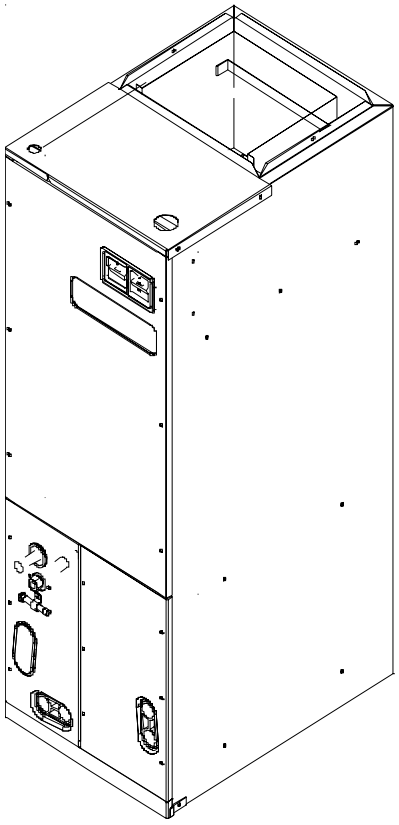
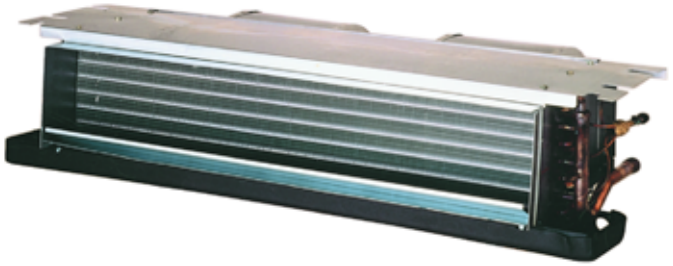
TECHNICAL INFORMATION MANUAL

ACNF, AWUF, ADPF, ARPF, ARUF, AEPF, ASPF, ATUF Air Handlers

Models listed on page 3

- Refer to Service Manual RS6100004 & RS6200006 for installation, operation, and troubleshooting information.
- All safety information must be followed as provided in the Service Manual.
- Refer to the appropriate Parts Catalog for part number information.



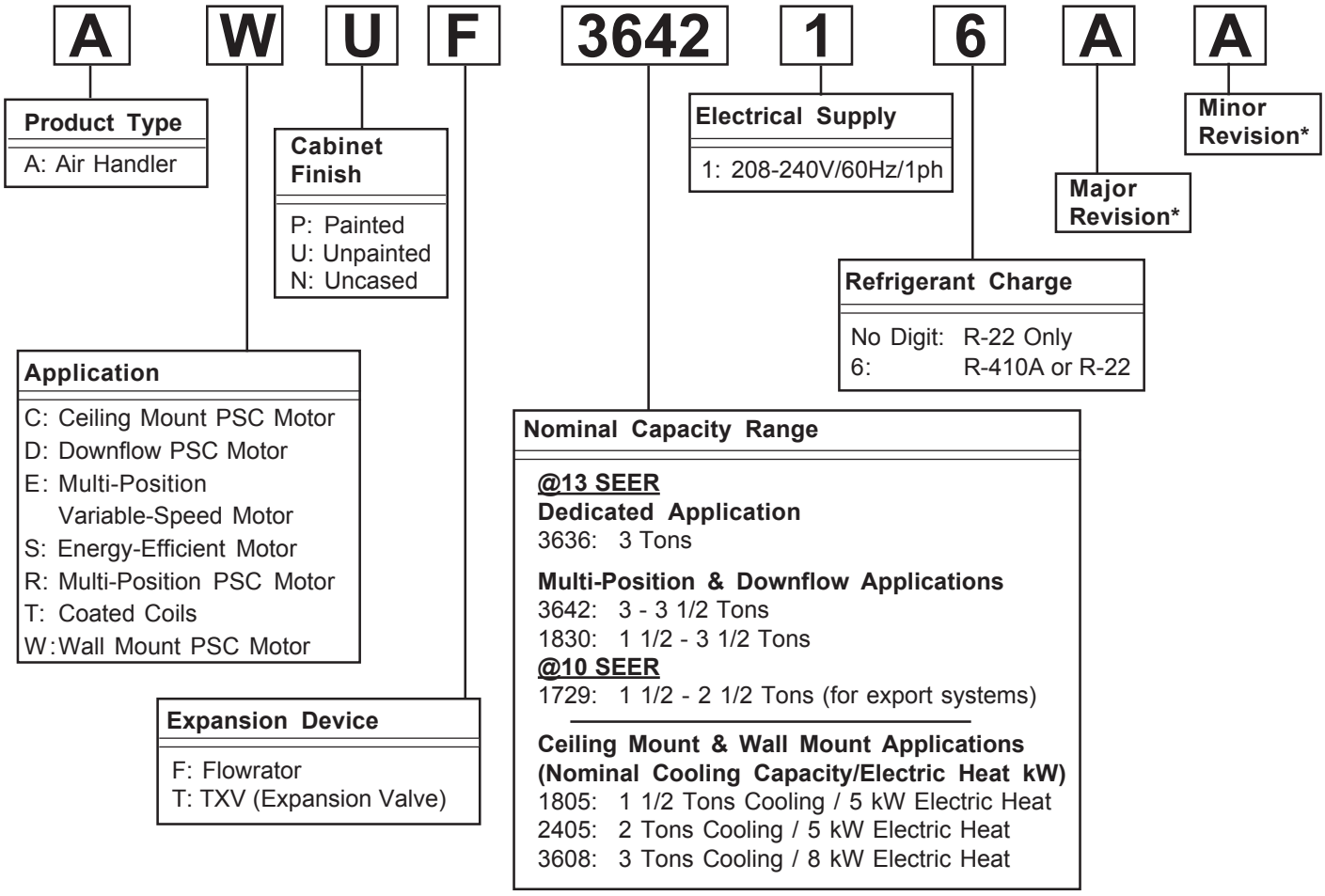


This manual is to be used by qualified, professionally trained HVAC technicians only. Goodman does not assume any responsibility for property damage or personal injury due to improper service procedures or services performed by an unqualified person.

RT6121000 Rev. 3
November 2007

PRODUCT IDENTIFICATION

The model number is used for positive identification of component parts used in manufacturing. Please use this number when requesting service or parts information.



All Airhandlers use **DIRECT DRIVE MOTORS**. Power supply is AC 208-230v, 60 hz, 1 phase.

⚠ 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.

⚠ WARNING

Installation and repair of this unit should be performed ONLY by individuals meeting the requirements of an "entry level technician" as specified by the Air Conditioning and Refrigeration Institute (ARI). Attempting to install or repair this unit without such background may result in product damage, personal injury or death.

⚠ WARNING

Goodman will not be responsibile for any injury or property damage arising from improper service or service procedures. If you install or perform service on this unit, you assume responsibility for any personal injury or property damage which may result. Many jurisdictions require a license to install or service heating and air conditioning equipment.

PRODUCT IDENTIFICATION

The model number is used for positive identification of component parts used in manufacturing. Please use this number when requesting service or parts information.

ACNF18001**
ACNF18051**
ACNF18061**
ACNF18081**
ACNF24001**
ACNF24051**
ACNF24061**
ACNF24081**
ACNF24101**
ACNF30001**
ACNF30051**
ACNF30061**
ACNF30081**
ACNF30101**

AWUF18051**
AWUF18081**
AWUF24051**
AWUF24081**
AWUF24101**
AWUF30051**
AWUF30081**
AWUF30101**
AWUF36051**
AWUF36081**
AWUF36101**

ADPF18241**
ADPF30421**
ADPF48601**
ADPF182416**
ADPF304216**
ADPF486016**

ARPF18241**
ARPF30301**
ARPF37431**
ARPF48601**
ARPF182416**
ARPF193116**
ARPF303016**
ARPF363616**
ARPF364216**
ARPF374316**
ARPF486016**

ARUF18241**
ARUF30301**
ARUF36421**
ARUF37431**
ARUF48601**
ARUF172916**
ARUF182416**
ARUF193116**
ARUF303016**
ARUF363616**
ARUF364216**
ARUF374316**
ARUF486016**

AEPF18301**
AEPF30361**
AEPF42601**

ASPF183016*
ASPF303616*
ASPF426016*

ATUF182416**
ATUF193116**
ATUF303016**
ATUF363616**
ATUF364216**
ATUF374316**
ATUF486016**

WARNING

The United States Environmental Protection Agency ("EPA") has issued various regulations regarding the introduction and disposal of refrigerants introduced into this unit. Failure to follow these regulations may harm the environment and can lead to the imposition of substantial fines. These regulations may vary by jurisdiction. Should questions arise, contact your local EPA office.

WARNING

To prevent the risk of property damage, personal injury, or death, do not store combustible materials or use gasoline or other flammable liquids or vapors in the vicinity of this appliance.

WARNING

Do not connect or use any device that is not design certified by Goodman for use with this unit. Serious property damage, personal injury, reduced unit performance and/or hazardous conditions may result from the use of such non-approved devices.

PRODUCT DESIGN

WARNING

When installing or servicing this equipment, safety clothing, including hand and eye protection, is strongly advised. If installing this equipment in an area that has special safety requirements (hard hats etc.), observe these requirements. To protect the unit when brazing close to the painted surfaces, the use of a quenching cloth is strongly advised to prevent scorching or marring of the equipment finish.

WARNING

HIGH VOLTAGE
Disconnect ALL power before servicing or installling this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury or death.

WARNING

The unit MUST have an uninterrupted, unbroken electrical ground to minimize the possibility of personal injury if an electrical fault should occur. The electrical ground circuit may consist of an appropriately sized electrical wire connecting the ground lug in the unit control box to the building electrical service panel. Other methods of grounding are permitted if performed in accordance with the "National Electric Code" (NEC)/"American National Standards Institute" (ANSI)/"National Fire Protection Association" (NFPA) 70 and local/state codes. In Canada, electrical grounding is to be in accordance with the Canadian Electric Code CSA C22.1. Failure to observe this warning can result in electrical shock that can cause personal injury or death.

WARNING

If this appliance is installed in an enclosed area such as a garage or utility room with any carbon monoxide (CO) producing appliance (i.e. automobile, furnace, water-heaters, etc.), ensure the area is properly ventilated.

AIR HANDLERS

**See Air Handler Specification Sheet for Proper Combinations.*

ALL AIR HANDLERS USE DIRECT DRIVE MOTORS. POWER SUPPLY IS 220-240 V, 60 HZ, 1 PHASE

Installation

Before installing this appliance insure that it is properly sized and adequate power is available.

This appliance can be installed in the vertical or right horizontal position without modification. The horizontal left and downflow positions require product modification.

This product is designed for zero inches (0 inches) clearance; however, adequate access for service or replacement must be considered without removing permanent structure. This unit can be installed on a platform when deemed necessary.

In an attic installation a secondary drain pan must be provided by the installer and placed under the entire unit with a separate drain line properly sloped and terminated in an area visible to the owner. This secondary drain pan is required in the event that there is a leak or main drain blockage. Closed cell insulation should be applied to the drain lines in unconditioned spaces where sweating may occur.

Appliances installed in garages, warehouses or other areas where they may be subjected to mechanical damage must be suitably guarded against such damage by installing behind protective barriers, being elevated or located out of the normal path of vehicles. When installed on a base, the base must also be protected by similar means.

Heating and cooling equipment located in garages, which may generate a glow, spark or flame capable of igniting flammable vapors, must be installed with the ignition source at least 18"[46cm] above the floor level.

When more than one appliance is installed in a building it shall be permanently identified as to the area or space serviced by the equipment.

When this product is installed in the downflow installation in an unconditioned space, remove the horizontal drain pan and install the following insulation kit

ARUF/ARPF	AEPF/ASPF	INSULATION KIT
018-032	N/A	DPI18-30/20
036-042	30	DPI36-42/20
048-061	036, 060	DPI48-61/20

This kit is used to prevent sweating on the vertical drain pan.

PRODUCT DESIGN

To prevent the horizontal drain pan from sweating in high humidity applications, it is recommended that a DPIH insulation accessory kit be used. NOTE: The DPIH insulation kit is not supplied with this product and must be purchased separately.

See Chart below for the correct DPIH kit.

ARUF/ARPF	AEPF/ASPF	INSULATION KIT
1729 1824	N/A	DPIH18-32
3030 1931 3636	1830	DPIH36-42
3642 3743	3036	DPIH48-61
4860	4260	

ACNF AC electric heat air handlers are designed for ceiling mounting and have a direct drive, multi-speed motor. They are available in 1-1/2, 2 and 2 1/2 ton sizes.

AWUF is a vertical stud or wall-mount electric heat air handler and features a direct drive, multi-speed motor. The AWUF has a check flowrater for cooling only and heat pump operation, with sequence controlled heating elements of 5, 8, and 10 kW. The AWUF is available in 1 1/2 to 3 ton sizes.

ADPF is a dedicated downflow, multi-speed air handler and is available in 1 1/2 to 5 ton sizes. Electric heat kits are available as a field-installed option.

***ARPF** air handlers are multi-position, multi-speed with direct drive motors. They are available in 1 1/2 to 5 ton sizes with optional 3 kW to 21kW electric heat kits available for field installation. *(See note below.)*

ARUF is a multi-position air handler and can be used with R-410A or R-22 (models ending in 1/16) and features a direct drive, multi-speed motor. The ARUF has a check flowrater for cooling-only and heat pump operation. The ARUF is available in 1 1/2 to 5 ton sizes.

***AEPF** is a multi-position, variable-speed air handler and can be used with R-410A or R-22 (models ending in 1/16). The unit's blower design includes a variable-speed DC motor and is compatible with heat pumps and variable-capacity cooling applications. *(See note below.)*

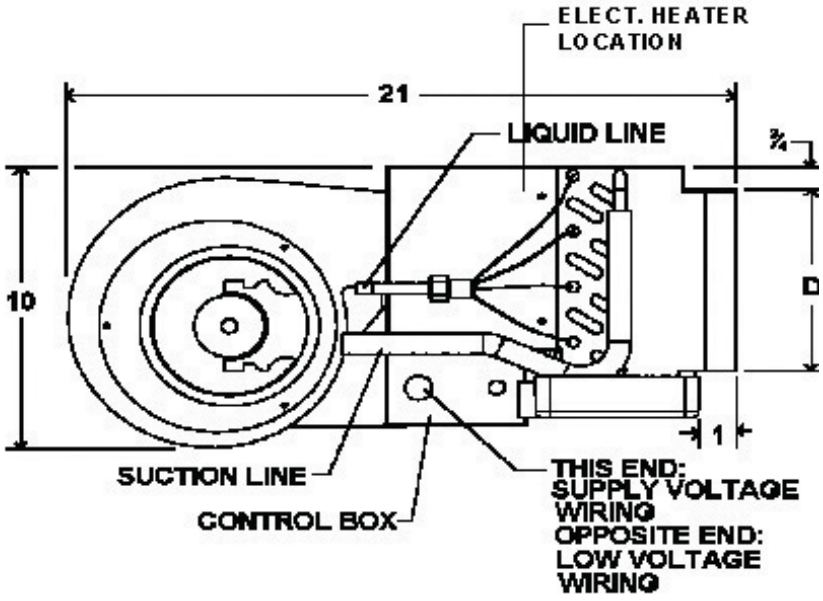
***ASPF** is a multi-position air handler that can be used with R-410A or R-22 and it features a X-13 motor. This motor is a constant torque motor with very low power consumption and it is energized by a 24V signal. The X-13 features an integrated control module and is compatible with heat pumps and cooling applications. *(See note below.)*

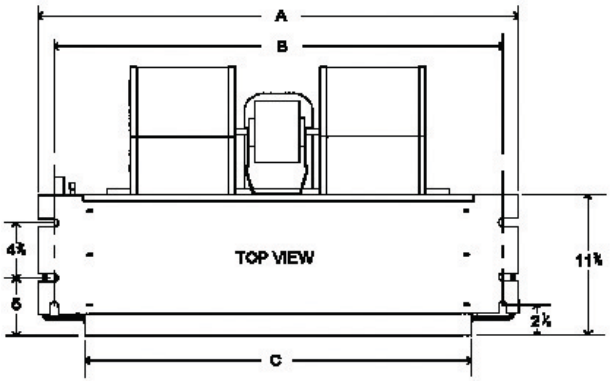
***NOTE:** Factory-sealed to achieve a 2% or less leakage rate at 1.0" water gauge external duct static pressure.*

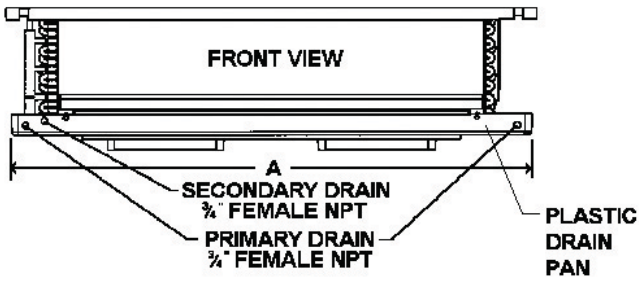
Complies with the Factory-sealed Air Handling Credit as listed in the 2001 Florida Building Code, Chapter 13, Section 610.2.A.2.1.

PRODUCT DIMENSIONS ACNF

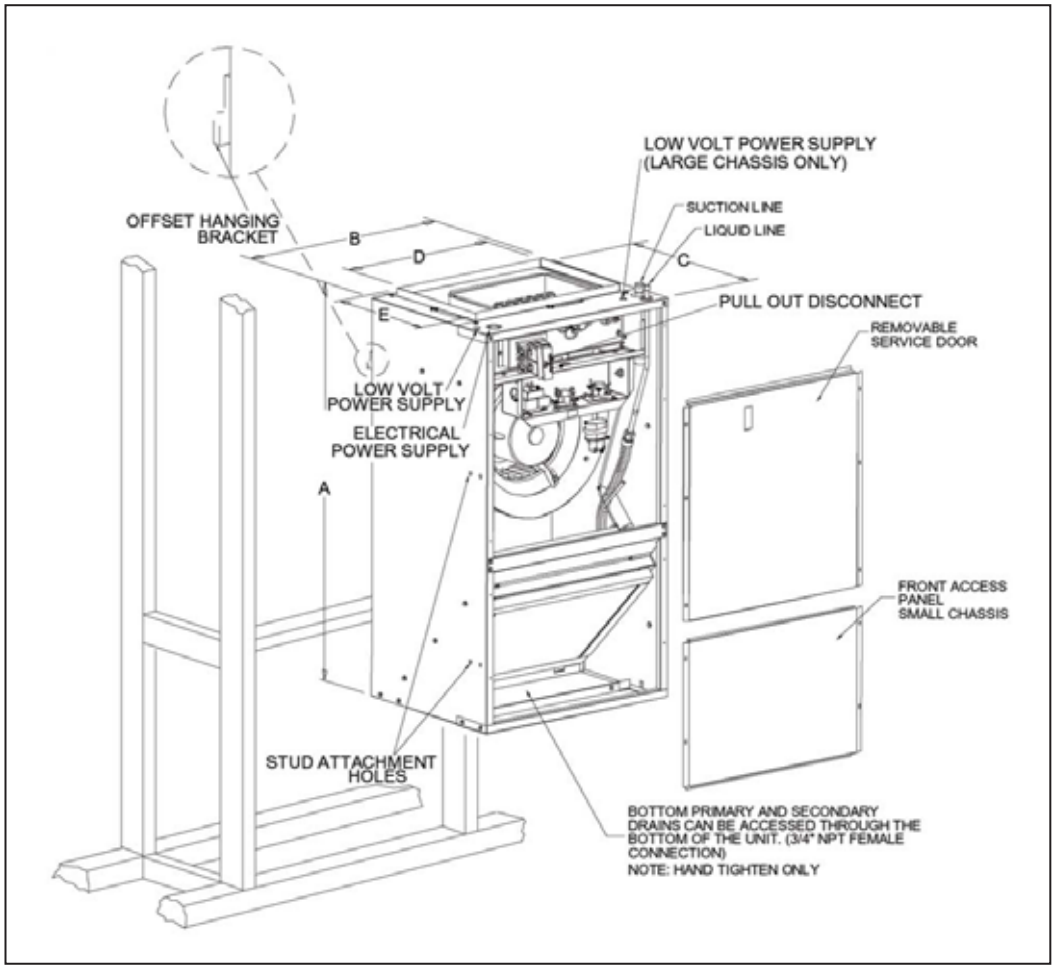
Model	A	B	C	D
ACNF18	37¼"	34 11/16"	30"	6½"
ACNF24	43¼"	40 11/16"	36"	6½"
ACNF30	49¼"	46 11/16"	42"	6½"
AC18	37¼"	34 11/16"	30"	6½"
AC30	43¼"	40 11/16"	36"	6½"
AC36	49¼"	46 11/16"	42"	6½"







PRODUCT DIMENSIONS

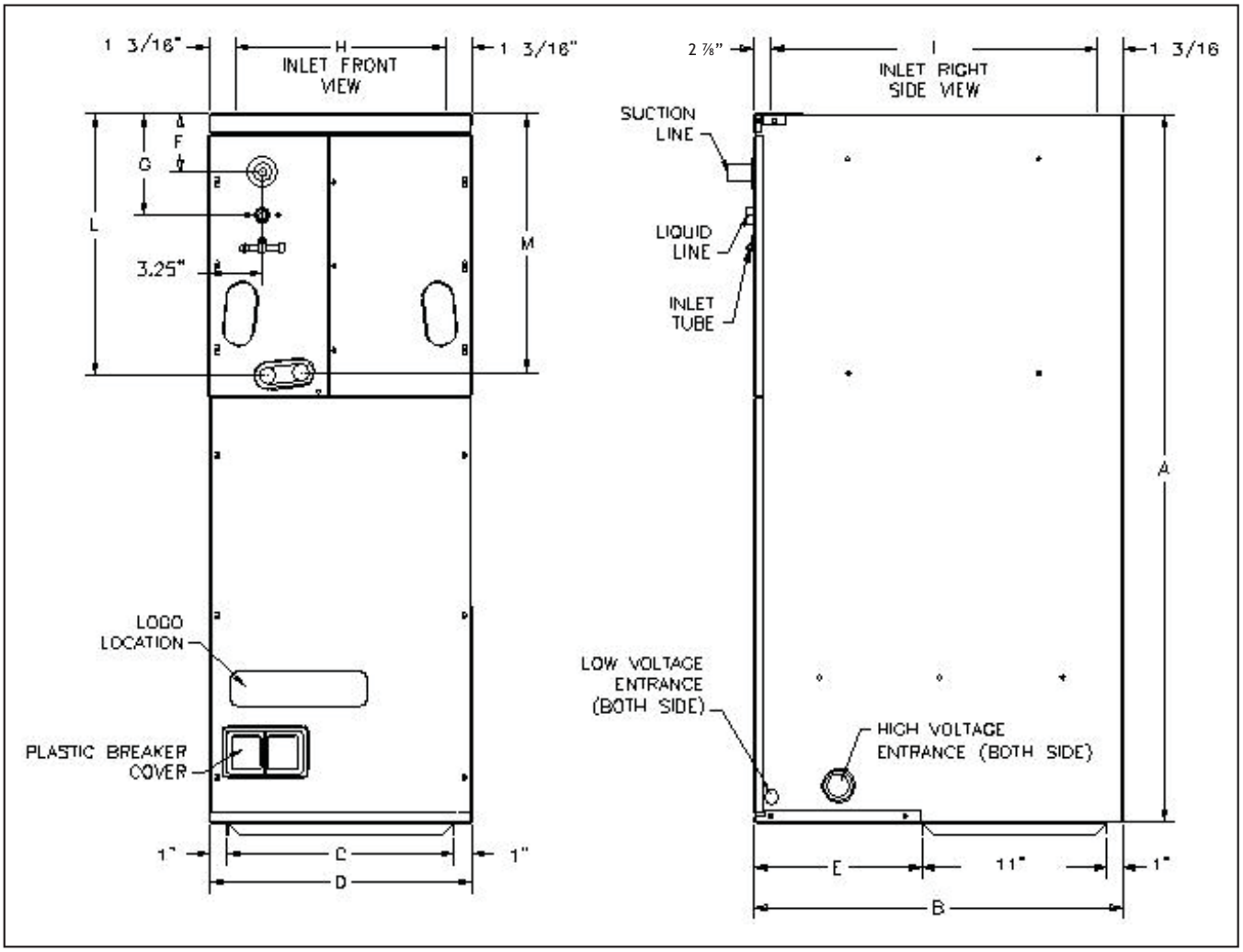


Small Chassis AWUF 18 & 24	
A	36"
B	20 3/8"
C	16 1/8"
D	16"
E	11"
FILTER	14" X 18" X 1"

Large Chassis AWUF 30 & 36	
A	36"
B	24"
C	21"
D	19 7/8"
E	15 7/8"
FILTER	16" X 20" X 1"

PRODUCT DIMENSIONS

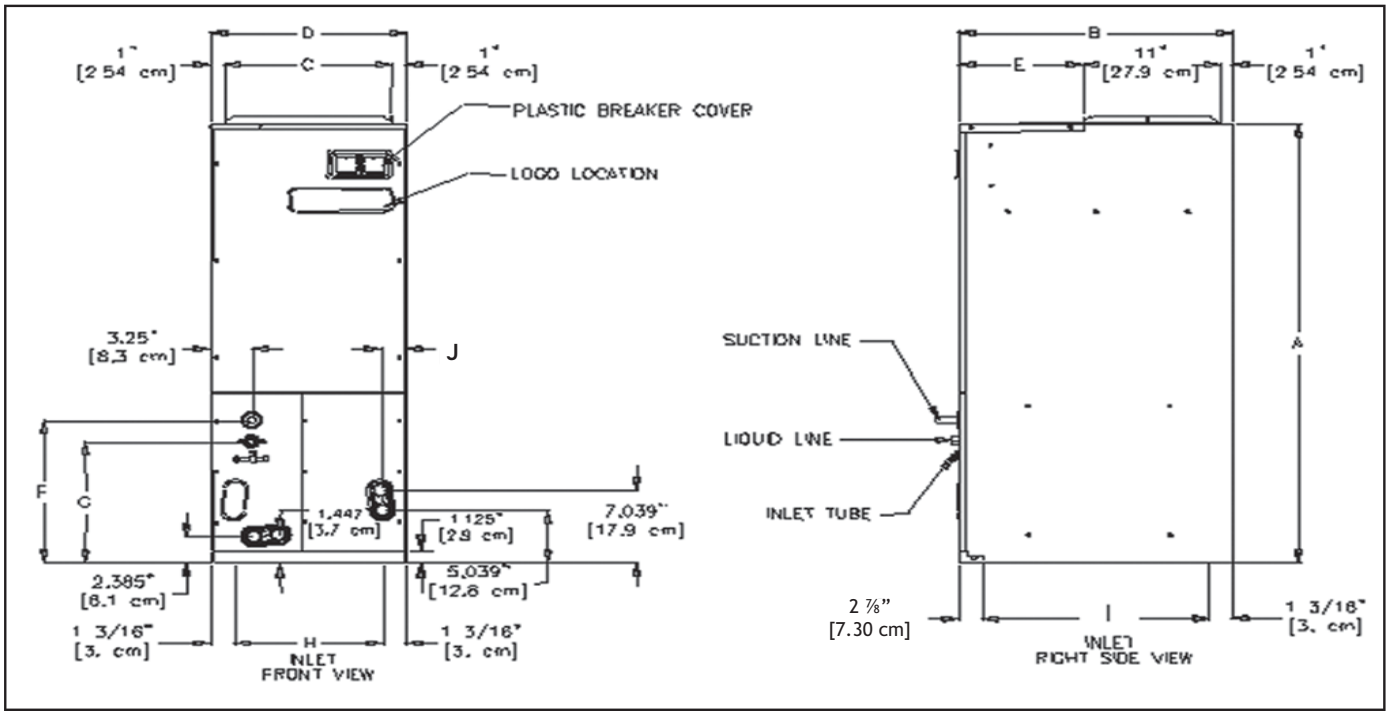
ADPF



Model	A	B	C	D	E	F	G	H	I	L	M
ADPF18241/16	42⅛"	22"	13½"	15½"	10"	3½"	6 1/16"	13⅛"	17 15/16"	15½"	15 5/16"
ADPF30421/16	53¼"	24"	20"	22"	12"	9¼"	11 13/16"	19⅝"	19 15/16"	21 7/16"	21¼"
ADPF48601/16	53¼"	24"	20"	22"	12"	9¼"	11 13/16"	19⅝"	19 15/16"	21 7/16"	21¼"

PRODUCT DIMENSIONS

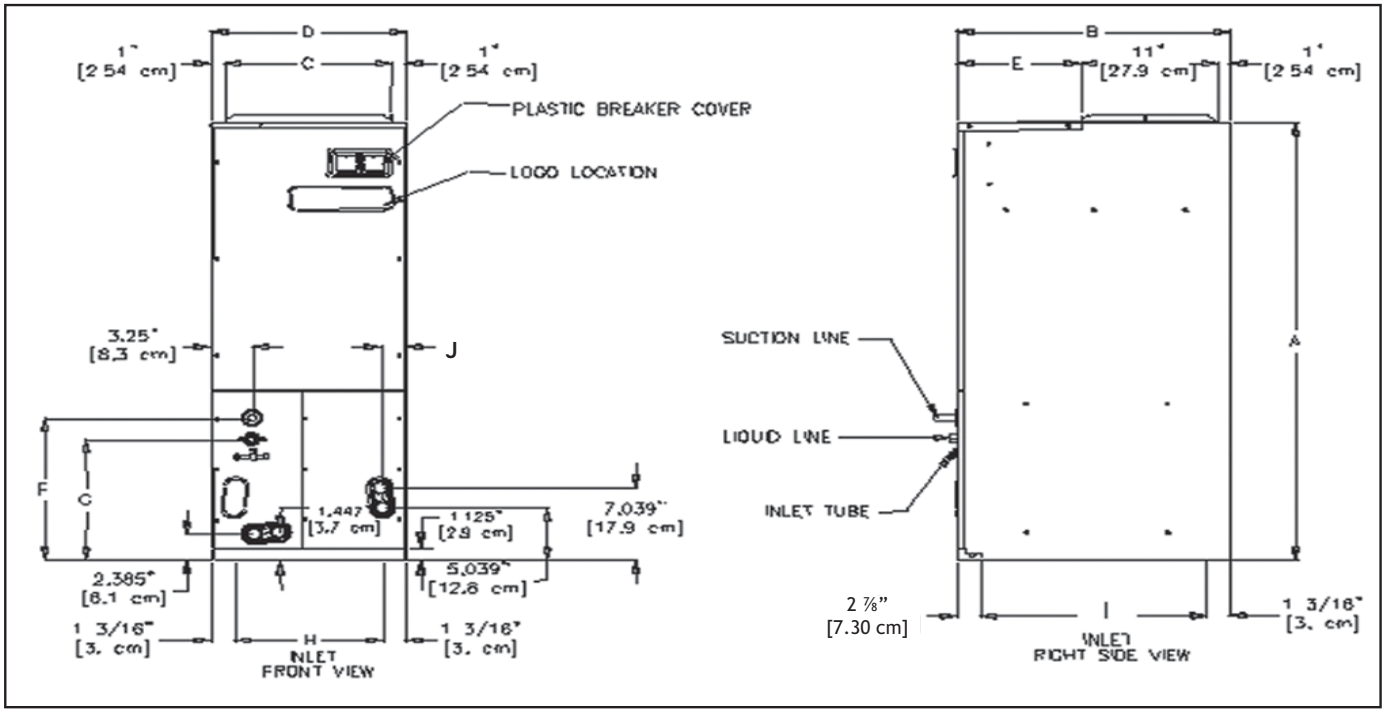
ARPF



Model	A	B	C	D	E	F	G	H	I	J
ARPF18241*	42 1/8"	22"	13 1/2"	15 1/2"	10"	14 1/2"	11 15/16"	13 1/8"	17 15/16"	2"
ARPF19311*	46 3/4"	22"	17 1/2"	19 1/2"	10"	14 1/2"	11 15/16"	17 1/8"	17 15/16"	2"
ARPF30301*	46 3/4"	22"	17 1/2"	19 1/2"	10"	14 1/2"	11 15/16"	17 1/8"	17 15/16"	2"
ARPF36361*	46 3/4"	22"	17 1/2"	19 1/2"	10"	14 1/2"	11 15/16"	17 1/8"	17 15/16"	2"
ARPF36421*	53 1/4"	24"	20"	22"	12"	14 1/2"	11 15/16"	19 5/8"	19 15/16"	1 13/16"
ARPF37431*	53 1/4"	24"	20"	22"	12"	14 1/2"	11 15/16"	19 5/8"	19 15/16"	1 13/16"
ARPF48601*	53 1/4"	24"	20"	22"	12"	14 1/2"	11 15/16"	19 5/8"	19 15/16"	1 13/16"

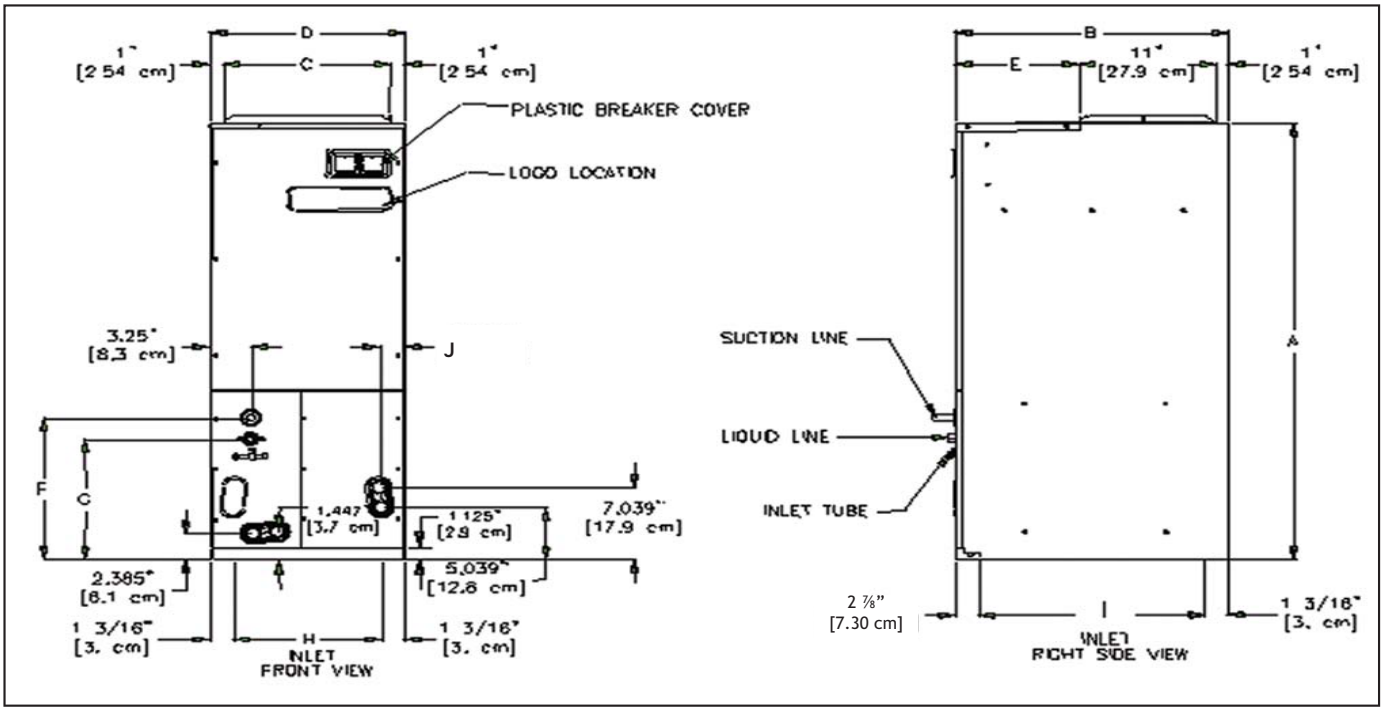
PRODUCT DIMENSIONS

ARUF



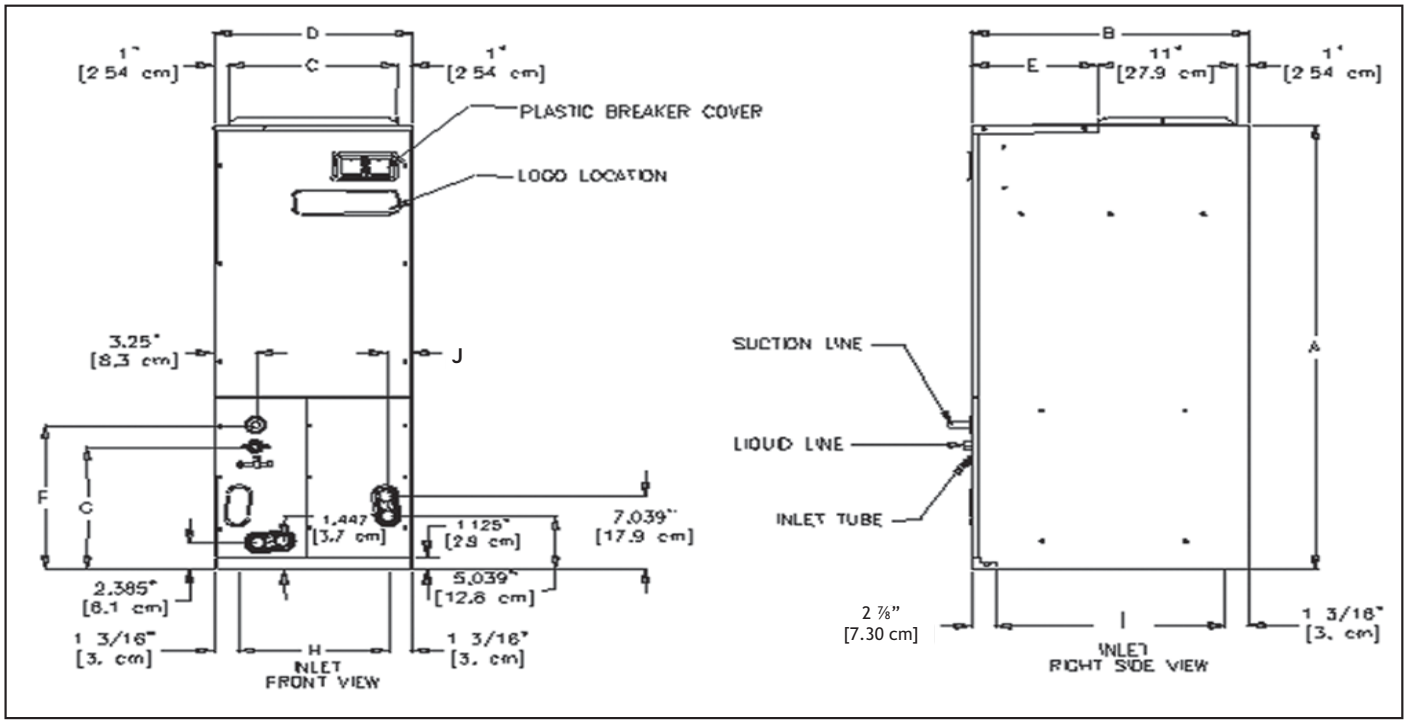
Model	A	B	C	D	E	F	G	H	I	J
ARUF172916	42 1/8"	22"	13 1/2"	15 1/2"	10"	14 1/2"	11 15/16"	13 1/8"	17 15/16"	2"
ARUF182416	42 1/8"	22"	13 1/2"	15 1/2"	10"	14 1/2"	11 15/16"	13 1/8"	17 15/16"	2"
ARUF193116	46 3/4"	22"	17 1/2"	19 1/2"	10"	14 1/2"	11 15/16"	17 1/8"	17 15/16"	2"
ARUF303016	46 3/4"	22"	17 1/2"	19 1/2"	10"	14 1/2"	11 15/16"	17 1/8"	17 15/16"	2"
ARUF363616	46 3/4"	22"	17 1/2"	19 1/2"	10"	14 1/2"	11 15/16"	17 1/8"	17 15/16"	2"
ARUF364216	53 1/4"	24"	20"	22"	12"	14 1/2"	11 15/16"	19 5/8"	19 15/16"	1 13/16"
ARUF374316	53 1/4"	24"	20"	22"	12"	14 1/2"	11 15/16"	19 5/8"	19 15/16"	1 13/16"
ARUF486016	53 1/4"	24"	20"	22"	12"	14 1/2"	11 15/16"	19 5/8"	19 15/16"	1 13/16"

PRODUCT DIMENSIONS AEPF



Model	A	B	C	D	E	F	G	H	I	J
AEPF18301/16	46¾"	22"	17½"	19½"	10"	14½"	11 15/16"	17⅛"	17 15/16"	2"
AEPF30361/16	53¼"	24"	20"	22"	12"	19⅝"	11 15/16"	19⅝"	19 15/16"	1 13/16"
AEPF42601/16	53¼"	24"	20"	22"	12"	19⅝"	11 15/16"	19⅝"	19 15/16"	1 13/16"

PRODUCT DIMENSIONS ASPF



Model	A	B	C	D	E	F	G	H	I	J
ASPF183016*	46 3/4"	22"	17 1/2"	19 1/2"	10'	14 1/2"	11 15/16"	17 1/8"	17 15/16"	2"
ASPF303616*	53 1/4"	24"	20"	22"	12"	19 5/8"	11 15/16"	19 5/8"	19 15/16"	1 13/16"
ASPF426016*	53 1/4"	24"	20"	22"	12"	19 5/8"	11 15/16"	19 5/8"	19 15/16"	1 13/16"

PRODUCT SPECIFICATIONS

ACNF

	ACNF18001	ACNF18051	ACNF18061	ACNF18081	ACNF24001	ACNF24051	ACNF24061	ACNF24081	ANF24101	ACNF30001	ACNF30051	ACNF30061	ACNF30081	ACNF30101
Blower														
Diameter	5.75	5.75	5.75	5.75	6.31	6.31	6.31	6.31	6.31	6.75	6.75	6.75	6.75	6.75
Width	6.75	6.75	6.75	6.75	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.25
Coil Drain Connection FPT	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Lineset Connection Size														
Liquid	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Suction	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Electrical Data														
Min. Circuit Ampacity @ 240V	0.9	27	33.5	40.5	1.68	27.8	34.3	41.3	54.9	1.68	27.8	34.3	41.3	54.9
Min. Circuit Ampacity @ 208V	0.9	2405	30.5	36.8	1.68	25.3	31.36	37.6	49.8	1.68	25.3	31.3	37.6	49
Max. Overcurrent Device 240V	15	30	40	50	15	30	40	50	60	15	30	40	50	8
Max. Overcurrent Device @ 208V	15	30	40	40	15	30	40	40	50	15	30	40	40	60
Minimum VAC	197	197	197	197	197	197	197	197	197	197	197	197	197	50
Maximum VAC	253	253	253	253	253	253	253	253	253	253	253	253	253	253
Blower Motor														
FLA	0.72	0.72	0.72	0.72	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34
HP	1/8	1/8	1/8	1/8	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Ship Weight (lbs)	59	59	59	59	69	69	69	69	69	79	79	79	79	79

AC

	AC18-05D	AC18-06D	AC18-08D	AC30-05D	AC20-08D	AC30-10D	AC36-05D	AC36-08D	AC36-10D
Blower									
Diameter	5.75	5.75	5.75	5.75	6.31	6.31	6.31	6.31	6.31
Width	6.75	6.75	6.75	6.75	8.25	8.25	8.25	8.25	8.25
Coil Drain Connection FPT	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Lineset Connection Size									
Liquid	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Suction	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Electrical Data									
Min. Circuit Ampacity @ 240V	29	36	43	29	43	58	29	44	59
Min. Circuit Ampacity @ 208V	27	33	39	27	39	53	27	39	54
Max. Overcurrent Device 240V	30	40	45	30	45	60	30	45	60
Max. Overcurrent Device @ 208V	30	40	40	30	40	60	30	40	60
Minimum VAC	197	197	197	197	197	197	197	197	197
Maximum VAC	253	253	253	253	253	253	253	253	253
Blower Motor									
FLA	0.72	0.72	0.72	0.72	1.34	1.34	1.34	1.34	1.34
HP	1/8	1/8	1/8	1/4	1/4	1/4	1/4	1/4	1/4
Ship Weight (lbs)	59	59	59	59	69	69	69	69	69

PRODUCT SPECIFICATIONS

AWUF

	AWUF18051	AWUF18081	AWUF24051	AWUF24081	AWUF24101	AWUF30051	AWUF30081	AWUF30101	AWUF36051	AWUF36081	AWUF36101
Heating Capacity											
Actual kW @ 240 volts	4.8	7.3	4.8	7.3	9.8	4.8	7.3	9.8	4.8	7.3	9.8
BTU/h @ 240 volts	16,390	24,925	16,390	24,925	33,460	16,390	24,925	33,460	16,390	24,925	33,460
Blower											
Diameter	9"	9"	10"	10"	10"	9"	9"	9"	9"	9"	9"
Width	6"	6"	6"	6"	6"	8"	8"	8"	8"	8"	8"
Coil Drain Connection FPT	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Lineset Connection Size											
Liquid	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Suction	5/8"	5/8"	5/8"	5/8"	5/8"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Electrical Data											
Min. Circuit Ampacity*	26.7/23.3	39.7/34.2	26.7/23.3	39.7/34.2	52.7/45.6	27.0/23.6	40.0/34.5	53.0/45.9	27.0/23.6	40.0/34.5	53.0/45.9
Max. Overcurrent Device (amps)*	30/30	40/40	30/30	40/40	60/50	30/30	40/40	60/50	30/30	40/40	60/50
Minimum VAC	197	197	197	197	197	197	197	197	197	197	197
Maximum VAC	253	253	253	253	253	253	253	253	253	253	253
Blower Motor											
FLA	1.35	1.35	1.35	1.35	1.35	1.61	1.61	1.61	1.61	1.61	1.61
HP	1/5	1/5	1/5	1/5	1/5	1/3	1/3	1/3	1/3	1/3	1/3
Ship Weight (lbs)	84	84	84	84	84	93	93	93	96	96	96

* @ 208V/240V

ADPF

	ADPF1824 1/16	ADPF3042 1/16	ADPF4860 1/16
Blower			
Diameter	9 1/2"	10 5/8"	10 5/8"
Width	6"	8"	10 5/8"
Coil Drain Connection FPT	3/4"	3/4"	3/4"
Lineset Connection Size			
Liquid	3/8"	3/8"	3/8"
Suction	3/4"	7/8"	7/8"
Electrical Data			
Voltage	208/240	208/240	208/240
Min. Circuit Ampacity*	2.1/2.1	3.7/3.7	5.4/5.4
Max. Overcurrent Device (amps)*	15/15	15/15	15/15
Minimum VAC	197	197	197
Maximum VAC	253	253	253
Blower Motor			
FLA	1.70	2.95	4.30
HP	1/3	1/2	3/4
Ship Weight (lbs)	100	144	160

* @ 208V/240V

PRODUCT SPECIFICATIONS ARPF

	ARPF18241*	ARPF19311*	ARPF30301*	ARPF36361*
Blower				
Diameter	9 1/2"	9 1/2"	9 1/2"	9 1/2"
Width	6"	6"	8"	6"
Coil Drain Connection FPT	3/4"	3/4"	3/4"	3/4"
Lineset Connection Size				
Liquid	3/8"	3/8"	3/8"	3/8"
Suction	3/4"	7/8"	3/4"	3/4"
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
Minimum VAC	197	197	197	197
Maximum VAC	253	253	253	253
Blower Motor				
FLA	1.70	1.48	2.64	2.64
HP	1/3	1/4	1/3	1/3
Ship Weight (lbs)	120	155	144	164

	ARPF36421*	ARPF37431*	ARPF48601*
Blower			
Diameter	10 5/8"	11 15/16"	10 5/8"
Width	8"	10 11/16"	10 5/8"
Coil Drain Connection FPT	3/4"	3/4"	3/4"
Lineset Connection Size			
Liquid	3/8"	3/8"	3/8"
Suction	7/8"	7/8"	7/8"
Electrical Data			
Voltage	208 / 240	208 / 240	208 / 240
Min. Circuit Ampacity	3.7 / 3.7	4.2 / 4.2	5.4 / 5.4
Max. Overcurrent Device (amps)	15 / 15	15 / 15	15 / 15
Minimum VAC	197	197	197
Maximum VAC	253	253	253
Blower Motor			
FLA	2.95	3.39	4.30
HP	1/2	1/2	3/4
Ship Weight (lbs)	173	195	192

PRODUCT SPECIFICATIONS ARUF

	ARUF172916	ARUF182416	ARUF193116	ARUF303016
Blower				
Diameter	9 1/2"	9 1/2"	9 1/2"	9 1/2"
Width	6"	6"	6"	8"
Coil Drain Connection FPT	3/4"	3/4"	3/4"	3/4"
Lineset Connection Size				
Liquid	3/8"	3/8"	3/8"	3/8"
Suction	3/4"	7/8"	3/4"	3/4"
Electrical Data				
Voltage	208 / 240	208 / 240	208 / 240	208 / 240
Min. Circuit Ampacity	2.1 / 2.1	2.1 / 2.1	1.9 / 1.9	3.3 / 3.3
Max. Overcurrent Device (amps)	15 / 15	15 / 15	15 / 15	15 / 15
Minimum VAC	197	197	197	197
Maximum VAC	253	253	253	253
Blower Motor				
FLA	1.70	1.70	1.48	2.64
HP	1/3	1/3	1/4	1/3
Ship Weight (lbs)	110	120	155	144

	ARUF363616	ARUF364216	ARUF374316	ARUF486016
Blower				
Diameter	9 1/2"	10 5/8"	11 15/16"	10 5/8"
Width	6"	8"	10 11/16"	10 5/8"
Coil Drain Connection FPT	3/4"	3/4"	3/4"	3/4"
Lineset Connection Size				
Liquid	3/8"	3/8"	3/8"	3/8"
Suction	3/4"	7/8"	7/8"	7/8"
Electrical Data				
Voltage	208 / 240	208 / 240	208 / 240	208 / 240
Min. Circuit Ampacity	3.3 / 3.3	3.7 / 3.7	4.2 / 4.2	5.4 / 5.4
Max. Overcurrent Device (amps)	15 / 15	15 / 15	15 / 15	15 / 15
Minimum VAC	197	197	197	197
Maximum VAC	253	253	253	253
Blower Motor				
FLA	2.64	2.95	3.39	4.30
HP	1/3	1/2	1/2	3/4
Ship Weight (lbs)	164	173	195	192

PRODUCT SPECIFICATIONS

AEPF

	AEPF183016	AEPF303616	AEPF416016
Blower			
Diameter	9 1/2"	10 5/8"	10 5/8"
Width	8"	10 5/8"	10 5/8"
Coil Drain Connection FPT	3/4"	3/4"	3/4"
Lineset Connection Size			
Liquid	3/8"	3/8"	3/8"
Suction	3/4"	7/8"	7/8"
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	2.00	2.50	6.20
HP	1/2	3/4	3/4
Ship Weight (lbs)	125	176	195

ASPF

	ASPF183016*	ASPF303616*	ASPF426016*
Blower			
Diameter	9 1/2"	10 5/8"	10 15/16"
Width	8"	10 5/8"	10 11/16"
Coil Drain Connection FPT	3/4"	3/4"	3/4"
Lineset Connection Size			
Liquid	3/8"	3/8"	3/8"
Suction	3/4"	7/8"	7/8"
Electrical Data			
Voltage	208 / 230	208 / 230	208 / 230
Min. Circuit Ampacity	3.1 / 3.1	3.8 / 3.8	5.3
Max. Overcurrent Device (amps)	15 / 15	15 / 15	15 / 15
Minimum VAC	197	197	197
Maximum VAC	253	253	253
Blower Motor			
FLA	2.5	3.0	4.2
HP	1/2	3/4	3/4
Ship Weight (lbs)	125	176	195

BLOWER PERFORMANCE DATA

ACNF

Model	Speed	CFM delivered against External Static Pressure				
		0.1”	0.2”	0.3”	0.4”	0.5”
ACNF18001	High	780	710	625	520	440
	Low	675	585	510	460	400
ACNF18051	High	780	710	625	520	440
	Low	675	585	510	460	400
ACNF18061	High	780	710	625	520	440
	Low	675	585	510	460	400
ACNF18081	High	780	710	625	520	440
	Low	675	585	510	460	400
ACNF24001	High	935	880	810	735	675
	Low	720	680	630	565	490
ACNF24051	High	935	880	810	735	675
	Low	720	680	630	565	490
ACNF24061	High	935	880	810	735	675
	Low	720	680	630	565	490
ACNF24081	High	935	880	810	735	675
	Low	720	680	630	565	490
ACNF24101	High	935	880	810	735	675
	Low	720	680	630	565	490
ACNF30001	High	1,075	1,015	945	865	770
	Low	830	785	720	665	605
ACNF30051	High	1,075	1,015	945	865	770
	Low	830	785	720	665	605
ACNF30061	High	1,075	1,015	945	865	770
	Low	830	785	720	665	605
ACNF30081	High	1,075	1,015	945	865	770
	Low	830	785	720	665	605
ACNF30101	High	1,075	1,015	945	865	770
	Low	830	785	720	665	605

Model	Speed	CFM Delivered Against External Static Pressure				
		0.1”	0.2”	0.3”	0.4”	0.5”
AC18-05D AC18-06D AC18-08D	High	780	710	625	520	440
	Low	675	585	510	460	400
AC30-05D AC30-08D AC30-10D	High	1,075	1,015	945	865	770
	Low	830	785	720	665	605
AC36-05D AC36-08D AC36-10D	High	1,200	1,150	1,090	1,025	945
	Low	920	880	830	770	710

Note:
Assumes dry coil with filter in place;
208-volt operation x .96

BLOWER PERFORMANCE DATA AWUF

Model	Speed	CFM deliverd against External Static Pressure				
		0.1"	0.2"	0.3"	0.4"	0.5"
AWUF18051	High	750	730	690	650	595
	Low	710	700	690	635	585
AWUF18081	High	750	730	690	650	595
	Low	710	700	690	635	585
AWUF24051	High	880	845	810	770	735
	Low	845	815	780	745	705
AWUF24081	High	880	845	810	770	735
	Low	845	815	780	745	705
AWUF24101	High	880	845	810	770	735
	Low	845	815	780	745	705
AWUF30051	High	1250	1195	1135	1085	1010
	Low	1110	1055	1020	955	905
AWUF30081	High	1250	1195	1135	1085	1010
	Low	1110	1055	1020	955	905
AWUF30101	High	1250	1195	1135	1085	1010
	Low	1110	1055	1020	955	905
AWUF36051	High	1280	1190	1110	1010	930
	Low	1170	1100	1030	950	890
AWUF36081	High	1280	1190	1110	1010	930
	Low	1170	1100	1030	950	890
AWUF36101	High	1280	1190	1110	1010	930
	Low	1170	1100	1030	950	890

Note: Assumes dry coil with filter in place; SCFM correction for wet coil = 4% (208V/240V)

BLOWER PERFORMANCE DATA

ADPF

Model	Speed	CFM delivered against External Static Pressure				
		0.1”	0.2”	0.3”	0.4”	0.5”
ADPF18241/16	High	1,155	1,090	1,025	950	895
	Med	875	830	790	750	715
	Low	640	610	570	535	490
ADPF30421/16	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
ADPF48601/16	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% (208V/240V)

ARPF

Model	Speed	CFM deliverd against External Static Pressure				
		0.1"	0.2"	0.3"	0.4"	0.5"
ARPF18241*	High	1155	1090	1025	950	895
	Med.	875	830	790	750	715
	Low	640	610	570	535	490
ARPF19311*	High	1135	1085	1025	965	915
	Med.	860	825	780	750	680
	Low	600	570	545	500	465
ARPF30301*	High	1455	1385	1330	1205	1090
	Med.	1340	1290	1230	1140	1050
	Low	1075	1030	980	910	840
ARPF36361*	High	1345	1290	1230	1150	1070
	Med.	1270	1210	1140	1075	980
	Low	1045	1005	955	885	805
ARPF36421*	High	1700	1680	1645	1610	1535
	Med.	1500	1480	1440	1380	1325
	Low	1345	1320	1275	1230	1195
ARPF37431*	High	2065	2000	1925	1860	1780
	Med.	1685	1635	1550	1470	1410
	Low	1490	1425	1345	1280	1205
ARPF48601*	High	2135	2080	1985	1900	1805
	Med.	1975	1935	1875	1775	1675
	Low	1715	1670	1650	1590	1530

Note: Assumes dry coil with filter in place; SCFM correction for wet coil = 4% (208V/240V)

BLOWER PERFORMANCE DATA

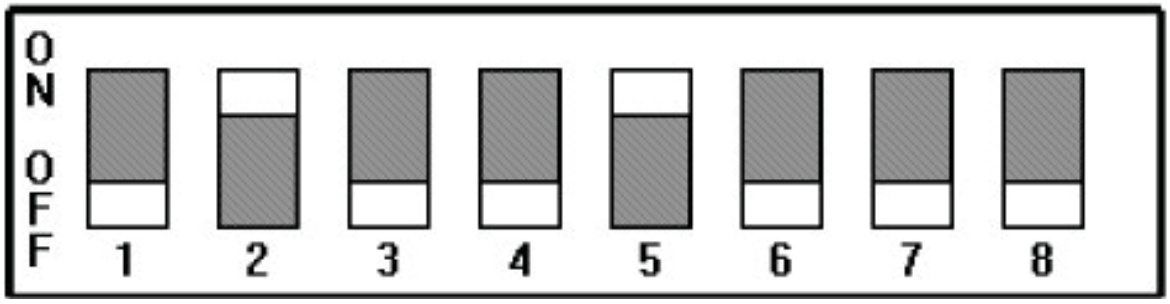
Model	Speed	CFM deliverd against External Static Pressure				
		0.1"	0.2"	0.3"	0.4"	0.5"
ARUF172916	High	1155	1090	1025	950	895
	Med.	875	830	790	750	715
	Low	640	610	570	535	490
ARUF182416	High	1155	1090	1025	950	895
	Med.	875	830	790	750	715
	Low	640	610	570	535	490
ARUF193116	High	1135	1085	1025	965	915
	Med.	860	825	780	750	680
	Low	600	570	545	500	465
ARUF303016	High	1455	1385	1330	1205	1090
	Med.	1340	1290	1230	1140	1050
	Low	1075	1030	980	910	840
ARUF363616	High	1345	1290	1230	1150	1070
	Med.	1270	1210	1140	1075	980
	Low	1045	1005	955	885	805
ARUF364216	High	1700	1680	1645	1610	1535
	Med.	1500	1480	1440	1380	1325
	Low	135	1320	1275	1230	1195
ARUF374316	High	2065	2000	1925	1860	1780
	Med.	1685	1635	1550	1470	1410
	Low	1490	1425	1345	1280	1205
ARUF486016	High	2135	2080	1985	1900	1805
	Med.	1975	1935	1875	1775	1675
	Low	1715	1670	1650	1590	1530

Note: Assumes dry coil with filter in place; SCFM correction for wet coil = 4% (208V/240V)

BLOWER PERFORMANCE DATA AEPF

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-Off[1]	1100	1210
Up to 10	On-Off	850	935
5	Off-On	700	770

AEPF3036 / 4260

Heating Element (kW)	Switch Position	Emergency Backup	Heat Pump With Backup
Up to 20	Off-Off	2050	2150
Up to 20	On-Off	1750	1835
Up to 15	Off-On	1600	1680
Up to 10	On-On	1200	1260
Up to 10 [1]	On-On	1020	1020

Dipswitch 5/6

AEPF1830

Switch Position	Indoor Airflow	
	Cooling	Heat Pump
Off-Off[1]	1100	1100
On-Off	850	800
Off-On	700	600

AEPF3036 / 4260

Switch Position	Indoor Airflow	
	Cooling	Heat Pump
Off-Off	1600	1600
On-Off	1350	1350
Off-On	1250	1250
On-On	1000	1000
On-On[1]	850	850

[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%

BLOWER PERFORMANCE DATA

Model	Motor Speed Tap	CFM deliverd against External Static Pressure				
		0.1"	0.2"	0.3"	0.4"	0.5"
ASPF183016	1	700	670	650	595	510
	2	820	785	765	745	705
	3	920	900	850	840	815
	4	1075	1055	1015	975	960
	5	1130	1115	1085	1040	1000
ASPF303616	1	1060	865	600	515	420
	2	1105	910	795	745	690
	3	1165	1070	1020	960	915
	4	1285	1240	1195	1140	1100
	5	1435	1395	1350	1315	1265
ASPF426016	1	1445	1275	1040	940	855
	2	1545	1405	1325	1260	1145
	3	1660	1610	1555	1490	1415
	4	1905	1870	1810	1750	1695
	5	2115	2070	2000	1965	1915

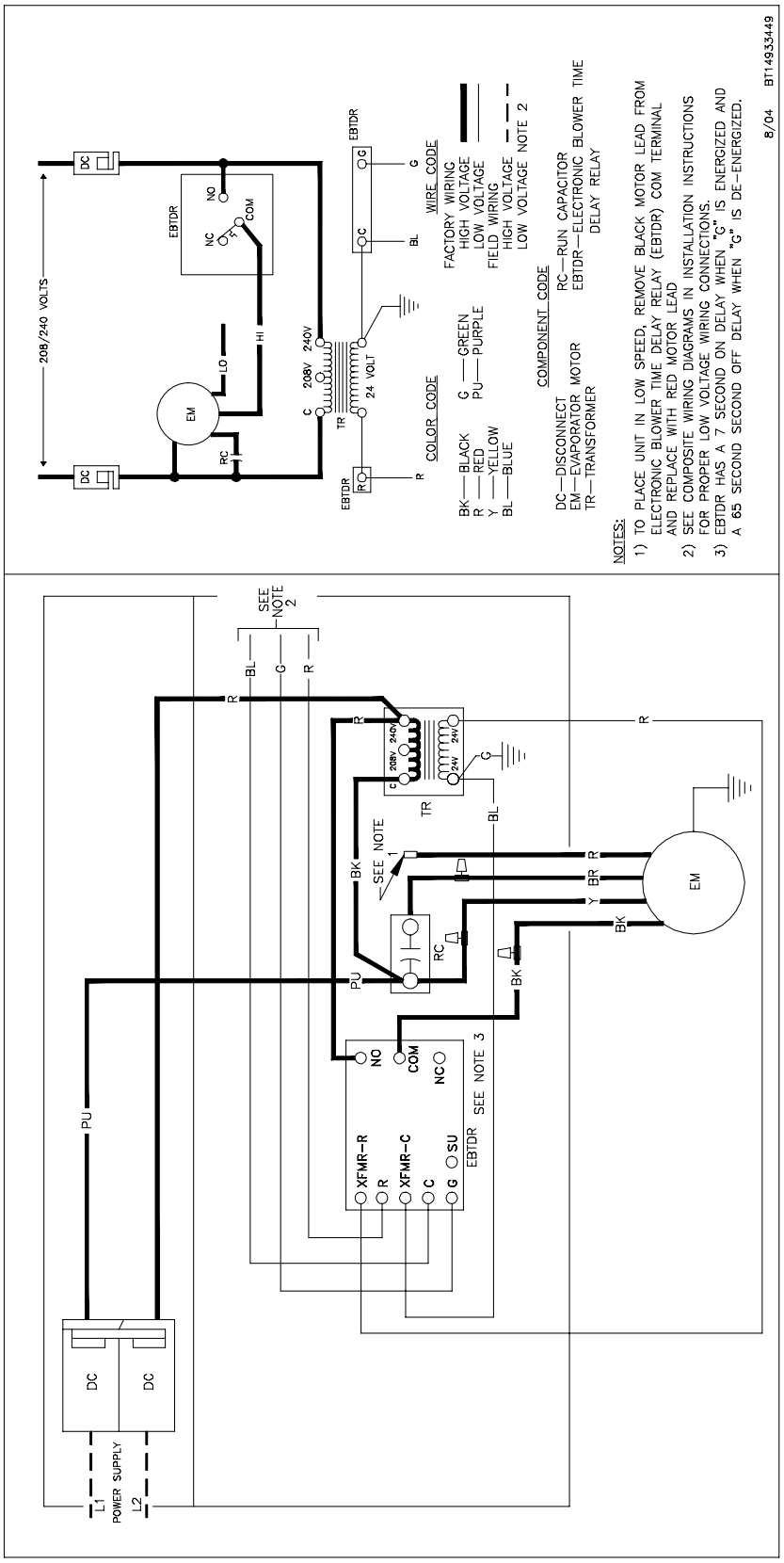
Notes: Assumes dry coil with filter in place; SCFM correction for wet coil = 4% (208/240V)
All ASPF models are shipped from the factory with the speed tap set on T4.

WIRING DIAGRAMS

ACNF

WARNING

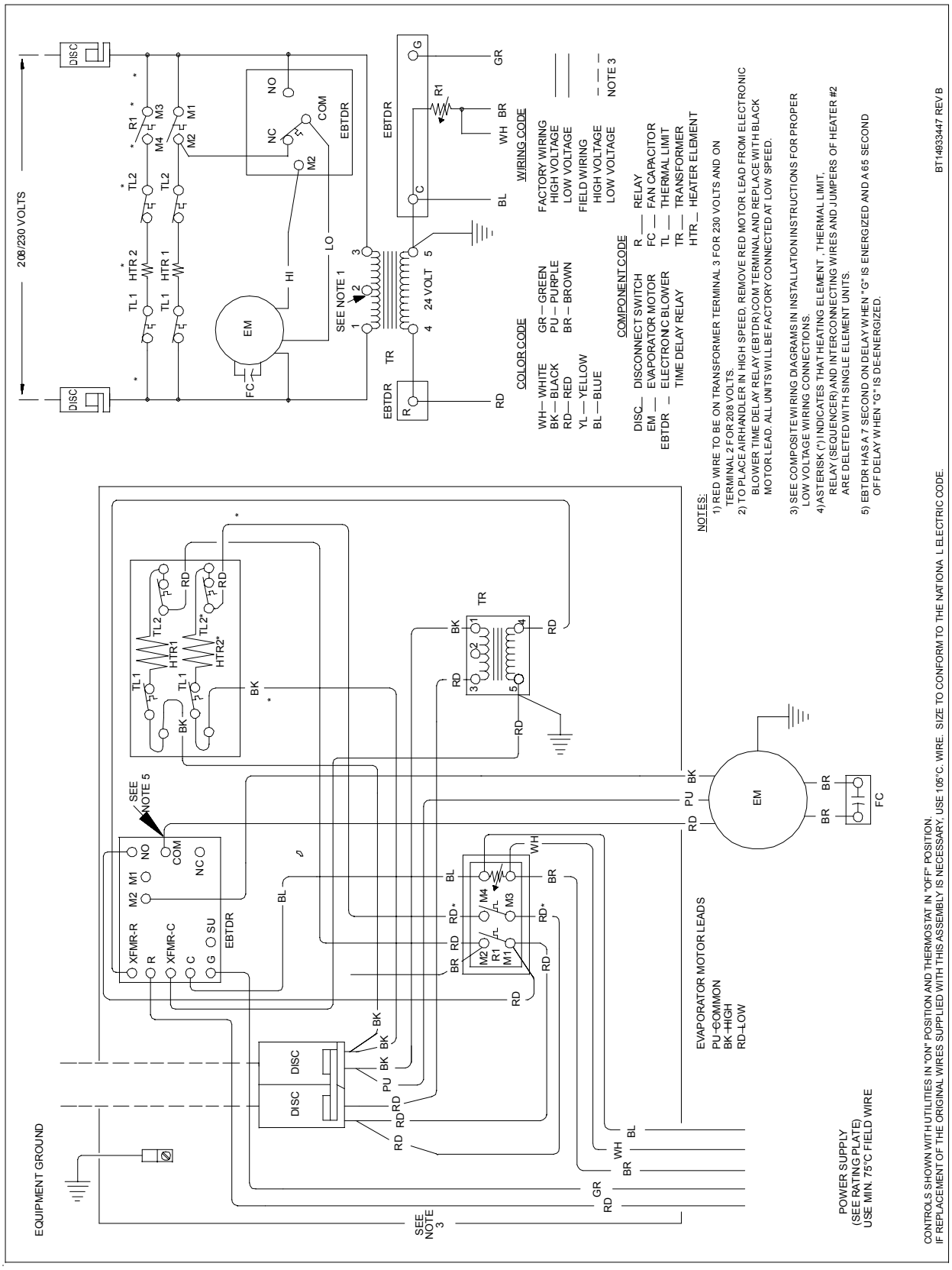
HIGH VOLTAGE!
DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



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.

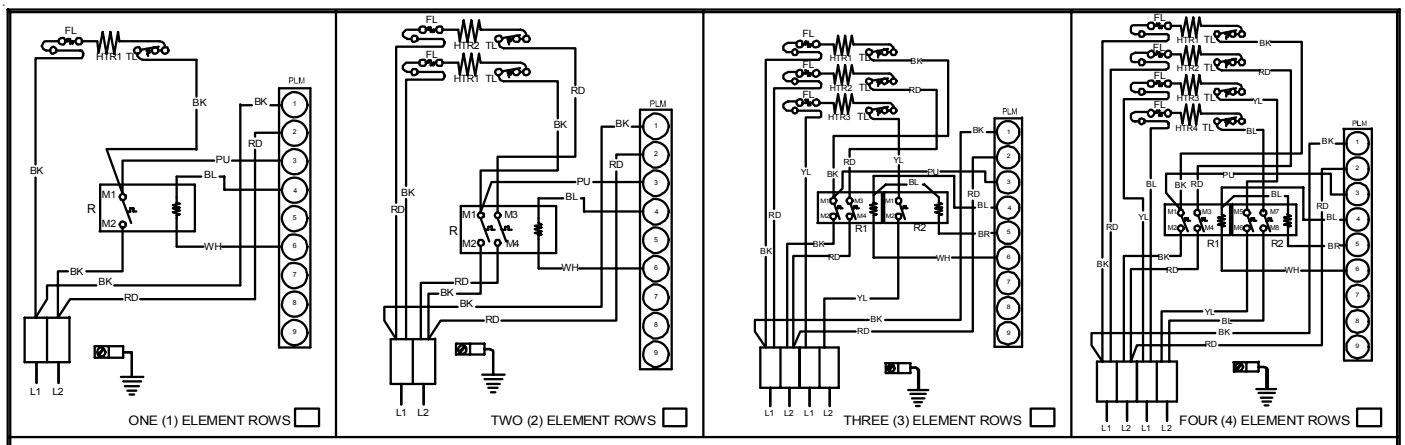


Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

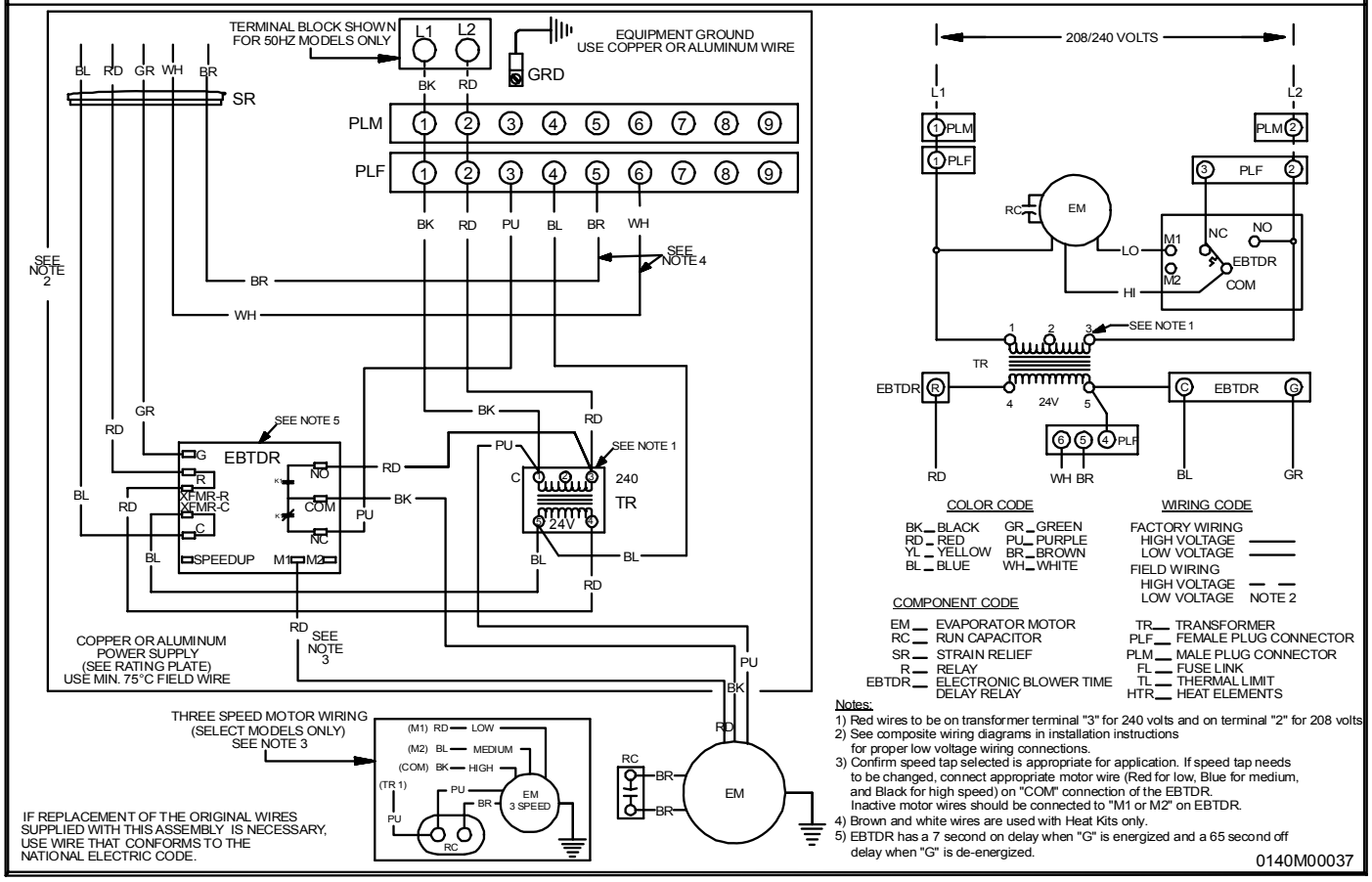
WIRING DIAGRAMS ADPF, ARPF, ARUF

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.



NOTE: WHEN INSTALLING HEATER KIT, ENSURE SPEED TAP DOES NOT EXCEED MINIMUM BLOWER SPEED (MBS) SPECIFIED FOR THE AIRHANDLER/HEAT ER 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.



Notes:
1) Red wires to be on transformer terminal "3" for 240 volts and on terminal "2" for 208 volts
2) See composite wiring diagrams in installation instructions for proper low voltage wiring connections.
3) Confirm speed tap selected is appropriate for application. If speed tap needs to be changed, connect appropriate motor wire (Red for low, Blue for medium, and Black for high speed) on "COM" connection of the EBTDR. Inactive motor wires should be connected to "M1 or M2" on EBTDR.
4) Brown and white wires are used with Heat Kits only.
5) EBTDR has a 7 second on delay when "G" is energized and a 65 second off delay when "G" is de-energized.

0140M00037

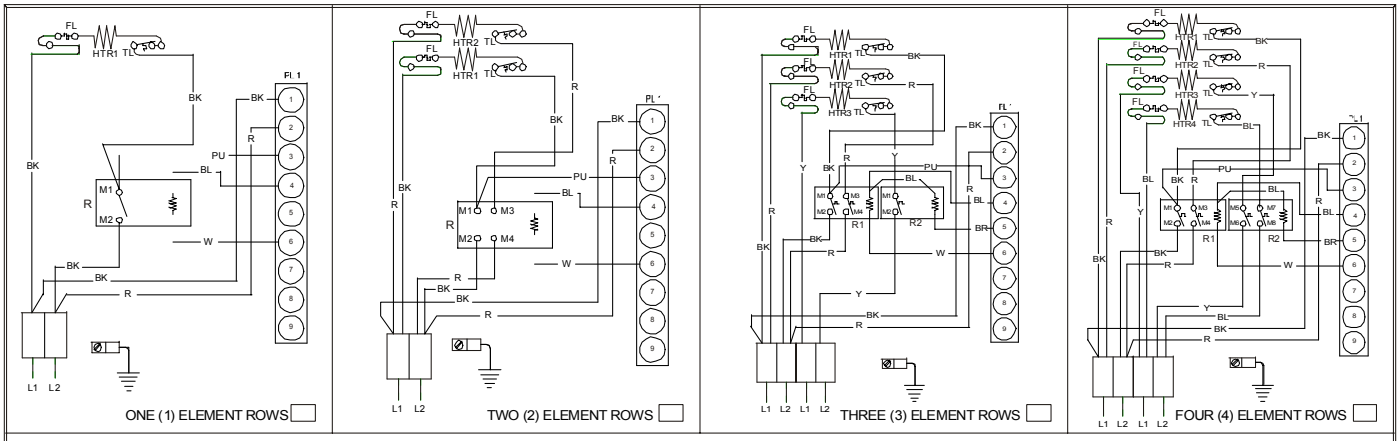
Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

WIRING DIAGRAMS

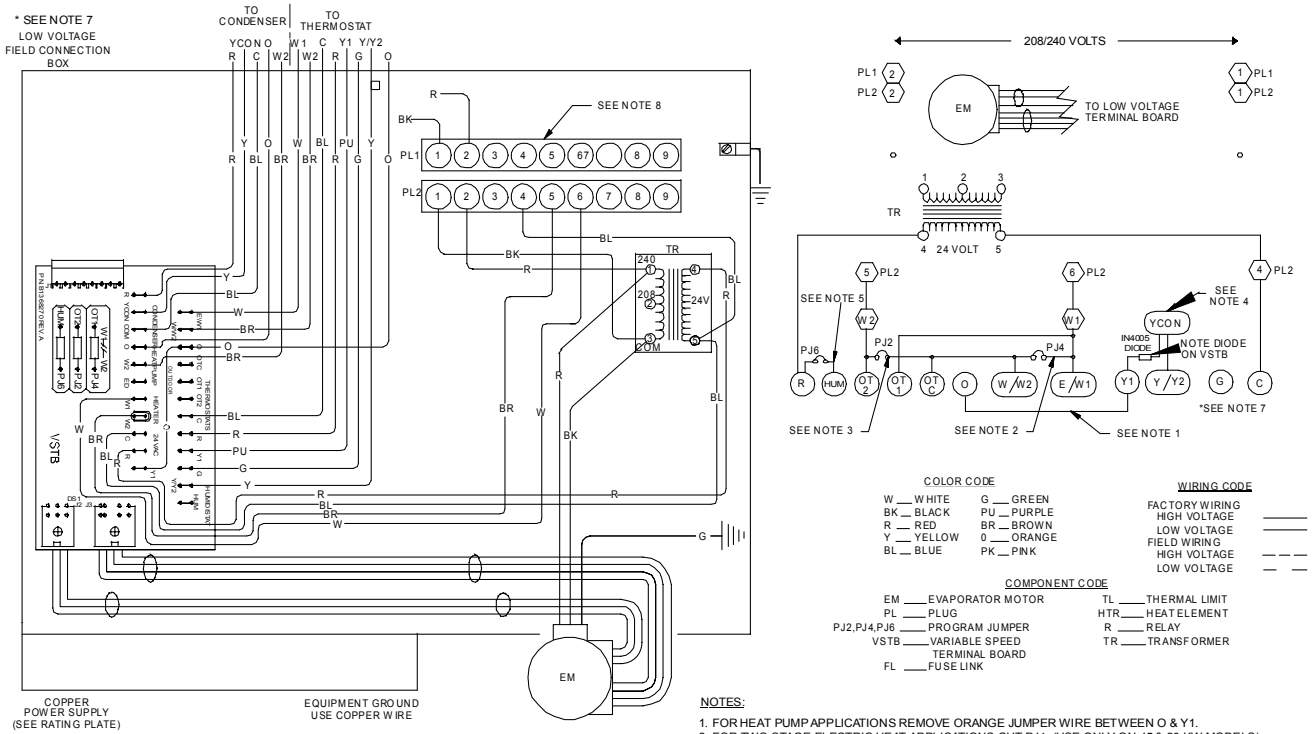
AEPF

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.



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



COLOR CODE

W	WHITE	G	GREEN
BK	BLACK	PU	PURPLE
R	RED	BR	BROWN
Y	YELLOW	O	ORANGE
BL	BLUE	PK	PINK

WIRING CODE

FACTORY WIRING
HIGH VOLTAGE ———
LOW VOLTAGE ———
FIELD WIRING
HIGH VOLTAGE — — —
LOW VOLTAGE — —

COMPONENT CODE

EM	EVAPORATOR MOTOR	TL	THERMAL LIMIT
PL	PLUG	HTR	HEAT ELEMENT
PJ2,PJ4,PJ6	PROGRAM JUMPER	R	RELAY
VSTB	VARIABLE SPEED TERMINAL BOARD	TR	TRANSFORMER
FL	FUSE LINK		

NOTES:

1. FOR HEAT PUMP APPLICATIONS REMOVE ORANGE JUMPER WIRE BETWEEN O & Y1.
2. FOR TWO STAGE ELECTRIC HEAT APPLICATIONS CUT PJ4. (USE ONLY ON 15 & 20 KW MODELS).
3. FOR OUTDOOR THERMOSTAT OPERATION OF SECOND STAGE HEAT, CUT PJ2 & ADD OT18-60 TO OTC & OT2.
4. FOR SINGLE STAGE COOLING APPLICATIONS CONNECT THERMOSTAT TO Y/Y2 ONLY, TAPE OR REMOVE Y1 CONNECTION. CONNECT CONDENSING UNIT TO YCON & C.
5. WHEN HUMIDSTAT IS PROVIDED CUT PJ6. THERMOSTAT OPENS ON HUMIDITY RISE.
6. RED WIRES TO BE ON TRANSFORMER TERMINAL 3 FOR 240 VOLTS AND ON TERMINAL 2 FOR 208 VOLTS.
7. SEE COMPOSITE WIRING DIAGRAMS IN INSTALLATION INSTRUCTIONS FOR PROPER LOW VOLTAGE CONNECTIONS AND DETAILS ON COMPATIBLE THERMOSTATS AND THEIR CONNECTIONS.
8. DISCARD ORIGINAL "PL1" PLUG CONNECTOR WHEN INSTALLING OPTIONAL HEAT KIT.

CONTROLS SHOWN WITH UTILITIES IN "ON" POSITION AND THERMOSTAT IN "OFF" POSITION.
IF REPLACEMENT OF THE ORIGINAL WIRES SUPPLIED WITH THIS ASSEMBLY IS NECESSARY, USE 105°C. WIRE. SIZE TO CONFORM TO THE NATIONA L ELECTRIC CODE.

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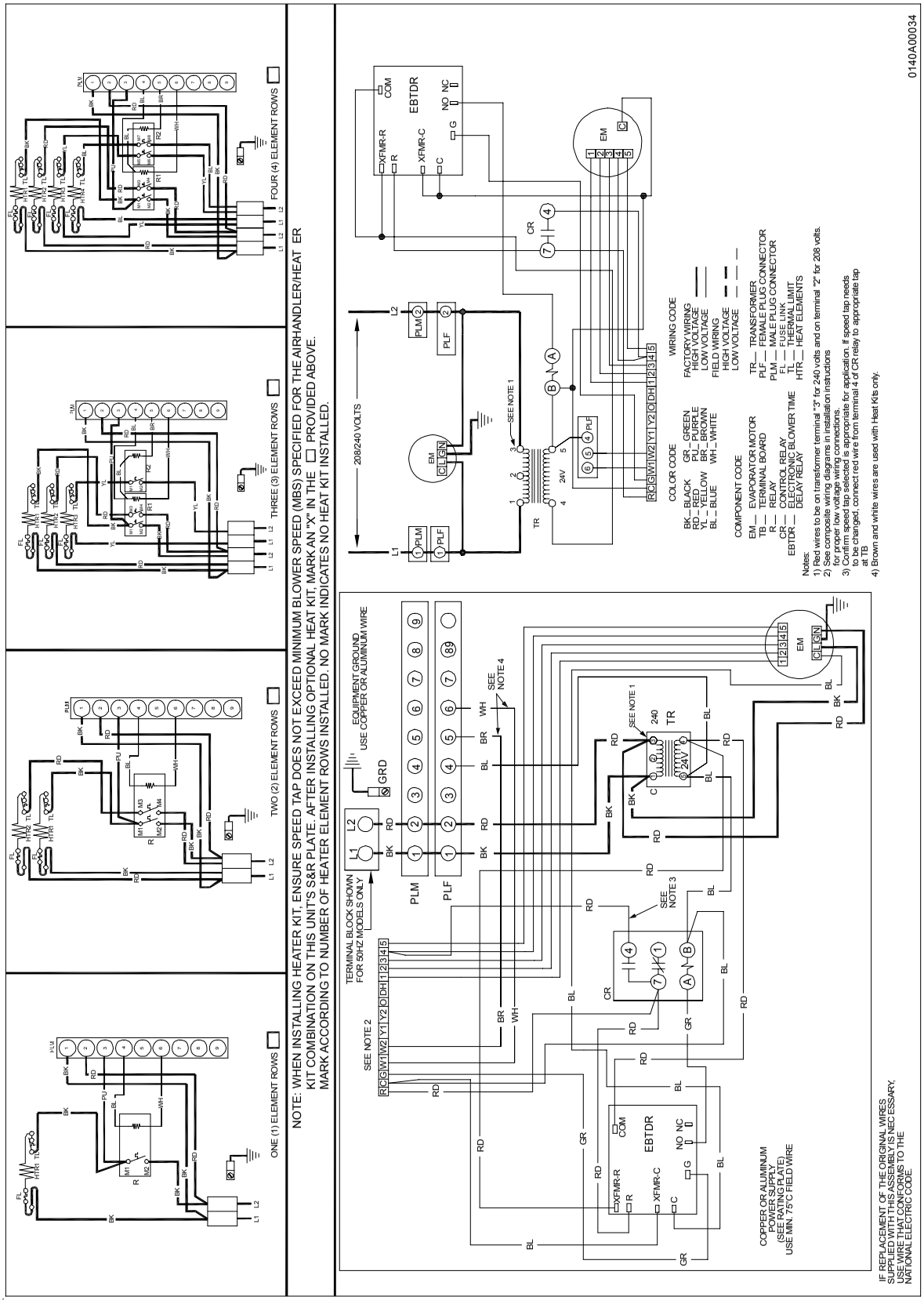
Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

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.



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