Goodman®

Air Conditioning & Heating

Product Specifications

1½ to 5 Tons
Multi-Position, Three-Speed

ARPF

Air Handler
with Painted Cabinet

The Goodman® brand ARPF Multi-Position, Multi-Speed Air Handler is suitable for use with refrigerants R-410A and R-22. The ARPF features a check flowrater expansion device as well as direct-drive, multi-speed motor.

Standard Features

- Suitable for use with refrigerants R-410A and R-22
- Check flowrater expansion device
- Direct-drive, multi-speed motor
- Transformer and blower time-delay on all units
- Copper tube/aluminum fin coil
- 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
- AHRI Certified
- ETL Listed

Cabinet Features

- Fully insulated, painted steel cabinet with attractive Architectural Gray finish
- Built-in coil has horizontal, vertical, and downflow drain pans with secondary drain connections
- Built-in filter rack for 1" filter (filter not included)
- Power supply entry at top; low-voltage entry on top and both sides
- 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

10 YEAR PARTS LIMITED WARRANTY* GoodCare EXTENDED SERVICE PLAN ETL PERFORMANCE CERTIFIED ISO 9001

* To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Québec. Full warranty details available at www.goodmanmfg.com.

GUARANTEED QUALITY DARE TO COMPARE EXCEPTIONAL VALUE

NOMENCLATURE

A	R	P	F	3642	1	6	AA
1	2	3	4	5,6,7,8	9	10	11,12

Brand
A Single-piece Air Handler

Unit Application
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 Unpainted
P Painted
N Uncased

Expansion Device
F Flowrater
T Expansion Valve

Engineering *
Major/ Minor Revisions
* Not used for inventory management

Refrigerant Charge
No Digit = R-22 only
6 = R-410A or R-22

Electrical
1 208/240 V, 1 Phase, 60 Hz

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

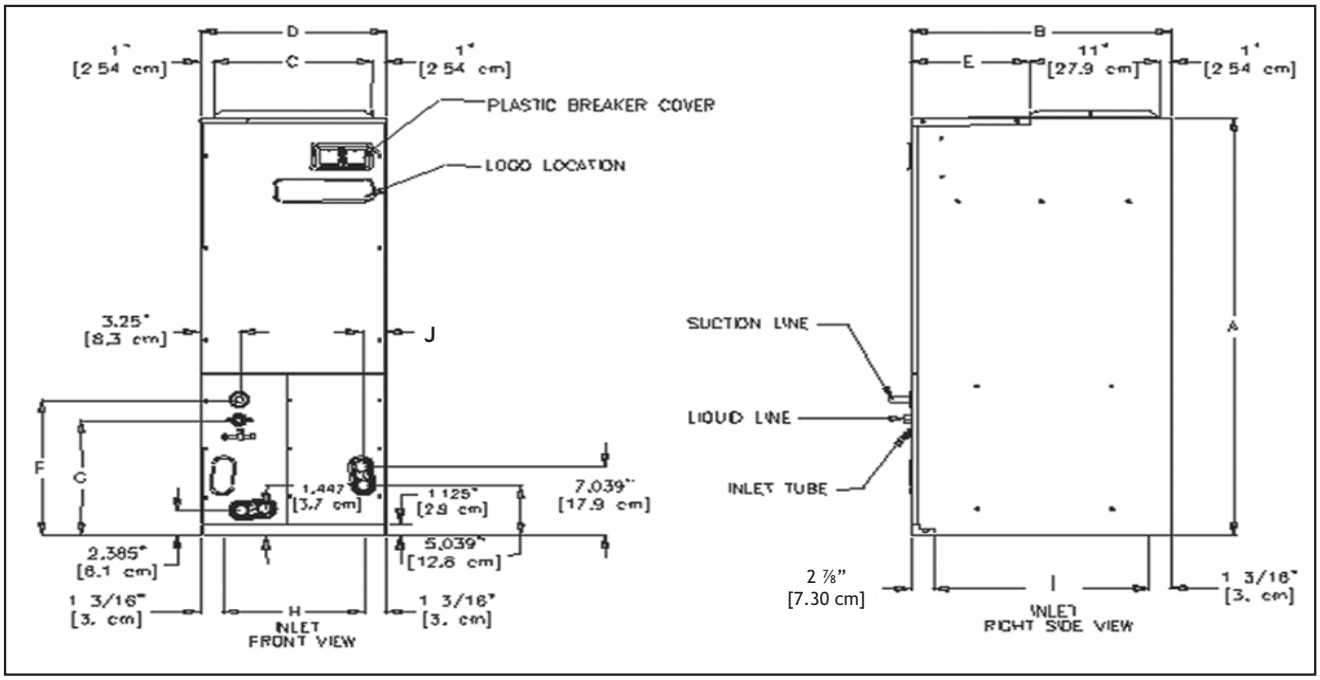
Ceiling Mount & Wall Mount Applications
(Nominal Cooling Capacity/ Electric Heat kW)
1805 1½ Tons Cooling/ 5 kW Electric Heat
2405 2 Tons Cooling/ 5 kW Electric Heat
3608 3 Tons Cooling/ 8 kW Electric Heat

SPECIFICATIONS

	ARPF 182416*	ARPF 193116*	ARPF 303016*	ARPF 363616*
Nominal Ratings				
Cooling (Btu/h)	18,000 - 24,000	18,000 - 30,000	30,000	36,000
CFM (High/ Med/ Low)	1,025/ 790/ 570	1,025/ 780/ 545	1,330/ 1,230/ 980	1,230/ 1,140/ 955
Blower				
Diameter	9½”	9½”	9½”	9½”
Width	6”	6”	8”	6”
Coil Drain Connect FPT	¾”	¾”	¾”	¾”
Service Valve				
Liquid Line	⅜”	⅜”	⅜”	⅜”
Suction Line	¾”	⅞”	¾”	¾”
Electrical Data				
Voltage	208/240	208/240	208/240	208/240
Min Circuit Ampacity	2.1/2.1	1.9/1.9	3.3/3.3	3.3/3.3
Max. Overcurrent Device (amps)	15 / 15	15 / 15	15 / 15	15/15
Min./ Max VAC	197/ 253	197/ 253	197/ 253	197/ 253
Blower Motor FLA/ HP	1.7/ ⅓	1.48/ ¼	2.64/ ⅓	2.64/ ⅓
Ship Weight (lbs)	120	155	144	164

	ARPF 364216*	ARPF 374316*	ARPF 486016*	ARPF 496116*
Nominal Ratings				
Cooling (Btu/h)	36,000 - 42,000	36,000 - 42,000	48,000 - 60,000	48,000 - 60,000
CFM (High/ Med/ Low)	1,645/ 1,440/ 1,275	1,925/ 1,550/ 1,345	1,985/ 1,875/ 1,650	1,915/ 1,795/ 1,585
Blower				
Diameter	10⅝”	11 15/16”	10⅝”	10⅝”
Width	8”	10 ¹/16”	10⅝”	10⅝”
Coil Drain Connect FPT	¾”	¾”	¾”	¾”
Service Valve				
Liquid Line	⅜”	⅜”	⅜”	⅜”
Suction Line	⅞”	⅞”	⅞”	⅞”
Electrical Data				
Voltage	208/240	208/240	208/240	208/240
Min Circuit Ampacity	3.7/3.7	4.2/4.2	5.4/5.4	5.4/5.4
Max. Overcurrent Device (amps)	15 / 15	15 / 15	15 / 15	15/15
Min./ Max VAC	197/ 253	197/ 253	197/ 253	197/ 253
Blower Motor FLA/ HP	2.95/ ½	3.39/ ½	4.3/ ¾	4.3/ ¾
Ship Weight (lbs)	173	195	192	192

DIMENSIONS



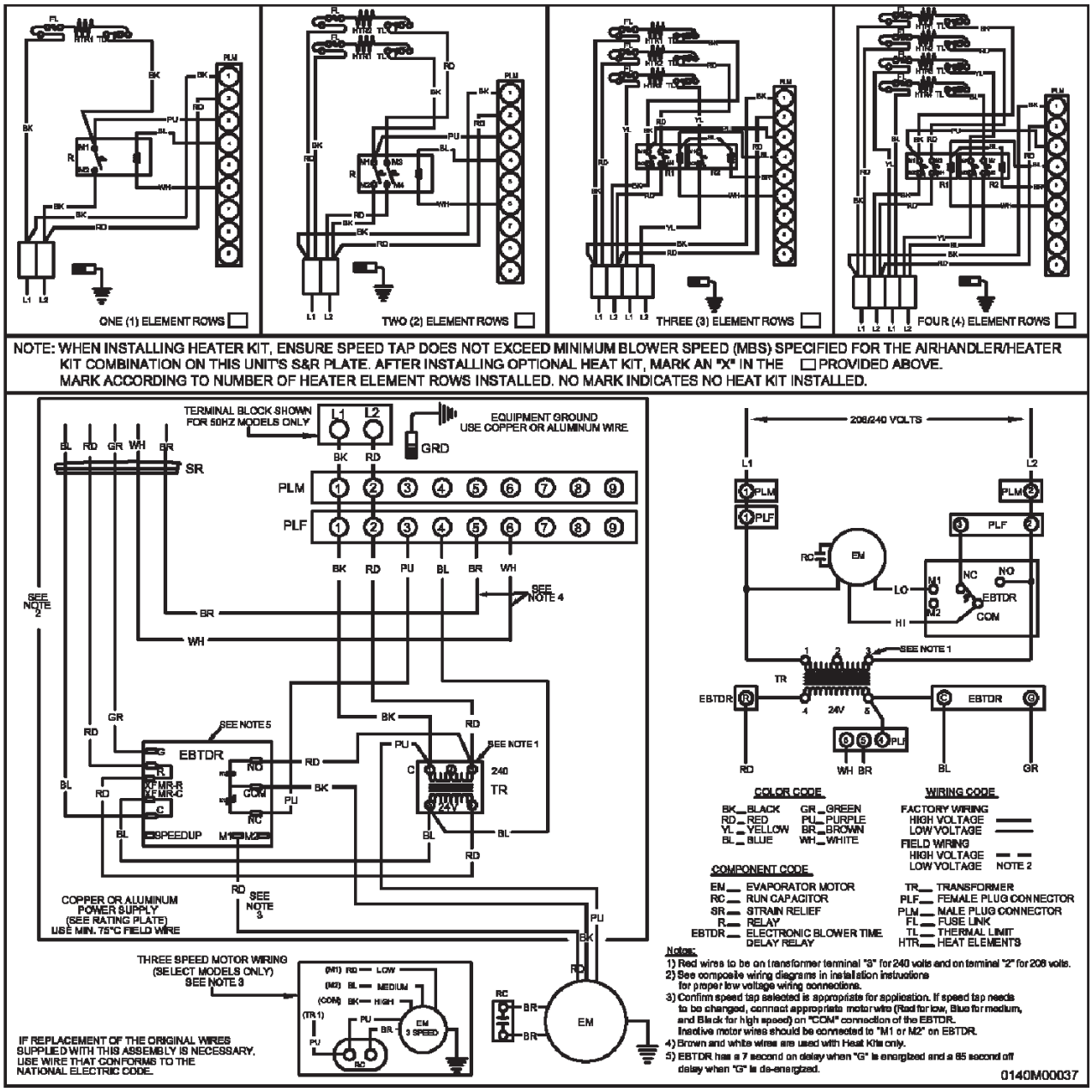
Model	A	B	C	D	E	F	G	H	I	J
ARPF182416*	42⅛”	22”	13½”	15½”	10”	14½”	$11^{15}/_{16}$”	13⅛”	$17^{15}/_{16}$”	2”
ARPF193116*	46¾”	22”	17½”	19½”	10”	14½”	$11^{15}/_{16}$”	17⅛”	$17^{15}/_{16}$”	2”
ARPF303016*	46¾”	22”	17½”	19½”	10”	14½”	$11^{15}/_{16}$”	17⅛”	$17^{15}/_{16}$”	2”
ARPF363616*	46¾”	22”	17½”	19½”	10”	14½”	$11^{15}/_{16}$”	17⅛”	$17^{15}/_{16}$”	$1^{4}/_{5}$”
ARPF364216*	53¼”	24”	20”	22”	12”	14½”	$11^{15}/_{16}$”	19⅝	$19^{15}/_{16}$”	$1^{4}/_{5}$”
ARPF374316*	53¼”	24”	20”	22”	12”	14½”	$11^{15}/_{16}$”	19⅝	$19^{15}/_{16}$”	$1^{4}/_{5}$”
ARPF486016*	53¼”	24”	20”	22”	12”	14½”	$11^{15}/_{16}$”	19⅝	$19^{15}/_{16}$”	$1^{4}/_{5}$”
ARPF496116*	53¼”	24”	20”	22”	12”	14½”	$11^{15}/_{16}$”	19⅝	$19^{15}/_{16}$”	$1^{4}/_{5}$”

AIRFLOW DATA

Model	Motor Speed	CFM delivered against External Static Pressure				
		0.1”	0.2”	0.3”	0.4”	0.5”
ARPF182416*	High	1,155	1,090	1,025	950	895
	Med.	875	830	790	750	715
	Low	640	610	570	535	490
ARPF193116*	High	1,135	1,085	1,025	965	915
	Med.	860	825	780	750	680
	Low	600	570	545	500	465
ARPF303016*	High	1,455	1,385	1,330	1,205	1,090
	Med.	1,340	1,290	1,230	1,140	1,050
	Low	1,075	1,030	980	910	840
ARPF363616*	High	1,345	1,290	1,230	1,150	1,070
	Med	1,270	1,210	1,140	1,075	980
	Low	1,045	1,005	955	885	805
ARPF364216*	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
ARPF374316*	High	2,065	2,000	1,925	1,860	1,780
	Med.	1,685	1,635	1,550	1,470	1,410
	Low	1,490	1,425	1,345	1,280	1,205
ARPF486016*	High	2,135	2,080	1,985	1,900	1,805
	Med.	1,975	1,935	1,875	1,775	1,675
	Low	1,715	1,670	1,650	1,590	1,530
ARPF496116*	High	2,075	2,000	1,915	1,875	1,715
	Med.	1,935	1,865	1,795	1,715	1,610
	Low	1,670	1,625	1,585	1,525	1,455

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

ARPF WIRING DIAGRAM



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

⚠ **WARNING**	**High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.**

ACCESSORIES

Heat Kits	ARPF 182416	ARPF 193116	ARPF 303016	ARPF 363616	ARPF 364216	ARPF 374316	ARPF 486016	ARPF 496116*
HKR-03*	X	X	X	X	X	X	X	X
HKR-05*, HKR-05C*	X	X	X	X	X	X	X	X
HKR-06*	X	X	X	X	X	X	X	X
HKR-08*, HKR-08C*	X[1]	X[1]	X	X	X	X	X	X
HKR-10*, HKR-10C*	X[1]	X[1]	X[1]	X	X	X	X	X
HKR-15C*	X[2]	X[2]	X[2]	X[2]	X[3]	X[3]	X	X
HKR-20C*			X[2]		X[3]	X[3]	X	X
HKR-21C*			X[2]		X[3]	X[3]	X	X
^ HKR3-15*			X[2]	X[2]	X[3]	X[3]	X	X
^ HKR3-20*			X[2]		X[3]	X[3]	X	X

* Revision level that may or may not be designated
C Circuit breaker option
^ Heat kit requires three-phase power supply

[1] Air handler must either be on medium or high speed
[2] Air handler must be on high speed
[3] For static pressure of 0.6 or higher, air handler must be on medium or high speed

EXPANSION VALVE KITS FOR AIR CONDITIONING AND HEAT PUMP APPLICATIONS

Kit Number	Description	Application	Refrigerant	Tonnage: Outdoor Unit
XVB18-36C	20% Bleed Valve	AC Only	R-22	1½ - 3 Ton
XVB42-60C	20% Bleed Valve	AC Only	R-22	3½ - 5 Ton
XV18-36C	Non-bleed Valve	AC Only	R-22	1½ - 3 Ton
XV42-60C	Non-bleed Valve	AC Only	R-22	3½ - 5 Ton
TX2N2	Non-bleed Valve	AC or HP	R-22	1½ - 2 Ton
TX3N2	Non-bleed Valve	AC or HP	R-22	2½ - 3 Ton
TX5N2	Non-bleed Valve	AC or HP	R-22	3½ - 5 Ton
TX2N4	Non-bleed Valve	AC or HP	R-410A	1½ - 2 Ton
TX3N4	Non-bleed Valve	AC or HP	R-410A	2½ - 3 Ton
TX5N4	Non-bleed Valve	AC or HP	R-410A	3½ - 5 Ton

SINGLE POINT KIT **

Model	HKR-15C	HKR-20C	HKR-21C
SPW-01	X	X	X

** Must be installed along with any of the above compatible heat kits. This kit will fit any ARPF air handler as long as a compatible heat kit is installed in the unit.

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

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

	Filter #	Qty Required
1824	FIL 18-32	1
1931	FIL-36-42	1
3030/ 3636	FIL-36-42	1
3642	FIL 48-61	1
3743	FIL 48-61	1
4860/4961	FIL 48-61	1

Notes

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