Heating & Air Conditioning

Amana®

ASPF Series

Multi-Position Energy-Saver Air Handler

1½ to 5 Tons

Standard Features

- Suitable for use with refrigerants R-410A and R-22
- All-aluminum evaporator coil
- Check flowrater expansion device for cooling and heat pump applications
- EEM multi-speed motor
- Built-in coil has horizontal, vertical, and downflow drain pans with secondary drain connections
- Complies with the Factory-sealed Air Handling Credit 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
- Multi-position – upflow, downflow, or horizontal installations
- Built-in filter rack for 1" filter (filter not included)
- Low-voltage cabinet connections
- Power supply on top; low-voltage entry on top or side
- Factory-sealed to achieve 2% or less leakage rate at 1.0" water gauge external duct static pressure

10 YEAR PARTS LIMITED WARRANTY* R-410A REFRIGERANT

* Complete warranty details available from your local dealer or at www.amana-hac.com. 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.

Contents

NOMENCLATURE

A	S	P	F	2405	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

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

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

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

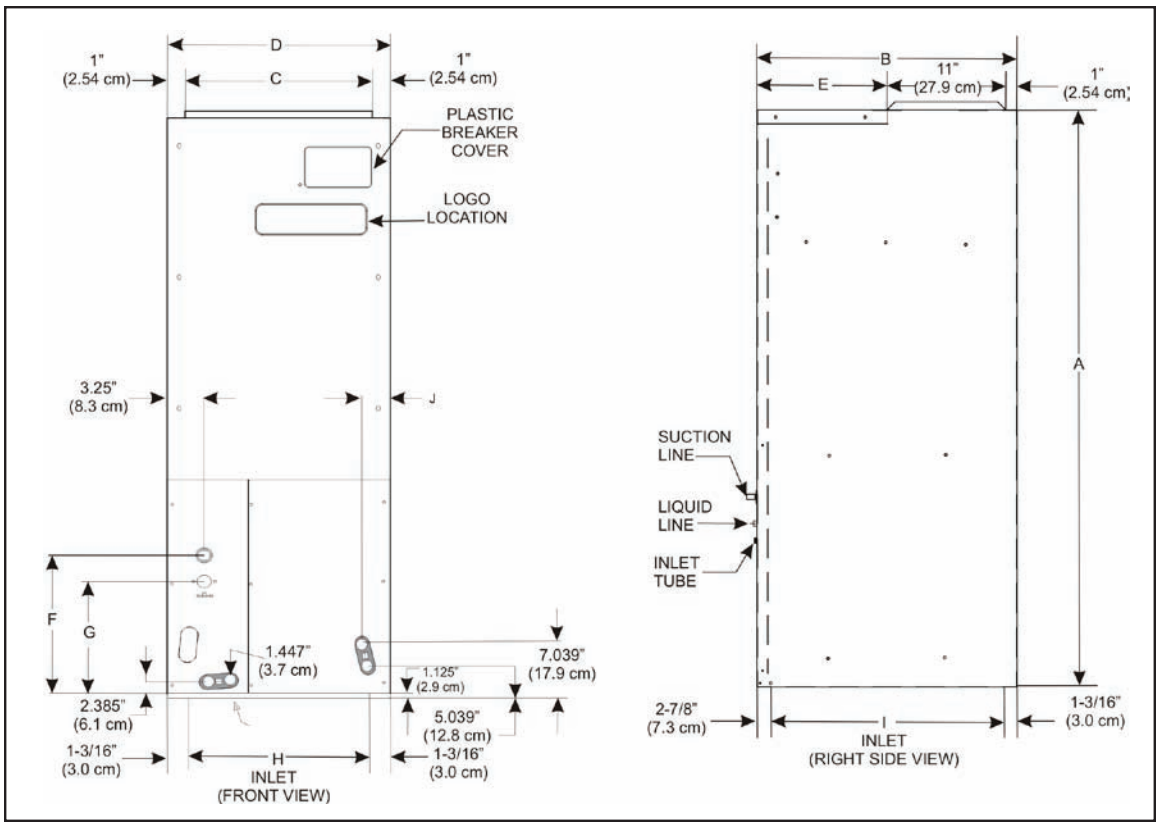
Engineering *
Major/ Minor Revisions
* Not used for inventory management

Specifications

	ASPF 183016*	ASPF 313716*	ASPF 426016*
Nominal Ratings			
Cooling (BTU/h)	18,000 - 30,000	30,000 - 36,000	42,000 - 60,000
Airflow Rate CFM (High/ Low)*	1,085/ 650	1,350/ 600	2,000/ 1,175
Blower			
Diameter	9½"	10⅝"	11 15/16"
Width	8"	10⅝"	10⅝"
Coil Drain Connection FPT	¾"	¾"	¾"
Refrigerant Line Connection Size			
Liquid	⅜"	⅜"	⅜"
Suction	¾"	⅞"	⅞"
Electrical Data			
Voltage	208 - 230	208 - 230	208 - 230
Electric Heat Capacity (kW)	5, 8, 10	3, 5, 6, 8, 10, 15, 20, 21	10, 15, 20, 21
Minimum Circuit Ampacity	3.1/ 3.1	3.8/ 3.8	5.3/ 5.3
Maximum Overcurrent Device	15/ 15 amps	15/ 15 amps	15/ 15 amps
Min. / Max VAC	197/ 253	197/ 253	197/ 253
Blower Motor FLA/ HP	2.5 / ½	3.0 / ¾	4.2 / ¾
Ship Weight (lbs)	125	176	195

*CFM @.3 static

DIMENSIONS



MODEL	A	B	C	D	E	F	G	H	I	J
ASPF183016*	46¾"	22"	17½"	19½"	10"	14½"	$11^{15}/_{16}$"	17⅛"	$17^{15}/_{16}$"	2"
ASPF313716*	53¼"	24"	20"	22"	12"	19⅝"	$11^{15}/_{16}$"	19⅝"	$19^{15}/_{16}$"	$1^{13}/_{16}$"
ASPF426016*	53¼"	24"	20"	22"	12"	19⅝"	$11^{15}/_{16}$"	19⅝"	$19^{15}/_{16}$"	$1^{13}/_{16}$"

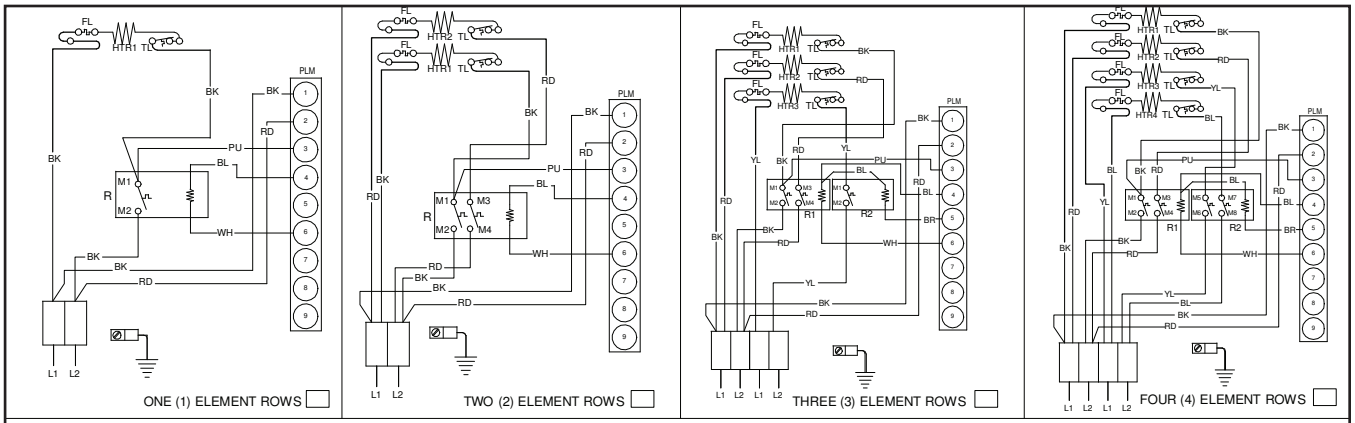
Airflow Data

Model	Motor Speed Tap	CFM delivered against External Static Pressure				
		0.1"	0.2"	0.3"	0.4"	0.5"
ASPF183016*	Low (T1)	700	670	650	595	510
	Med-Low (T2)	820	785	765	745	705
	Medium (T3)	920	900	850	840	815
	Med-High (T4)	1,075	1,055	1,015	975	960
	High (T5)	1,130	1,115	1,085	1,040	1,000
ASPF313716*	Low (T1)	1,060	865	600	515	420
	Med-Low (T2)	1,105	910	795	745	690
	Medium (T3)	1,165	1,070	1,020	960	915
	Med-High (T4)	1,285	1,240	1,195	1,140	1,100
	High (T5)	1,435	1,395	1,350	1,315	1,265
ASPF426016*	Low (T1)	1,445	1,275	1,175	940	855
	Med-Low (T2)	1,545	1,405	1,325	1,260	1,145
	Medium (T3)	1,660	1,610	1,555	1,490	1,415
	Med-High (T4)	1,905	1,870	1,810	1,750	1,695
	High (T5)	2,115	2,070	2,000	1,965	1,915

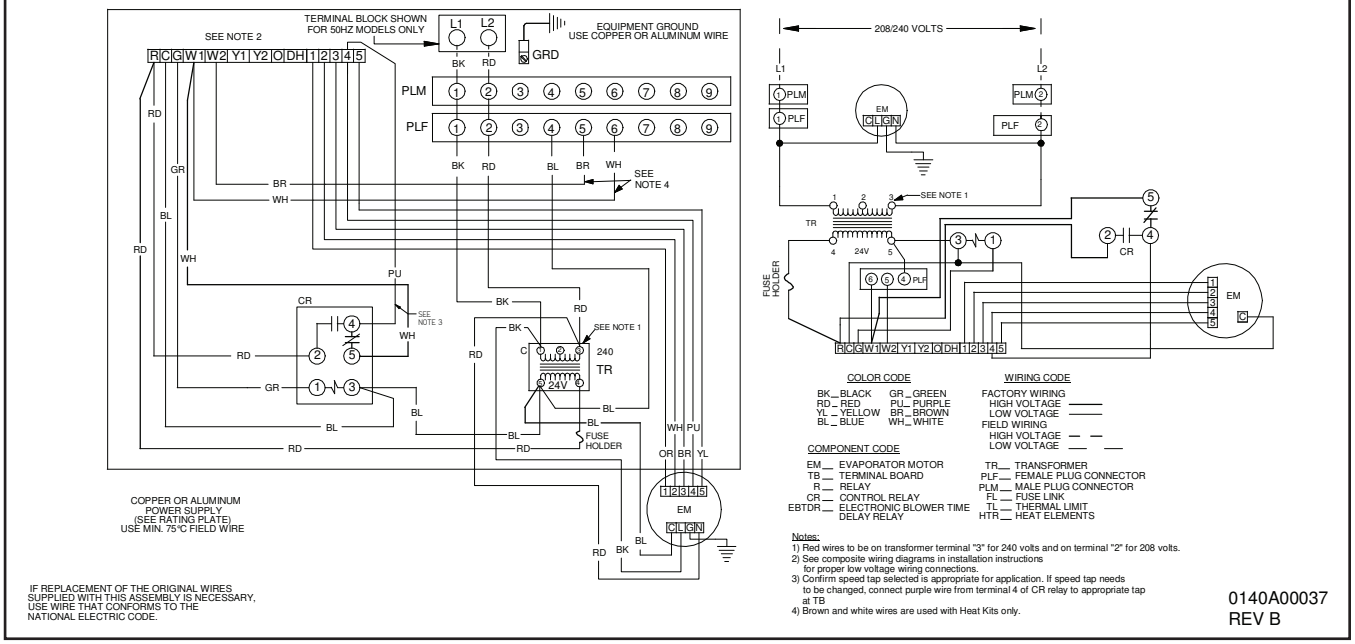
Notes:

- Assumes dry coil with filter in place; SCFM correction for wet coil = 4%
- All ASPF models are shipped from the factory with the speed tap set on T4.

ASPF****B*/D* 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.

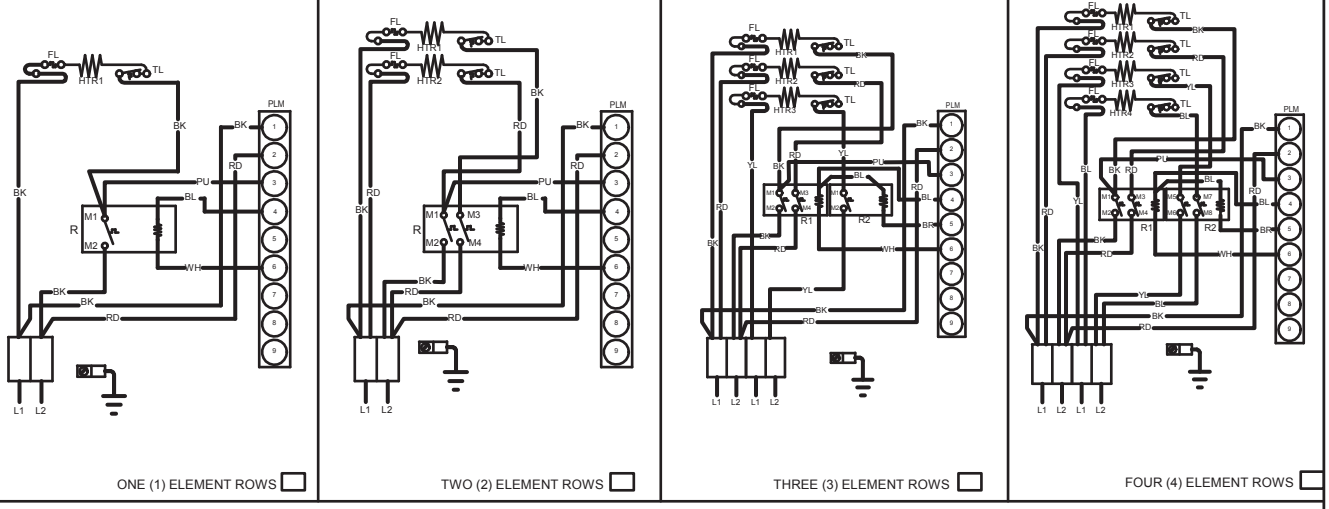


Wiring is subject to change. Always refer to the wiring diagram or the unit for the most up-to-date wiring.

⚠ 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. ⚡

ASPF****C*/E* WIRING DIAGRAM



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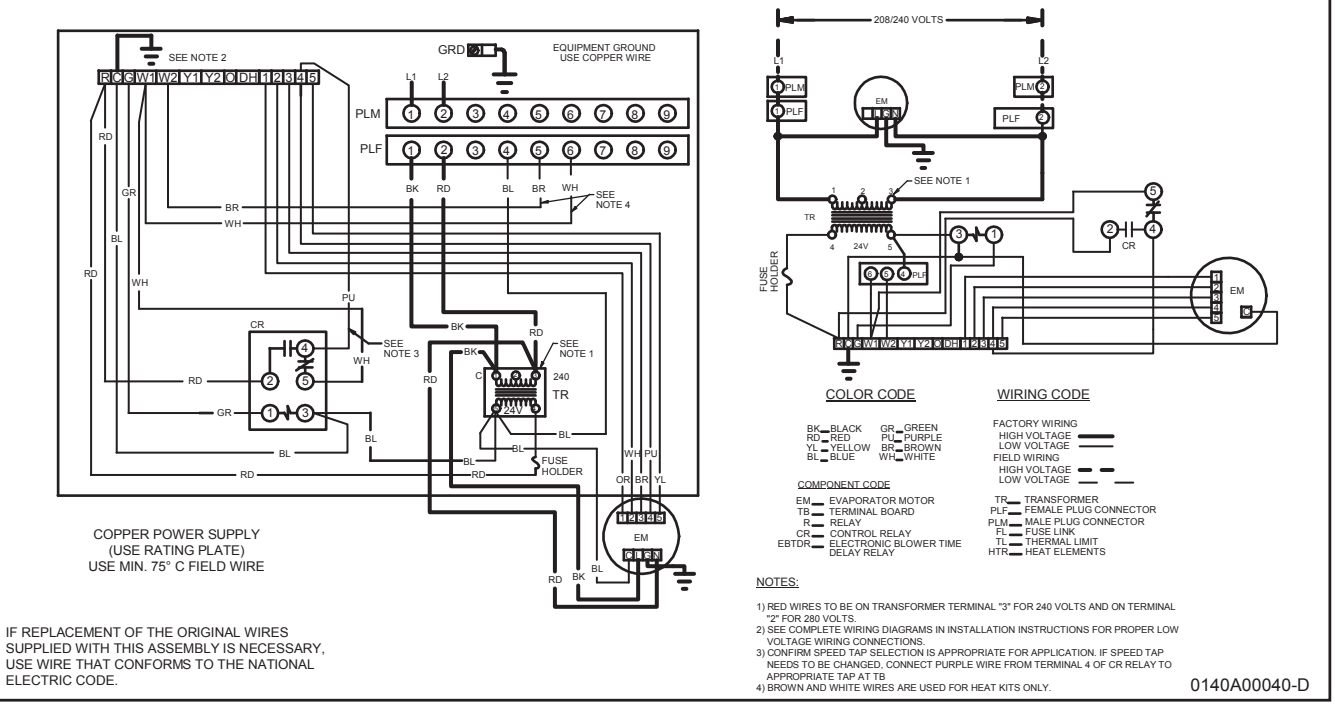

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Accessories

Heat Kit Selection

	ASPF 183016*	ASPF 313716*	ASPF 426016*
HKR-03*	X	X	X
HKR-05*, HKR-05C*	X	X	X
HKR-06*	X	X	X
HKR-08*, HKR-08C*	X[1]	X[1]	X
HKR-10*, HKR-10C*	X[1]	X[1]	X
HKR-15C*	X[2]	X[2]	X[1]
HKR-20C*		X[2]	X[1]
HKR-21C*		X[2]	
^ HKR3-15*	X[2]	X[2]	X[1]
^ HKR3-20*		X[2]	X[1]

* Revision level that may or may not be designated

C Circuit breaker option ^ Heat kit requires three-phase power supply

[1] Air handler must be on speed tap 2, 3, 4, or 5

[2] Air handler must be on speed tap 4 or 5.

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 ASPF air handler as long as a compatible heat kit is installed in the unit.

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
TX2N4A	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

Filters

ASPF	Filter #	Qty Required
1830	FIL-36-42	1
3137	FIL 48-61	1
4260	FIL 48-61	1

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