



Air Conditioning & Heating

## PRODUCT SPECIFICATIONS



**1½ TO 5 TON**  
**DEDICATED DOWNFLOW**



# ADPF

## THREE-SPEED AIR HANDLER

The Goodman® brand ADPF Dedicated Downflow Three-Speed Air Handler is suitable for use with refrigerants R-410A and R-22. The unit features a check flowrater expansion device and may be installed in a variety of locations.

### Standard Features

- Suitable for use with refrigerants R-410A & R-22
- Check flowrater expansion device
- Direct-drive, multi-speed motor
- Transformer and blower time-delay on all units
- Dedicated downflow requires no modification in the field
- ARI Certified
- ETL Listed

### Cabinet Features

- Fully painted cabinet with attractive Architectural Gray finish
- Built-in coil has downflow drain pan with secondary drain connections
- Power supply entry at top
- Low-voltage entry on left side and top

### Accessories

- 3 kW to 21 kW electric heat kits available as field-installed options



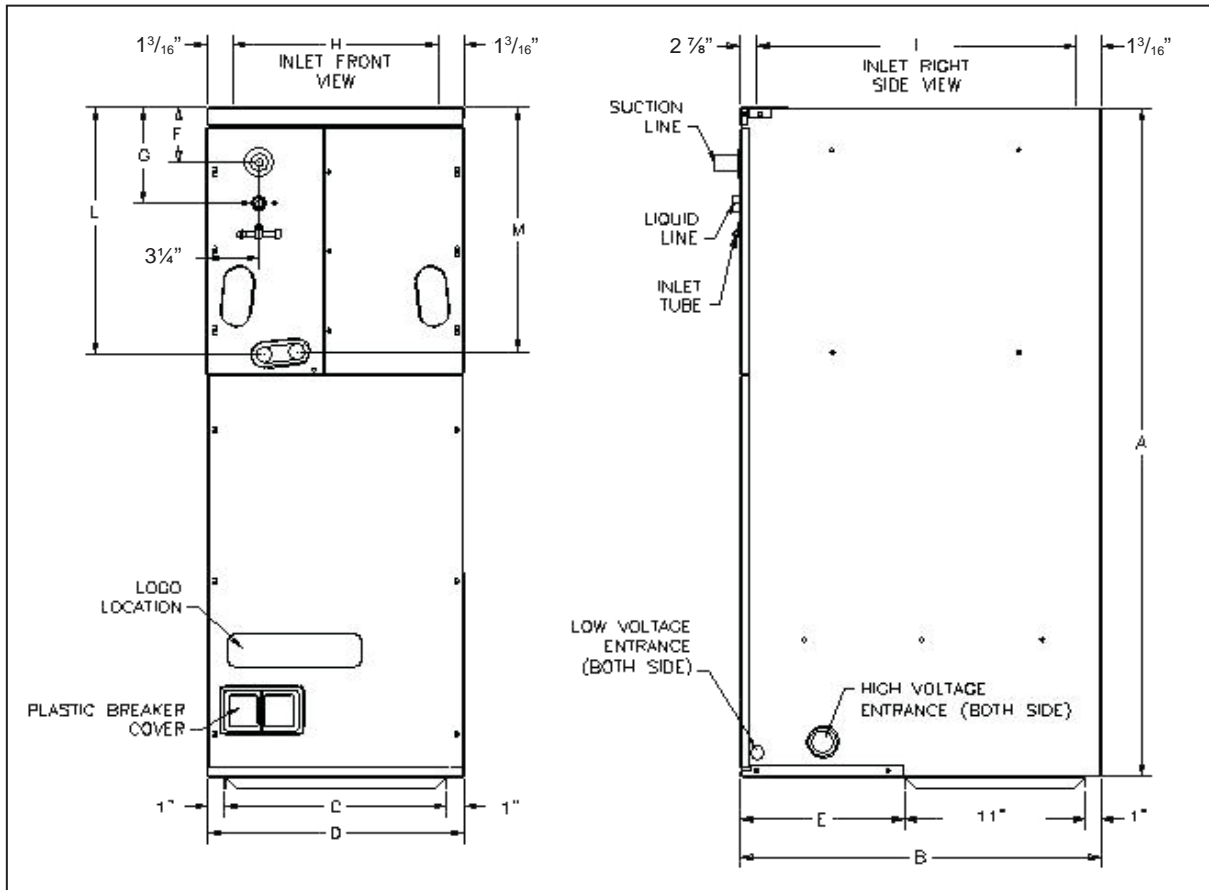
NOMENCLATURE

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

SPECIFICATIONS

	ADPF182416	ADPF304216	ADPF486016
<b>Blower</b>			
Diameter	9½"	10 <sup>5</sup> / <sub>8</sub> "	10 <sup>5</sup> / <sub>8</sub> "
Width	6"	8"	10 <sup>5</sup> / <sub>8</sub> "
Coil Drain Connection FPT	¾"	¾"	¾"
<b>Service Valve</b>			
Liquid	¾"	¾"	¾"
Suction	¾"	7 <sup>8</sup> / <sub>8</sub> "	7 <sup>8</sup> / <sub>8</sub> "
<b>Electrical Data</b>			
Voltage	208/240	208/240	208/240
Min Circuit Ampacity	2.1/2.1	3.7/3.7	5.4/5.4
Max. Overcurrent Protection	15/15 amps	15/15 amps	15/15 amps
Min./Max. VAC	197/253	197/253	197/253
<b>Blower Motor</b>			
FLA	1.7	2.95	4.3
HP	1 <sup>3</sup> / <sub>3</sub>	1 <sup>2</sup> / <sub>2</sub>	3 <sup>4</sup> / <sub>4</sub>
<b>Ship Weight (lbs)</b>	100	144	160

**DIMENSIONS**



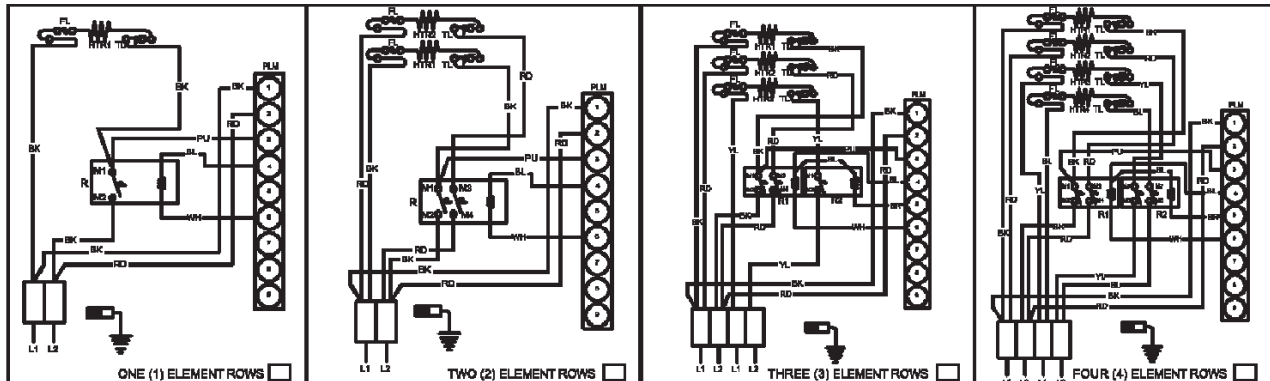
Model	A	B	C	D	E	F	G	H	I	L	M
ADPF182416	42 1/8"	22"	13 1/2"	15 1/2"	10"	3 1/2"	6 1/16"	13 1/8"	17 15/16"	15 1/2"	15 5/16"
ADPF304216	53 3/4"	24"	20"	22"	12"	9 1/4"	11 13/16"	19 5/8"	19 15/16"	21 7/16"	21 1/4"
ADPF486016	53 3/4"	24"	20"	22"	12"	9 1/4"	11 13/16"	19 5/8"	19 15/16"	21 7/16"	21 1/4"

**BLOWER PERFORMANCE**

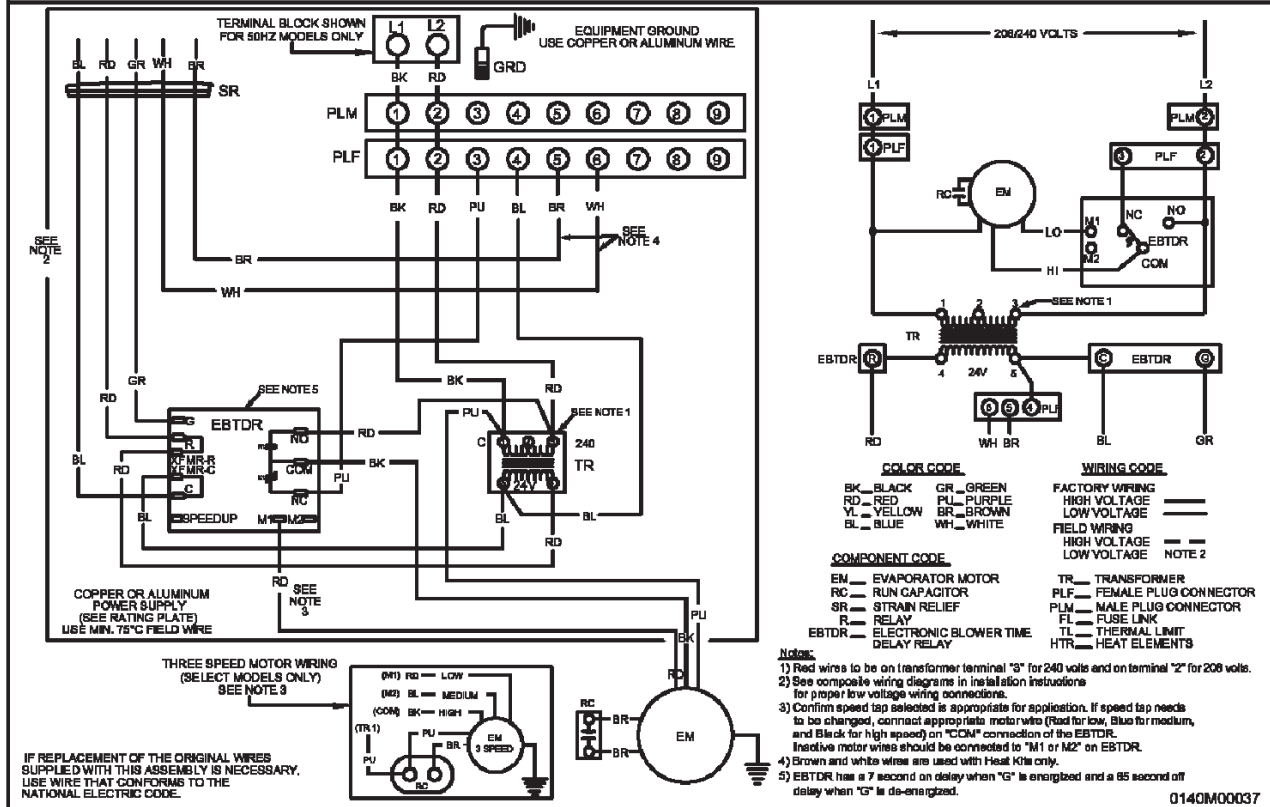
Model	Speed	CFM delivered against External Static Pressure				
		0.1"	0.2"	0.3"	0.4"	0.5"
ADPF182416	High	1,155	1,090	1,025	950	895
	Med	875	830	790	750	715
	Low	640	610	570	535	490
ADPF304216	High	1,700	1,680	1,645	1,610	1,535
	Med	1,500	1,480	1,440	1,380	1,325
	Low	1,345	1,320	1,275	1,230	1,195
ADPF486016	High	2,135	2,080	1,985	1,900	1,805
	Med	1,980	1,935	1,875	1,775	1,675
	Low	1,715	1,670	1,650	1,590	1,530

Note: Assumes dry coil with filter in place; SCFM correction for wet coil = 4%

# ADPF WIRING DIAGRAM



NOTE: WHEN INSTALLING HEATER KIT, ENSURE SPEED TAP DOES NOT EXCEED MINIMUM BLOWER SPEED (MBS) SPECIFIED FOR THE AIRHANDLER/HEATER KIT COMBINATION ON THIS UNIT'S S&R PLATE. AFTER INSTALLING OPTIONAL HEAT KIT, MARK AN "X" IN THE  PROVIDED ABOVE. MARK ACCORDING TO NUMBER OF HEATER ELEMENT ROWS INSTALLED. NO MARK INDICATES NO HEAT KIT INSTALLED.



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

## ACCESSORIES

### EXPANSION VALVE KITS FOR AIR CONDITIONING AND HEAT PUMP APPLICATIONS

#### FOR R-22 SYSTEMS

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

### HEAT KIT SELECTION

	ADPF182416	ADPF304216	ADPF486016
HKR-03*	X	X	X
HKR-05*, HKR-05C*	X	X	X
HKR-06*	X	X	X
HKR-08*, HKR-08C*	X <sup>1</sup>	X	X
HKR-10*, HKR-10C*	X <sup>1</sup>	X	X
HKR-15C*	X <sup>2</sup>	X <sup>3</sup>	X
HKR-20C*		X <sup>3</sup>	X
HKR-21C*		X <sup>3</sup>	X
^ HKR3-15*		X <sup>3</sup>	X
^ HKR3-20*		X <sup>3</sup>	X

**Notes:**

\* Revision level that may or may not be designated

C Circuit breaker option

^ Heat kit requires three-phase power supply

<sup>1</sup> Air handler must either be on medium or high speed

<sup>2</sup> Air handler must be on high speed

<sup>3</sup> For static pressure of 0.6 or higher, air handler must be on medium or high speed

### FILTERS

ADPF	Filter #	Qty Required
1824	FIL 18-32	1
3042	FIL 48-61	1
4860	FIL 48-61	1

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## NOTES

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