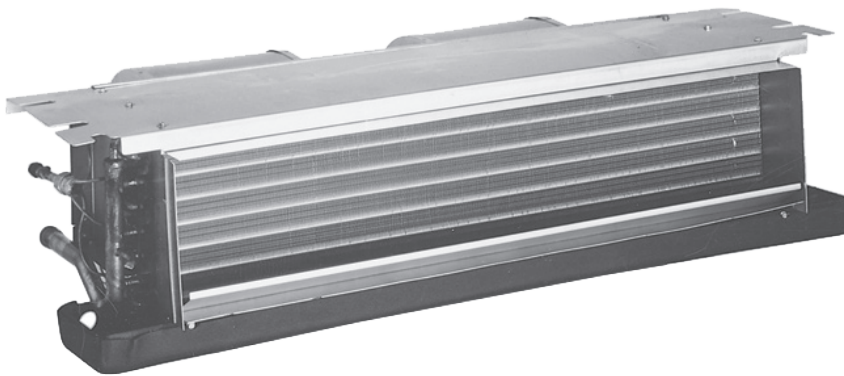


## CEILING-MOUNT AIR HANDLERS 1½ TO 2½ TONS

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### Features

- Check flowrate for heat pump and cooling-only applications
- All-Aluminum tube/aluminum fin coil
- Direct-drive, resilient-mount, multi-speed motor
- Available without heat or with sequence-controlled and rust-resistant nickel chromium heating elements of 5, 6, 8 or 10 kW
- High-efficiency evaporator coil
- Quiet operation
- Models with EEM motor: ACNF25 & ACNF31
- Models with PSC motors: ACNF18, ACNF24, & ACNF30
- AHRI Certified; ETL Listed
- 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



\* Complete warranty details available from your local dealer or at [www.goodmanmfg.com](http://www.goodmanmfg.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.

	A	C	N	F	24	05	1	6	AA
	1	2	3	4	5,6	7,8	9	10	11,12
<b>Brand</b>									<b>Engineering *</b>
A Single-piece Air Handler									Major/ Minor Revisions * Not used for inventory management
<b>Unit Application</b>									<b>Refrigerant Charge</b>
C Ceiling Mount PSC Motor									6 = R-410 or R-22A
D Downflow PSC Motor									<b>Electrical</b>
E Multi-Position Variable-Speed Motor									1 208/240 V, 1 Phase, 60 Hz
R Multi-Position PSC Motor									<b>Heater Kits</b>
S Multi-Position EEM Motor									00 No Heat      06 -- 6 kW
W Wall Mount PSC Motor									03 - 3 kW      08 - 8 kW
									05 - 5 kW      10 - 10 kW
<b>Cabinet Finish</b>									<b>Nominal Capacity Range</b>
U Unpainted      N      Uncased									18 - 1½ Tons (PSC motor)      30 2½ Tons (PSC motor)
P Painted									24 - 2 Tons (PSC motor)      31 2½ Tons (EEM motor)
<b>Expansion Device</b>									25 - 2 Tons (EEM motor)
F Flowrater									
T Expansion Valve									

	ACNF18 0016	ACNF18 0516	ACNF18 0616	ACNF18 0816	ACNF24 0016	ACNF24 0516	ACNF24 0616	ACNF24 0816
<b>PERFORMANCE RATINGS</b>								
Cooling (BTU/h)	18,000	18,000	18,000	18,000	24,000	24,000	24,000	24,000
Piston Size <sup>2</sup>	0.051	0.051	0.051	0.051	0.057	0.057	0.057	0.057
<b>BLOWER</b>								
Diameter	5.75	5.75	5.75	5.75	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
Coil Drain Connect FPT	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
<b>BLOWER MOTOR</b>								
FLA	0.66	0.66	0.66	0.66	1.29	1.29	1.29	1.29
HP	1/8	1/8	1/8	1/8	1/4	1/4	1/4	1/4
<b>REFRIGERANT LINE CONNECTION SIZE</b>								
Liquid	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"
<b>ELECTRICAL DATA</b>								
Voltage	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230
Min Circuit Ampacity @ 230V	0.8	27	33	40.5	1.6	28	34.2	41
Min Circuit Ampacity @ 208V	0.8	24.5	30.4	37	1.6	25.3	31	37.6
Max. Overcurrent Device @ 230V	15	30	35	45	15	30	35	45
Max. Overcurrent Device @ 208V	15	25	35	40	15	30	35	40
Minimum Voltage VAC	197	197	197	197	197	197	197	197
Maximum Voltage VAC	253	253	253	253	253	253	253	253
<b>ELECTRIC HEAT</b>								
kW @ 230 Volts	0.0	4.8	6.0	7.3	0.0	4.8	6.0	7.3
BTU/h @ 230 Volts	0	16,400	20,500	24,900	0	16,400	20,500	24,900
<b>SHIP WEIGHT (LBS)</b>								
	59	59	59	59	69	69	69	69

<sup>1</sup> CFM @.3 static

<sup>2</sup>Shipped with Coil

**NOTES**

- For a properly matched system and piston sizing information, refer to Amana piston kit chart of the corresponding Amana® outdoor unit.
- 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.

PRODUCT SPECIFICATIONS

	ACNF24 1016	ACNF25 0016	ACNF25 0516	ACNF25 0616	ACNF25 0816	ACNF25 1016	ACNF30 0016	ACNF30 0516
<b>PERFORMANCE RATINGS</b>								
Cooling (BTU/h)	24,000	24,000	24,000	24,000	24,000	24,000	30,000	30,000
Piston Size <sup>2</sup>	0.057	0.055	0.055	0.055	0.055	0.055	0.061	0.061
<b>BLOWER</b>								
Diameter	6.31	6.31	6.31	6.31	6.31	6.31	6.75	6.75
Width	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.25
Coil Drain Connect FPT	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
<b>BLOWER MOTOR</b>								
FLA	1.29	2	2	2	2	2	1.29	1.29
HP	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
<b>REFRIGERANT LINE CONNECTION SIZE</b>								
Liquid	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"
<b>ELECTRICAL DATA</b>								
Voltage	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230
Min Circuit Ampacity @ 230V	55	2.5	28.6	35.1	42	56	1.6	28
Min Circuit Ampacity @ 208V	49.8	2.5	26	32	38.4	50.7	1.6	25.3
Max. Overcurrent Device @ 230V	60	15	30	40	45	60	15	30
Max. Overcurrent Device @ 208V	50	15	30	35	40	60	15	30
Minimum Voltage VAC	197	197	197	197	197	197	197	197
Maximum Voltage VAC	253	253	253	253	253	253	253	253
<b>ELECTRIC HEAT</b>								
kW @ 230 Volts	9.8	0.0	4.8	6.0	7.3	9.8	0.0	4.8
BTU/h @ 230 Volts	33,500	0	16,400	20,500	24,900	33,500	0	16,400
<b>SHIP WEIGHT (LBS)</b>								
	69	69	69	69	69	69	79	79

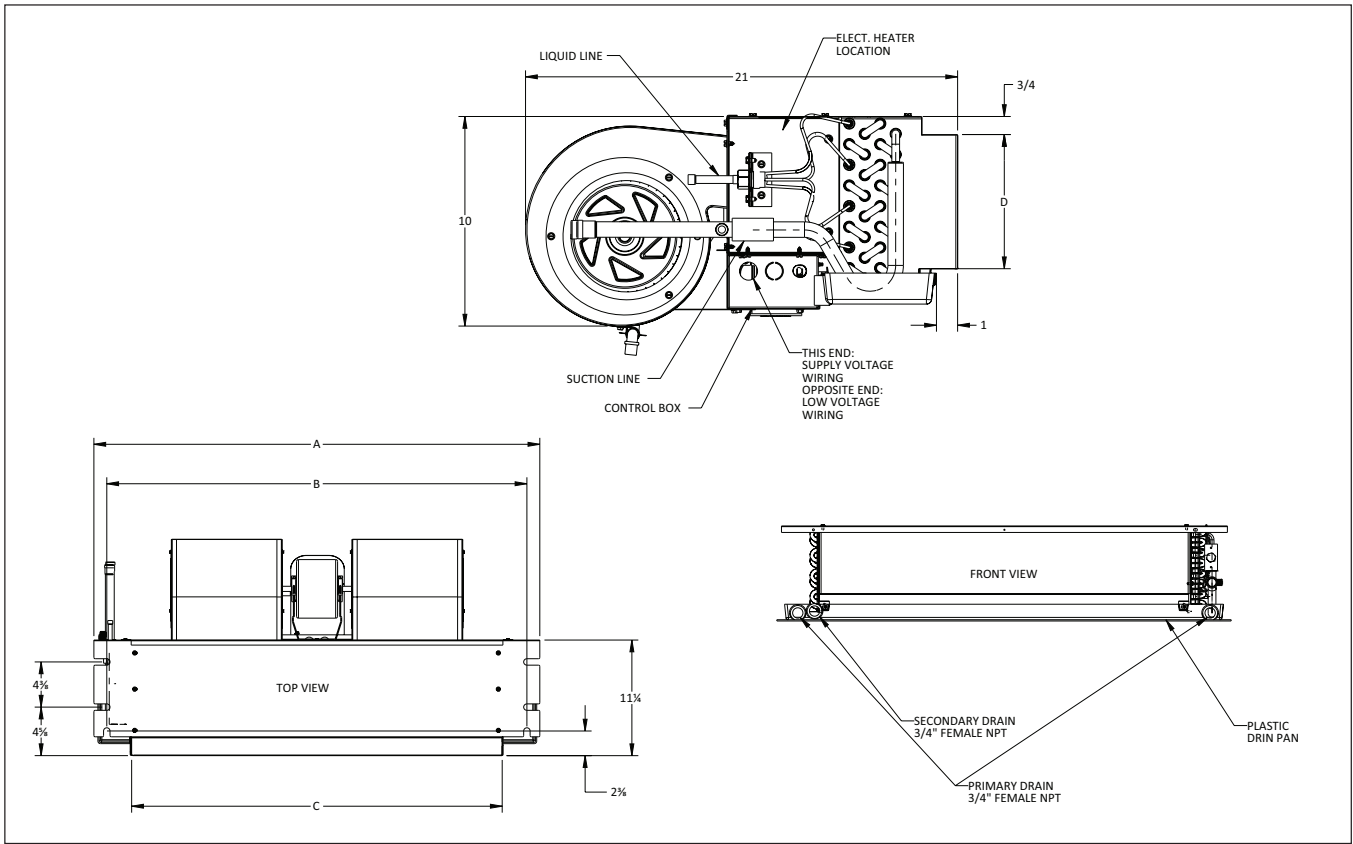
<sup>1</sup> CFM @ .2 static

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.

	ACNF30 0616	ACNF30 0816	ACNF30 1016	ACNF31 0016	ACNF31 0516	ACNF31 0616	ACNF31 0816	ACNF31 1016
<b>PERFORMANCE RATINGS</b>								
Cooling (BTU/h)	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
Piston Size <sup>2</sup>	0.061	0.061	0.061	0.059	0.059	0.059	0.059	0.059
<b>BLOWER</b>								
Diameter	6.75	6.75	6.75	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	8.25
Coil Drain Connect FPT	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
<b>BLOWER MOTOR</b>								
FLA	1.29	1.29	1.29	2	2	2	2	2
HP	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
<b>REFRIGERANT LINE CONNECTION SIZE</b>								
Liquid	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"
<b>ELECTRICAL DATA</b>								
Voltage	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230
Min Circuit Ampacity @ 230V	34.2	41	55	2.5	28.6	35.1	42	56
Min Circuit Ampacity @ 208V	31	37.6	49.8	2.5	26	32	38.4	50.7
Max. Overcurrent Device @ 230V	35	45	60	15	30	40	45	60
Max. Overcurrent Device @ 208V	35	40	50	15	30	35	40	60
Minimum Voltage VAC	197	197	197	197	197	197	197	197
Maximum Voltage VAC	253	253	253	253	253	253	253	253
<b>ELECTRIC HEAT</b>								
kW @ 230 Volts	6.0	7.3	9.8	0.0	4.8	6.0	7.3	9.8
BTU/h @ 230 Volts	20,500	24,900	33,500	0	16,400	20,500	24,900	33,500
<b>SHIP WEIGHT (LBS)</b>								
	79	79	79	79	79	79	79	79

<sup>1</sup> CFM @ .2 static

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.



	ACNF18	ACNF24	ACNF25	ACNF30	ACNF31
A	37 1/4"	43 1/4"	43 1/4"	49 1/4"	49 1/4"
B	34 3/4"	40 3/4"	40 3/4"	46 3/4"	46 3/4"
C	30"	36"	36"	42"	42"
D	6 1/2"	6 1/2"	6 1/2"	6 1/2"	6 1/2"

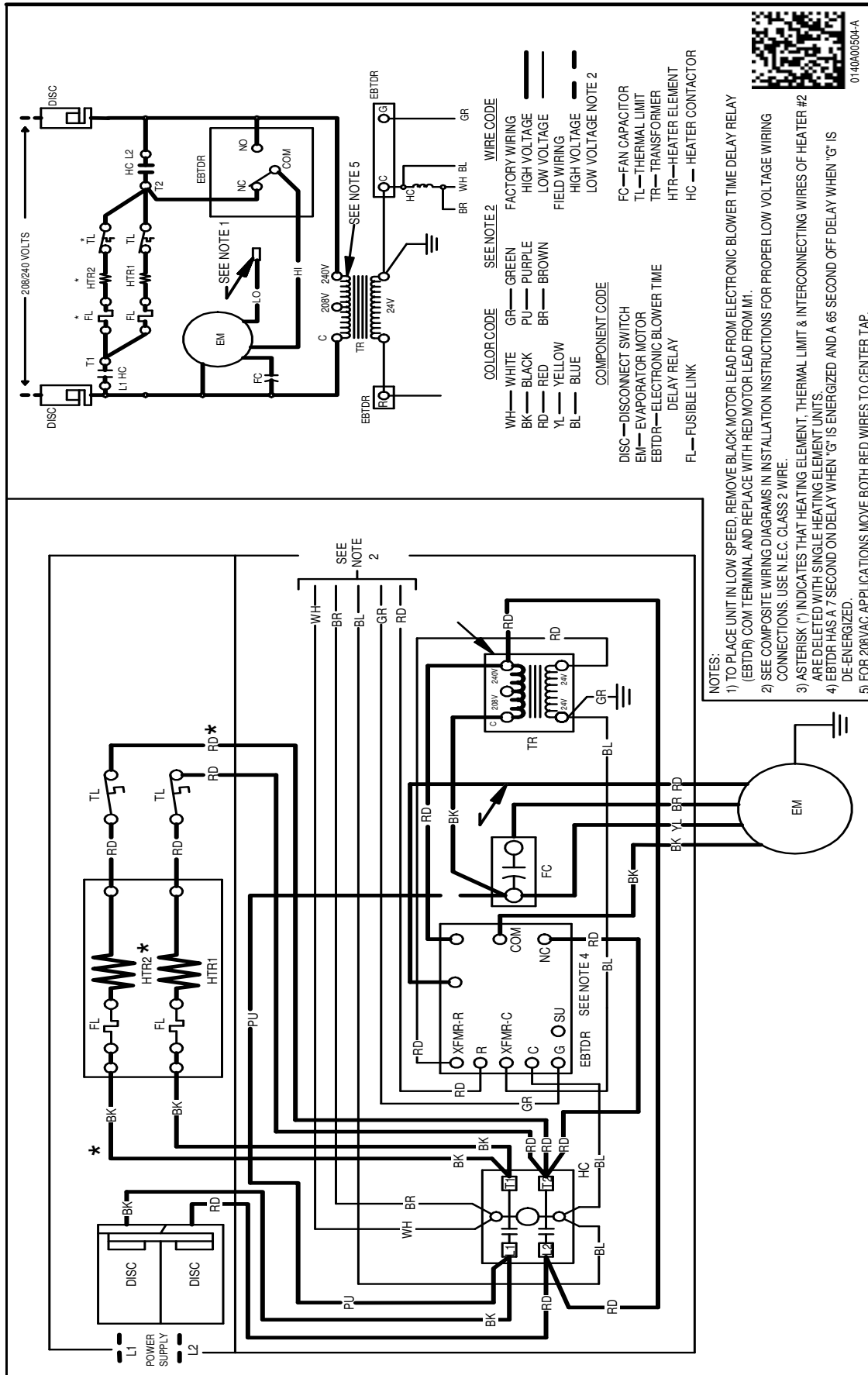
MODEL	MOTOR SPEED	CFM DELIVERED AGAINST EXTERNAL STATIC PRESSURE				
		0.1"	0.2"	0.3"	0.4"	0.5"
ACNF18****	High	710	660	590	515	435
	Low	650	595	540	480	390
ACNF24****	High	955	880	820	740	675
	Low	885	840	775	725	620
ACNF25****	T5	969	912	854	798	778
	T4	969	912	854	798	778
	T3	802	776	690	641	584
	T2	680	610	550	484	431
	T1	680	610	550	484	431
ACNF30****	High	1,075	1,005	920	820	730
	Low	945	890	835	760	650
ACNF31****	T5	999	928	868	824	764
	T4	999	928	868	824	764
	T3	871	798	750	687	614
	T2	763	695	625	548	478
	T1	763	695	625	548	478

Note: Airflow data for 240 Vac with dry coil and no filter in place.

**HEATING CAPACITY/KW CORRECTION FACTOR**

<b>SUPPLY VOLTAGE</b>	240	230	220	210	208
<b>CORRECTION FACTOR</b>	1.08	1.00	0.92	0.84	0.82

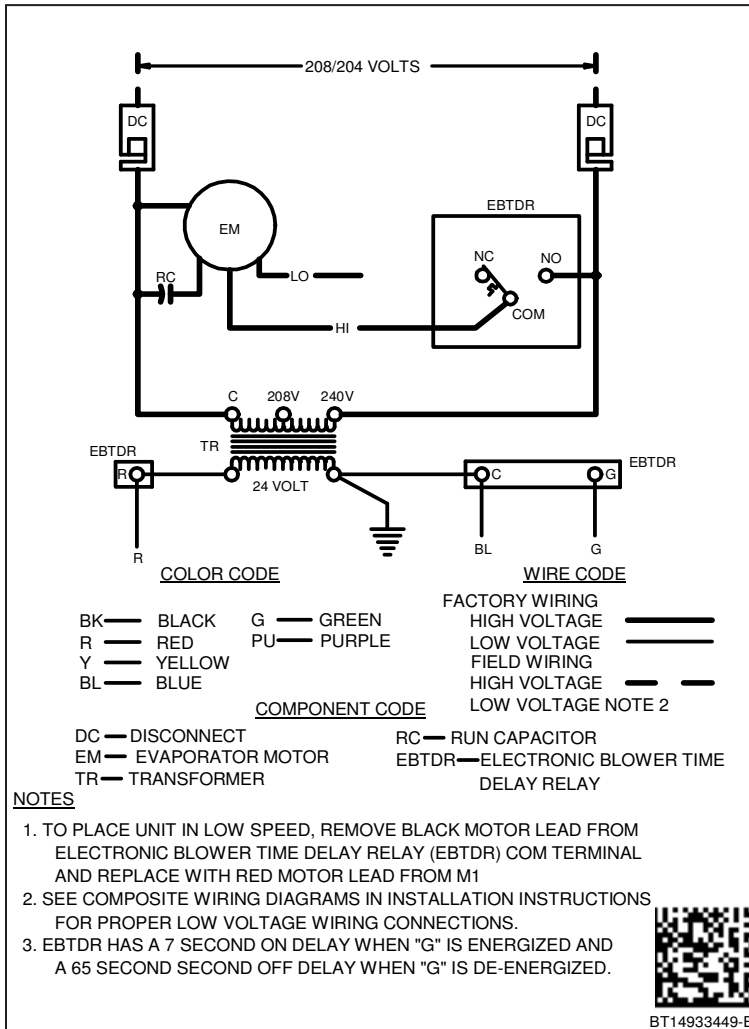
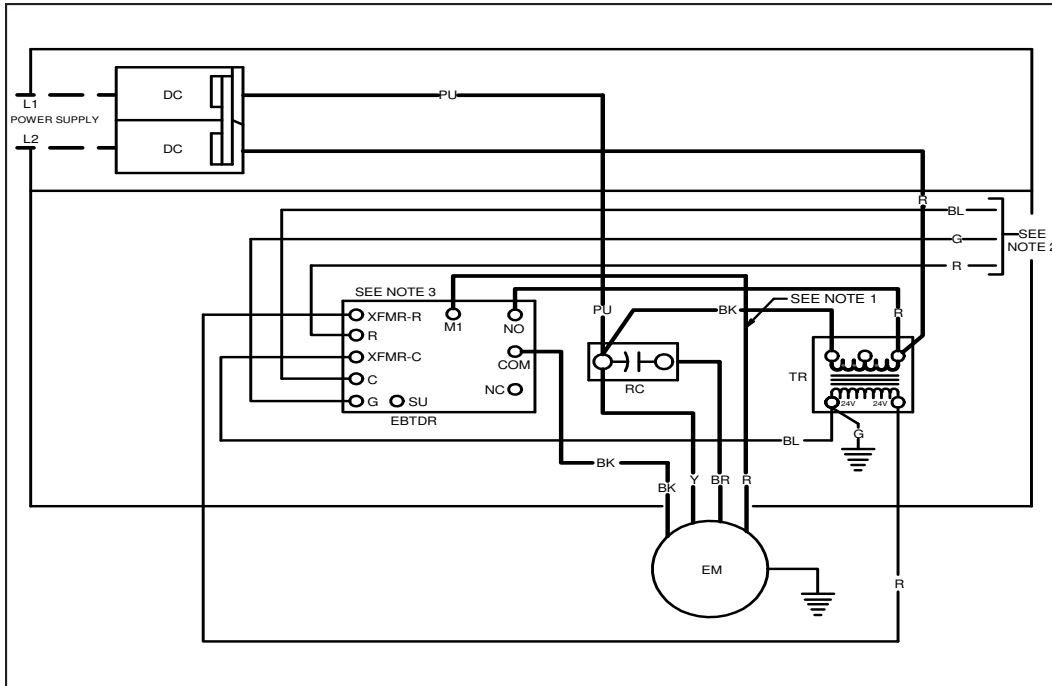
(Multiply the 230-volt capacity by factors)



**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.

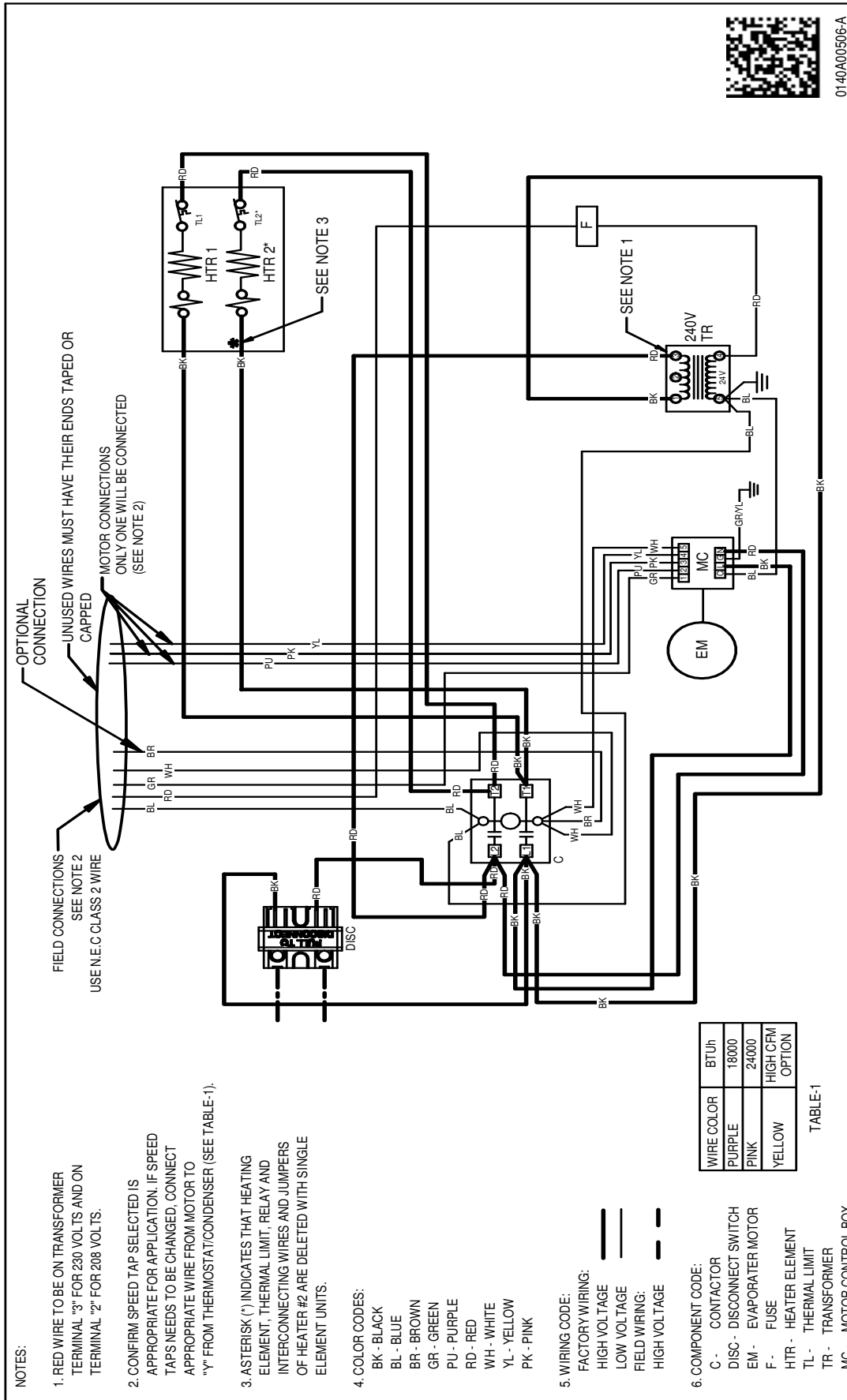




**WARNING**

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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.



NOTES:

1. RED WIRE TO BE ON TRANSFORMER TERMINAL "3" FOR 230 VOLTS AND ON TERMINAL "2" FOR 208 VOLTS.
2. CONFIRM SPEED TAP SELECTED IS APPROPRIATE FOR APPLICATION. IF SPEED TAPS NEEDS TO BE CHANGED, CONNECT APPROPRIATE WIRE FROM MOTOR TO "Y" FROM THERMOSTAT/CONDENSER (SEE TABLE-1).
3. ASTERISK (\*) INDICATES THAT HEATING ELEMENT, THERMAL LIMIT, RELAY AND INTERCONNECTING WIRES AND JUMPERS OF HEATER #2 ARE DELETED WITH SINGLE ELEMENT UNITS.

4. COLOR CODES:

- BK - BLACK
- BL - BLUE
- BR - BROWN
- GR - GREEN
- PU - PURPLE
- RD - RED
- WH - WHITE
- YL - YELLOW
- PK - PINK

5. WIRING CODE:

- FACTORY WIRING: ———
- HIGH VOLTAGE: ———
- LOW VOLTAGE: ———
- FIELD WIRING: - - -
- HIGH VOLTAGE: - - -

6. COMPONENT CODE:

- C - CONTACTOR
- DISC - DISCONNECT SWITCH
- EM - EVAPORATER MOTOR
- F - FUSE
- HTR - HEATER ELEMENT
- TL - THERMAL LIMIT
- TR - TRANSFORMER
- MC - MOTOR CONTROL BOX

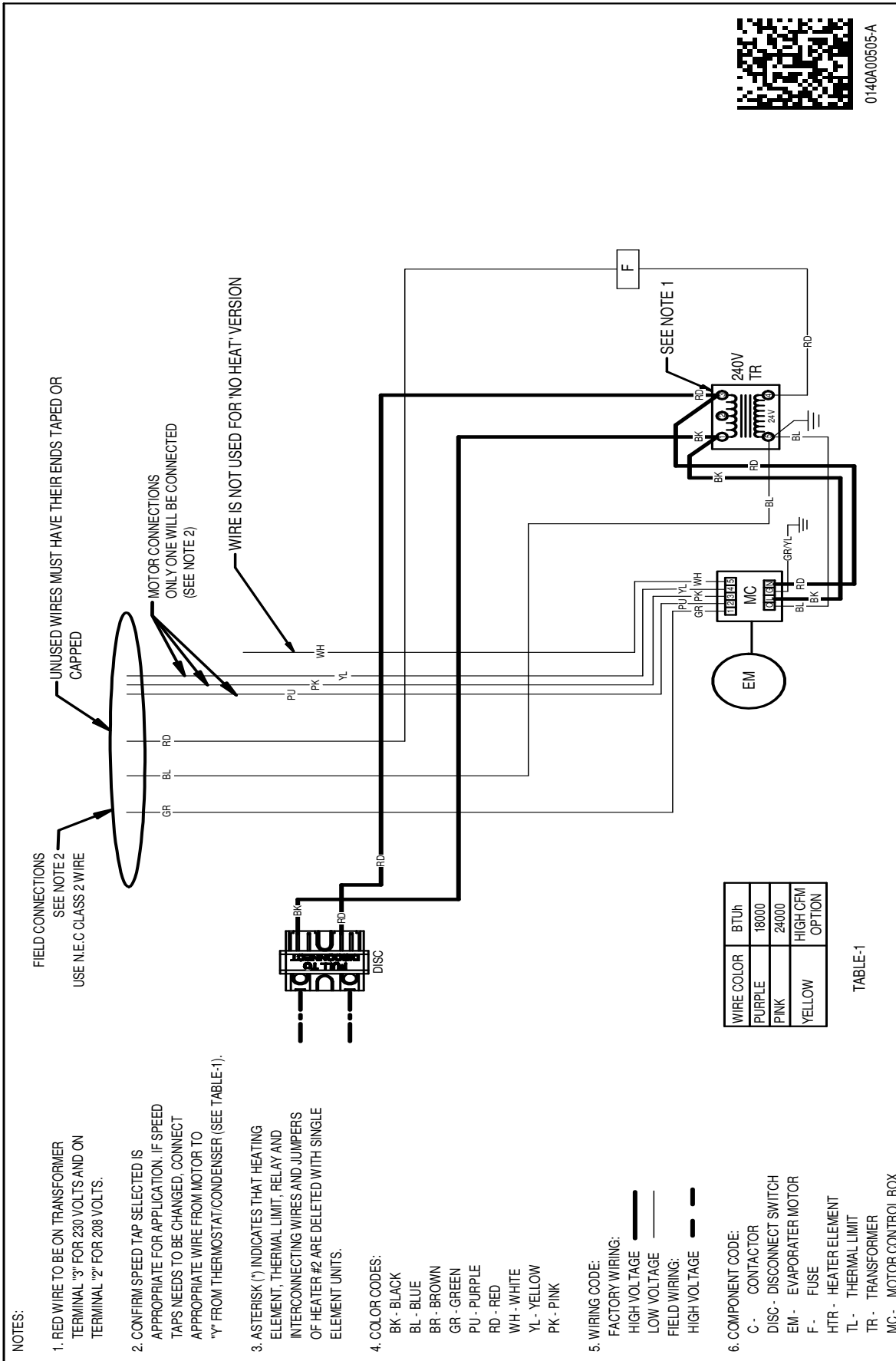
WIRE COLOR	BTUh
PURPLE	18000
PINK	24000
YELLOW	HIGH CFM OPTION

TABLE-1

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

**WARNING**

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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.

MODEL	DESCRIPTION
HPSK-01	Heat Pump Shut-off Relay Kit

PART NUMBER	CEILING ACCESS PANEL DESCRIPTION	USE WITH
CAP-1-AM	Ceiling Access Panel - Small - No Louvers	ACNF18
CAP-1L-AM	Ceiling Access Panel - Small - Louvers	ACNF18
CAP-2-AM	Ceiling Access Panel - Medium - No Louvers	ACNF24/ 25
CAP-2L-AM	Ceiling Access Panel - Medium - Louvers	ACNF24/ 25
CAP-3-AM	Ceiling Access Panel - Large - No Louvers	ACNF30/ 31
CAP-3L-AM	Ceiling Access Panel - Large - Louvers	ACNF30/ 31