

# AWST SERIES

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



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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 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.

|                               | A | W | S | T | 30  | L | U | 1 | 4  | 05    | A     |  |
|-------------------------------|---|---|---|---|-----|---|---|---|----|-------|-------|--|
|                               | 1 | 2 | 3 | 4 | 5,6 | 7 | 8 | 9 | 10 | 11,12 | 13,14 |  |
| <b>Product</b>                |   |   |   |   |     |   |   |   |    |       |       | <b>Engineering *</b>   |
| A Corporate Air Handler       |   |   |   |   |     |   |   |   |    |       |       | Major/Minor Revisions<br>A - Initial Release<br>B - 1st Revision |
| <b>Unit Application</b>       |   |   |   |   |     |   |   |   |    |       |       | <b>Electric Heat KW</b>  |
| W Wall Mount                  |   |   |   |   |     |   |   |   |    |       |       | 3 = 3kw<br>5 = 5kw<br>8 = 8kw<br>10 = 10kw                       |
|                               |   |   |   |   |     |   |   |   |    |       |       | <b>Refrigerant</b>   |
|                               |   |   |   |   |     |   |   |   |    |       |       | 4 - R410A  |
| <b>Motor</b>                  |   |   |   |   |     |   |   |   |    |       |       | <b>Electrical</b>  |
| S MS-ECM                      |   |   |   |   |     |   |   |   |    |       |       | 1 208/230 V, 1 Phase, 60 Hz                                      |
| <b>Expansion Device</b>       |   |   |   |   |     |   |   |   |    |       |       | <b>Cabinet</b>   |
| F Flowrator                   |   |   |   |   |     |   |   |   |    |       |       | P - Painted  |
| T Thermal Expansion Valve     |   |   |   |   |     |   |   |   |    |       |       | U - Unpainted  |
| <b>Nominal Capacity Range</b> |   |   |   |   |     |   |   |   |    |       |       | <b>Cabinet Width</b>   |
| 18 = 1.5 Tons                 |   |   |   |   |     |   |   |   |    |       |       | AW* Series   |
| 24 = 2.0 Tons                 |   |   |   |   |     |   |   |   |    |       |       | S = 20.2"  |
| 30 = 2.5 Tons                 |   |   |   |   |     |   |   |   |    |       |       | L = 24.0"  |
| 36 = 3.0 Tons                 |   |   |   |   |     |   |   |   |    |       |       |  |

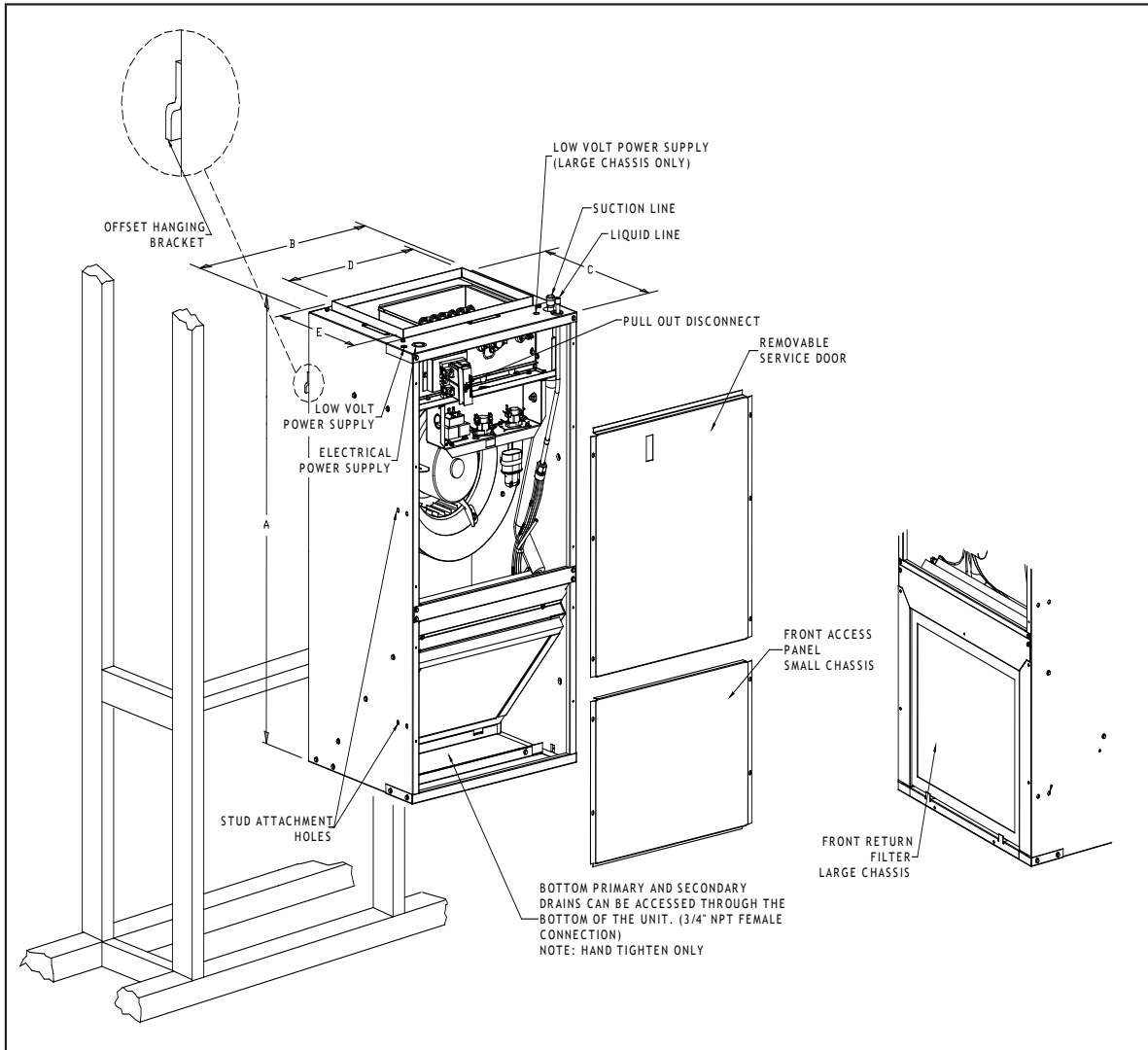
## ACCESSORIES

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

|                                | AWST18<br>SU1403 AA | AWST18<br>SU1405 AA | AWST18<br>SU1408 AA | AWST24<br>SU1405 AA | AWST24<br>SU1408 AA | AWST24<br>SU1410 AA |
|--------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>NOMINAL RATINGS</b>         |                     |                     |                     |                     |                     |                     |
| Cooling (BTU/h)                | 18,000              | 18,000              | 18,000              | 24,000              | 24,000              | 24,000              |
| Electric Heat (kW)             | 3                   | 5                   | 8                   | 5                   | 8                   | 10                  |
| <b>BLOWER</b>                  |                     |                     |                     |                     |                     |                     |
| Diameter                       | 10                  | 10                  | 10                  | 10                  | 10                  | 10                  |
| Width                          | 6                   | 6                   | 6                   | 6                   | 6                   | 6                   |
| <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"                | 5/8"                |
| 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       | 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                 |
| <b>BLOWER MOTOR</b>            |                     |                     |                     |                     |                     |                     |
| 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                 |
| <b>SHIP WEIGHT (LBS)</b>       | 84                  | 84                  | 84                  | 84                  | 84                  | 84                  |

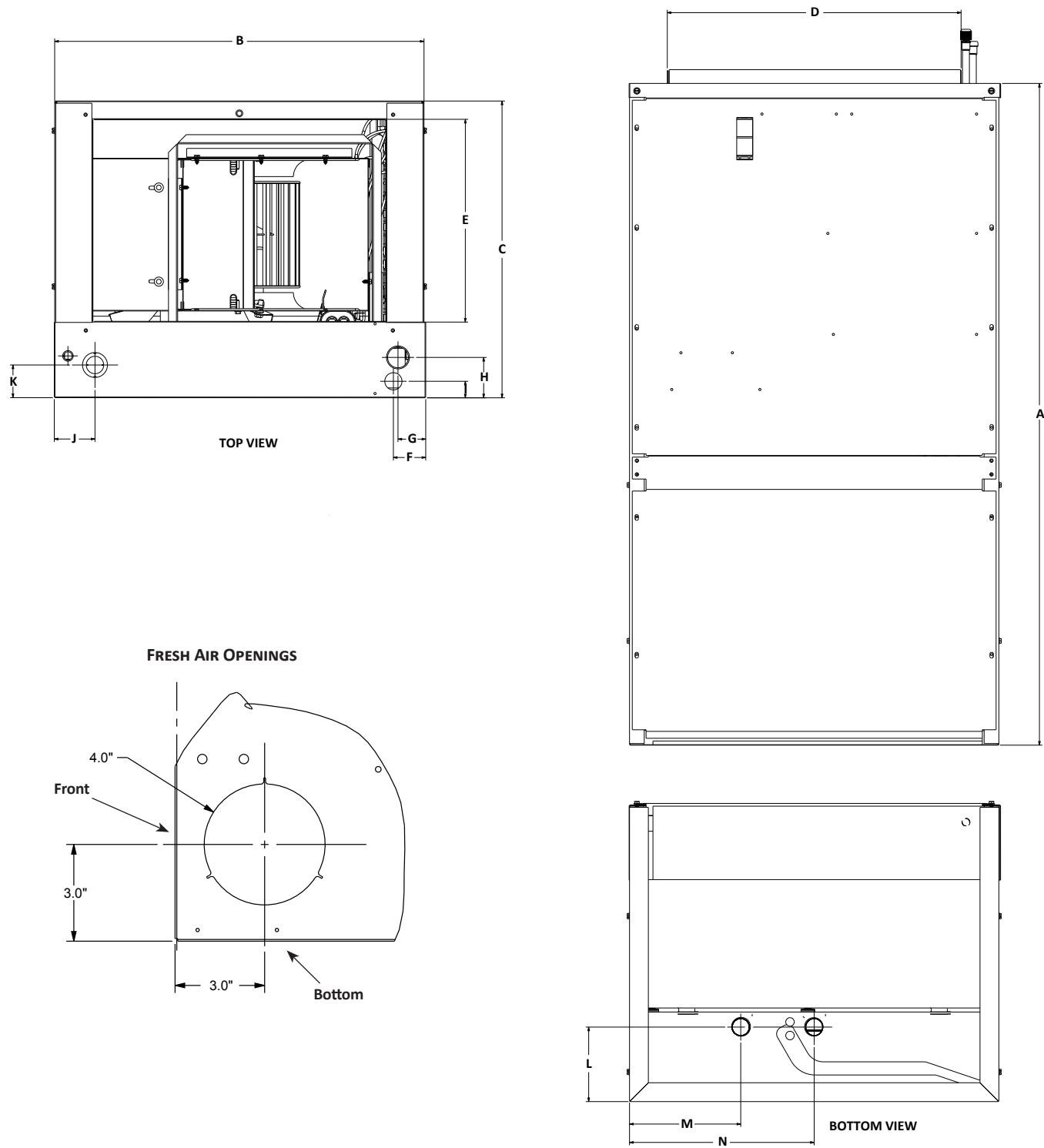
|                                | AWST30<br>LU1405 AA | AWST30<br>LU1408 AA | AWST30<br>LU1410 AA | AWST36<br>LU1405 AA | AWST36<br>LU1408 AA | AWST36<br>LU1410 AA |
|--------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>NOMINAL RATINGS</b>         |                     |                     |                     |                     |                     |                     |
| Cooling (BTU/h)                | 30,000              | 30,000              | 30,000              | 36,000              | 36,000              | 36,000              |
| Electric Heat (kW)             | 5                   | 8                   | 10                  | 5                   | 8                   | 10                  |
| <b>BLOWER</b>                  |                     |                     |                     |                     |                     |                     |
| Diameter                       | 10                  | 10                  | 10                  | 10                  | 10                  | 10                  |
| Width                          | 8                   | 8                   | 8                   | 8                   | 8                   | 8                   |
| <b>COIL CONNECTIONS</b>        |                     |                     |                     |                     |                     |                     |
| Liquid                         | $\frac{3}{8}$ "     | $\frac{3}{8}$ "     | $\frac{3}{8}$ "     | $\frac{3}{8}$ "     | $\frac{3}{8}$ "     | $\frac{3}{8}$ "     |
| Suction                        | $\frac{3}{4}$ "     | $\frac{3}{4}$ "     | $\frac{3}{4}$ "     | $\frac{3}{4}$ "     | $\frac{3}{4}$ "     | $\frac{3}{4}$ "     |
| Coil Drain Connection (FPT)    | $\frac{3}{4}$ "     | $\frac{3}{4}$ "     | $\frac{3}{4}$ "     | $\frac{3}{4}$ "     | $\frac{3}{4}$ "     | $\frac{3}{4}$ "     |
| <b>ELECTRICAL DATA</b>         |                     |                     |                     |                     |                     |                     |
| 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                 |
| <b>BLOWER MOTOR</b>            |                     |                     |                     |                     |                     |                     |
| 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                 |
| <b>SHIP WEIGHT (LBS)</b>       | 109                 | 109                 | 109                 | 109                 | 109                 | 109                 |

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



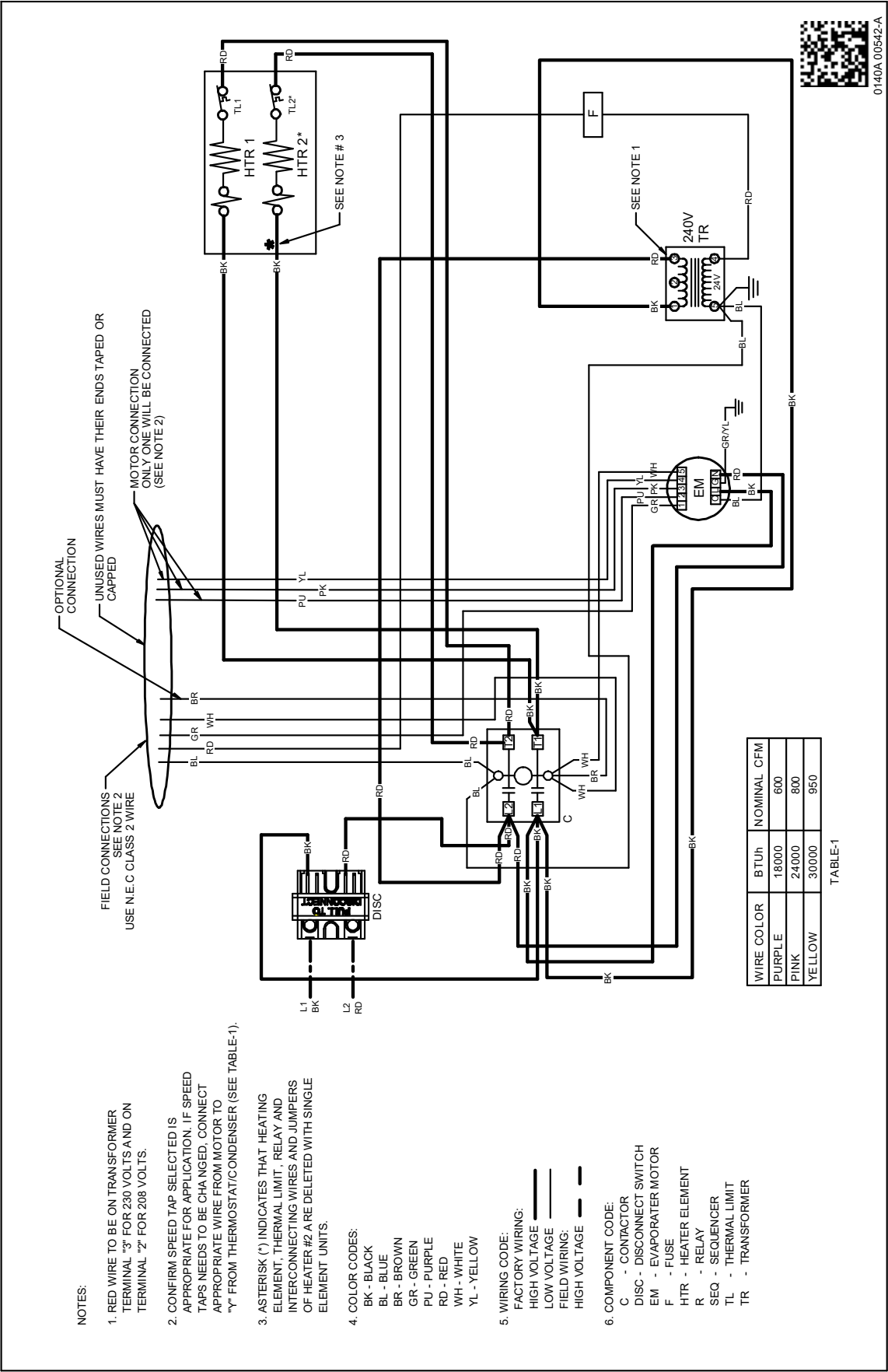
| SMALL CHASSIS<br>(AWST18-24) |                      |
|------------------------------|----------------------|
| A                            | 36"                  |
| B                            | 20 <sup>3/16</sup> " |
| C                            | 16 <sup>1/8</sup> "  |
| D                 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

| LARGE CHASSIS<br>(AWST30-36) |                     |
|------------------------------|---------------------|
| A                            | 36"                 |
| B                            | 24"                 |
| C                            | 21"                 |
| D                            | 19 <sup>7/8</sup> " |
| E                            | 15 <sup>7/8</sup> " |
| 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 $\frac{7}{8}$ " | 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 $\frac{7}{8}$ " | 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           | 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 |



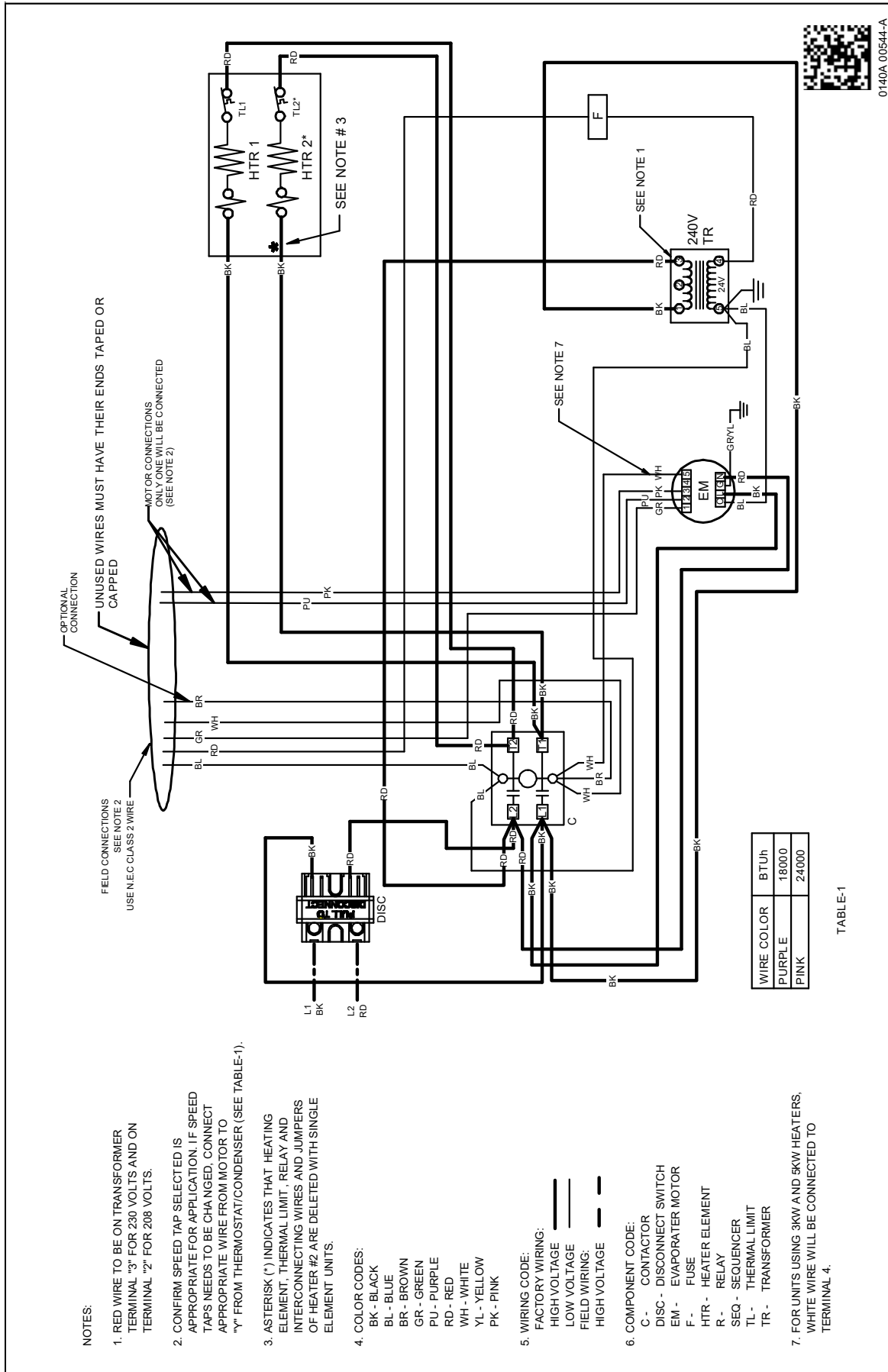
Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.



**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.



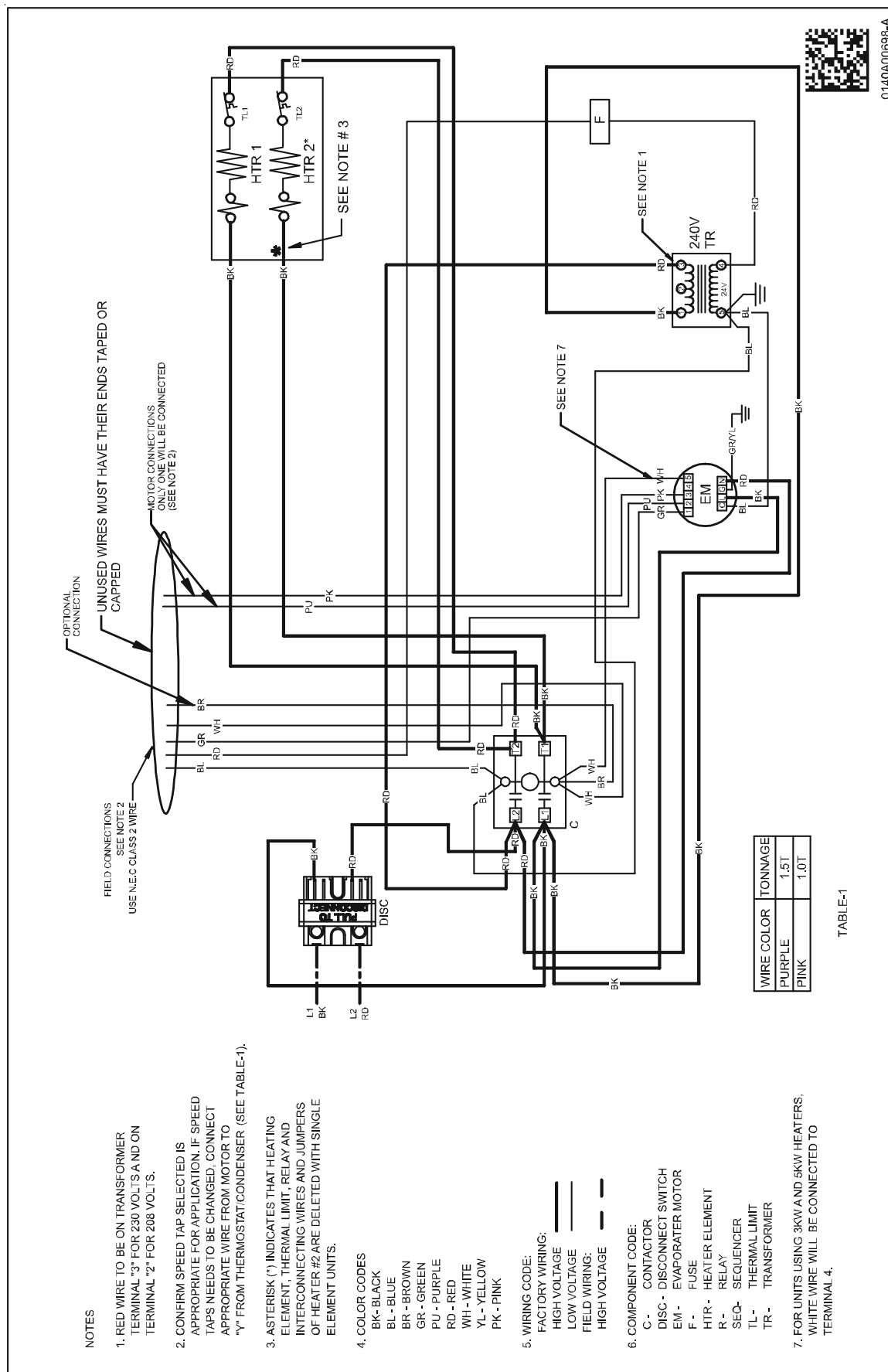


Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.



# **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.

**⚠ WARNING**

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