

# AWSF SERIES

## WALL-MOUNT AIR HANDLER 1½ TO 3 TONS



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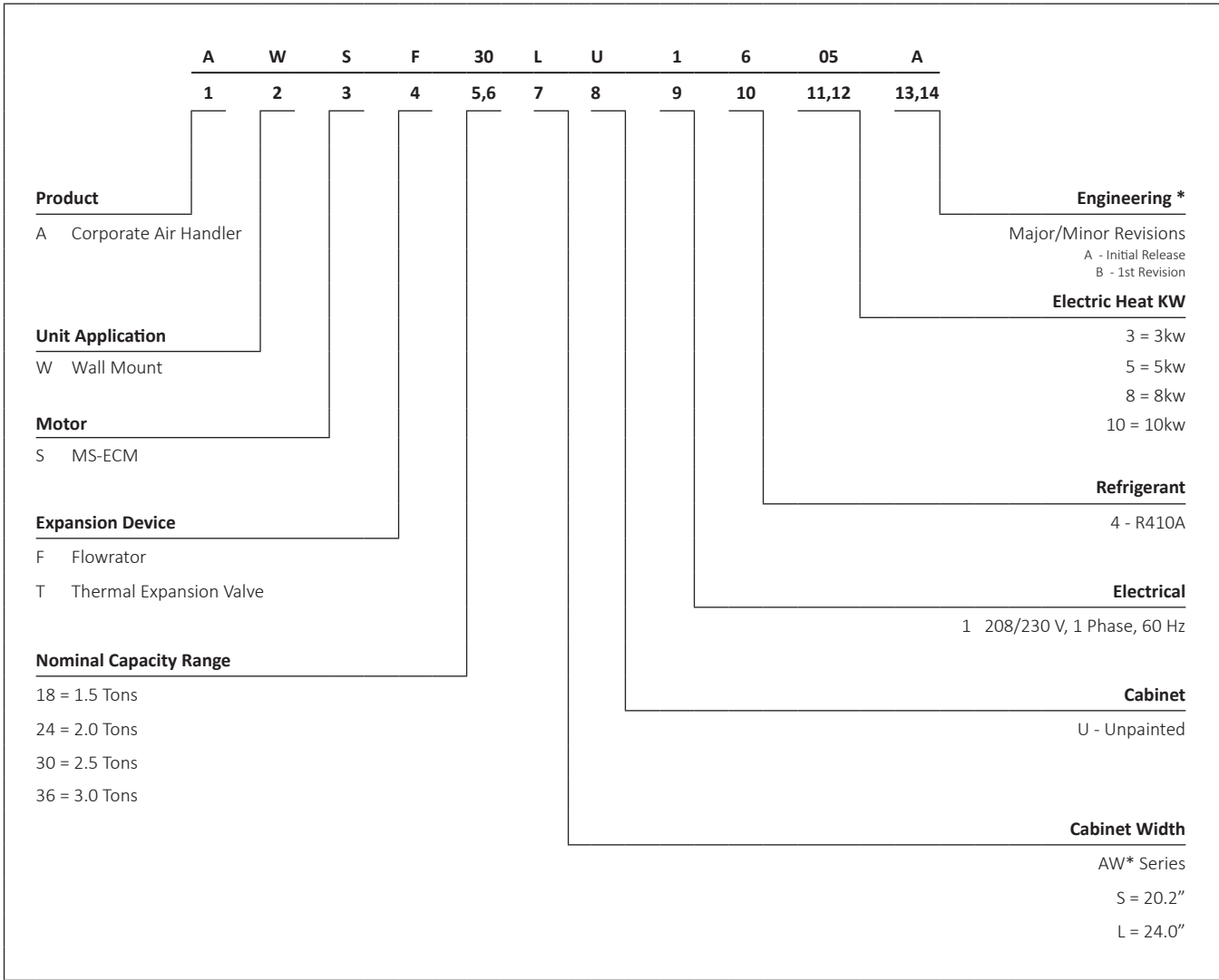
### Product Features

- AWSF Models: Equipped with a Check Flowrator
- Direct-drive, multi-speed motors allows air volume variation for heating/cooling
- Sequence-controlled, rust-resistant nickel chromium heating elements of 5, 8, and 10 kW
- Aluminum tubing coils on all models
- Cabinet air leakage less than 2.0% at 1.0 inch H<sub>2</sub>O when tested in accordance with ASHRAE standard 193
- Cabinet air leakage less than 1.4% at 0.5 inch H<sub>2</sub>O when tested in accordance with ASHRAE standard 193
- Factory-installed pull-type disconnect
- Thermoplastic drain pan with bottom primary and secondary drain connections
- Built-in filter rack (filter included)
- Large chassis (2½- and 3-ton units) – front return only
- Small chassis (1½- and 2-ton units) – front or bottom return
- Wall-hanging bracket provided
- AHRI Certified; ETL Listed



\* 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 Quebec. The duration of warranty coverages in Texas differs in some cases.

**NOMENCLATURE**



**ACCESSORIES**

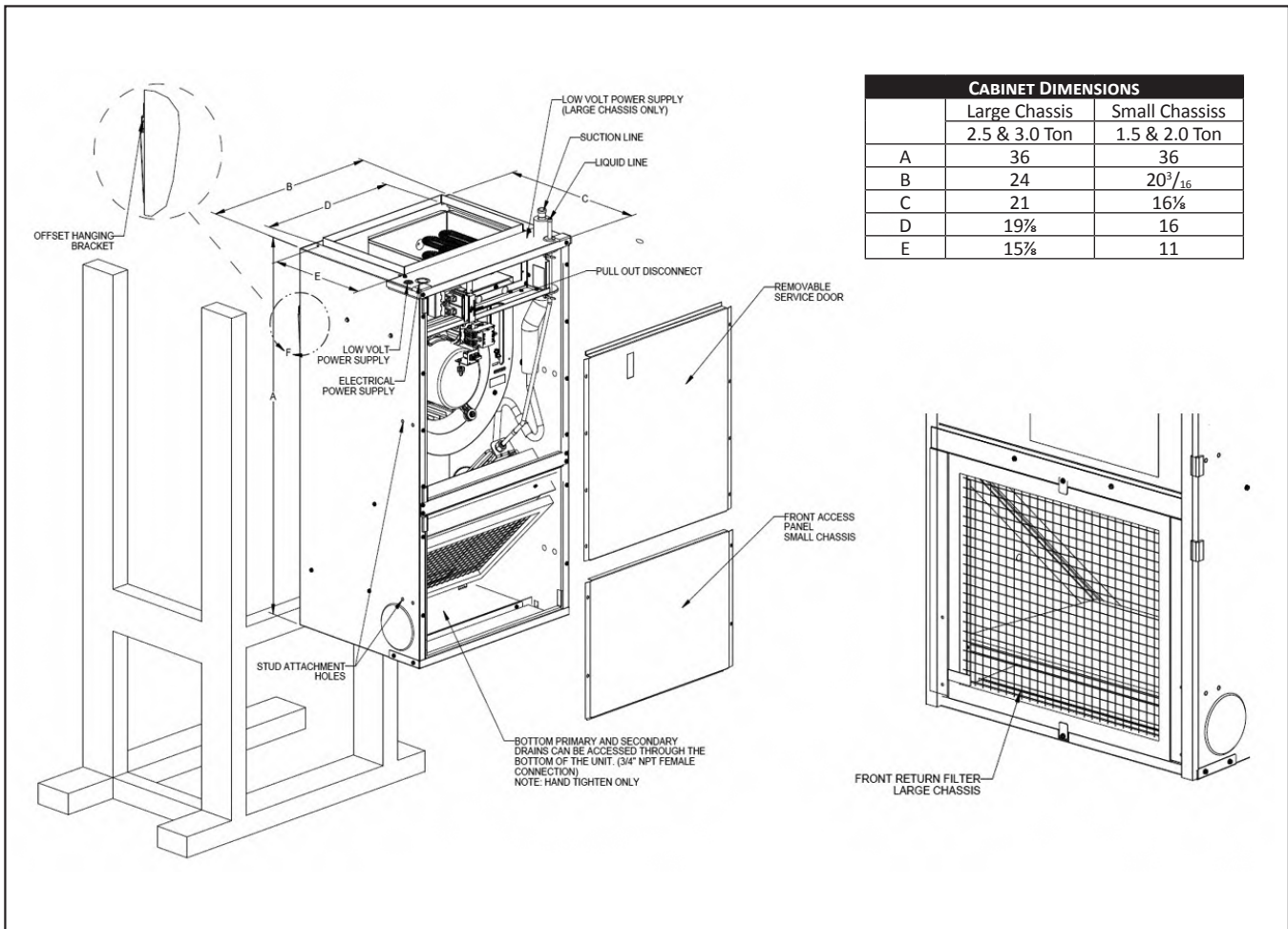
MODEL	ITEM #	DESCRIPTION
AWSF18-AWSF24	Wad-1	Wall access door
AWSF30-AWSF36	Wad-2	Wall access door

	AWSF18 SU1605 AA	AWSF18 SU1608 AA	AWSF24 SU1605 AA	AWSF24 SU1608 AA	AWSF24 SU1610 AA	AWSF30 LU1605 AA
<b>NOMINAL RATINGS</b>						
Cooling (BTU/h)	18000	18000	24000	24000	24000	30000
Electric Heat (kW)	5	8	5	8	10	5
<b>BLOWER</b>						
Diameter	10	10	10	10	10	10
Width	6	6	6	6	6	8
<b>COIL CONNECTIONS</b>						
Liquid	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"
Coil Drain Connection (FPT)	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
Minimum Circuit Ampacity	24.9/28	36/41.3	24.9/28	36/41.3	46.6/53	26/29.8
Max. Overcurrent Device (Amps)	25/30	40/45	25/30	40/45	50/60	30/30
Minimum VAC	197	197	197	197	197	197
Maximum VAC	253	253	253	253	253	253
<b>BLOWER MOTOR</b>						
Full Load Amps (FLA)	2.6	2.6	2.6	2.6	2.6	3.8
Horsepower (HP)	1/3	1/3	1/3	1/3	1/3	1/2
<b>SHIP WEIGHT (LBS)</b>						
	84	84	84	84	84	109

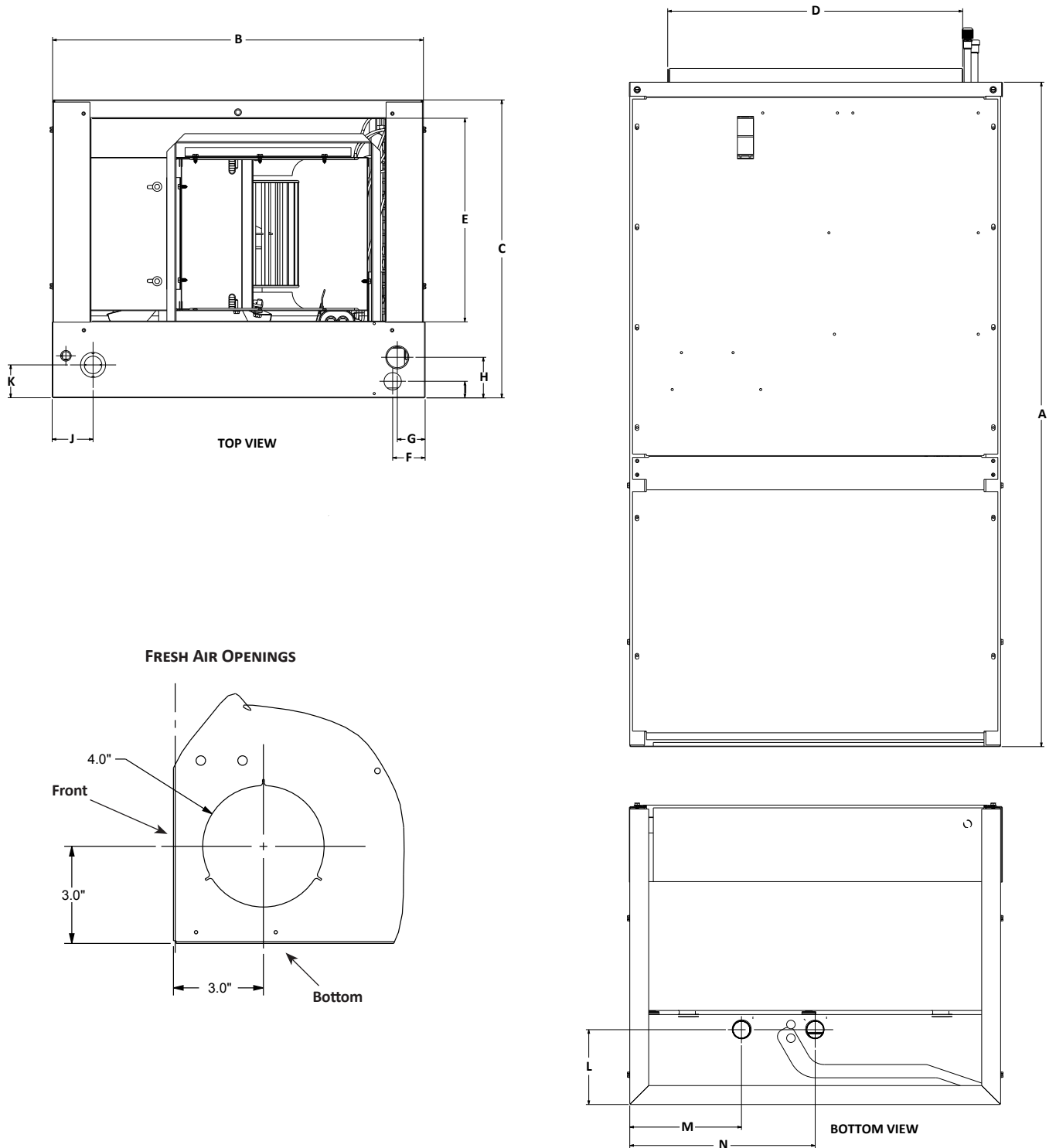
PRODUCT SPECIFICATIONS (CONTD.)

	AWSF30 LU1608 AA	AWSF30 LU1610 AA	AWSF36 LU1605 AA	AWSF36 LU1608 AA	AWSF36 LU1610 AA
<b>NOMINAL RATINGS</b>					
Cooling (BTU/h)	30000	30000	36000	36000	36000
Electric Heat (kW)	8	10	5	8	10
<b>BLOWER</b>					
Diameter	10	10	10	10	10
Width	8	8	8	8	8
<b>COIL CONNECTIONS</b>					
Liquid	3/8"	3/8"	3/8"	3/8"	3/8"
Suction	3/4"	3/4"	3/4"	3/4"	3/4"
Coil Drain Connection (FPT)	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
Minimum Circuit Ampacity	37.7/43	48/54.8	26/29.8	37.7/43	48/54.8
Max. Overcurrent Device (Amps)	40/45	50/60	30/30	40/45	50/60
Minimum VAC	197	197	197	197	197
Maximum VAC	253	253	253	253	253
<b>BLOWER MOTOR</b>					
Full Load Amps (FLA)	3.8	3.8	3.8	3.8	3.8
Horsepower (HP)	1/2	1/2	1/2	1/2	1/2
<b>SHIP WEIGHT (LBS)</b>					
	109	109	109	109	109

**Note** - Once installed, top of unit must be level or slightly tilted back to ensure proper condensate drainage.



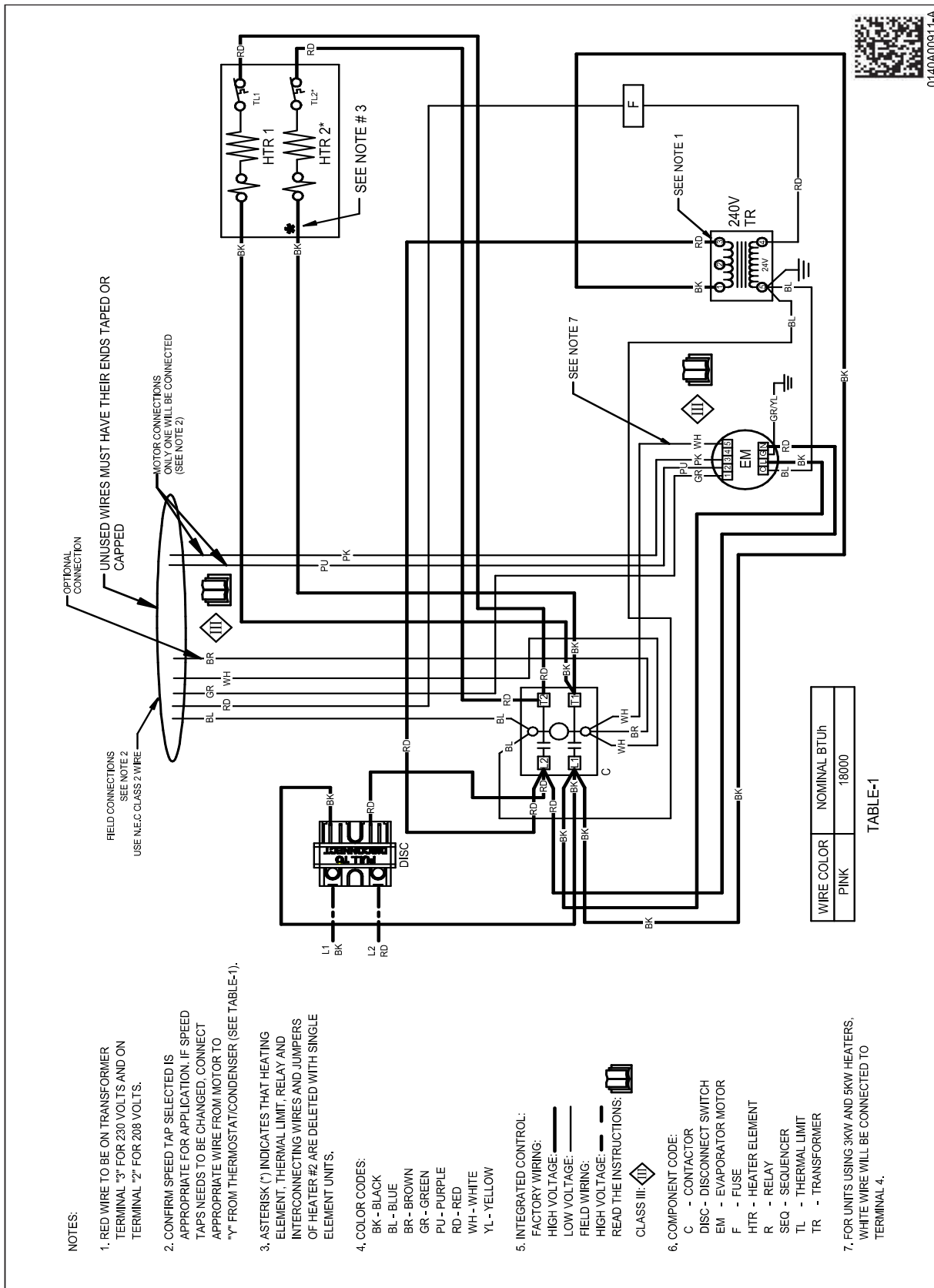
DIMENSIONS (CONTD.)



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
AWSF 18-24	36"	20 $\frac{1}{4}$ "	16 $\frac{5}{8}$ "	16"	11"	1 $\frac{3}{4}$ "	1 $\frac{1}{2}$ "	2 $\frac{1}{4}$ "	$\frac{7}{8}$ "	1 $\frac{1}{8}$ "	1 $\frac{3}{4}$ "	4"	6"	10"
AWSF 30-36	36"	24"	21"	19 $\frac{5}{8}$ "	16"	4 $\frac{1}{8}$ "	1 $\frac{1}{2}$ "	1 $\frac{3}{4}$ "	2"	1 $\frac{1}{4}$ "	2 $\frac{3}{8}$ "	4"	8"	12"

MODEL	SPEED TAP	CFM DELIVERED AGAINST EXTERNAL STATIC PRESSURE				
		0.1"	0.2"	0.3"	0.4"	0.5"
AWSF18SU16** AA	T1	630	602	576	550	521
	T2	630	602	576	550	521
	T3	637	609	586	557	531
	T4	630	602	576	550	521
	T5	846	824	800	777	756
AWSF24SU16** AA	T1	630	602	576	550	521
	T2	630	602	576	550	521
	T3	784	763	742	728	705
	T4	630	602	576	550	521
	T5	846	823	800	777	756
AWSF30LU16** AA	T1	683	604	525	460	369
	T2	900	856	803	734	681
	T3	1079	1025	989	949	889
	T4	944	897	848	783	733
	T5	1168	1127	1083	1050	1005
AWSF36LU16** AA	T1	1114	1072	1031	982	924
	T2	1114	1072	1031	982	924
	T3	1225	1191	1152	1112	1071
		1287	1255	1219	1183	1146
	T5	1360	1329	1299	1264	1230

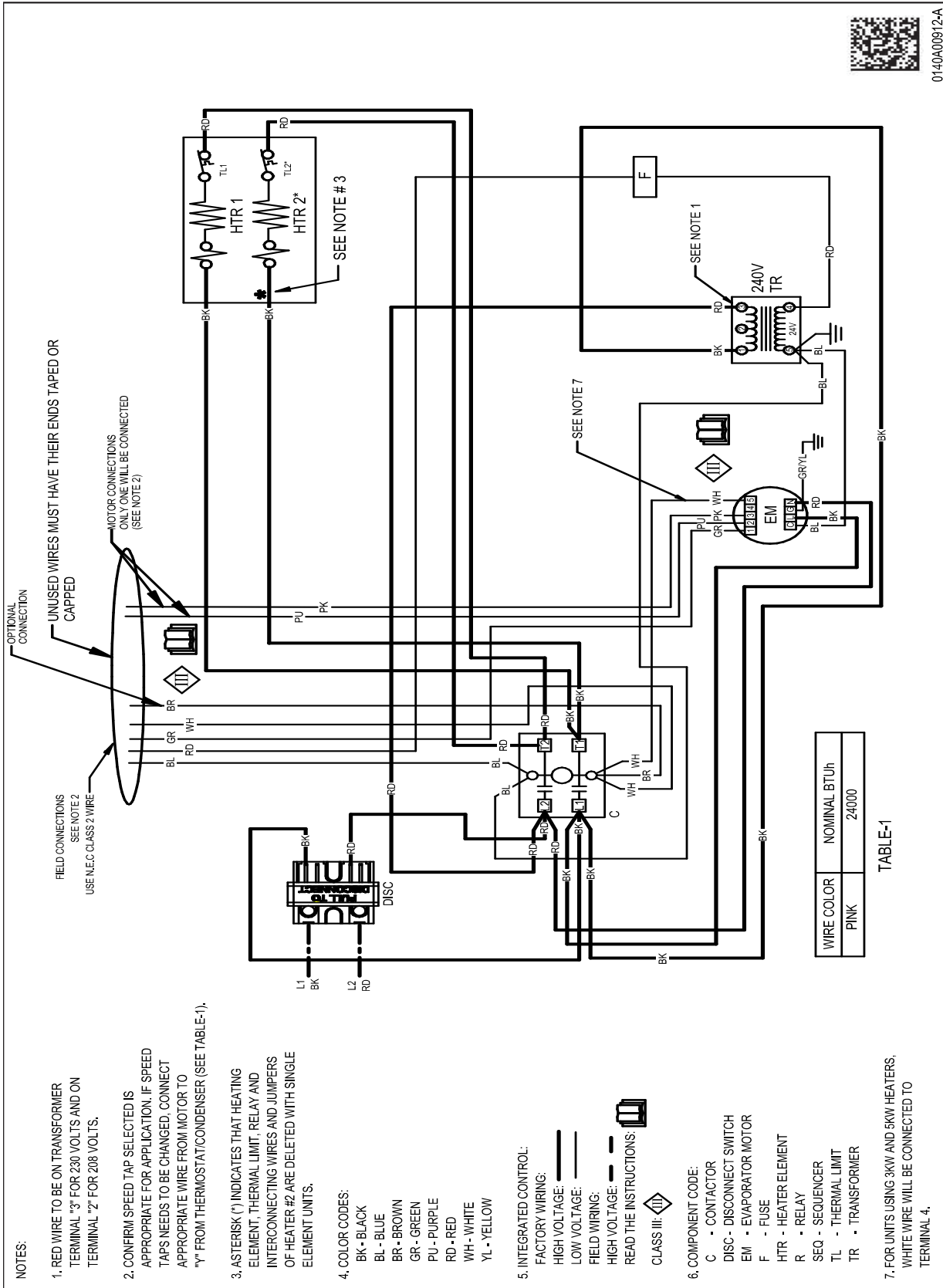
Note: Airflow data indicated is at 230 V with no filter in place.



**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.

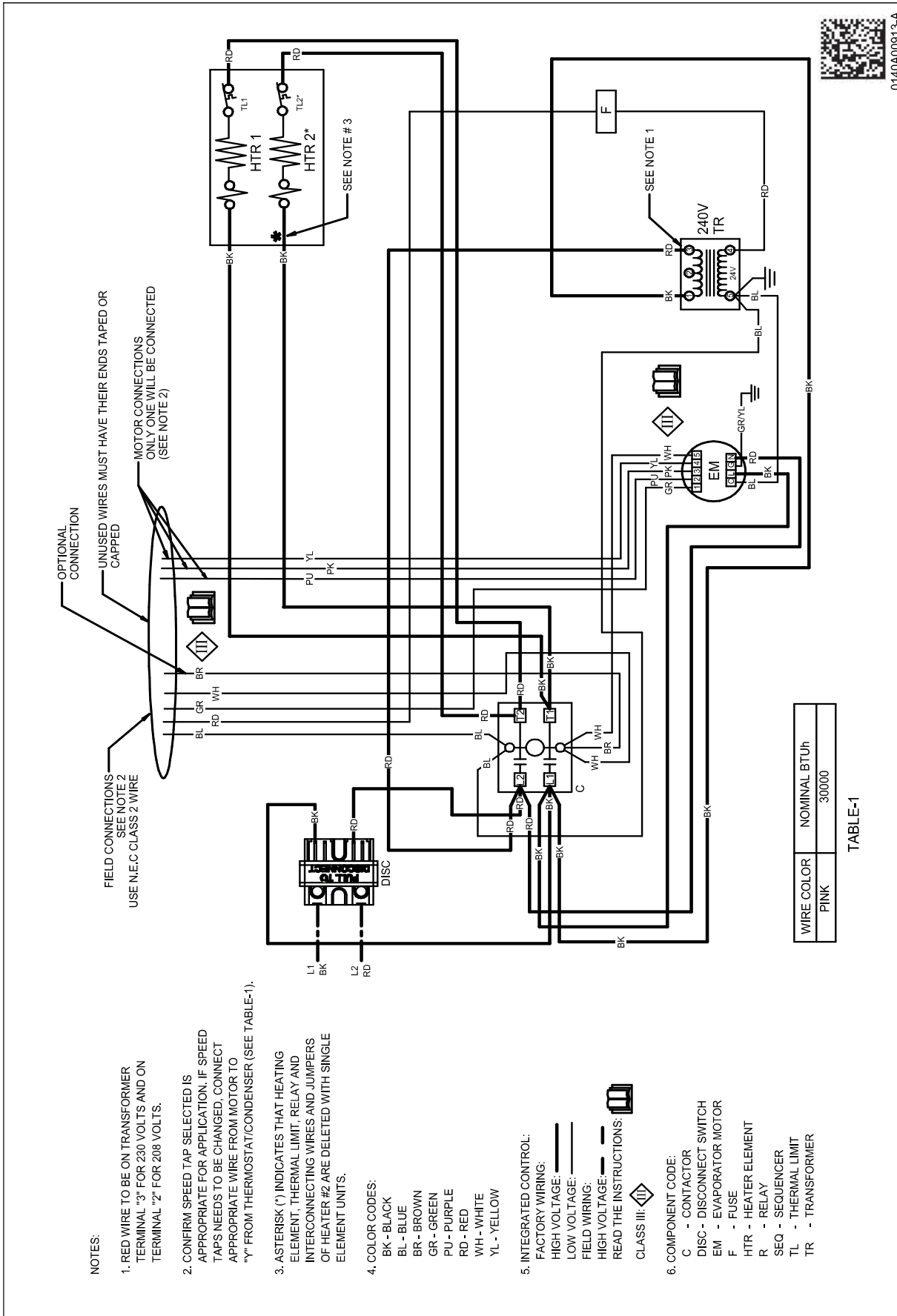




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NOTES:

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

5. INTEGRATED CONTROL:  
 FACTORY WIRING: ———  
 LOW VOLTAGE: ———  
 FIELD WIRING: - - -  
 HIGH VOLTAGE: - - -  
 READ THE INSTRUCTIONS:  
 CLASS III:

6. COMPONENT CODE:  
 C - CONTACTOR  
 DISC - DISCONNECT SWITCH  
 EM - EVAPORATOR MOTOR  
 F - FUSE  
 HTR - HEATER ELEMENT  
 R - RELAY  
 SEQ - SEQUENCER  
 TL - THERMAL LIMIT  
 TR - TRANSFORMER

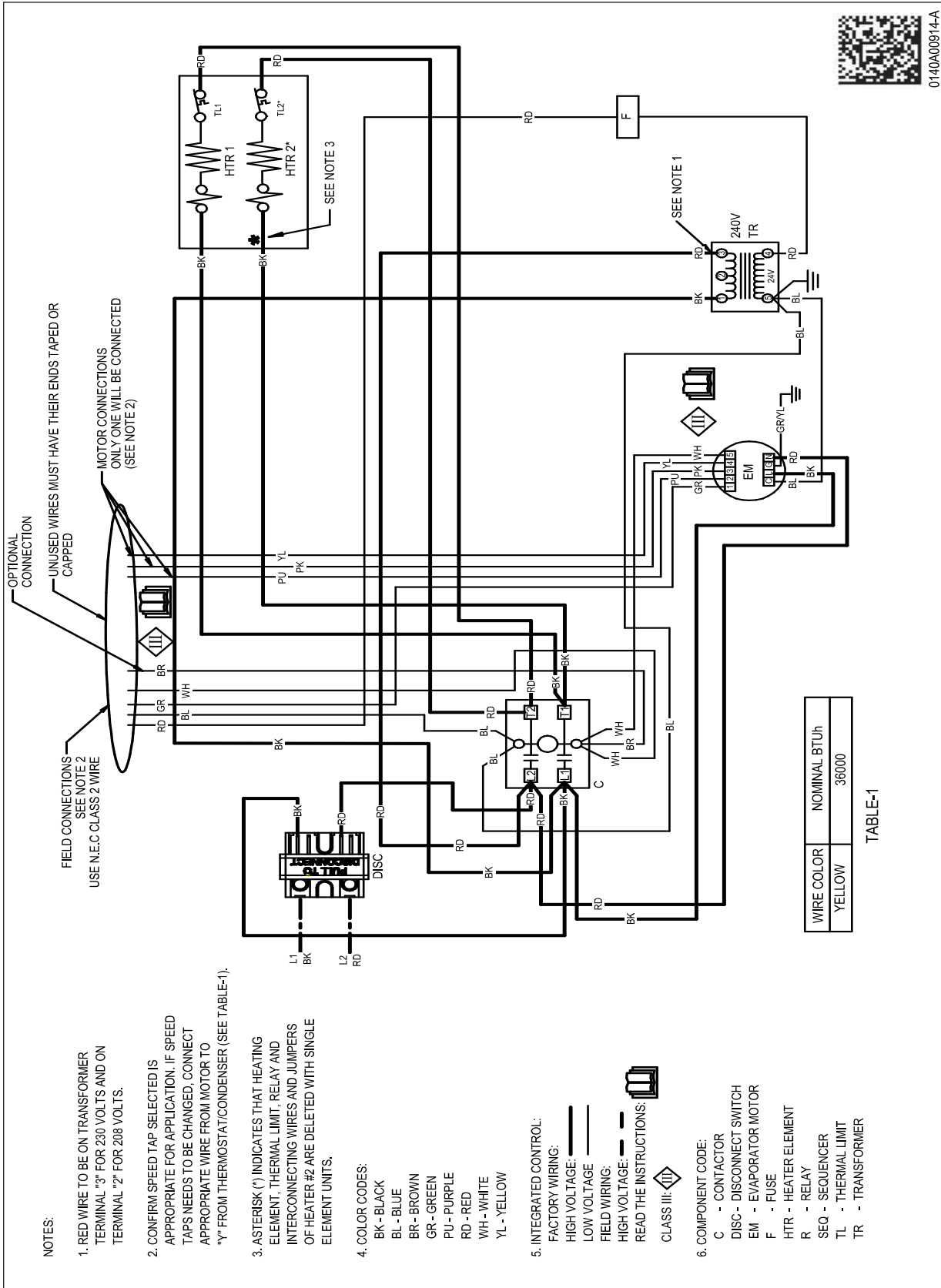
WIRE COLOR	NOMINAL BTU/h
PINK	30000

TABLE-1

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**5. INTEGRATED CONTROL:**

- FACTORY WIRING:
- LOW VOLTAGE:
- FIELD WIRING:
- HIGH VOLTAGE:
- READ THE INSTRUCTIONS:
- CLASS III:

**6. COMPONENT CODE:**

- C - CONTACTOR
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- EM - EVAPORATOR MOTOR
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- HTR - HEATER ELEMENT
- R - RELAY
- SEQ - SEQUENCER
- TL - THERMAL LIMIT
- TR - TRANSFORMER

FIELD CONNECTIONS SEE NOTE 2  
USE N.E.C CLASS 2 WIRE

OPTIONAL CONNECTION  
UNUSED WIRES MUST HAVE THEIR ENDS TAPED OR CAPPED

MOTOR CONNECTIONS ONLY ONE WILL BE CONNECTED (SEE NOTE 2)

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