83.4	67.73	28.63	81.46	66.93	29.77	76.86	64.79	32.19
	26.6	38.75	97.17	84.27	20.97	93.41	82.53	23.15	83.56	77.8	28.64	81.3	76.73	29.76	76.9	74.77	32.2
	26.6	51.2	102.38	72.7	21.26	98.59	71.24	23.49	88.82	67.31	29.09	86.85	66.5	30.24	82.72	64.8	32.72
	26.6	64.09	109.75	62.75	21.66	105.64	61.16	23.95	95.01	56.88	29.61	92.9	56.01	30.77	87.81	53.93	33.19
	27	47	101.68	76.73	21.22	97.34	74.9	23.41	87.69	71.02	28.99	85.74	70.22	30.15	81.65	68.53	32.62
2.42 17000 m ³ /h	24.4	48.8	97.4	74.94	20.99	93.61	73.18	23.16	83.61	68.47	28.64	81.63	67.61	29.79	76.95	65.46	32.2
	26.6	38.75	97.59	85.25	21	93.8	83.49	23.17	83.62	78.65	28.64	81.39	77.6	29.77	77.25	75.78	32.23
	26.6	51.2	102.9	73.57	21.29	98.99	72.04	23.52	89.16	68.09	29.11	87.18	67.28	30.27	83.02	65.56	32.75
	26.6	64.09	110.22	63.3	21.68	106.08	61.7	23.98	95.41	57.4	29.65	92.95	56.31	30.78	88.14	54.55	33.22
	27	47	101.77	77.41	21.23	97.76	75.8	23.44	88.02	71.88	29.02	86.06	71.07	30.17	81.94	69.37	32.65
2.48 17400 m ³ /h	24.4	48.8	97.79	75.69	21.01	93.98	73.91	23.19	83.97	69.31	28.67	81.71	68.27	29.8	77.27	66.29	32.23
	26.6	38.75	97.99	86.22	21.02	94.16	84.44	23.2	83.72	79.53	28.65	81.46	78.47	29.77	77.68	76.72	32.27
	26.6	51.2	103.31	74.38	21.31	99.38	72.84	23.55	89.48	68.86	29.14	87.49	68.04	30.3	83.31	66.32	32.77
	26.6	64.09	110.68	63.85	21.71	106.51	62.24	24.01	95.51	57.78	29.66	93.03	56.76	30.79	88.44	55.14	33.25
	27	47	101.89	78.11	21.23	98.14	76.68	23.46	88.34	72.74	29.04	86.37	71.92	30.2	82.22	70.21	32.68
2.54 17800 m ³ /h	24.4	48.8	98.17	76.44	21.03	94.33	74.65	23.21	84.06	69.98	28.68	81.79	68.94	29.8	77.54	67.1	32.25
	26.6	38.75	98.37	87.17	21.04	94.53	85.39	23.22	83.79	80.38	28.66	81.66	79.38	29.79	78.09	77.65	32.3
	26.6	51.2	103.71	75.17	21.33	99.76	73.62	23.57	89.8	69.62	29.17	87.8	68.8	30.33	83.59	67.07	32.8
	26.6	64.09	111.12	64.39	21.73	106.92	62.76	24.04	95.57	58.17	29.66	93.19	57.25	30.8	88.76	55.76	33.28
	27	47	102.42	79.08	21.26	98.5	77.56	23.49	88.65	73.58	29.07	86.66	72.77	30.23	82.5	71.05	32.7
kWf	TOTAL CAPACITY(KW)					kWs	SENSIBLE CAPACITY(KW)										
kWe	COMPRESSOR POWER INPUT(KW)																

WP380																	
Face Velocity(m/s) AIR FLOW (m ³ /h)	on coil		AMBIENT TEMPERATURE °C														
	T°CJ	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
2.14 17300 m ³ /h	24.4	48.8	105.84	80.78	19.56	101.95	78.95	21.72	90.97	73.76	26.92	88.99	72.95	27.99	84.93	71.27	30.29
	26.6	38.75	105.99	92.04	19.57	102.11	90.22	21.73	91.08	85	26.93	89.14	84.21	28	85.35	82.29	30.32
	26.6	51.2	112.43	79.66	19.74	108.41	78.07	21.98	98.18	73.95	27.34	96.05	73.07	28.42	91.57	71.23	30.72
	26.6	64.09	120.59	68.38	19.94	116.15	66.61	22.26	104.89	62.05	27.73	102.48	61.07	28.81	97.2	59.14	31.08
	27	47	110.95	83.74	19.7	106.97	82.16	21.92	96.89	78.1	27.27	94.86	77.27	28.35	90.44	75.45	30.64
2.19 17700 m ³ /h	24.4	48.8	106.27	81.6	19.57	102.36	79.76	21.74	91.21	74.6	26.93	89.32	73.86	28.01	85.22	72.15	30.31
	26.6	38.75	106.42	93.11	19.58	102.63	91.37	21.75	91.42	86.14	26.95	89.46	85.33	28.02	85.88	83.23	30.35
	26.6	51.2	112.89	80.55	19.75	108.84	78.95	21.99	98.51	74.78	27.36	96.36	73.9	28.44	91.86	72.04	30.74
	26.6	64.09	121.05	68.95	19.95	116.57	67.17	22.27	105.07	62.55	27.74	102.7	61.67	28.83	97.29	59.66	31.09
	27	47	111.4	84.72	19.71	107.39	83.14	21.94	97.25	79.05	27.29	95.19	78.2	28.37	90.73	76.37	30.66
2.23 18100 m ³ /h	24.4	48.8	106.69	82.42	19.59	102.82	80.62	21.76	91.59	75.54	26.96	89.63	74.74	28.03	85.49	73.04	30.33
	26.6	38.75	106.83	94.18	19.59	102.79	92.27	21.76	91.74	87.26	26.97	89.99	86.28	28.05	86.38	84.17	30.38
	26.6	51.2	113.34	81.43	19.77	109.26	79.83	22.01	98.83	75.61	27.38	96.66	74.72	28.46	92.14	72.86	30.75
	26.6	64.09	121.49	69.52	19.96	116.99	67.73	22.29	105.32	63.11	27.75	102.81	62.2	28.83	97.36	60.18	31.09
	27	47	111.84	85.7	19.73	107.8	84.11	21.95	97.6	79.99	27.31	95.49	79.12	28.39	91	77.27	30.68
2.28 18500 m ³ /h	24.4	48.8	107.08	83.24	19.6	103.14	81.41	21.77	91.9	76.43	26.98	89.93	75.61	28.05	85.77	73.91	30.34
	26.6	38.75	107.27	95.26	19.6	102.74	93.03	21.75	92.25	88.22	27	90.52	87.22	28.09	86.78	85.96	30.41
	26.6	51.2	113.77	82.31	19.78	109.67	80.69	22.02	99.13	76.43	27.4	96.96	75.53	28.48	92.41	73.66	30.77
	26.6	64.09	121.92	70.08	19.97	117.38	68.28	22.3	105.53	63.69	27.77	102.9	62.72	28.84	97.47	60.71	31.1
	27	47	112.27	86.67	19.74	108.21	85.06	21.97	97.93	80.92	27.33	95.77	80.03	28.41	91.26	78.18	30.7
kWf	TOTAL CAPACITY(KW)					kWs	SENSIBLE CAPACITY(KW)										
kWe	COMPRESSOR POWER INPUT(KW)																

WP450																	
Face Velocity(m/s) AIR FLOW (m ³ /h)	on coil		AMBIENT TEMPERATURE °C														
	T°C	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
2.38 19300 m ³ /h	24.4	48.8	127.62	95.04	26.19	122.58	92.69	28.79	110.8	87.06	36.2	108.65	86.06	37.86	103.07	83.23	41.41
	26.6	38.75	127.84	107.5	26.2	122.8	105.15	28.81	111.11	99.62	36.22	108.54	98.26	37.85	102.72	95.23	41.38
	26.6	51.2	135.22	93.07	26.6	130.19	91.14	29.24	118.05	86.26	36.73	115.73	85.31	38.4	110.97	83.36	42.06
	26.6	64.09	145.43	81.21	27.16	139.97	79.09	29.84	126.62	73.7	37.37	124.07	72.65	39.05	118.83	70.51	42.72
	27	47	134.39	98.11	26.55	128.4	95.55	29.14	116.46	90.76	36.61	114.16	89.82	38.28	109.45	87.89	41.93
2.43 19700 m ³ /h	24.4	48.8	128.13	95.9	26.22	123.06	93.54	28.82	111.23	87.9	36.23	108.92	86.78	37.88	103.16	83.88	41.42
	26.6	38.75	128.35	108.59	26.23	123.28	106.23	28.84	111.34	100.51	36.24	108.5	98.97	37.85	103.12	96.42	41.41
	26.6	51.2	135.88	94.07	26.64	130.7	92.04	29.28	118.48	87.13	36.76	116.15	86.18	38.43	111.36	84.22	42.09
	26.6	64.09	146.03	81.85	27.2	140.51	79.7	29.87	127.05	74.27	37.41	124.48	73.21	39.08	119.26	71.08	42.76
	27	47	134.57	98.89	26.56	128.98	96.59	29.17	116.89	91.73	36.65	114.57	90.78	38.31	109.83	88.84	41.96
2.48 20100 m ³ /h	24.4	48.8	128.63	96.75	26.24	123.53	94.38	28.85	111.8	88.84	36.27	108.86	87.23	37.87	103.31	84.63	41.43
	26.6	38.75	128.85	109.68	26.26	123.75	107.3	28.86	111.37	101.27	36.24	108.47	99.81	37.84	103.51	97.6	41.45
	26.6	51.2	136.44	95	26.67	131.19	92.94	29.31	118.9	88	36.8	116.56	87.04	38.46	111.74	85.08	42.12
	26.6	64.09	146.61	82.49	27.23	141	80.3	29.9	127.46	74.83	37.44	124.88	73.77	39.11	119.57	71.61	42.78
	27	47	134.7	99.63	26.57	129.47	97.58	29.2	117.3	92.69	36.68	114.97	91.74	38.34	110.2	89.79	41.99
2.53 20500 m ³ /h	24.4	48.8	129.11	97.6	26.27	123.98	95.2	28.88	111.75	89.25	36.27	108.85	87.88	37.87	103.58	85.52	41.45
	26.6	38.75	129.34	110.75	26.28	124.2	108.36	28.89	111.33	102.04	36.24	108.45	100.58	37.84	103.83	98.73	41.47
	26.6	51.2	136.95	95.9	26.69	131.67	93.83	29.33	119.31	88.86	36.83	116.95	87.9	38.49	112.09	85.91	42.15
	26.6	64.09	147.18	83.11	27.26	141.48	80.88	29.93	127.86	75.38	37.47	125.27	74.32	39.14	119.7	72.01	42.79
	27	47	135.04	100.54	26.59	129.94	98.57	29.23	117.7	93.64	36.71	115.36	92.69	38.37	110.57	90.73	42.02
kWf	TOTAL CAPACITY(KW)						kWs	SENSIBLE CAPACITY(KW)									
kWe	COMPRESSOR POWER INPUT(KW)																

WP540																	
Face Velocity(m/s) AIR FLOW (m ³ /h)	on coil		AMBIENT TEMPERATURE °C														
	T°C	%	30			35			46			48			52		
			kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
2.47 21300 m ³ /h	24.4	48.8	155.35	114.24	33.32	149.61	111.58	36.71	134.99	104.54	45.78	132.09	103.11	47.7	126.04	100.14	51.8
	26.6	38.75	155.72	128.29	33.34	149.95	125.61	36.73	135.3	118.56	45.8	132.4	117.14	47.72	126.32	114.15	51.82
	26.6	51.2	167.22	113.49	33.94	159.4	109.51	37.26	143.67	103	46.36	140.67	101.76	48.29	134.41	99.18	52.42
	26.6	64.09	176.75	97.08	34.45	170.25	94.58	37.88	153.94	88.09	47.05	150.64	86.75	48.98	143.77	84.12	53.12
	27	47	165.09	118.74	33.83	158.9	115.85	37.23	141.82	108.02	46.24	138.86	106.79	48.16	132.66	104.23	52.29
2.51 21700 m ³ /h	24.4	48.8	156.01	115.22	33.36	150.17	112.51	36.74	135.46	105.42	45.81	132.55	103.99	47.73	126.53	101.05	51.83
	26.6	38.75	156.39	129.51	33.38	150.52	126.77	36.76	135.78	119.69	45.85	132.86	118.26	47.75	126.47	114.99	51.83
	26.6	51.2	167.77	114.24	33.97	159.42	110.1	37.26	144.18	103.95	46.39	141.16	102.7	48.32	134.86	100.1	52.45
	26.6	64.09	177.46	97.84	34.48	170.91	95.32	37.91	154.44	88.77	47.08	151.12	87.46	49.02	144.21	84.93	53.15
	27	47	165.76	119.7	33.87	159.11	116.52	37.25	142.32	109.07	46.27	139.34	107.83	48.2	133.1	105.25	52.32
2.56 22100 m ³ /h	24.4	48.8	156.65	116.2	33.39	150.73	113.43	36.78	135.93	106.3	45.84	132.99	104.85	47.76	126.92	101.88	51.86
	26.6	38.75	157.04	130.73	33.41	151.07	127.94	36.79	136.25	120.8	45.87	133.32	119.37	47.78	126.61	115.84	51.84
	26.6	51.2	167.73	114.74	33.97	159.83	110.99	37.29	144.67	104.89	46.43	141.64	103.63	48.36	135.31	101.02	52.48
	26.6	64.09	178.15	98.59	34.52	171.56	96.06	37.95	154.93	89.44	47.12	151.59	88.19	49.05	144.65	85.74	53.18
	27	47	166.43	120.71	33.9	159.04	116.99	37.24	142.81	110.1	46.3	139.81	108.85	48.23	133.54	106.26	52.35
2.60 22500 m ³ /h	24.4	48.8	157.29	117.16	33.42	151.26	114.33	36.81	136.38	107.16	45.87	133.43	105.71	47.79	127.07	102.51	51.87
	26.6	38.75	157.68	131.93	33.44	151.61	129.08	36.82	136.7	121.91	45.9	133.87	120.56	47.82	126.78	116.75	51.85
	26.6	51.2	167.55	115.08	33.96	160.53	112.05	37.33	145.15	105.82	46.46	142.1	104.56	48.39	135.74	101.92	52.52
	26.6	64.09	178.82	99.34	34.56	172.19	96.79	37.99	155.4	90.15	47.15	152.05	88.95	49.08	145.07	86.54	53.21
	27	47	167.15	121.77	33.94	158.93	117.63	37.24	143.29	111.12	46.33	140.27	109.87	48.26	133.96	107.26	52.38
kWf	TOTAL CAPACITY(KW)						kWs	SENSIBLE CAPACITY(KW)									
kWe	COMPRESSOR POWER INPUT(KW)																

EXTENDED FAN PERFORMANCE DATA

WP040														
ESP (Pa)														
Air flow (m³/h)	50		75		100		125		150		175		200	
	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)
1650	723	0.10	799	0.12	884	0.15	969	0.17	1048	0.20	1116	0.22	1175	0.24
1850	770	0.14	832	0.15	902	0.18	977	0.20	1053	0.23	1127	0.26	1195	0.29
2050	823	0.17	876	0.19	934	0.21	997	0.24	1064	0.27	1133	0.30	1202	0.33
2250	875	0.22	922	0.24	972	0.26	1025	0.28	1082	0.31	1142	0.34	1205	0.37

ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)												
1650	1225	0.27	1268	0.29	1306	0.32	1340	0.36	1370	0.39	1398	0.44	1423	0.48
1850	1254	0.31	1307	0.34	1354	0.36	1395	0.39	1432	0.42	1465	0.46	1496	0.49
2050	1267	0.36	1327	0.39	1381	0.42	1430	0.45	1474	0.48	1514	0.51	1551	0.54
2250	1268	0.41	1330	0.44	1389	0.48	1444	0.51	1495	0.54	1542	0.57	1585	0.61

WP055														
ESP (Pa)														
Air flow (m³/h)	50		75		100		125		150		175		200	
	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)
2500	810	0.22	850	0.24	889	0.26	928	0.28	968	0.30	1010	0.32	1054	0.34
2700	859	0.27	896	0.29	932	0.31	968	0.33	1005	0.35	1042	0.37	1081	0.39
2900	909	0.33	943	0.35	977	0.37	1011	0.39	1045	0.41	1079	0.43	1114	0.46
3100	960	0.40	992	0.42	1024	0.43	1056	0.46	1088	0.48	1119	0.50	1151	0.53

ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)												
2500	1100	0.37	1148	0.39	1200	0.42	1254	0.46	1310	0.49	1366	0.53	1423	0.57
2700	1121	0.42	1162	0.45	1206	0.47	1251	0.50	1299	0.54	1349	0.57	1401	0.61
2900	1149	0.48	1186	0.51	1224	0.53	1263	0.56	1304	0.59	1347	0.63	1392	0.66
3100	1183	0.55	1216	0.58	1250	0.60	1285	0.63	1321	0.66	1358	0.69	1397	0.73

WP065														
ESP (Pa)														
Air flow (m³/h)	50		75		100		125		150		175		200	
	RPM	shaft power (kW)												
3300	961	0.44	994	0.46	1025	0.48	1056	0.50	1086	0.52	1116	0.54	1146	0.57
3500	1009	0.52	1040	0.54	1071	0.56	1100	0.58	1129	0.60	1157	0.63	1185	0.65
3700	1057	0.60	1087	0.63	1117	0.65	1145	0.67	1172	0.70	1199	0.72	1226	0.74
3900	1106	0.70	1135	0.72	1163	0.75	1190	0.77	1217	0.80	1243	0.82	1268	0.85

ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)												
3300	1175	0.59	1205	0.62	1235	0.64	1266	0.67	1297	0.70	1329	0.73	1361	0.76
3500	1213	0.67	1241	0.70	1269	0.73	1297	0.75	1326	0.78	1355	0.81	1384	0.84
3700	1253	0.77	1279	0.79	1305	0.82	1332	0.85	1359	0.88	1385	0.91	1413	0.94
3900	1294	0.87	1319	0.90	1344	0.92	1369	0.95	1394	0.98	1419	1.01	1445	1.04



Westinghouse

WP070														
ESP (Pa)														
Air flow (m³/h)	50		75		100		125		150		175		200	
	RPM	shaft power (kW)												
3800			700	0.36	740	0.39	780	0.43	819	0.47	858	0.51	896	0.55
4000			720	0.40	760	0.44	799	0.48	836	0.51	873	0.56	909	0.60
4200	702	0.41	742	0.45	781	0.49	818	0.53	854	0.57	890	0.61	925	0.65
4400	725	0.46	764	0.51	802	0.55	838	0.59	873	0.63	907	0.67	941	0.71

WP070														
ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)
3800	934	0.59	971	0.64	1006	0.68	1040	0.72	1070	0.76	1097	0.78	1122	0.80
4000	946	0.64	981	0.69	1017	0.74	1051	0.78	1084	0.83	1114	0.87	1141	0.90
4200	959	0.70	994	0.75	1028	0.79	1062	0.84	1095	0.89	1126	0.94	1156	0.99
4400	974	0.76	1007	0.81	1040	0.85	1073	0.91	1105	0.96	1137	1.01	1167	1.06

WP080														
ESP (Pa)														
Air flow (m³/h)	50		75		100		125		150		175		200	
	RPM	shaft power (kW)												
4100	721	0.42	761	0.45	799	0.49	836	0.53	873	0.57	908	0.61	944	0.66
4300	745	0.47	784	0.51	821	0.55	856	0.59	891	0.63	926	0.67	960	0.72
4500	770	0.53	807	0.57	843	0.61	877	0.65	911	0.69	944	0.74	977	0.78
4700	795	0.59	831	0.63	866	0.68	899	0.72	932	0.76	964	0.81	996	0.86

WP080														
ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)												
4100	979	0.70	1014	0.75	1048	0.80	1082	0.85	1113	0.90	1142	0.93	1169	0.97
4300	993	0.76	1027	0.81	1060	0.86	1093	0.92	1125	0.97	1156	1.02	1184	1.06
4500	1009	0.83	1042	0.88	1074	0.93	1106	0.98	1137	1.04	1168	1.09	1198	1.14
4700	1027	0.90	1058	0.95	1089	1.00	1119	1.06	1150	1.11	1180	1.17	1210	1.22

WP090														
ESP (Pa)														
Air flow (m³/h)	50		75		100		125		150		175		200	
	RPM	shaft power (kW)												
4500			713	0.47	753	0.51	790	0.55	827	0.59	862	0.63	896	0.68
4700	700	0.48	732	0.52	771	0.56	807	0.60	843	0.65	877	0.69	911	0.74
4900	713	0.53	752	0.57	789	0.62	825	0.66	859	0.71	893	0.75	925	0.80
5100	734	0.59	772	0.63	808	0.68	842	0.73	876	0.77	909	0.82	941	0.87

WP090														
ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)
4500	930	0.72	962	0.76	995	0.81	1027	0.86	1059	0.91	1091	0.96	1123	1.01
4700	943	0.78	975	0.82	1006	0.87	1037	0.92	1068	0.97	1099	1.02	1130	1.08
4900	957	0.84	988	0.89	1019	0.94	1049	0.99	1079	1.04	1108	1.09	1138	1.14
5100	972	0.91	1002	0.96	1032	1.01	1061	1.06	1090	1.11	1119	1.16	1148	1.22

WP100														
ESP (Pa)														
Air flow (m³/h)	50		75		100		125		150		175		200	
	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)
4700	700	0.48	732	0.52	771	0.56	807	0.60	843	0.65	877	0.69	911	0.74
4900	713	0.53	752	0.57	789	0.62	825	0.66	859	0.71	893	0.75	925	0.80
5100	734	0.59	772	0.63	808	0.68	842	0.73	876	0.77	909	0.82	941	0.87
5300	756	0.65	792	0.70	827	0.75	861	0.79	894	0.84	926	0.89	957	0.94
ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)
4700	943	0.78	975	0.82	1006	0.87	1037	0.92	1068	0.97	1099	1.02	1130	1.08
4900	957	0.84	988	0.89	1019	0.94	1049	0.99	1079	1.04	1108	1.09	1138	1.14
5100	972	0.91	1002	0.96	1032	1.01	1061	1.06	1090	1.11	1119	1.16	1148	1.22
5300	987	0.99	1017	1.04	1046	1.09	1075	1.14	1103	1.19	1131	1.24	1158	1.29

WP120														
ESP (Pa)														
Air flow (m³/h)	50		75		100		125		150		175		200	
	RPM	shaft power (kW)												
6600	854	1.08	885	1.14	915	1.20	945	1.26	974	1.32	1003	1.38	1031	1.44
6800	875	1.17	905	1.23	934	1.29	963	1.35	992	1.42	1020	1.48	1047	1.54
7000	896	1.26	925	1.33	953	1.39	982	1.45	1010	1.52	1037	1.58	1064	1.65
7200	916	1.36	945	1.43	973	1.49	1000	1.56	1028	1.63	1054	1.69	1081	1.76
ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)												
6600	1058	1.50	1085	1.56	1111	1.62	1137	1.68	1163	1.75	1188	1.81	1212	1.86
6800	1074	1.61	1100	1.67	1126	1.73	1152	1.79	1177	1.86	1201	1.92	1226	1.98
7000	1090	1.71	1116	1.78	1142	1.84	1167	1.91	1191	1.97	1216	2.04	1239	2.10
7200	1107	1.83	1132	1.89	1157	1.96	1182	2.03	1206	2.09	1230	2.16	1253	2.22

WP160														
ESP (Pa)														
Air flow (m³/h)	50		75		100		125		150		175		200	
	RPM	shaft power (kW)												
7100	589	0.72	621	0.77	652	0.83	683	0.90	712	0.96	740	1.02	768	1.09
7500	613	0.83	644	0.89	674	0.95	703	1.02	731	1.08	759	1.15	785	1.21
7900	637	0.95	667	1.01	696	1.08	724	1.15	751	1.21	778	1.28	804	1.35
8300	661	1.08	690	1.15	717	1.21	744	1.28	771	1.36	797	1.43	822	1.50
ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)												
7100	794	1.15	820	1.22	846	1.29	871	1.36	895	1.43	920	1.51	943	1.58
7500	811	1.28	836	1.35	861	1.42	885	1.49	909	1.57	933	1.65	956	1.72
7900	829	1.42	853	1.49	877	1.57	901	1.64	924	1.72	947	1.80	969	1.87
8300	846	1.57	870	1.65	894	1.72	917	1.80	939	1.88	961	1.96	983	2.04

WP180														
ESP (Pa)														
Air flow (m³/h)	50		75		100		125		150		175		200	
	RPM	shaft power (kW)												
9200	717	1.43	744	1.50	769	1.58	794	1.65	819	1.73	843	1.81	866	1.89
9600	742	1.61	768	1.68	792	1.76	816	1.84	840	1.92	864	2.00	887	2.08
10000	767	1.80	792	1.88	815	1.95	839	2.04	862	2.12	885	2.20	907	2.29
10400	792	2.00	815	2.08	839	2.17	861	2.25	884	2.33	906	2.42	927	2.51

ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)
9200	889	1.97	912	2.05	934	2.13	956	2.21	977	2.29	998	2.38	1019	2.46
9600	909	2.16	931	2.25	953	2.33	974	2.42	995	2.50	1015	2.59	1036	2.68
10000	929	2.37	950	2.46	971	2.55	992	2.64	1013	2.73	1033	2.81	1052	2.90
10400	949	2.60	970	2.69	990	2.78	1011	2.87	1031	2.96	1050	3.05	1070	3.14

WP200														
ESP (Pa)														
Air flow (m³/h)	50		75		100		125		150		175		200	
	RPM	shaft power (kW)												
9300	667	1.32	695	1.39	722	1.47	748	1.54	773	1.62	798	1.69	822	1.77
9700	690	1.48	716	1.55	742	1.63	768	1.71	792	1.79	816	1.87	840	1.95
10100	712	1.64	738	1.73	763	1.81	788	1.89	812	1.97	835	2.05	858	2.14
10500	735	1.83	760	1.92	785	2.01	809	2.09	832	2.17	855	2.26	877	2.34

ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)								
9300	846	1.85	870	1.93	893	2.01	915	2.09	937	2.17	959	2.26	980	2.34
9700	863	2.03	886	2.11	908	2.19	931	2.28	952	2.36	973	2.45	994	2.54
10100	881	2.22	903	2.31	925	2.39	947	2.48	968	2.57	989	2.66	1009	2.75
10500	899	2.43	921	2.52	942	2.60	963	2.69	984	2.79	1004	2.88	1024	2.97

WP240														
ESP (Pa)														
Air flow (m³/h)	50		75		100		125		150		175		200	
	RPM	shaft power (kW)												
12300	597	1.85	619	1.96	640	2.07	661	2.17	681	2.28	701	2.39	720	2.50
12700	612	2.02	634	2.13	655	2.24	675	2.35	695	2.46	714	2.57	733	2.69
13100	628	2.20	649	2.31	669	2.42	689	2.54	708	2.65	727	2.77	745	2.88
13500	643	2.38	663	2.50	683	2.61	703	2.74	722	2.85	740	2.97	758	3.09

ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)												
12300	739	2.61	757	2.71	775	2.82	793	2.94	810	3.05	827	3.16	844	3.28
12700	751	2.80	769	2.91	787	3.02	804	3.13	821	3.25	838	3.37	855	3.49
13100	763	2.99	781	3.11	798	3.22	815	3.34	832	3.46	849	3.58	865	3.70
13500	776	3.21	793	3.32	810	3.44	827	3.56	844	3.69	860	3.81	876	3.93

WP275														
Air flow (m³/h)	ESP (Pa)													
	50		75		100		125		150		175		200	
	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)
14100	638	2.50	658	2.62	678	2.75	698	2.88	717	3.00	735	3.12	753	3.24
14500	653	2.70	673	2.83	692	2.96	711	3.08	730	3.21	748	3.34	766	3.47
14900	668	2.91	687	3.04	706	3.17	725	3.31	743	3.44	761	3.57	779	3.70
15300	683	3.13	702	3.27	721	3.40	739	3.54	757	3.67	774	3.80	791	3.94

ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)												
14100	771	3.37	788	3.49	805	3.61	822	3.74	838	3.86	855	3.99	871	4.12
14500	783	3.59	800	3.72	817	3.84	834	3.98	850	4.10	866	4.23	881	4.35
14900	796	3.83	812	3.95	829	4.09	845	4.22	861	4.35	877	4.48	892	4.61
15300	808	4.07	825	4.21	841	4.34	857	4.47	872	4.60	888	4.74	903	4.87

WP340														
Air flow (m³/h)	ESP (Pa)													
	50		75		100		125		150		175		200	
	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)
16600	437	1.99	456	2.14	474	2.28	492	2.42	510	2.58	527	2.73	544	2.88
17000	445	2.12	464	2.27	482	2.42	499	2.56	516	2.71	533	2.87	550	3.03
17400	453	2.26	471	2.40	489	2.56	506	2.70	523	2.86	540	3.02	556	3.18
17800	461	2.39	479	2.55	496	2.70	513	2.85	530	3.01	546	3.17	562	3.33

ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)												
16600	561	3.04	578	3.21	593	3.36	609	3.53	624	3.70	640	3.89	655	4.07
17000	567	3.19	583	3.35	599	3.52	615	3.69	630	3.87	644	4.04	660	4.21
17400	573	3.35	589	3.52	604	3.68	620	3.85	635	4.03	649	4.20	664	4.39
17800	578	3.50	594	3.67	610	3.85	625	4.02	640	4.19	654	4.38	669	4.56

WP380														
Air flow (m³/h)	ESP (Pa)													
	50		75		100		125		150		175		200	
	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)
17300	472	2.39	489	2.54	507	2.69	524	2.85	540	3.00	557	3.16	573	3.32
17700	480	2.54	498	2.69	515	2.85	531	3.00	548	3.17	564	3.33	580	3.49
18100	489	2.70	506	2.85	523	3.01	539	3.17	555	3.33	571	3.50	587	3.67
18500	498	2.86	515	3.02	531	3.18	547	3.34	563	3.51	578	3.67	594	3.85

ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)												
17300	589	3.49	605	3.66	620	3.83	635	4.01	650	4.18	665	4.37	680	4.55
17700	596	3.67	611	3.83	626	4.01	641	4.18	656	4.37	670	4.54	685	4.74
18100	602	3.83	617	4.01	632	4.18	647	4.37	662	4.56	676	4.74	690	4.92
18500	609	4.02	624	4.20	639	4.38	653	4.56	668	4.75	682	4.94	696	5.13

WP450														
Air flow (m³/h)	ESP (Pa)													
	50		75		100		125		150		175		200	
	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)
19300	536	3.42	552	3.59	567	3.75	582	3.92	597	4.10	612	4.28	627	4.46
19700	545	3.61	560	3.78	576	3.96	591	4.14	605	4.30	620	4.49	634	4.67
20100	554	3.82	569	3.99	584	4.16	599	4.34	613	4.52	628	4.71	642	4.89
20500	563	4.02	578	4.20	593	4.38	607	4.56	621	4.74	635	4.92	649	5.11

ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)												
19300	641	4.64	656	4.83	670	5.02	684	5.21	700	5.44	711	5.59	724	5.80
19700	649	4.86	663	5.05	677	5.24	691	5.43	704	5.62	717	5.81	730	6.02
20100	656	5.08	670	5.27	684	5.47	697	5.66	711	5.86	724	6.06	737	6.26
20500	663	5.31	677	5.51	691	5.71	704	5.90	717	6.09	730	6.29	743	6.50

WP540														
Air flow (m³/h)	ESP (Pa)													
	50		75		100		125		150		175		200	
	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)	RPM	shaft power (kW)
21300	548	4.06	562	4.23	577	4.41	592	4.60	606	4.78	620	4.97	634	5.16
21700	556	4.26	571	4.45	585	4.63	599	4.81	614	5.01	627	5.19	641	5.38
22100	565	4.49	579	4.67	593	4.85	607	5.04	621	5.23	635	5.43	648	5.62
22500	573	4.71	587	4.89	601	5.08	615	5.28	629	5.48	642	5.67	656	5.87

ESP (Pa)														
Air flow (m³/h)	225		250		275		300		325		350		375	
	RPM	shaft power (kW)												
21300	647	5.34	661	5.54	674	5.73	688	5.94	701	6.14	714	6.34	727	6.54
21700	654	5.57	668	5.78	681	5.97	694	6.17	707	6.38	720	6.58	733	6.79
22100	662	5.82	675	6.02	688	6.22	701	6.43	713	6.62	726	6.83	739	7.05
22500	669	6.07	682	6.27	694	6.46	707	6.67	720	6.89	732	7.09	745	7.31

Notes:

- Outside the highlighted area, within the standard motor operating range
- Within the highlighted area, larger motor size to be used
- Shown Fan performance is based on ISP = Coil PD + System Effect (Filters are not included).
- Refer to page 26 & 27 for 1" Aluminum Filter PD
- For special Filters, consult Westinghouse.

INTERNAL PRESSURE DROP DATA

<i>Unit Model</i>	<i>AFR</i>	<i>Filter PD</i>	<i>ISP (Without Filter)</i>	<i>ISP (With Filter)</i>
WP040	2250	35	144	179
	2050	28	123	151
	1850	23	103	126
	1650	19	85	104
WP055	3100	39	126	165
	2900	32	112	145
	2700	27	99	127
	2500	24	87	111
WP065	3900	33	139	172
	3700	29	126	155
	3500	26	114	140
	3300	23	103	126
WP070	3800	26	105	131
	4000	27	115	142
	4200	30	126	156
	4400	34	136	170
WP080	4700	40	176	216
	4500	36	163	199
	4300	32	151	182
	4100	28	139	168
WP090	4500	22	102	124
	4700	24	110	134
	4900	26	118	144
	5100	28	127	155
WP100	5300	31	136	167
	5100	28	127	155
	4900	26	118	144
	4700	24	110	134
WP120	7200	32	163	195
	7000	30	154	184
	6800	28	145	173
	6600	26	136	162
WP160	8300	27	148	175
	7900	25	136	160
	7500	23	124	146
	7100	21	112	133

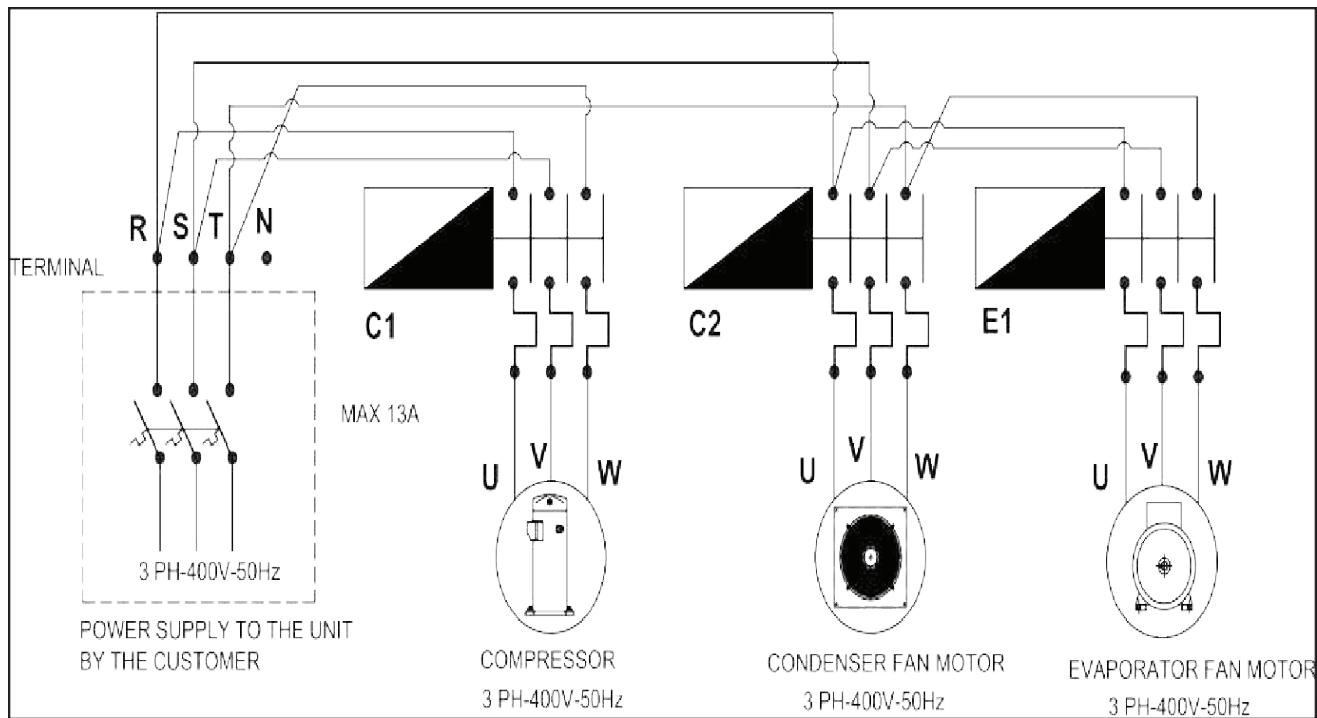
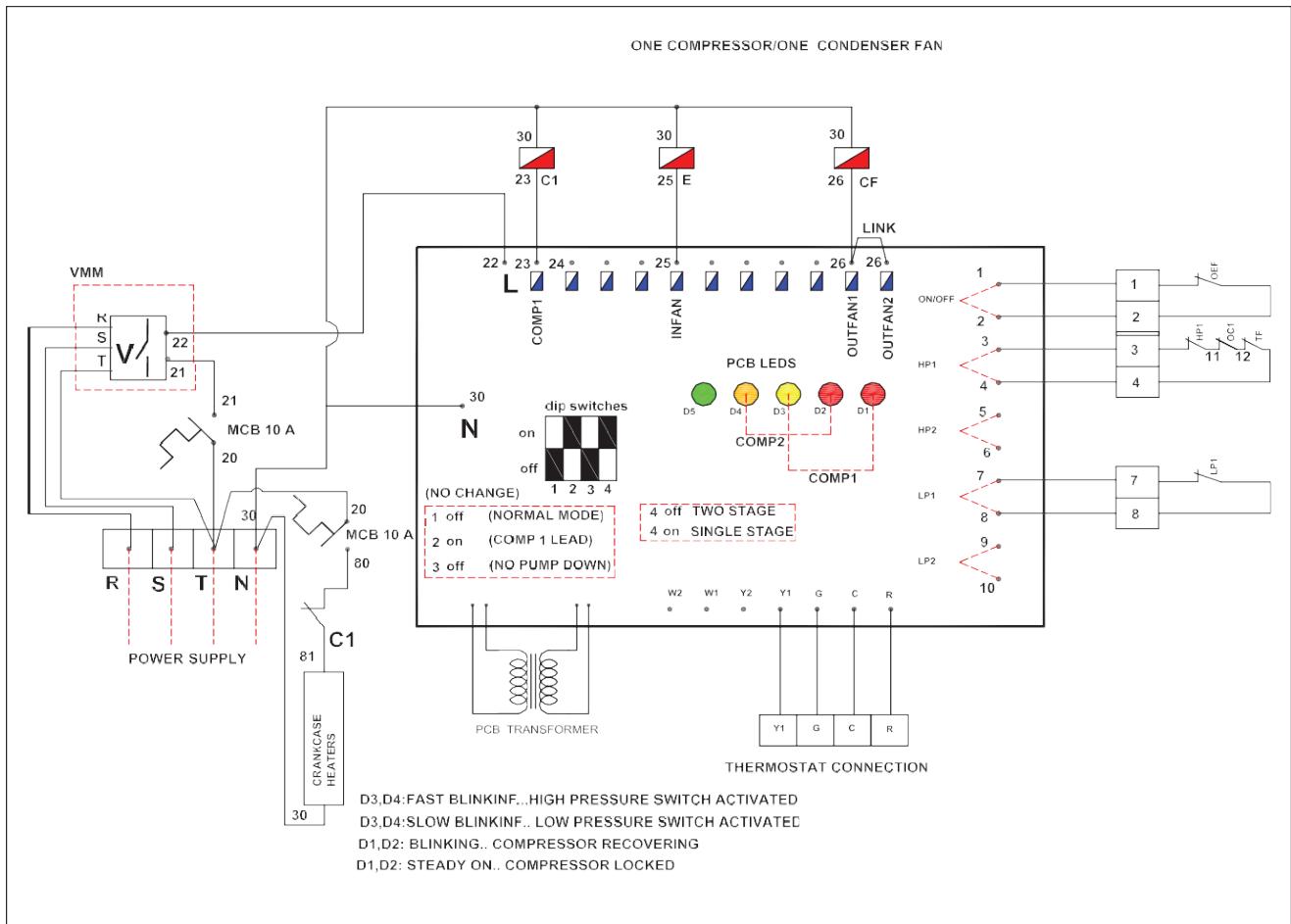
<i>Unit Model</i>	<i>AFR</i>	<i>Filter PD</i>	<i>ISP (Without Filter)</i>	<i>ISP (With Filter)</i>
WP180	10400	41	200	241
	10000	37	186	222
	9600	33	171	204
	9200	29	158	187
WP200	10500	20	162	182
	10100	19	151	169
	9700	18	140	158
	9300	17	130	147
WP240	13500	32	184	216
	13100	30	175	205
	12700	28	166	194
	12300	26	157	183
WP275	15300	29	189	219
	14900	28	181	209
	14500	26	172	199
	14100	25	164	189
WP340	17800	44	171	215
	17400	41	165	206
	17000	38	158	197
	16600	36	152	188
WP380	18500	33	216	249
	18100	31	208	239
	17700	30	199	229
	17300	28	191	220
WP450	20500	44	260	304
	20100	42	251	293
	19700	39	242	281
	19300	37	233	270
WP540	22500	54	287	341
	22100	51	278	329
	21700	48	269	317
	21300	45	260	305

SOUND POWER LEVEL DATA

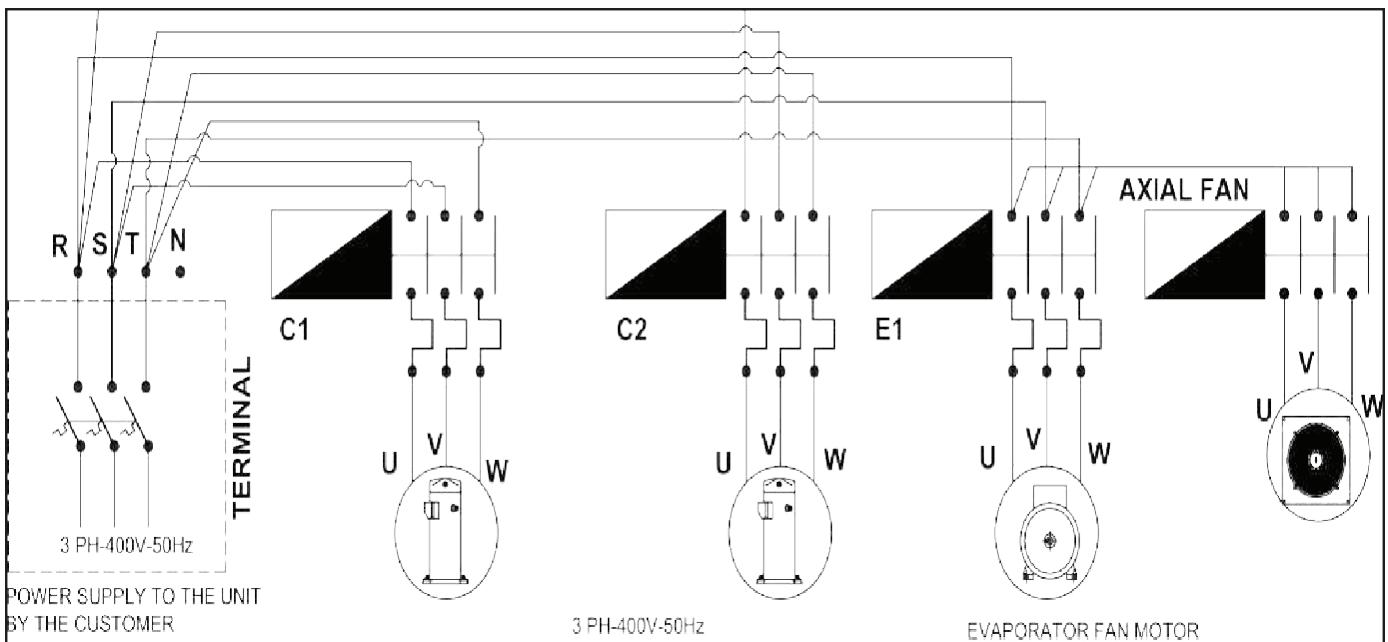
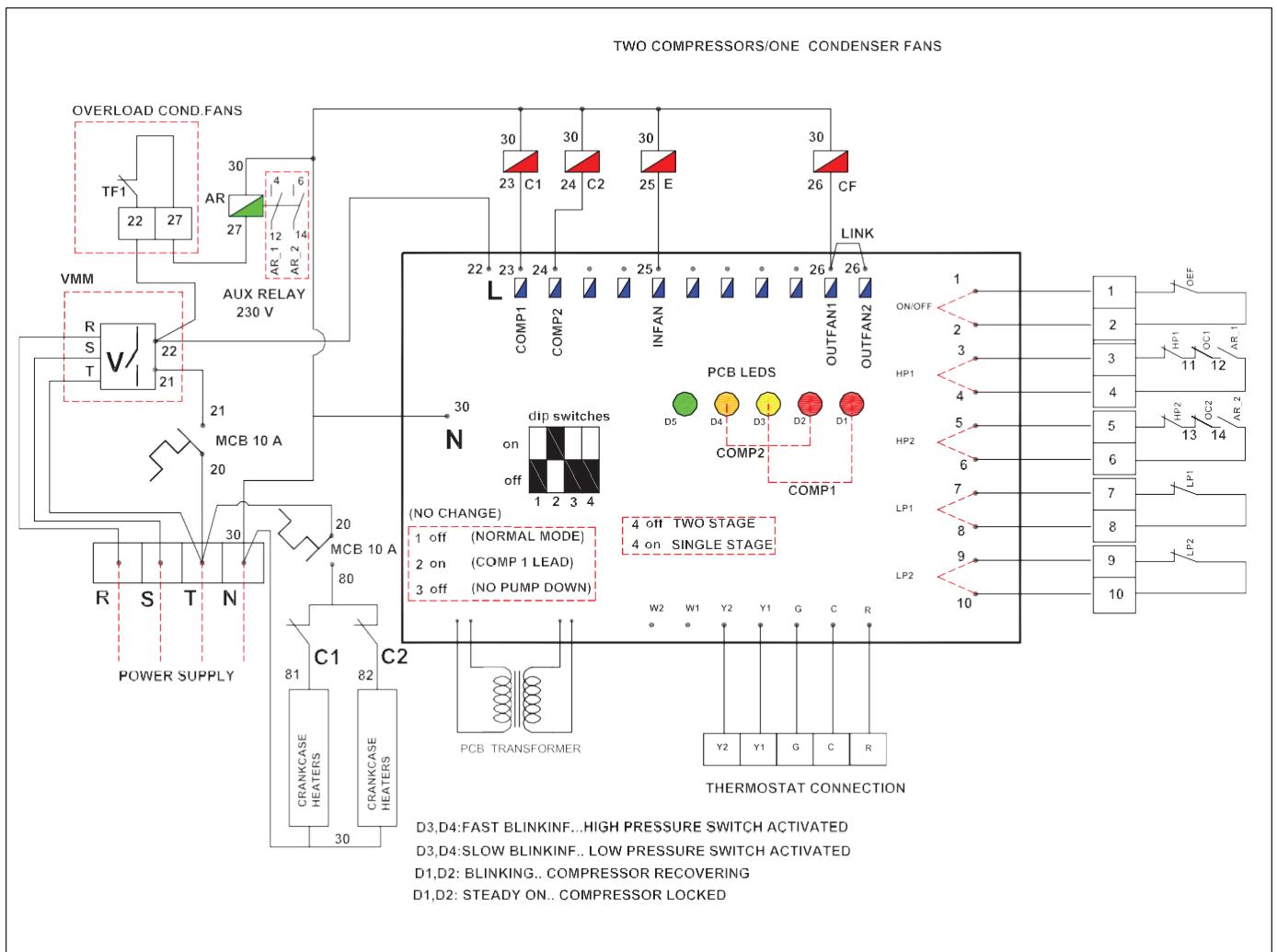
MODEL	SOUND POWER LEVEL in dB ref 10-12 W SPECTRUM PER OCTAVE BAND dBA								(dBA)
	63	125	250	500	1k	2k	4k	8k	
WP040	63.2	62.2	64.0	63.7	63.5	65.7	62.0	58.2	72.3
WP055	63.2	62.2	64.0	64.1	66.6	65.1	62.9	60.3	72.9
WP065	63.2	62.2	64.0	64.1	66.8	68.1	63.9	62.7	73.9
WP070	68.0	66.3	68.3	68.2	67.5	65.1	63.5	60.7	75.6
WP080	68.0	66.3	68.3	68.5	70.1	68.7	67.2	62.9	76.9
WP090	68.0	66.3	68.3	68.7	70.1	68.0	67.9	62.3	76.9
WP100	68.0	66.3	68.3	69.1	70.3	70.2	69.9	63.2	77.7
WP120	68.0	66.3	68.3	69.1	71.0	70.1	69.1	62.8	77.7
WP160	71.0	69.4	71.1	71.5	73.0	71.7	70.2	65.8	79.9
WP180	71.0	69.4	71.2	71.7	73.1	70.9	70.8	65.2	79.9
WP200	71.0	69.4	71.2	72.1	73.3	73.2	72.9	66.1	80.7
WP240	71.1	69.6	71.4	72.2	74.0	73.1	72.1	65.7	80.7
WP275	72.8	71.2	73.0	73.2	74.5	75.0	73.5	68.3	82.1
WP340	72.8	70.8	72.8	73.5	74.8	77.7	75.0	69.9	83.1
WP380	75.8	73.8	76.0	77.8	77.6	83.7	77.3	69.8	87.1
WP450	75.8	73.8	76.0	77.8	77.6	83.7	77.3	69.8	87.1
WP540	77.0	75.0	77.1	78.7	80.8	86.3	80.4	74.0	89.5

ELECTRICAL WIRING DIAGRAM

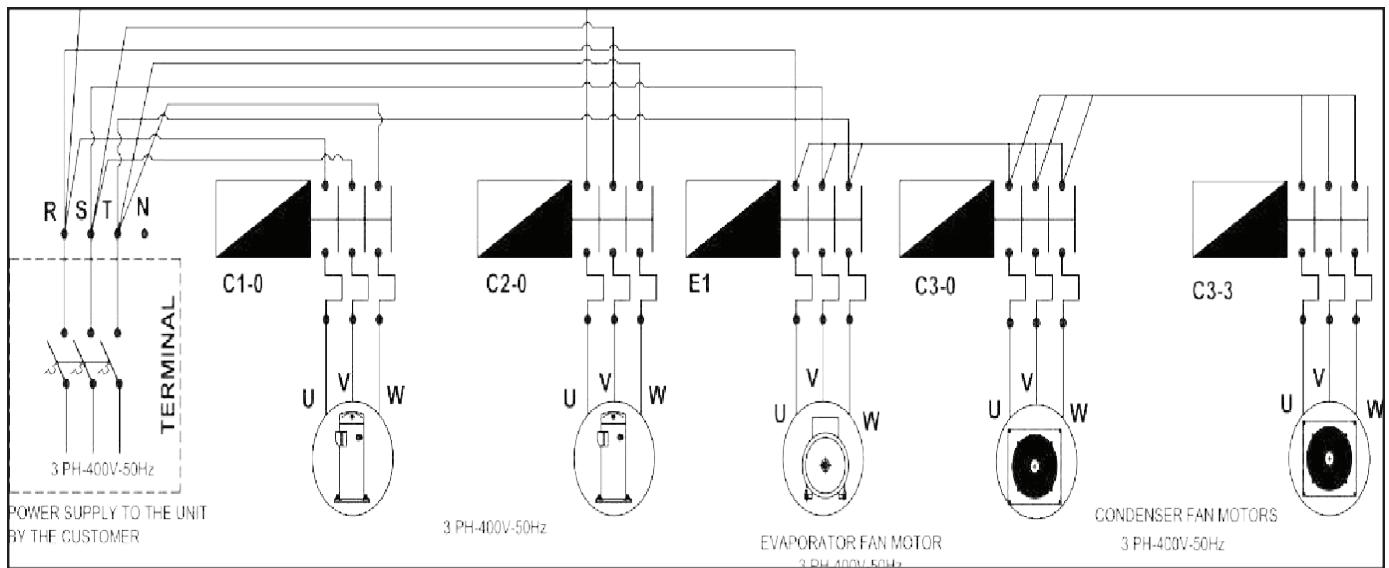
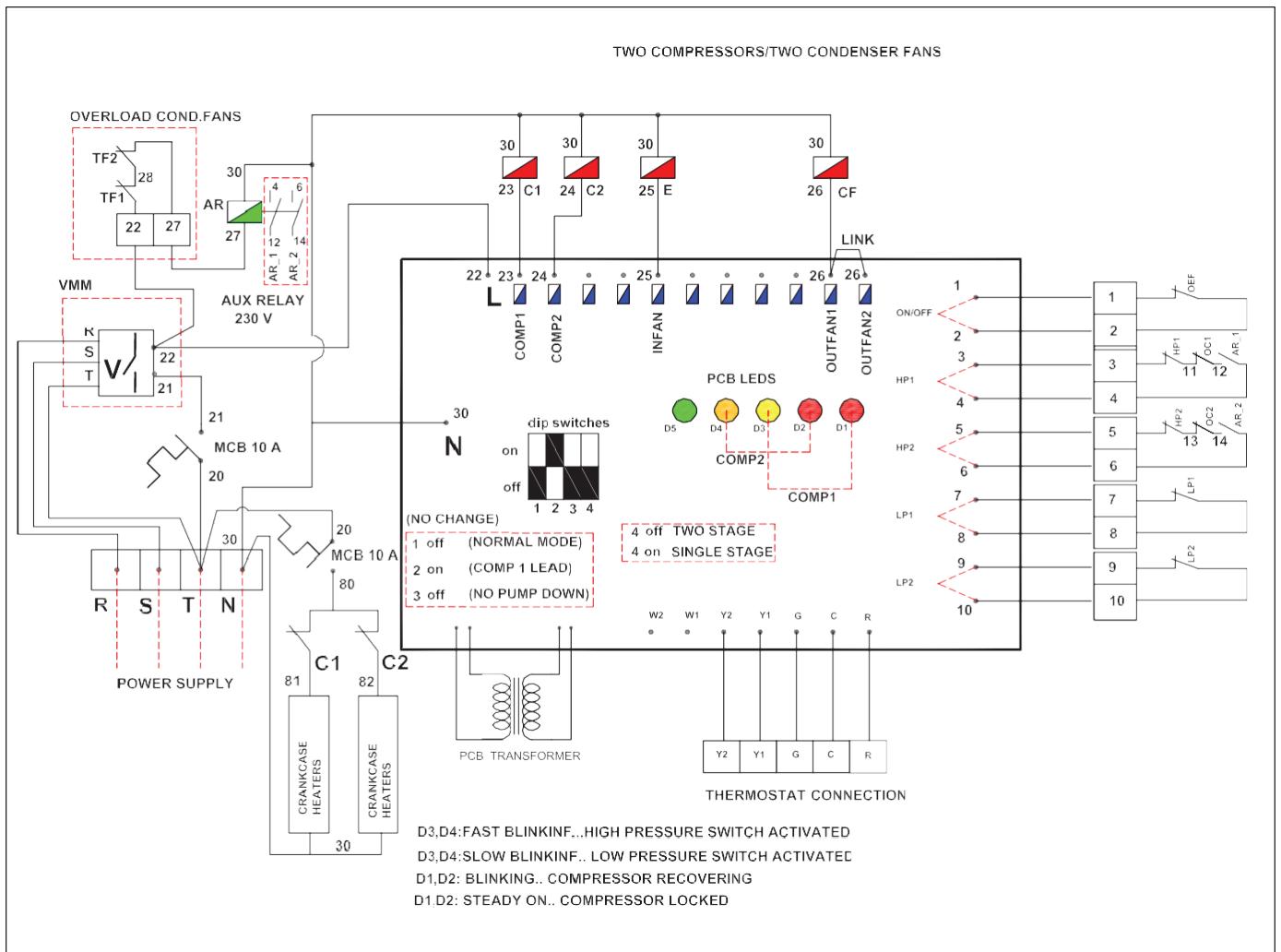
Model Range: WP040 to WP120



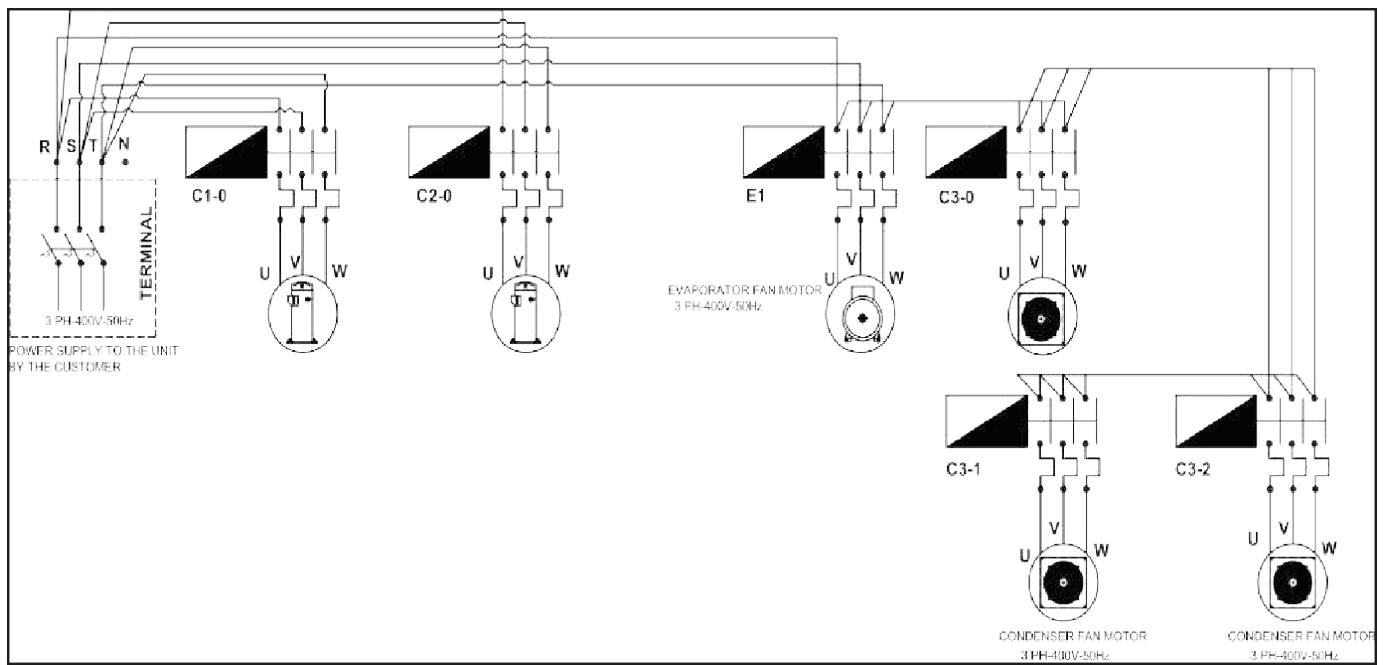
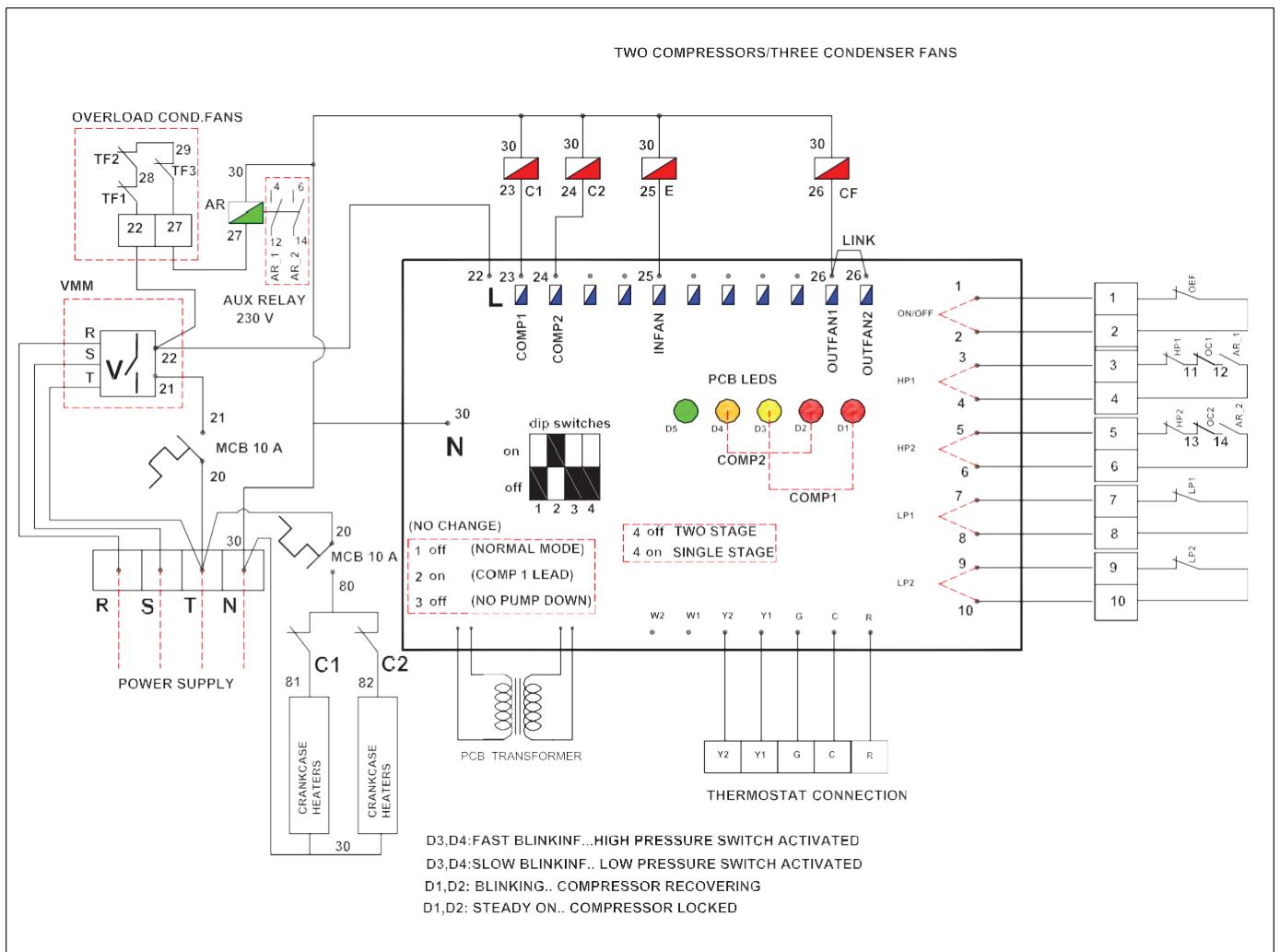
Model Range: WP160 to WP180



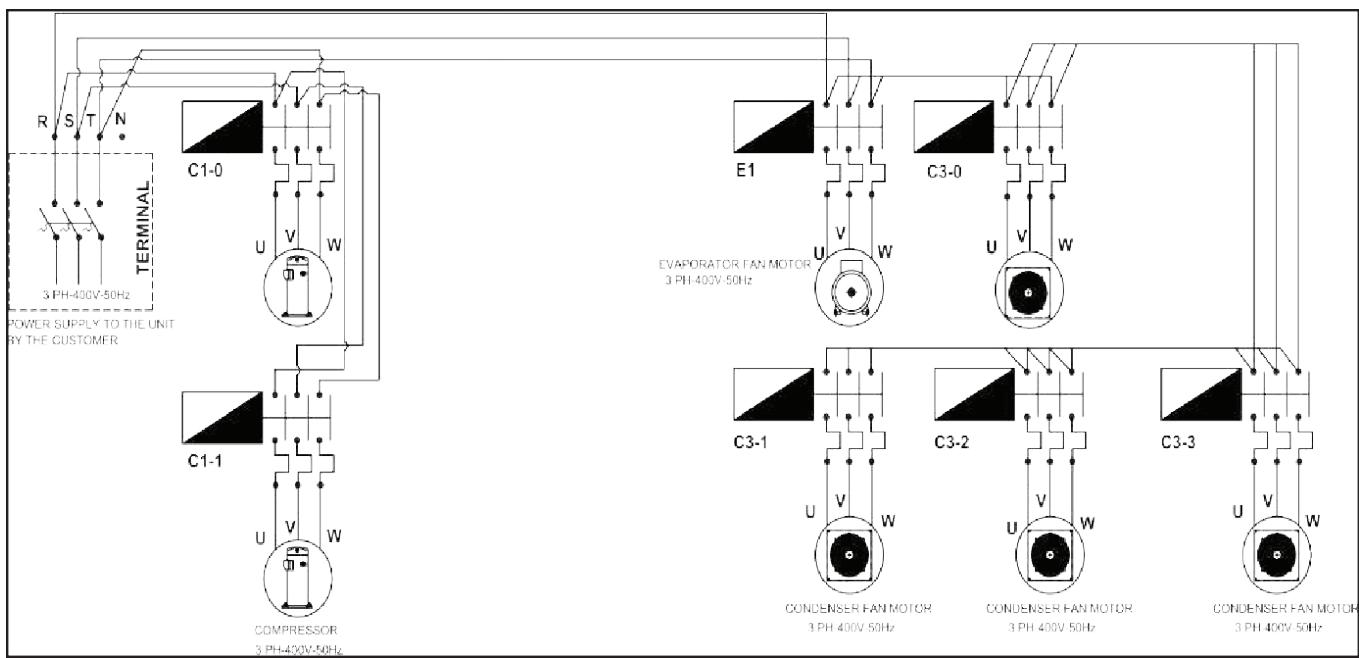
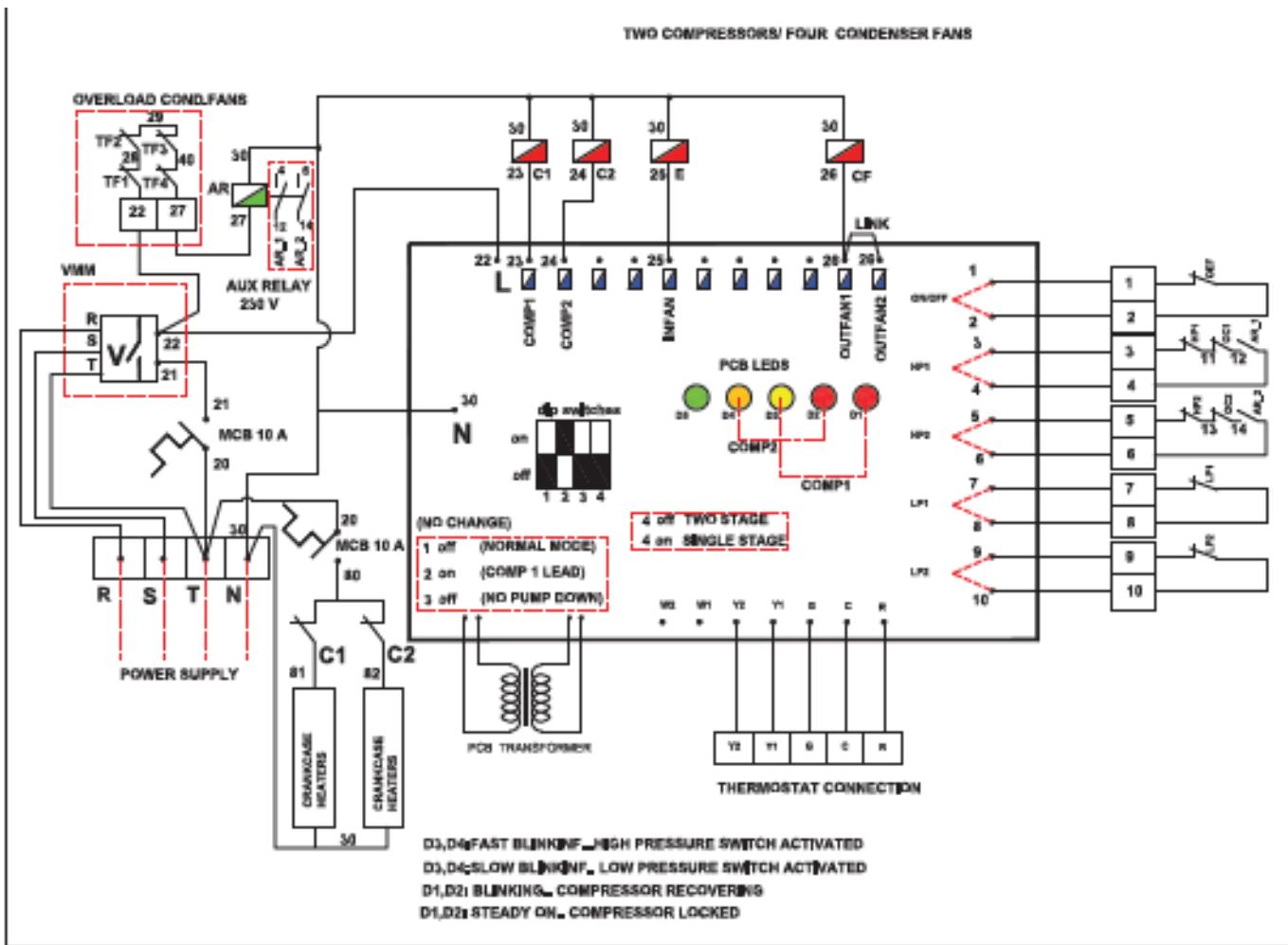
Model Range: WP200 to WP240



Model Range: WP275 to WP450

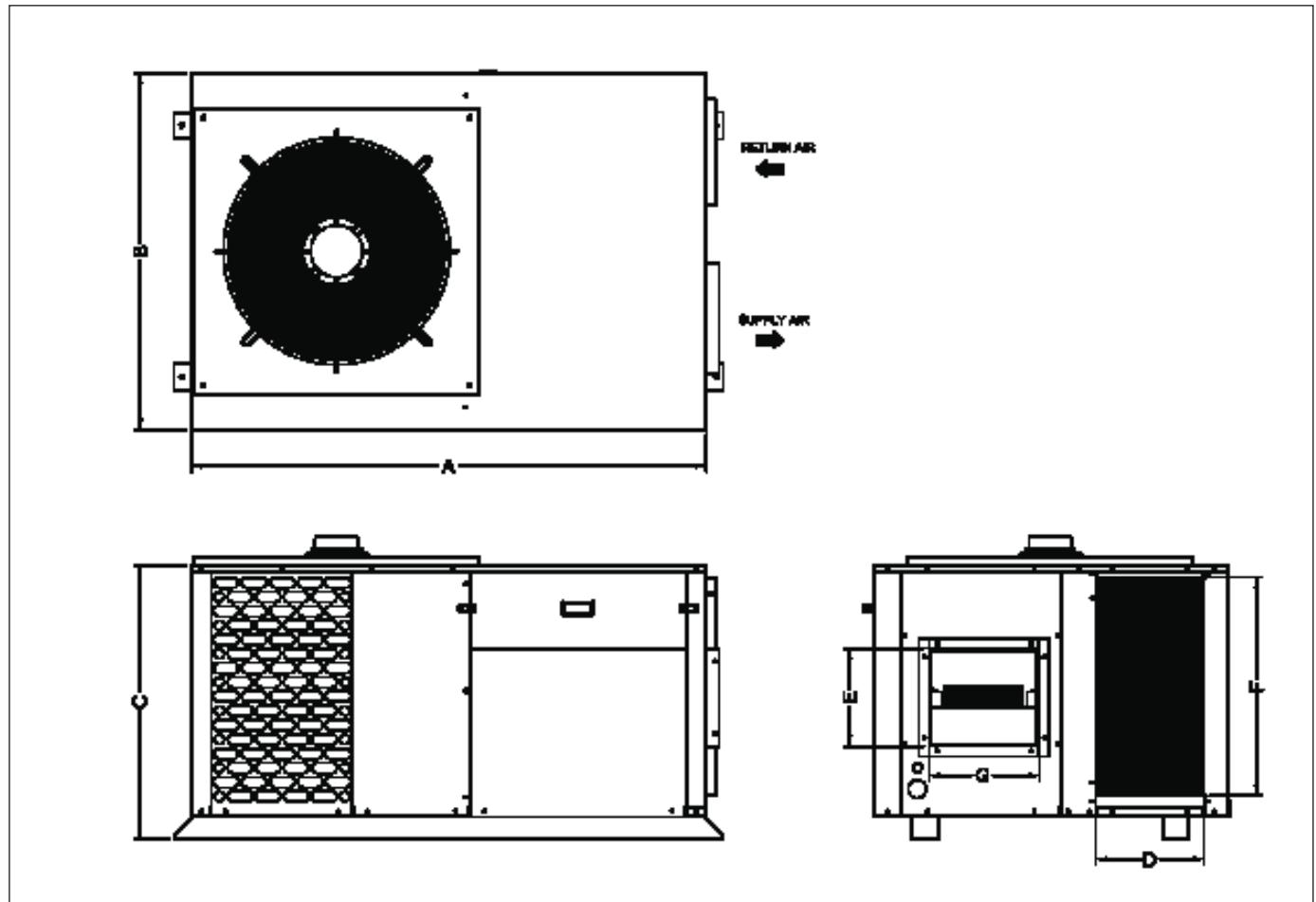


Model Range: WP540

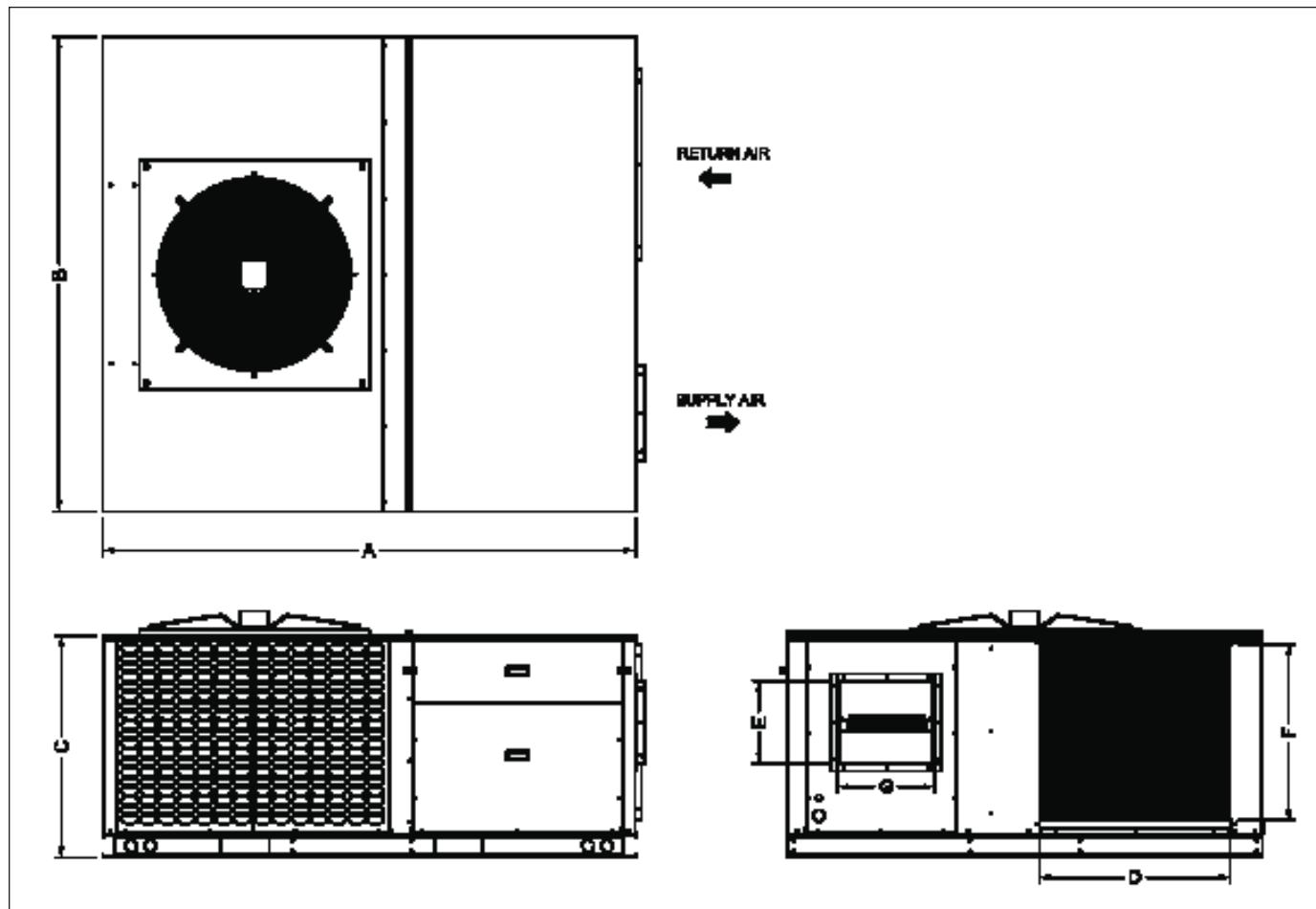


DIMENSIONAL DRAWING

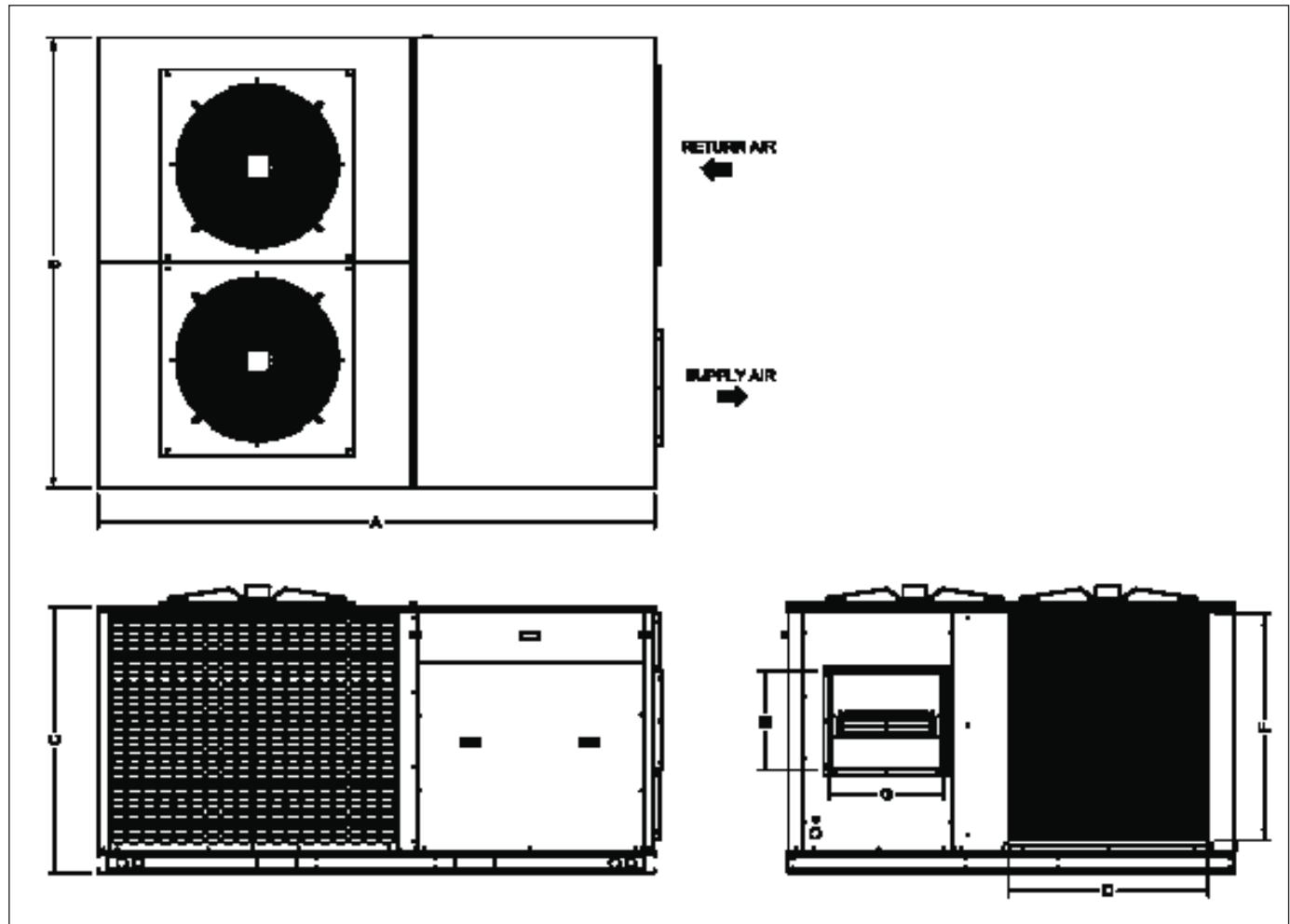
S.I. No	<i>Equipment Models (High Efficiency)</i>	Dimensions in "mm"						
		A	B	C	D	E	F	G
1	WP040	1450	1000	770	300	274	613	310
2	WP055	1450	1000	970	300	274	813	310
3	WP065	1500	1170	970	400	274	813	310
4	WP070	1725	1250	1070	400	353	912	407
5	WP080	1725	1250	1070	400	353	912	407
6	WP090	1725	1350	1070	500	353	912	407
7	WP100	1725	1350	1070	500	353	912	407
8	WP120	1750	1450	1070	600	353	912	407



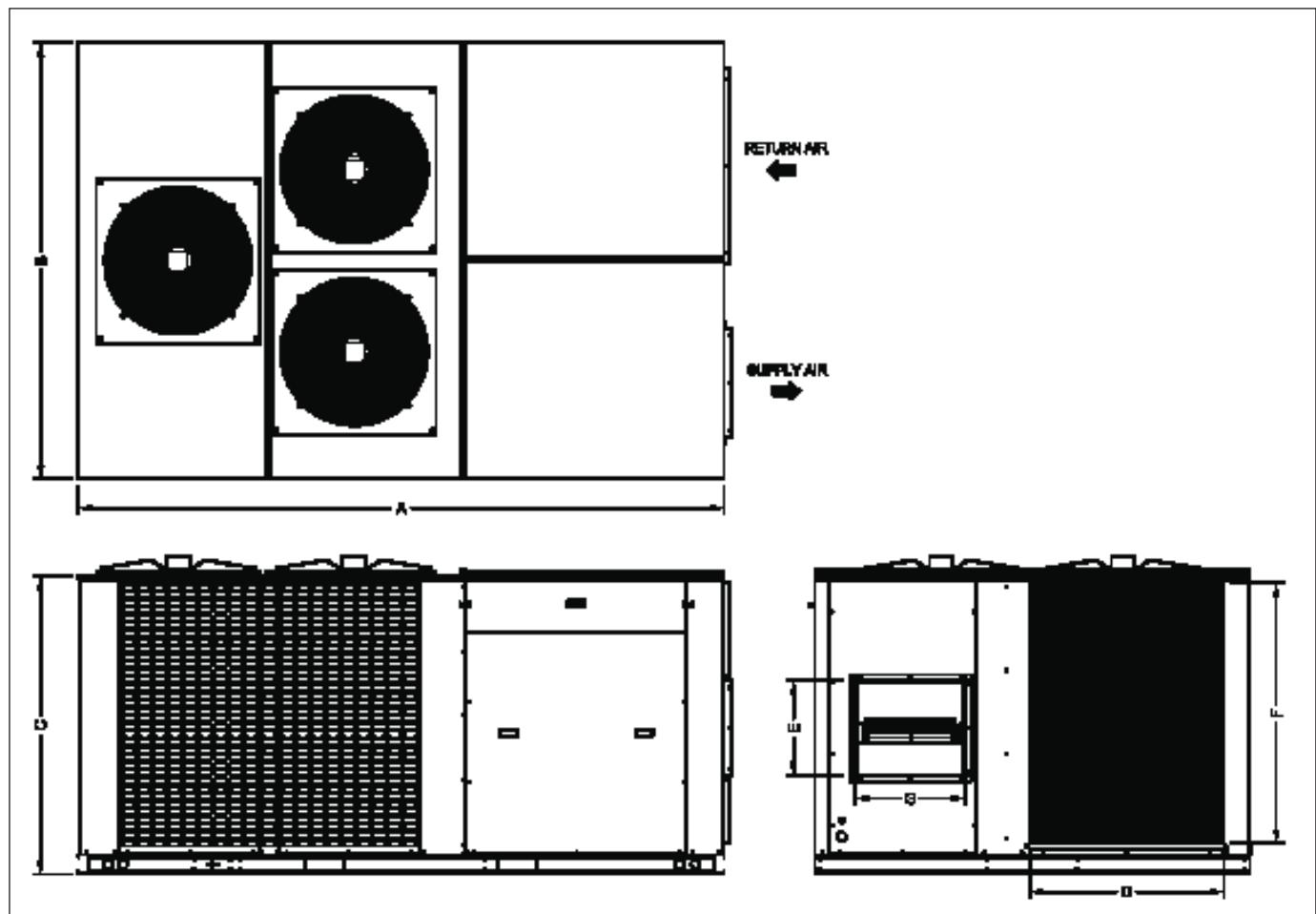
S.I. No	Equipment Models (High Efficiency)	Dimensions in "mm"						
		A	B	C	D	E	F	G
1	WP160	2244	2000	1135	800	416	941	483
2	WP180	2344	2000	1235	800	416	1041	483



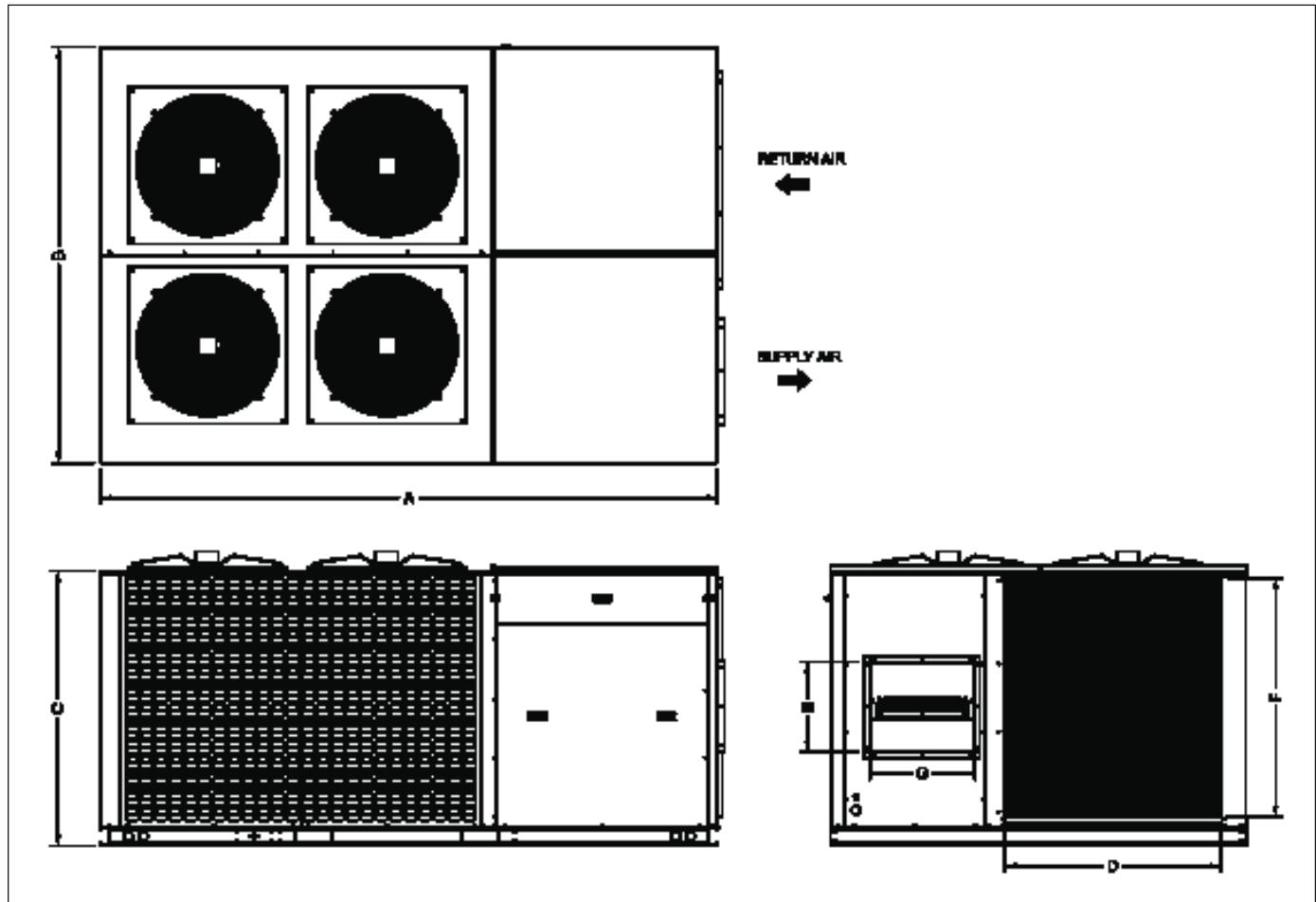
S.I. No	Equipment Models (High Efficiency)	<i>Dimensions in "mm"</i>						
		A	B	C	D	E	F	G
1	WP200	2244	2000	1435	1000	416	1241	483
2	WP240	2700	2250	1435	1000	490	1241	569



S.I. No	Equipment Models (High Efficiency)	Dimensions in "mm"						
		A	B	C	D	E	F	G
1	WP275	3200	2250	1535	1000	490	1341	569
2	WP340	3494	2250	1535	1000	707	1341	704
3	WP380	3585	2250	1735	1000	707	1540	704
4	WP450	3585	2250	1735	1000	707	1540	704

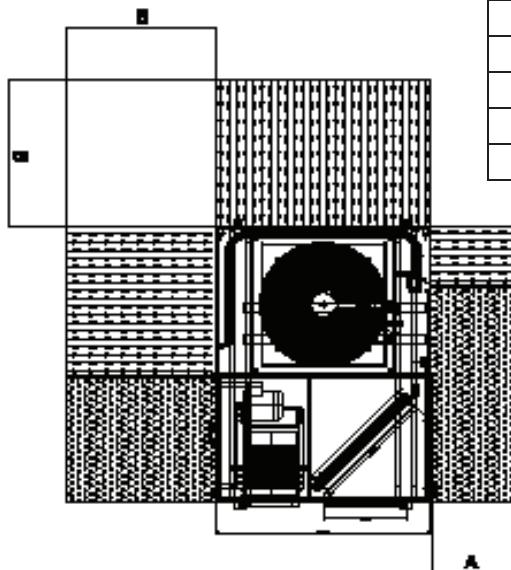


S.I. No	Equipment Models (High Efficiency)	Dimensions in "mm"						
		A	B	C	D	E	F	G
1	WP540	3830	2250	1800	1130	707	1606	704



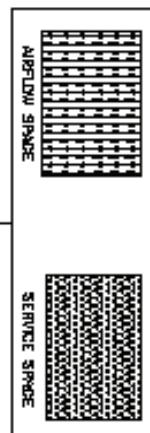
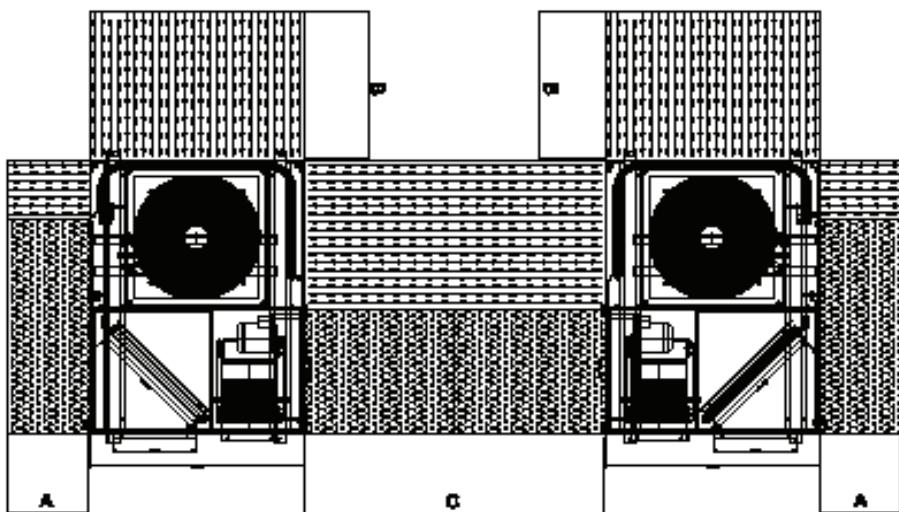
SPACE DIMENSION

SINGLE UNIT REQUIREMENT



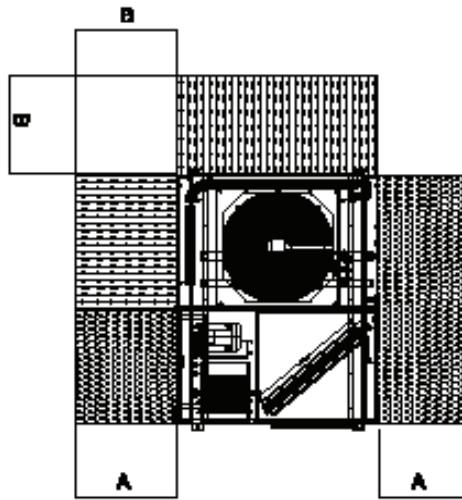
<i>Model</i>	<i>A</i>	<i>B</i>	<i>C</i>
WP040	550	600	900
WP055	630	900	1350
WP065	750	900	1350
WP070	800	1000	1500
WP080	800	1000	1500
WP090	900	1000	1500
WP100	900	1000	1500

SEVERAL UNIT REQUIREMENT

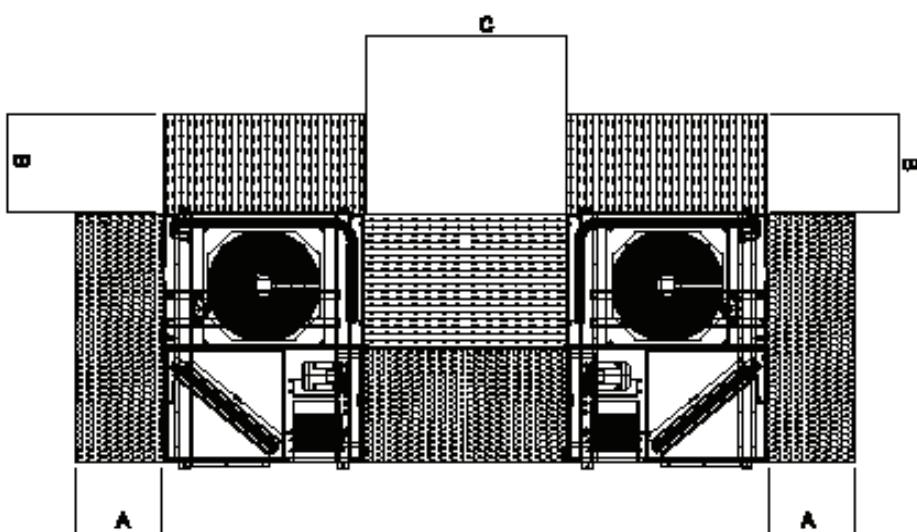


Model	A	B	C
WP120	1000	1000	1500

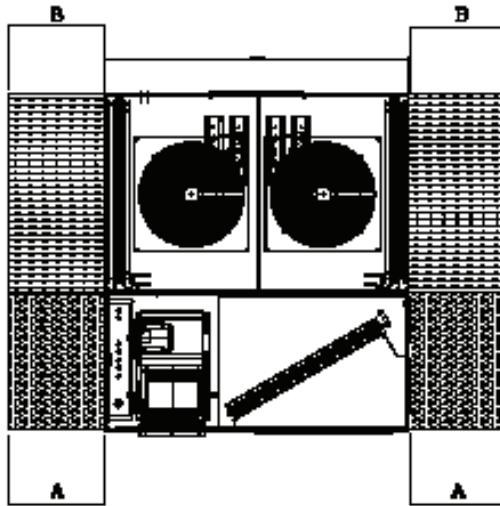
SINGLE UNIT REQUIREMENT



SEVERAL UNIT REQUIREMENT

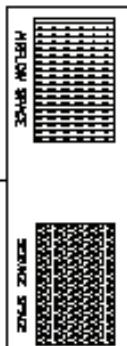
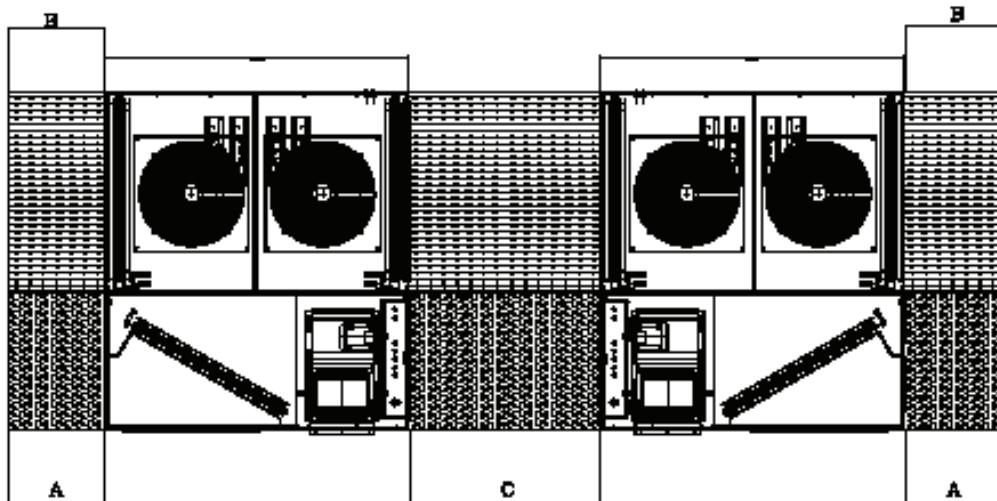


SINGLE UNIT REQUIREMENT



<i>Model</i>	<i>A</i>	<i>B</i>	<i>C</i>
WP160	1130	1000	1500
WP180	1300	1100	1650
WP200	1250	1300	1950
WP240	1350	1300	1950
WP275	1450	1400	2100
WP340	1650	1400	2100
WP380	1650	1600	2400
WP450	1650	1600	2400
WP540	1750	1500	2250

SEVERAL UNIT REQUIREMENT



ENGINEERING GUIDE SPECIFICATION

CONDENSER COIL(S)

The condensers are manufactured of inner grooved seamless copper tubes 3/8" O.D mechanically bonded to louvered aluminum fins to ensure optimum heat transfer. All the condensers are designed for the unit operation up to 52°C ambient temperature whereby the fin spacing selected (14 FPI) provides long life and maintenance free operation with the least possibility of operational blockage of the condenser. The coils are pressure leak tested by high pressure 49 bar (710 psig) under water.

COMPRESSOR(S)

The compressors are hermetic scroll. Scroll compressors have the following characteristics:

- High efficiency
- Low sound levels
- Limited wear due to few moving parts and suction gas motor cooling
- Unique ability to handle liquid refrigerant in the suction line.
- Crank case heater as standard feature to prevent liquid migration

CONDENSER FAN(S) & MOTOR(S)

The condenser fans are axial type directly driven by external rotor motors with condensation drain hole. The motors are six poles, with class F insulation and IP 54 protection, colled rolled steel blades with high strength. The combination of an external rotor motor and axial fan, on rubber isolators, with a properly dynamically balanced impeller, gives an efficient, quiet and reliable operation.

The motors are factory wired to the control panel, to a separate contactor with overload for each fan.

EVAPORATOR COIL

The evaporators are manufactured of inner grooved seamless copper tubes 3/8" O.D mechanically bonded to louvered aluminum fins to ensure optimum heat transfer. Seamless copper tube suction headers and properly sized distributor at the refrigerant inlet along with the thermostatic expansion valve ensures smooth and reliable operation. All the evaporators are rated as per AHRI 410 standard. The coils are leak pressure tested by dry air pressure 35 bar (508 psig) under water.

EVAPORATOR FAN & MOTOR

The evaporator fan is forward curved centrifugal DIDW, statically and dynamically balanced, complete with shaft, self-aligning and permanently lubricated ball bearings. The fan is driven by a single speed, 4 pole through adjustable V belt drive, Insulation class F and IP55 protection motor, rated for continuous operation at the rated conditions.

The motor is factory wired to the control panel where a dedicated contactor is located and is protected by an overload relay.

The group of fan and motor is located on a rigid base which is isolated from the rest of the unit by rubber vibration isolators.

REFRIGERANT PIPING

Each circuit pipe is properly sized with low pressure drop for higher capacity and lower compressor power input. Circuits encompass properly sized filter drier, ball valve, sight glass and thermostatic expansion valve External Access ports in the liquid and suction lines are provided. Manual or Automatic high-pressure switch can be provided on request.

CASING

The unit casing is made of zinc coated galvanized steel sheets conforming to ASTM A653, electrostatic powder coated with approximate 75 microns coat, to ensure more than 1000 hours endurance at salt spray test as per ASTM B117. The drain pan of the unit is also manufactured with the same way as standard.

The evaporator side of the unit is insulated with closed cell rubber type 12 mm thickness insulation. The insulation meets the fire requirements of NFPA90A & 90B. The structure permits easy access to all the working parts of the unit, so the maintenance of the unit is very easy.

FILTERS

Units shall be supplied with a range of filter sections with flat filter 1" or 2" thick, with 54% or 72% dust arrestance, respectively, in accordance with ASHRAE 52.2 if so specified. High efficiency pleat filter shall be provided, if so specified.

CONTROL PANEL

The electrical panel enclosure is made from galvanized sheet metal electrostatic powder coated. The panel is located at the evaporator side of the unit and is being cooled by the unit cool air. Access to the panel can be made while the unit is working without any disturbance in the operation of the unit.

Unit operation and fault diagnostics are monitored and controlled by advanced PCB which provides both intelligent monitoring and easy diagnostics as featured below.

- The HP and LP are monitored independently for each circuit (Automatic reset is standard; HP reset Manual upon request)
- Compressor overload
- Condenser Fan overload
- Evaporator Fan overload
- Phase loss
- Loss of Refrigeration charge
- Lock of compressor to prevent failure

SYSTEM PROTECTION

The safety features which are standard for our units and factory installed are:

- Low suction pressure switch.
- High pressure switch.
- Compressor (s) overload.
- Condenser fan (s) overload.
- Evaporator fan overload.
- Phase loss in the power supply.

All the above safety switches are controlled with the PCB to ensure proper, reliable and safe operation of the unit.

SPARE PARTS LIST

Sl. No.	Spare Parts
1	Compressor
2	Crank case heater
3	Condenser Fan
4	Filter Drier
5	Pressure Switch (HP + LP)
6	Expansion Valve
7	Evap. Fan
8	Evap. Fan motor
9	Contactors
10	Relays
11	Thermostat



Westinghouse

Contact us :

Westinghouse Air Conditioning and
Electronics Middle East and Africa FZE

LB08025,JFZA,Dubai, United Arab Emirates
Tel : +971 42 669 681 | Fax : +971 43 290 670
E-mail-contact@westinghouseMEA.com

