



Air Conditioning & Heating

PRODUCT SPECIFICATIONS



1½ TO 5 Ton

MULTI-POSITION, VARIABLE-SPEED



AEPF

AIR HANDLERS

The Goodman® AEPF Multi-Position, Variable-Speed Air Handler is suitable for use with refrigerants R-410A and R-22. This unit's blower motor allows for a soft start and stop for quieter, more efficient operation and eliminates the cold blast of air upon heating start-up. Using an ECM™ motor, this air handler is ideal for new or retrofit applications.

Standard Features

- Suitable for use with R-410A and R-22 refrigerants
- Check flowrate expansion device for cooling and heat pump applications
- Variable-speed motor
- Provides constant CFM over a wide range of static pressure conditions independent of duct system; provides low CFM for efficient fan-only operation
- Up to 14 adjustable airflow settings to optimize the system's CFM for each individual mode of operation
- Improved humidity control and comfort
- Compatible with heat pumps and variable-capacity cooling applications
- Multi-position — upflow, downflow or horizontal
- Built-in coil has horizontal, vertical, and downflow drain pans with secondary drain connections
- Complies with the Factory-sealed Air Handling Credit with or without field-installed filter kits as listed in the 2001 Florida Building Code, Chapter 13, Section 610.2.A.2.1
- ARI Certified; ETL Listed

Cabinet Features

- Fully painted cabinet with attractive Architectural Gray finish
- Built-in filter rack for 1" filter (filter not included)
- Low-voltage cabinet connections; control circuit arranged to permit staging
- Power supply on top; low-voltage entry on top or side
- Factory-sealed to achieve 2% or less leakage rate with or without field-installed filter kits at 1.0" water gauge external duct static pressure



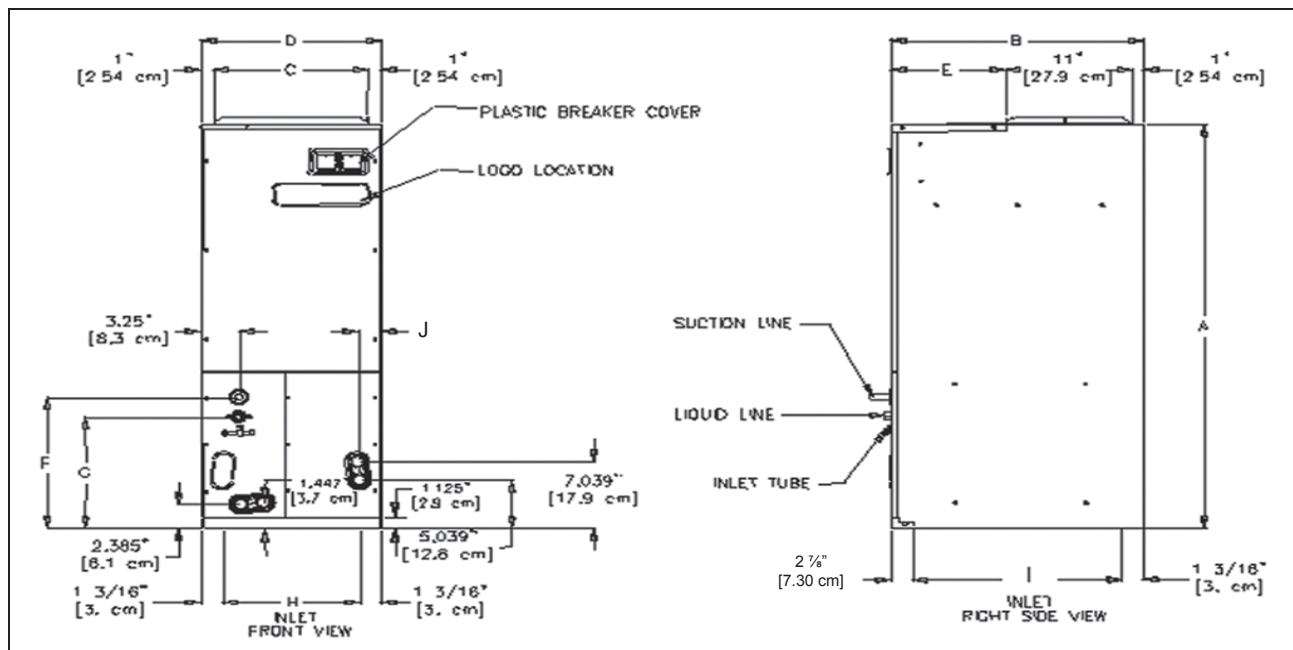
NOMENCLATURE

	A	E	P	F	3642	1	6	AA	
	1	2	3	4	5,6,7,8	9	10	11,12	
Brand	A		E		P		F		Engineering * Major/ Minor Revisions * Not used for inventory management
A Single-piece Air Handler									
Unit Application	C		D		E		R		Refrigerant Charge No Digit = R-22 only 6 = R-410A or R-22
C Ceiling Mount PSC Motor D Downflow PSC Motor E Multi-Position Variable-Speed Motor R Multi-Position PSC Motor S Multi-Position EEM Motor W Wall Mount PSC Motor									
Cabinet Finish	U		P		N				Electrical 1 208/240 V, 1 Phase, 60 Hz
U Unpainted P Painted N Uncased									
Expansion Device	F		T						Nominal Capacity Range @ 13 SEER Multi-Position & Downflow Applications 1729 1½ to 2½ Tons (for Export Systems) 1830 1½-3½ Tons 3642 3-3½ Tons Ceiling Mount & Wall Mount Applications (Nominal Cooling Capacity/ Electric Heat kW) 1805 1½ Tons Cooling/ 5 kW Electric Heat 2405 2 Tons Cooling/ 5 kW Electric Heat 3608 3 Tons Cooling/ 8 kW Electric Heat
F Flowrater T Expansion Valve									

SPECIFICATIONS

	AEPF183016	AEPF303616	AEPF426016
Blower			
Diameter	9½"	10⅝"	10⅝"
Width	8"	10⅝"	10⅝"
Coil Drain Connection FPT	¾"	¾"	¾"
Service Valve			
Liquid	⅜"	⅜"	⅜"
Suction	¾"	⅞"	⅞"
Electrical Data			
Voltage	208/240	208/240	208/240
Min Circuit Ampacity	2.5/2.5	3.1/3.1	7.8/7.8
Max. Overcurrent Device (amps)	15/15	15/15	15/15
Minimum VAC	197	197	197
Maximum VAC	253	253	253
Blower Motor			
FLA	2.0	2.5	6.2
HP	½	¾	¾
Ship Weight (lbs)	125	176	195

DIMENSIONS

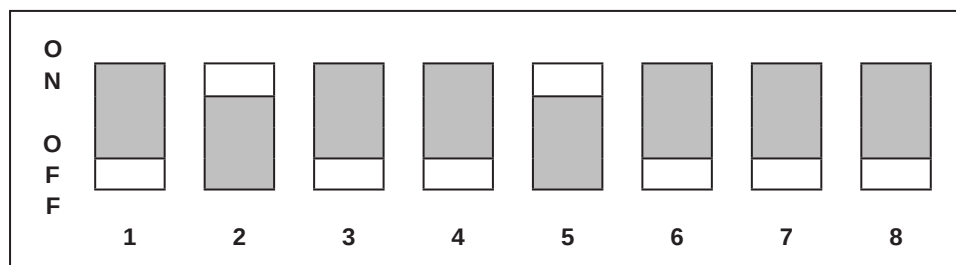


Model	A	B	C	D	E	F	G	H	I	J
AEPF183016	46 ³ / ₄ "	22"	17 ¹ / ₂ "	19 ¹ / ₂ "	10"	14 ¹ / ₂ "	11 ¹⁵ / ₁₆ "	17 ¹ / ₈ "	17 ¹⁵ / ₁₆ "	2"
AEPF303616	53 ¹ / ₄ "	24"	20"	22"	12"	19 ⁵ / ₈ "	11 ¹⁵ / ₁₆ "	19 ⁵ / ₈ "	19 ¹⁵ / ₁₆ "	1 ¹³ / ₁₆ "
AEPF426016	53 ¹ / ₄ "	24"	20"	22"	12"	19 ⁵ / ₈ "	11 ¹⁵ / ₁₆ "	19 ⁵ / ₈ "	19 ¹⁵ / ₁₆ "	1 ¹³ / ₁₆ "

AEPF DIPSWITCHES

The AEPF air handler blower motor is pre-programmed for operation at four distinct airflow levels when operating in the Cooling, Heat Pump heating, Backup heating (Electric Heating), and Backup + Heat Pump heating modes. Each mode has four levels to deliver different CFM. Simply flip the dipswitch for a different CFM combination.

SETTING THE MOTOR



Dipswitch Number	Function	Instructions
1	Electric Heat Mode	Select the taps allowed in the tables (Dipswitch 1/2) below.
2	Electric Heat Mode	
3	N/A	N/A
4	Thermostat Mode	ON = The system operates with single-stage units using a single-stage cooling or heat pump thermostat. (factory default) OFF = The system operates with two-stage units with either a conventional two-stage cooling/heat pump thermostat or with an encoded two-stage thermostat for cooling operation. The encoded thermostats can be used with two-stage condensing units in retrofit applications where not enough existing wires are available for connections to the indoor thermostat and outdoor units.
5	Cooling/Heat Pump Mode	Find the airflow for your application in the tables (Dipswitch 5/6) below. Set up the motor based on the outdoor unit capacity tons.
6	Cooling/Heat Pump Mode	
7	Trim CFM Adjust Mode	Increase or decrease your selected airflow to fit your requirement. ON-OFF = Increases selected Cool/Heat Pump airflow by 10%. OFF-ON = Decreases selected Cool/Heat Pump airflow by 15% NOTE: Other settings have no effect on the set airflow.
8	Trim CFM Adjust Mode	

Dipswitch 1/2

AEPF1830

Heating Element (kW)	Switch Position	Emergency Backup	Heat Pump with Backup
Up to 10	Off-Off1	1,100	1,210
Up to 10	On-Off	850	935
5	Off-On	700	770

Dipswitch 5/6

AEPF1830

Outdoor Unit (Tons)	Switch Position	Indoor Airflow	
		Cool	Heat Pump
2.5	Off-Off1	1,100	1,100
2	On-Off	800	800
1.5	Off-On	600	600

AEPF3036/4260

Heating Element (kW)	Switch Position	Emergency Backup	Heat Pump with Backup
Up to 20	Off-Off	2,050	2,150
Up to 20	On-Off	1,750	1,835
Up to 15	Off-On	1,600	1,680
Up to 10	On-On	1200	1,260
Up to 10	On-On	1,020	1,020

AEPF3036/4260

Outdoor Unit (Tons)	Switch Position	Indoor Airflow	
		Cool	Heat Pump
5	Off-Off	1,800	1,800
4	On-Off	1,580	1,580
3.5	Off-On	1,480	1,480
3	On-On	1,200	1,200
2.5	On-On	1,020	1,020

¹ 7-8 shall be OFF-ON for 2.5-Ton applications

NOTE: When applying a humidistat (normally closed), refer to the installation and operating instructions. The humidistat can adjust the cooling airflow to 85%

ACCESSORIES

HEAT KIT SELECTION

Models	AEPF 183016A*	AEPF 183016B*	AEPF 303616A*	AEPF 303616B*	AEPF 426016A*	AEPF 426016B*
HKR-03*		X		X		X
HKR-05*/-05C*	X	X		X		X
HKR-06*		X		X		X
HKR-08*/-08C*	X	X	X	X		X
HKR-10*/-10C*	X ¹	X ¹	X	X	X	X
HKR-15C*			X ¹	X ¹	X	X
HKR-20C*					X ²	X ²
HKR-21C*					X ²	X ²

* Revision level that may or may not be designated

C Circuit breaker option

¹ This heater kit can only be used for '1000 CFM or higher' applications

² This heater kit can only be used for '1200 CFM or higher' applications

EXPANSION VALVE KITS FOR AIR CONDITIONING-ONLY APPLICATIONS

Kit Number	Used with	Description
XVB18-36C	AEPF 18 to 36	20% bleed valve
XVB42-60C	AEPF 42 to 60	20% bleed valve
XV18-36C	AEPF 18 to 36	Non-bleed valve
XV42-60C	AEPF 42 to 60	Non-bleed valve

EXPANSION VALVE KITS FOR AIR CONDITIONING AND HEAT PUMP APPLICATIONS

For R-22 SYSTEMS

Valve	Description	Used with Outdoor Units below
TX2N2	Non-bleed valve	1½ Ton > Air Conditioner & Heat Pump
TX3N2	Non-bleed valve	3 Ton > Air Conditioner & Heat Pump
TX5N2	Non-bleed valve	3½ Ton < Air Conditioner & Heat Pump

For R-410A SYSTEMS

Valve	Description	Used with Outdoor Units below
TX2N4	Non-bleed valve	1½ Ton > Air Conditioner & Heat Pump
TX3N4	Non-bleed valve	3 Ton > Air Conditioner & Heat Pump
TX5N4	Non-bleed valve	3½ Ton < Air Conditioner & Heat Pump

ACCESSORIES (CONT.)

DRAIN PAN INSULATION KITS

DOWNFLOW APPLICATIONS

Chassis Size	Insulation Kit
Small (15½")	DPI18-30/20
Medium (19½")	DPI36-42/20
Large (22")	DPI48-60/20

Note: Each kit contains enough material to modify 20 coils

HORIZONTAL APPLICATIONS

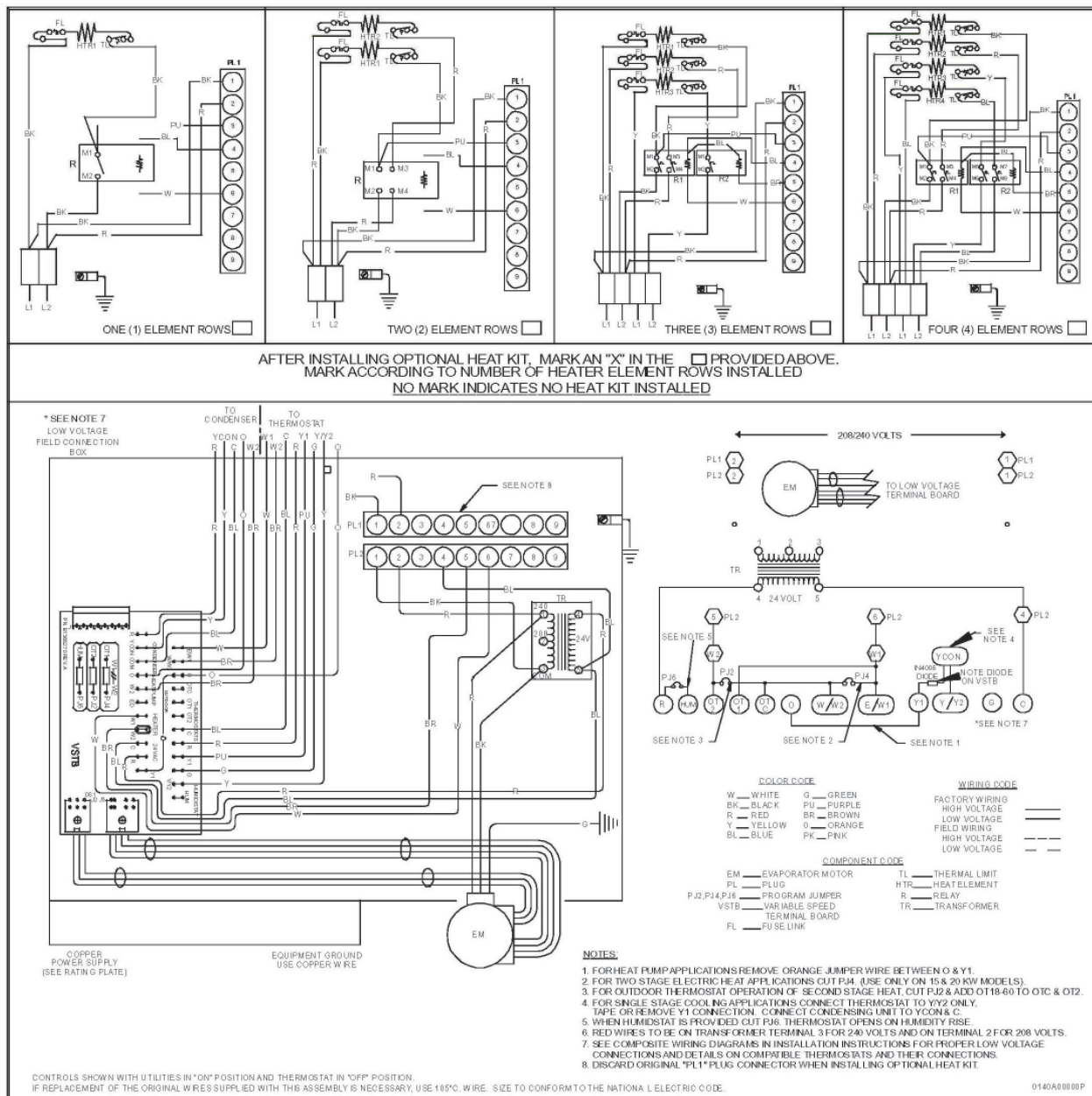
Chassis Size	Insulation Kit
Small (15½")	DPIH18-32
Medium (19½")	DPIH36-42
Large (22")	DPIH48-61

Note: Each kit contains enough material to modify 20 coils

FILTERS

AEPF	Filter #	Qty Required
N/A	FIL 18-32	1
1830	FIL-36-42	1
3036	FIL 48-61	1
4260	FIL 48-61	1

WIRING DIAGRAM



Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

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