Goodman®

Air Conditioning & Heating

ACNF Series

Ceiling-Mount Air Handlers

Product Specifications

1½ to 2½ Tons

The Goodman® brand ACNF Electric Heat Air Handler is designed to be ceiling-mounted. Its quiet operation and high performance makes the ACNF series a good choice for multi-family or lodging applications.

Standard Features

- Suitable for use with refrigerants R-410A and R-22
- Check flowrater for heat pump and cooling-only applications
- Direct-drive, resilient-mount, multi-speed motor
- Sequence-controlled and rust-resistant nickel chromium heating elements of 5, 6, 8 and 10 kW
- High-efficiency evaporator coil
- Quiet operation
- Available with and without heat
- AHRI Certified
- ETL Certified

Cabinet Features

- Primary/secondary drain connection in a high-temperature plastic drain pan
- Suitable for free-return installation (non-ducted return air)
- Galvanized-steel construction
- Factory-installed pull-type disconnect
- Easy service access

10 YEAR PARTS LIMITED WARRANTY* GoodCare ETL ARI 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	C	N	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 Compatability
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 & Nominal Factory-Installed Electric Heat kW
1805 1½ Tons Cooling/ 5 kW Electric Heat
2405 2 Tons Cooling/ 5 kW Electric Heat

SPECIFICATIONS

	ACNF 180016	ACNF 180516	ACNF 180616	ACNF 180816	ACNF 240016	ACNF 240516	ACNF 240616
Blower							
Diameter	5.75	5.75	5.75	5.75	6.31	6.31	6.31
Width	6.75	6.75	6.75	6.75	8.25	8.25	8.25
Coil Drain Connection FPT	3/4”	3/4”	3/4”	3/4”	3/4”	3/4”	3/4”
Service Valve							
Liquid	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”
Electrical Data							
Min Circuit Ampacity @ 230V	0.9	27	33.5	40.5	1.68	27.8	34.3
Min Circuit Ampacity @ 208V	0.9	24.5	30.5	36.8	1.68	25.3	31.3
Max. Overcurrent Device @ 230V	15	30	40	50	15	30	40
Max. Overcurrent Device @ 208V	15	30	40	40	15	30	40
Minimum VAC	197	197	197	197	197	197	197
Maximum VAC	253	253	253	253	253	253	253
Electric Heat							
kW @ 230 Volts	0	4.8	6.0	7.3	0	4.8	6.0
BTU/h @ 230 Volts	0	16,392	20,490	24,930	0	16,392	20,490
Blower Motor							
FLA	0.72	0.72	0.72	0.72	1.34	1.34	1.34
HP	1/8	1/8	1/8	1/8	1/4	1/4	1/4
Ship Weight (lbs)	59	59	59	59	69	69	69

Specifications (cont.)

	ACNF 240816	ACNF 241016	ACNF 300016	ACNF 300516	ACNF 300616	ACNF 300816	ACNF 301016
Blower							
Diameter	6.31	6.31	6.75	6.75	6.75	6.75	6.75
Width	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”
Service Valve							
Liquid	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”
Electrical Data							
Min Circuit Ampacity @ 230V	41.3	54.9	1.68	27.8	34.3	41.3	54.9
Min Circuit Ampacity @ 208V	37.6	49.8	1.68	25.3	31.3	37.6	49.8
Max. Overcurrent Device @ 230V	50	60	15	30	40	50	60
Max. Overcurrent Device @ 208V	40	50	15	30	40	40	50
Minimum VAC	197	197	197	197	197	197	197
Maximum VAC	253	253	253	253	253	253	253
Electric Heat							
kW @ 230 Volts	7.3	9.8	0	4.8	6.0	7.3	9.8
BTU/h @ 230 Volts	24,930	33,467	0	16,392	20,490	24,930	33,467
Blower Motor							
FLA	1.34	1.34	1.34	1.34	1.34	1.34	1.34
HP	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Ship Weight (lbs)	69	69	79	79	79	79	79

Note:
When the room thermostat calls for second stage heat, the first stage (heat pump) operation must be locked out. When matching the “AC” unit that has electric heat with a heat pump, order “HEAT PUMP SHUT OFF KIT HPSK-01.” The ACXX-00 units do not require this kit.

Blower Performance

Model	Speed	CFM delivered against External Static Pressure				
		0.1”	0.2”	0.3”	0.4”	0.5”
ACNF180016	High	780	710	625	520	440
	Low	675	585	510	460	400
ACNF180516	High	780	710	625	520	440
	Low	675	585	510	460	400
ACNF180616	High	780	710	625	520	440
	Low	675	585	510	460	400
ACNF180816	High	780	710	625	520	440
	Low	675	585	510	460	400
ACNF240016	High	935	880	810	735	675
	Low	720	680	630	565	490
ACNF240516	High	935	880	810	735	675
	Low	720	680	630	565	490
ACNF240616	High	935	880	810	735	675
	Low	720	680	630	565	490

Model	Speed	CFM delivered against External Static Pressure				
		0.1”	0.2”	0.3”	0.4”	0.5”
ACNF240816	High	935	880	810	735	675
	Low	720	680	630	565	490
ACNF241016	High	935	880	810	735	675
	Low	720	680	630	565	490
ACNF300016	High	1,075	1,015	945	865	770
	Low	830	785	720	665	605
ACNF300516	High	1,075	1,015	945	865	770
	Low	830	785	720	665	605
ACNF300616	High	1,075	1,015	945	865	770
	Low	830	785	720	665	605
ACNF300816	High	1,075	1,015	945	865	770
	Low	830	785	720	665	605
ACNF301016	High	1,075	1,015	945	865	770
	Low	830	785	720	665	605

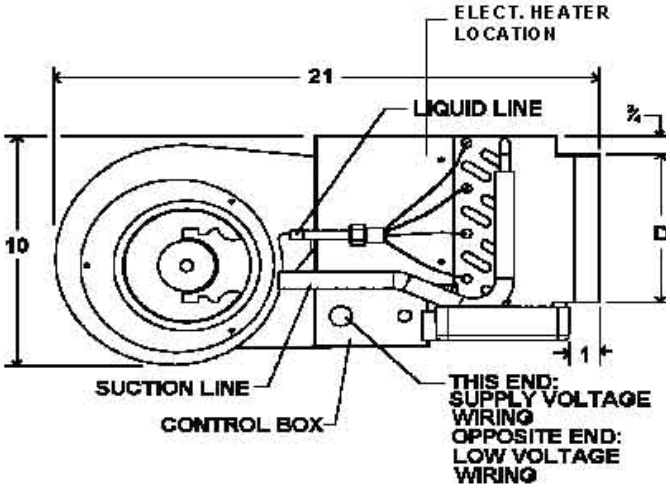
Note: Assumes dry coil with filter in place; 208-volt operation x .96

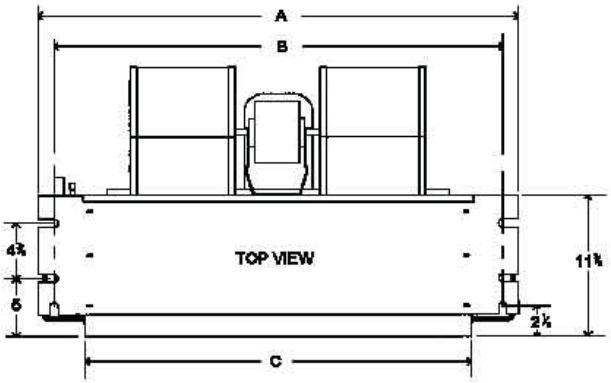
Heating Capacity/kW Correction Factor

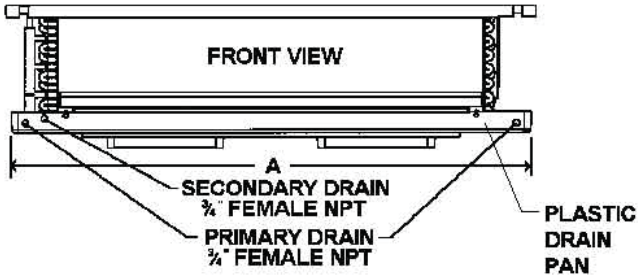
Supply Voltage	240	230	220	210	208
Correction Factor	1.08	1.00	.92	.84	.82

(Multiply the 230-volt capacity by factors)

DIMENSIONS

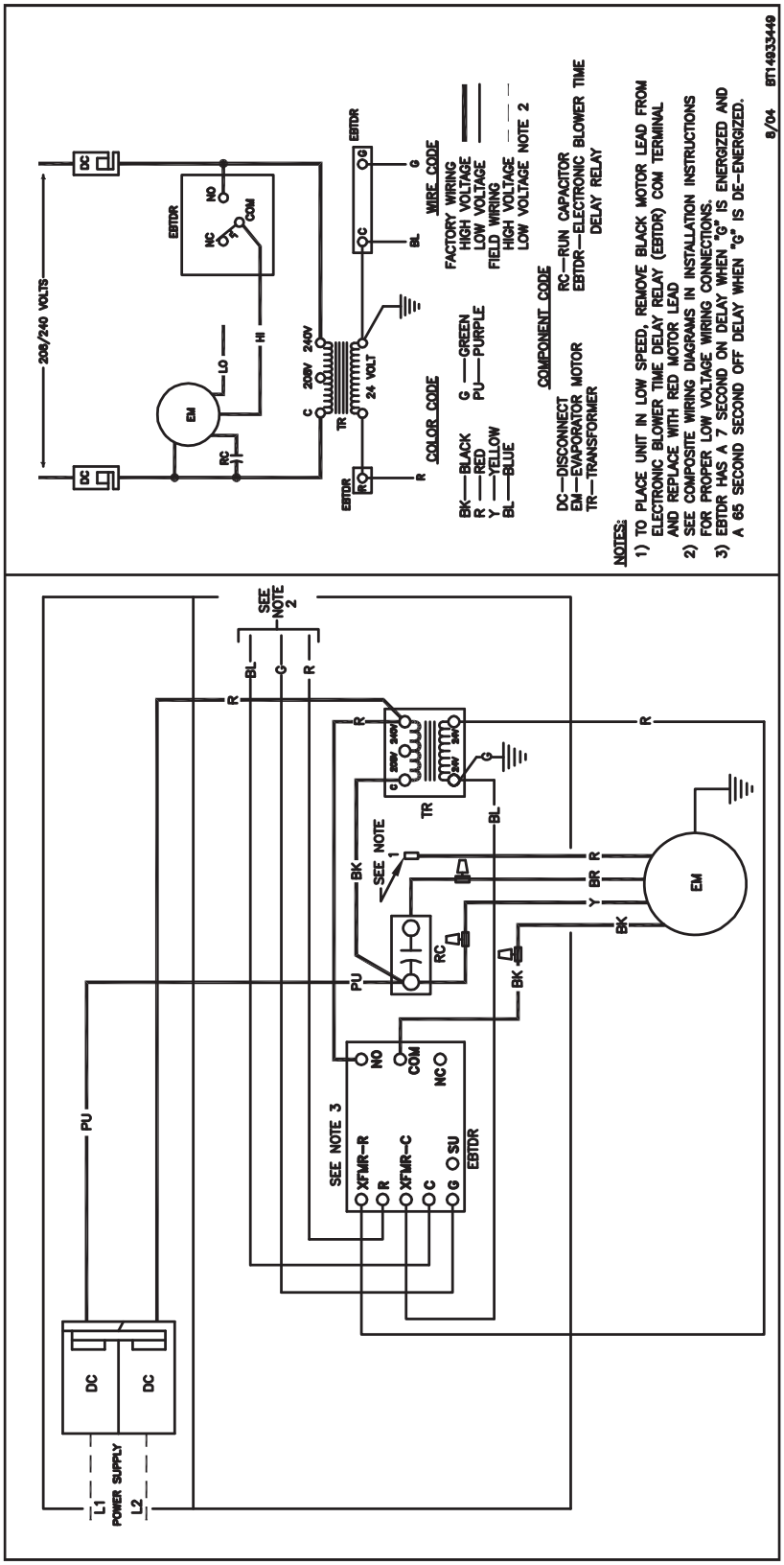






Model	A	B	C	D
ACNF18	37¼”	34 11/16”	30”	6½”
ACNF24	43¼”	40 11/16”	36”	6½”
ACNF30	49¼”	46 11/16”	42”	6½”

ACNF WIRING DIAGRAM



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

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

Model	Description
HPSK-01	Heat Pump Shut-off Relay Kit
Louvered Ceiling Access Panels	
CAP-1/ 1L	Fits ACNF18
CAP-2/ 2L	Fits ACNF24
CAP-3/ 3L	Fits ACNF30

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