



Air Conditioning & Heating

AWST SERIES

WALL-MOUNT AIR HANDLER 1-1/2 TO 3 TONS



Contents

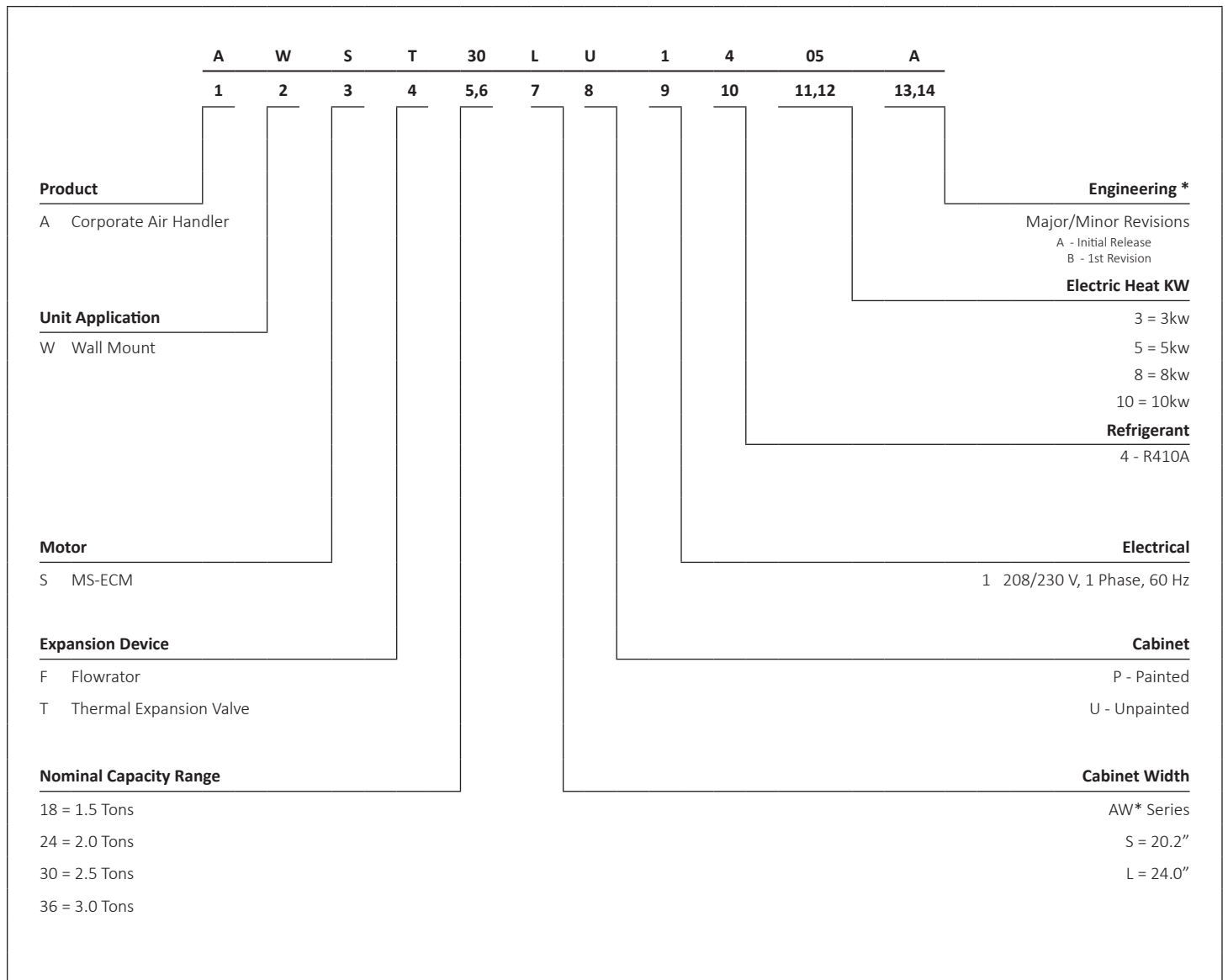
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Product Features

- AWST Models: Equipped with a fully adjustable TXV
- Direct-drive, multi-speed motors allows air volume variation for heating/cooling
- Sequence-controlled, rust-resistant nickel chromium heating elements of 3, 5, 8, and 10 kW
- Aluminum tubing coils on all models
- Cabinet air leakage less than 2.0% at 1.0 inch H₂O when tested in accordance with ASHRAE standard 193
- Cabinet air leakage less than 1.4% at 0.5 inch H₂O 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. 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.



ACCESSORIES

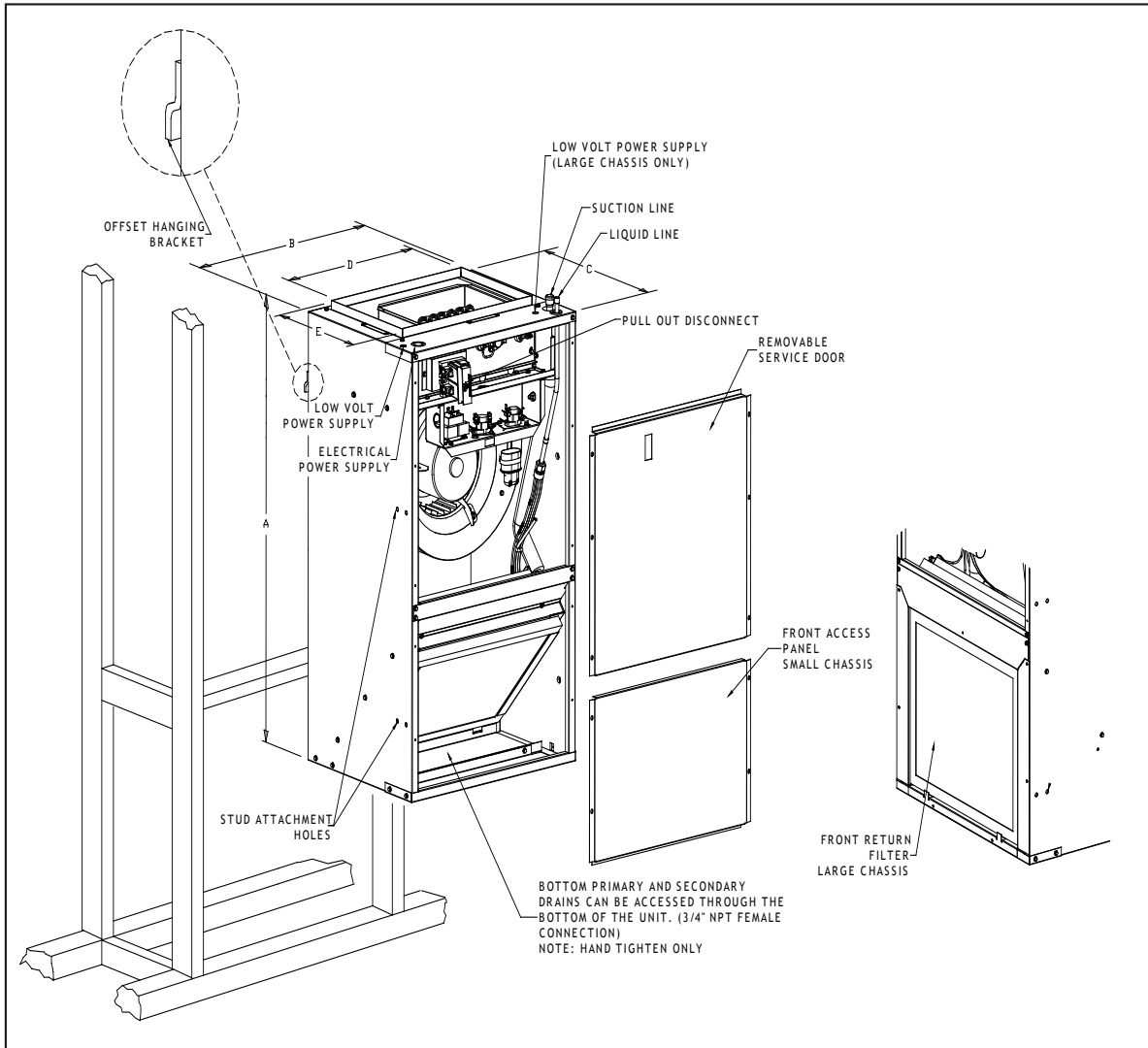
MODEL	ITEM #	DESCRIPTION
AWST18-AWST24	Wad-1	Wall access door
AWST30-AWST36	Wad-2	Wall access door

	AWST18 SU1403 AA	AWST18 SU1405 AA	AWST18 SU1408 AA	AWST24 SU1405 AA	AWST24 SU1408 AA	AWST24 SU1410 AA
NOMINAL RATINGS						
Cooling (BTU/h)	18,000	18,000	18,000	24,000	24,000	24,000
Electric Heat (kW)	3	5	8	5	8	10
BLOWER						
Diameter	10	10	10	10	10	10
Width	6	6	6	6	6	6
COIL CONNECTIONS						
Liquid	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Suction	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Coil Drain Connection (FPT)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
ELECTRICAL DATA						
Voltage	208/230	208/230	208/230	208/230	208/230	208/230
Minimum Circuit Ampacity	17/18.9	24.9/28	36/41.3	24.9/28	36/41.3	47.5/54
Max. Overcurrent Device (Amps)	20/20	25/30	40/45	25/30	40/45	50/60
Minimum VAC	197	197	197	197	197	197
Maximum VAC	253	253	253	253	253	253
BLOWER MOTOR						
Full Load Amps (FLA)	2.6	2.6	2.6	2.6	2.6	2.6
Horsepower (HP)	1/3	1/3	1/3	1/3	1/3	1/3
SHIP WEIGHT (LBS)						
	84	84	84	84	84	84

PRODUCT SPECIFICATIONS (CONTD.)

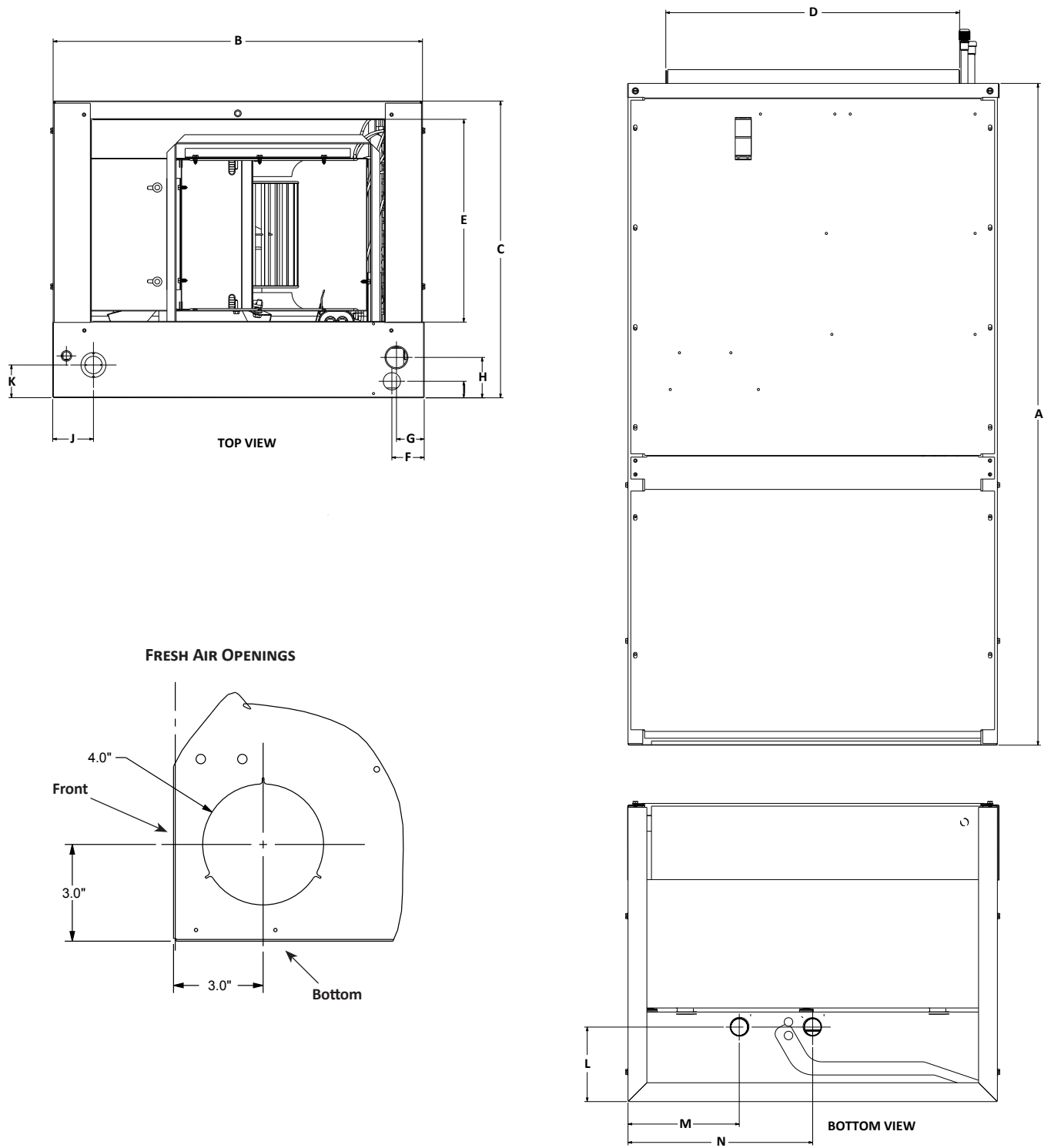
	AWST30 LU1405 AA	AWST30 LU1408 AA	AWST30 LU1410 AA	AWST36 LU1405 AA	AWST36 LU1408 AA	AWST36 LU1410 AA
NOMINAL RATINGS						
Cooling (BTU/h)	30,000	30,000	30,000	36,000	36,000	36,000
Electric Heat (kW)	5	8	10	5	8	10
BLOWER						
Diameter	10	10	10	10	10	10
Width	8	8	8	8	8	8
COIL CONNECTIONS						
Liquid	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"
Coil Drain Connection (FPT)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
ELECTRICAL DATA						
Voltage	208/230	208/230	208/230	208/230	208/230	208/230
Minimum Circuit Ampacity	26/29.8	37.8/43	49/55.8	26/29.8	37.8/43	49/55.8
Max. Overcurrent Device (Amps)	30/30	40/45	50/60	30/30	40/45	50/60
Minimum VAC	197	197	197	197	197	197
Maximum VAC	253	253	253	253	253	253
BLOWER MOTOR						
Full Load Amps (FLA)	3.9	3.9	3.9	3.9	3.9	3.9
Horsepower (HP)	1/2	1/2	1/2	1/2	1/2	1/2
SHIP WEIGHT (LBS)						
	109	109	109	109	109	109

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



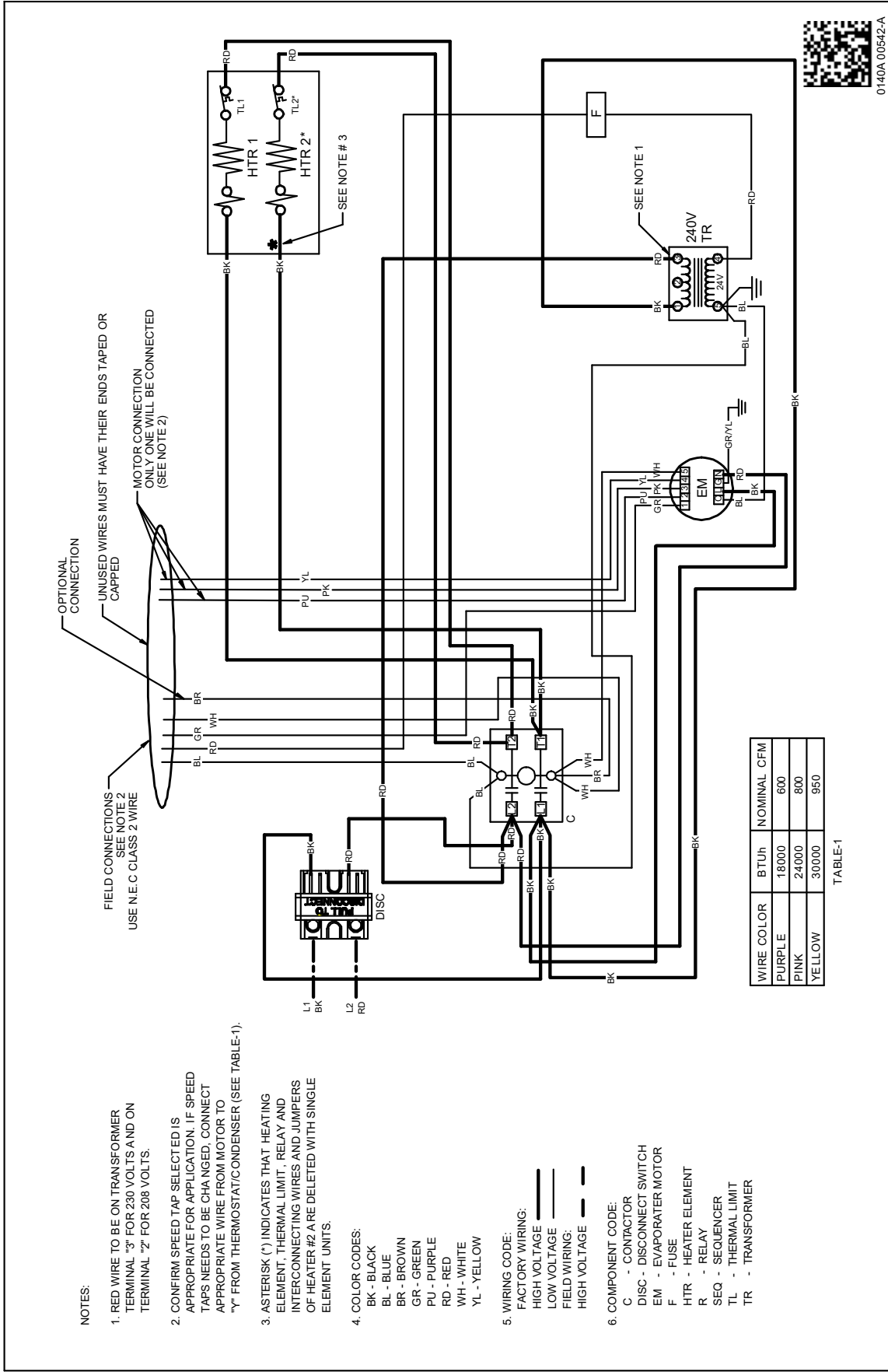
SMALL CHASSIS (AWST18-24)	
A	36"
B	20 ³ / ₁₆ "
C	16 ⁷ / ₈ "
D	16"
E	11"
Filter	14" x 18" x 1"

LARGE CHASSIS (AWST30-36)	
A	36"
B	24"
C	21"
D	19 ⁷ / ₈ "
E	15 ⁷ / ₈ "
Filter (30, 36, 31, 32, 37)	18" x 20" x 1"



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
AWST 18-24	36"	20 $\frac{1}{4}$ "	16 $\frac{1}{2}$ "	16"	11"	1 $\frac{3}{4}$ "	1 $\frac{1}{2}$ "	2 $\frac{1}{4}$ "	$\frac{7}{8}$ "	1 $\frac{1}{8}$ "	1 $\frac{1}{4}$ "	4"	6"	10"
AWST 30-36	36"	24"	21"	19 $\frac{1}{2}$ "	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	MOTOR SPEED	CFM DELIVERED AGAINST EXTERNAL STATIC PRESSURE				
		0.1"	0.2"	0.3"	0.4"	0.5"
AWST18SU14** 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
AWST24SU14** 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
AWST30LU14** 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
AWST36LU14** AA	T1	1114	1072	1031	982	924
	T2	1114	1072	1031	982	924
	T3	1225	1191	1152	1112	1071
	T4	1287	1255	1219	1183	1146
	T5	1360	1329	1299	1264	1230



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. WIRING CODE:

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

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	BTU/h	NOMINAL CFM
PURPLE	18000	600
PINK	24000	800
YELLOW	30000	950

TABLE-1

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

OPTIONAL CONNECTION
UNUSED WIRES MUST HAVE THEIR ENDS TAPED OR CAPPED

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

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

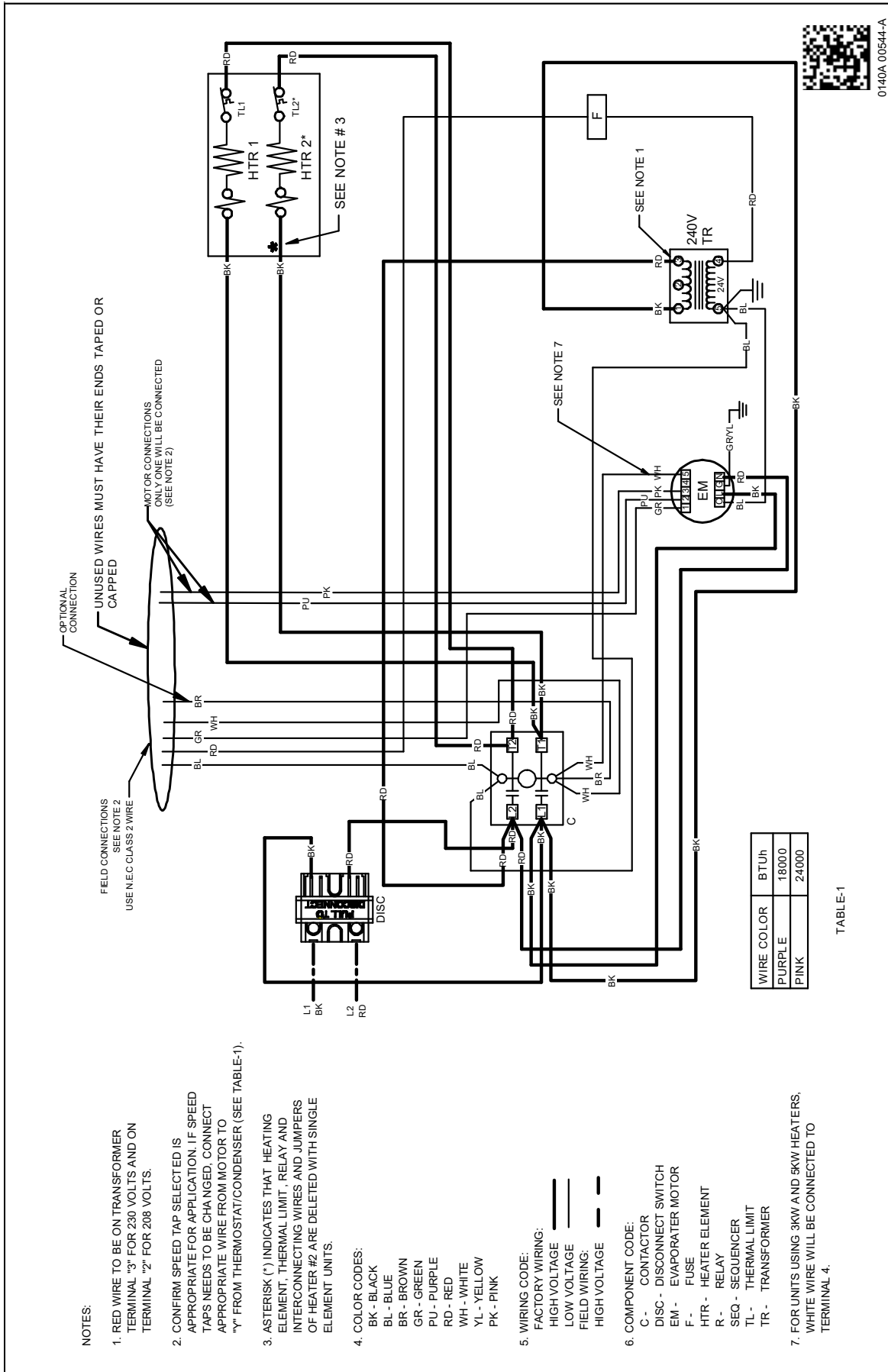


WARNING

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.



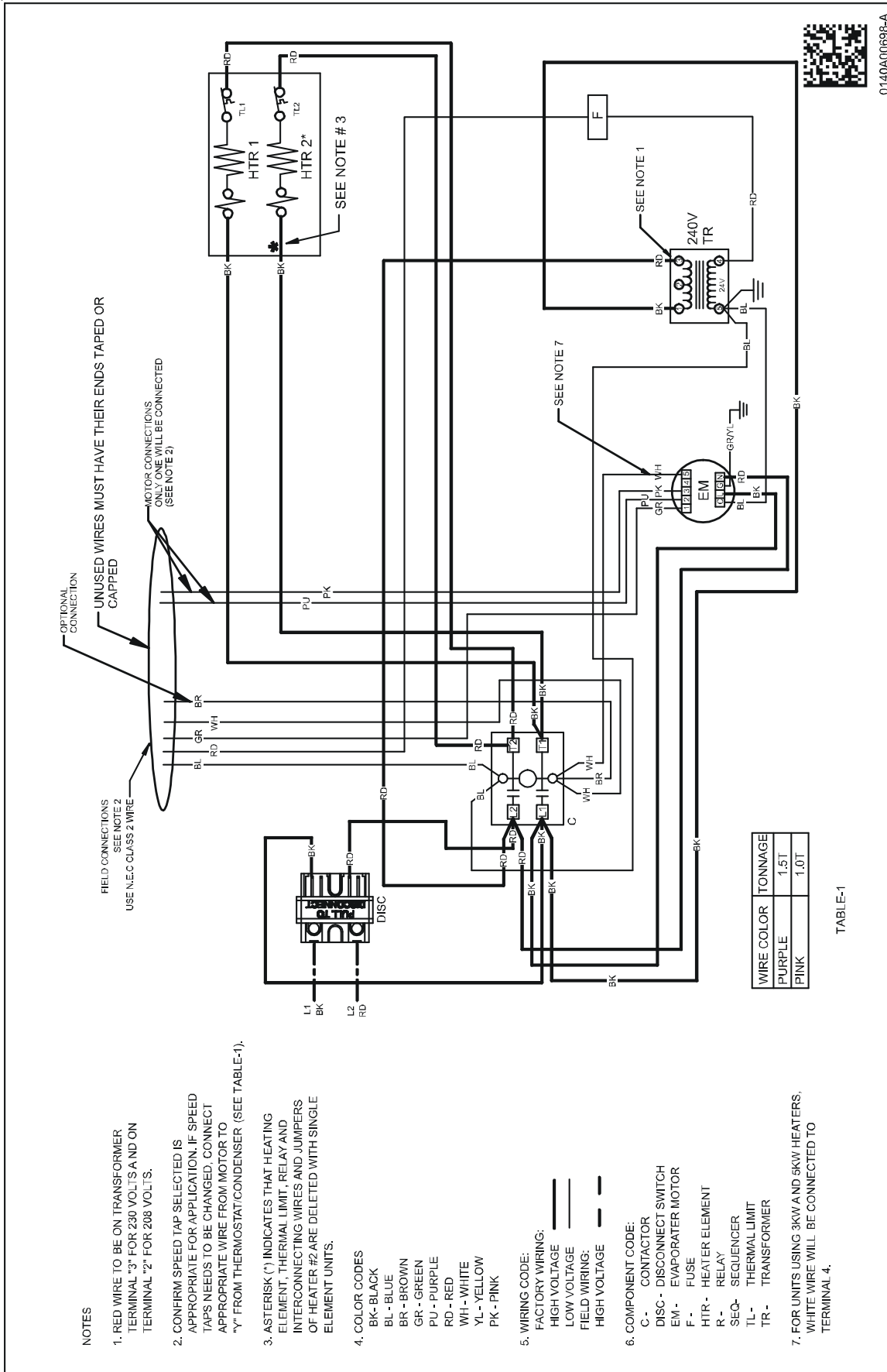
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NOTES

- RED WIRE TO BE ON TRANSFORMER TERMINAL "3" FOR 230 VOLTS AND ON TERMINAL "2" FOR 208 VOLTS.
- 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).
- ASTERISK (*) INDICATES THAT HEATING ELEMENT, THERMAL LIMIT, RELAY AND INTERCONNECTING WIRES AND JUMPERS OF HEATER #2 ARE DELETED WITH SINGLE ELEMENT UNITS.
- COLOR CODES
BK - BLACK
BL - BLUE
BR - BROWN
GR - GREEN
PU - PURPLE
RD - RED
WH - WHITE
YL - YELLOW
PK - PINK
- WIRING CODE:
FACTORY WIRING: ———
HIGH VOLTAGE: ———
LOW VOLTAGE: ———
FIELD WIRING: ———
HIGH VOLTAGE: ———
- COMPONENT CODE:
C - CONTACTOR
DISC - DISCONNECT SWITCH
EM - EVAPORATOR MOTOR
F - FUSE
HTR - HEATER ELEMENT
R - RELAY
SEQ - SEQUENCER
TL - THERMAL LIMIT
TR - TRANSFORMER
- FOR UNITS USING 3KW AND 5KW HEATERS, WHITE WIRE WILL BE CONNECTED TO TERMINAL 4.

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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TABLE-1

