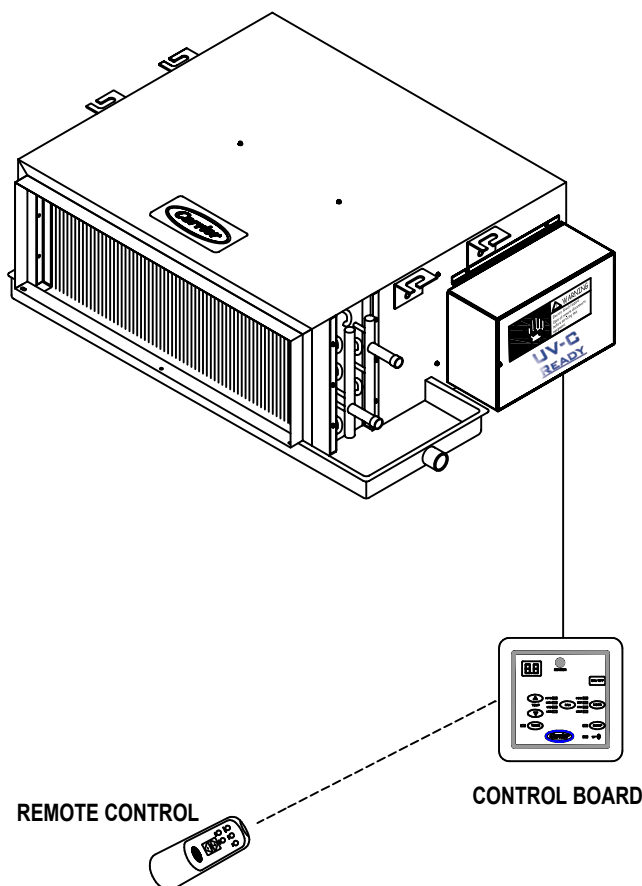


**42TW/MW-TD/MD**  
**Chilled Water**  
 Low Height Fan Coils  
 300 thru 2000 CFM  
 With Remote Control  
 50/60 Hz



## Product Data

The 42TW/MW standard cooling low height chilled water fan coil units and 42TD/MD district cooling low height chilled water fan coil units are available in airflow range from 300 CFM to 2000 CFM. All series are available with a 3 or 4 row coil. The 3-row coil is available as a 2-pipe system only, while the 4-row coil is available as a 2 or 4 pipe systems. Each unit is designed to occupy a minimum space. Piping and drain connections are readily accessible and mounting holes and slots are pre-drilled to save installation time and field labor expense.



## Features/Benefits

- 10 mm insulated drain pan.
- Piping connection are field exchangeable; Standard right hand side.
- Left hand connection option is available.
- Direct drive forward curved centrifugal fan.
- 3speed high efficiency motor with B class insulation.
- Standard galvanized sheet metal casing.
- Low unit height suitable for low false ceiling application.
- Washable aluminum filter.
- Factory installed heater option.
- Easy installation and maintenance.
- 12 mm thickness internal insulation with 32kg/m<sup>3</sup> density.
- Low noise level suitable for all application.
- Plastic blower and blower housing.
- Sweat connections for easy installation and maintenance.
- Electrical integrated wired control board and thermostat with remote control as a standard feature.

42TW/TD Series are available in 8 sizes designed for Medium external static pressure upto 0.25 inches water (63 Pa) in low false ceiling applications with nominal cooling capacity from 12 to 60 KBtu/Hr.

42MW/MD Series are available in 2 sizes designed for high external static pressure upto 0.5 inches water (125 Pa) in low false ceiling applications with nominal cooling capacity from 48 to 60 KBtu/Hr.

42TW/MW/TD/MD are designed for ease of service in under ceiling applications. A carton template for easy location of mounting hardware simplifies installation.

**UV-C**  
**READY**



Coils are made of double wavy aluminum fins mechanically bonded to copper tubes for superior heat transfer.

Direct drive forward curved centrifugal fan attached to 3-speed high efficiency motors. Galvanized sheet metal casing protects against rust

and drain pan is polyester powder coated for extra protection.

Optional electrical heater and washable Aluminum filters are standard features. Piping connections position (RH/LH) is optional, also it is field interchangeable to suite various applications.

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## Model Number Nomenclature

| 42 | TW | 3 | - | 05 | - | 2 | - | 3 | - | C | R                                                     | E                      |
|----|----|---|---|----|---|---|---|---|---|---|-------------------------------------------------------|------------------------|
|    |    |   |   |    |   |   |   |   |   |   |                                                       | E = Electronic Control |
|    |    |   |   |    |   |   |   |   |   |   | Connection :                                          |                        |
|    |    |   |   |    |   |   |   |   |   |   | R                                                     | = Right, Standard      |
|    |    |   |   |    |   |   |   |   |   |   | L                                                     | = Left, Option         |
|    |    |   |   |    |   |   |   |   |   |   | C = Cool only                                         |                        |
|    |    |   |   |    |   |   |   |   |   |   | H = With Heater                                       |                        |
|    |    |   |   |    |   |   |   |   |   |   | - = Standard                                          |                        |
|    |    |   |   |    |   |   |   |   |   |   | S = Optional Heater                                   |                        |
|    |    |   |   |    |   |   |   |   |   |   | Voltage 3 = 208/230 V, 1 P, 60 Hz                     |                        |
|    |    |   |   |    |   |   |   |   |   |   | 7 = 220/240 V, 1 P, 50 Hz                             |                        |
|    |    |   |   |    |   |   |   |   |   |   | Pipe System 2 = 2 Pipe                                |                        |
|    |    |   |   |    |   |   |   |   |   |   | 4 = 4 Pipe                                            |                        |
|    |    |   |   |    |   |   |   |   |   |   | Unit Size = Nominal CFM x 100 @ 0 Static & High Speed |                        |
|    |    |   |   |    |   |   |   |   |   |   | 3 = 3 Row                                             |                        |
|    |    |   |   |    |   |   |   |   |   |   | 4 = 4 Row                                             |                        |
|    |    |   |   |    |   |   |   |   |   |   | TW - Standard Cooling Low Static.                     |                        |
|    |    |   |   |    |   |   |   |   |   |   | TD - District Cooling Low Static.                     |                        |
|    |    |   |   |    |   |   |   |   |   |   | MW - Standard Cooling High Static.                    |                        |
|    |    |   |   |    |   |   |   |   |   |   | MD - District Cooling High Static.                    |                        |
|    |    |   |   |    |   |   |   |   |   |   | Low Height Fan Coils                                  |                        |

# Physical Data

| Model Series                         | 42TW3 / 42TD3 ( 2-Pipe System )                           |           |           |      |            |             |      |           |
|--------------------------------------|-----------------------------------------------------------|-----------|-----------|------|------------|-------------|------|-----------|
| Model Size                           | 03                                                        | 05        | 06        | 07   | 09         | 11          | 12   | 16        |
| CFM*                                 | 348                                                       | 592       | 692       | 780  | 883        | 1181        | 1385 | 1572      |
| Cooling Capacity (kw)*               | 3.4                                                       | 6.1       | 7.5       | 8.9  | 9.9        | 11.5        | 14.5 | 16.9      |
| Cooling Capacity (kbtuh)             | 11.7                                                      | 20.7      | 25.6      | 30.4 | 33.8       | 39.2        | 49.5 | 16.9      |
| SHR                                  | 0.75                                                      | 0.74      | 0.72      | 0.71 | 0.71       | 0.75        | 0.73 | 0.73      |
| Power Supply (V-Ph-Hz)               | 230-1-60 / 230-1-50                                       |           |           |      |            |             |      |           |
| Motor HP (Nominal)                   | 1 / 15                                                    |           | 1 / 10    |      |            | 1 / 15      |      | 1 / 10    |
| Input Watts (Med Speed, 25 Pa E.S.P) | 56                                                        | 64        | 70        | 80   | 80         | 130         | 146  | 160       |
| Number of Motors                     | 1 , 3 Speed                                               |           |           |      |            | 2 , 3 Speed |      |           |
| Coil Material                        | Smooth Copper Tubes / Aluminum Fins with Double Wavey Fin |           |           |      |            |             |      |           |
| Coil Face Area (m <sup>2</sup> )     | 0.11                                                      | 0.15      | 0.21      | 0.26 | 0.31       | 0.31        | 0.44 | 0.52      |
| Coil Connection Type                 | Sweat Type                                                |           |           |      |            |             |      |           |
| Coil Connection Size                 | 5 / 8 Inch                                                |           |           |      | 7 / 8 Inch |             |      |           |
| Number of Rows                       | 3                                                         |           |           |      |            |             |      |           |
| Fin Density / Inch                   | 14                                                        |           |           |      |            |             |      |           |
| Drain Diameter                       | 5 / 8 Inch                                                |           |           |      |            |             |      |           |
| Blower Type                          | Direct Drive Forward Curved Centrifugal Fan               |           |           |      |            |             |      |           |
| Blower Number                        | 1                                                         | 2         |           |      |            | 4           |      |           |
| Blower Diameter / Width (mm)         | 156 / 220                                                 | 156 / 170 | 156 / 220 |      |            | 156 / 170   |      | 156 / 220 |
| Filter Type                          | Washable Aluminum Filter                                  |           |           |      |            |             |      |           |
| Width (mm)                           | 640                                                       | 800       | 1010      | 1220 | 1430       |             |      | 1640      |
| Depth (mm)                           | 590                                                       |           |           |      |            |             |      |           |
| Height (mm)                          | 275                                                       |           |           |      |            |             | 375  |           |
| Net Weight (kg)                      | 18                                                        | 23        | 28        | 32   | 39         | 43          | 49   | 56        |

\*At 26.7 / 19 °C Approach 6.7 °C Water Inlet / 12.7 °C Water Outlet, High Speed @ 0 Static

| Model Series                         | 42TW4 / 42TD4 ( 2-Pipe System )                           |           |           |      |            |             |      |           |
|--------------------------------------|-----------------------------------------------------------|-----------|-----------|------|------------|-------------|------|-----------|
| Model Size                           | 03                                                        | 04        | 05        | 06   | 08         | 10          | 11   | 14        |
| CFM*                                 | 313                                                       | 533       | 623       | 702  | 795        | 1065        | 1247 | 1416      |
| Cooling Capacity (kw)*               | 3.8                                                       | 6.2       | 7.7       | 9.0  | 9.9        | 12.7        | 15.7 | 17.6      |
| Cooling Capacity (kbtuh)             | 13.0                                                      | 21.0      | 26.3      | 30.8 | 33.7       | 43.3        | 53.6 | 60.1      |
| SHR                                  | 0.69                                                      | 0.71      | 0.69      |      |            | 0.70        | 0.68 | 0.69      |
| Power Supply (V-Ph-Hz)               | 230-1-60 / 230-1-50                                       |           |           |      |            |             |      |           |
| Motor HP (Nominal)                   | 1 / 15                                                    |           | 1 / 10    |      |            | 1 / 15      |      | 1 / 10    |
| Input Watts (Med Speed, 25 Pa E.S.P) | 52                                                        | 60        | 65        | 75   |            | 121         | 136  | 150       |
| Number of Motors                     | 1 , 3 Speed                                               |           |           |      |            | 2 , 3 Speed |      |           |
| Coil Material                        | Smooth Copper Tubes / Aluminum Fins with Double Wavey Fin |           |           |      |            |             |      |           |
| Coil Face Area (m <sup>2</sup> )     | 0.11                                                      | 0.15      | 0.21      | 0.26 | 0.31       |             | 0.44 | 0.52      |
| Coil Connection Type                 | Sweat Type                                                |           |           |      |            |             |      |           |
| Coil Connection Size                 | 5 / 8 Inch                                                |           |           |      | 7 / 8 Inch |             |      |           |
| Number of Rows                       | 4                                                         |           |           |      |            |             |      |           |
| Fin Density / Inch                   | 14                                                        |           |           |      |            |             |      |           |
| Drain Diameter                       | 5 / 8 Inch                                                |           |           |      |            |             |      |           |
| Blower Type                          | Direct Drive Forward Curved Centrifugal Fan               |           |           |      |            |             |      |           |
| Blower Number                        | 1                                                         | 2         |           |      |            | 4           |      |           |
| Blower Diameter / Width (mm)         | 156 / 220                                                 | 156 / 170 | 156 / 220 |      |            | 156 / 170   |      | 156 / 220 |
| Filter Type                          | Washable Aluminum Filter                                  |           |           |      |            |             |      |           |
| Width (mm)                           | 640                                                       | 800       | 1010      | 1220 | 1430       |             |      | 1640      |
| Depth (mm)                           | 590                                                       |           |           |      |            |             |      |           |
| Height (mm)                          | 275                                                       |           |           |      |            |             | 375  |           |
| Net Weight (kg)                      | 19                                                        | 24        | 29        | 33   | 41         | 45          | 51   | 58        |

\*At 26.7 / 19 °C Approach 6.7 °C Water Inlet / 12.7 °C Water Outlet, High Speed @ 0 Static

# Physical Data

| Model Series                         | 42TW4 / 42TD4 ( 4-Pipe System )                          |           |           |      |            |             |      |           |
|--------------------------------------|----------------------------------------------------------|-----------|-----------|------|------------|-------------|------|-----------|
| Model Size                           | 03                                                       | 04        | 05        | 06   | 08         | 10          | 11   | 14        |
| CFM*                                 | 313                                                      | 533       | 623       | 702  | 795        | 1065        | 1247 | 1416      |
| Cooling Capacity (kw)*               | 3.4                                                      | 5.3       | 6.9       | 8.0  | 8.9        | 11.2        | 14.1 | 15.9      |
| Cooling Capacity (kbtuh)             | 11.5                                                     | 18.1      | 23.5      | 27.3 | 30.4       | 38.2        | 48.1 | 54.3      |
| Heating Capacity (kw)**              | 2.9                                                      | 5.5       | 6.8       | 7.9  | 9.4        | 12.2        | 13.9 | 17.5      |
| Heating Capacity (kbtuh)             | 9.9                                                      | 18.8      | 23.2      | 27.0 | 32.1       | 41.60       | 47.4 | 59.7      |
| Power Supply (V-Ph-Hz)               | 230-1-60 / 230-1-50                                      |           |           |      |            |             |      |           |
| Motor HP (Nominal)                   | 1 / 15                                                   |           | 1 / 10    |      |            | 1 / 15      |      | 1 / 10    |
| Input Watts (Med Speed, 25 Pa E.S.P) | 52                                                       | 60        | 65        | 75   |            | 121         | 136  | 150       |
| Number of Motors                     | 1 , 3 Speed                                              |           |           |      |            | 2 , 3 Speed |      |           |
| Coil Material                        | Smooth Copper Tubes / Aluminum Fins with Double Wavy Fin |           |           |      |            |             |      |           |
| Coil Face Area (m <sup>2</sup> )     | 0.11                                                     | 0.15      | 0.21      | 0.26 | 0.31       |             | 0.44 | 0.52      |
| Coil Connection Type                 | Sweat Type                                               |           |           |      |            |             |      |           |
| Coil Connection Size                 | 5 / 8 Inch                                               |           |           |      | 7 / 8 Inch |             |      |           |
| Number of Rows                       | 4                                                        |           |           |      |            |             |      |           |
| Fin Density / Inch                   | 14                                                       |           |           |      |            |             |      |           |
| Drain Diameter                       | 5 / 8 Inch                                               |           |           |      |            |             |      |           |
| Blower Type                          | Direct Drive Forward Curved Centrifugal Fan              |           |           |      |            |             |      |           |
| Blower Number                        | 1                                                        | 2         |           |      |            | 4           |      |           |
| Blower Diameter / Width (mm)         | 156 / 220                                                | 156 / 170 | 156 / 220 |      |            | 156 / 170   |      | 156 / 220 |
| Filter Type                          | Washable Aluminum Filter                                 |           |           |      |            |             |      |           |
| Width (mm)                           | 640                                                      | 800       | 1010      | 1220 | 1430       |             |      | 1640      |
| Depth (mm)                           | 590                                                      |           |           |      |            |             |      |           |
| Height (mm)                          | 275                                                      |           |           |      |            |             | 375  |           |
| Net Weight (kg)                      | 19                                                       | 24        | 29        | 33   | 41         | 45          | 51   | 58        |

\*At 26.7 / 19 °C Approach 6.7 °C Water Inlet / 12.7 °C Water Outlet, High Speed @ 0 Static

\*\* At 20 / 14 °C approach 70.0° C Water Inlet / 61.6 °C Water Outlet, High Speed @ 0 Static

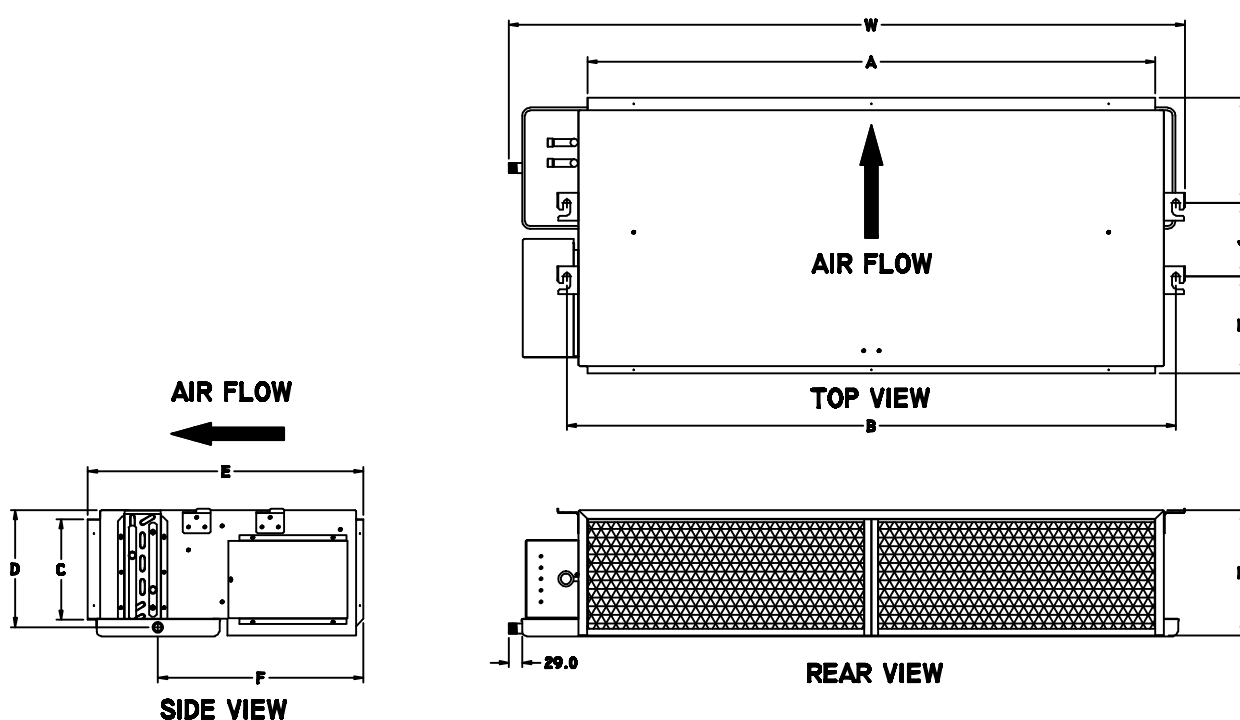
| Model Series                     | 42MW / 42MD ( 2-Pipe System )                             |                |                                  |                |
|----------------------------------|-----------------------------------------------------------|----------------|----------------------------------|----------------|
| Model Type                       | 42MW3/MD3 - 16                                            | 42MW4/MD4 - 14 | 42MW3/MD3 - 20                   | 42MW4/MD4 - 18 |
| CFM (Nominal)*                   | 1600                                                      | 1500           | 2000                             | 1900           |
| Cooling Capacity (kw)*           | 17.3                                                      | 19.6           | 22.0                             | 24.4           |
| Cooling Capacity (kbtuh)         | 59.0                                                      | 66.9           | 75.1                             | 83.3           |
| Power Supply (V-Ph-Hz)           | 230-1-60 / 230-1-50                                       |                |                                  |                |
| Motor HP (Nominal)               | 1 / 3                                                     |                | 1 / 2                            |                |
| Number of Motors                 | 1 , 6 Speed                                               |                | 1 , 5 Speed                      |                |
| Coil Material                    | Grooved Copper Tubes / Aluminum Fins With Double Wavy Fin |                |                                  |                |
| Coil Face Area (m <sup>2</sup> ) | 0.44                                                      |                | 0.52                             |                |
| Coil Connection Type             | Sweat Type                                                |                |                                  |                |
| Coil Connection Size             | 7 / 8 Inch                                                |                |                                  |                |
| Number of Rows                   | 3                                                         | 4              | 3                                | 4              |
| Fin Density / Inch               | 14                                                        |                |                                  |                |
| Drain Diameter                   | 1 Inch                                                    |                |                                  |                |
| Blower Type                      | Direct Drive Forward Curved Centrifugal Fan               |                |                                  |                |
| Blower Diameter / Width (mm)     | 180 x 240                                                 |                |                                  |                |
| Blower Number                    | 2                                                         |                | 3                                |                |
| Filter Type                      | Washable Aluminum Filter                                  |                | Flame Retardant Polyester Fibers |                |
| Width (mm)                       | 1430                                                      |                | 1640                             |                |
| Depth (mm)                       | 656                                                       |                | 656                              |                |
| Height (mm)                      | 375                                                       |                | 375                              |                |
| Net Weight (kg)                  | 49                                                        | 50             | 56                               | 57             |

\*At 26.7 / 19 °C Approach 6.7 °C Water Inlet / 12.7 °C Water Outlet, High Speed @ 0 Static

# Base Unit Dimensions

## Notes:

- The piping connections drain pan outlet and control box are located on the right hand side facing the airflow as factory standard, They however can be relocated to the left hand side facing air flow in the field when needed.
- Unit should be installed for horizontal discharge only. Suspend horizontally using the factory-provided holes located at the topside flanges of the unit.



| All Dimensions in mm |             | H   | E   | W    | A    | B    | C   | D   | F   | I   | J   | K   |
|----------------------|-------------|-----|-----|------|------|------|-----|-----|-----|-----|-----|-----|
| 42TW/TDS-03          | 42TW/TD4-03 | 275 | 600 | 682  | 440  | 541  | 219 | 255 | 447 | 228 | 160 | 211 |
| 42TW/TDS-05          | 42TW/TD4-04 | 275 | 600 | 842  | 604  | 696  | 219 | 255 | 447 | 228 | 160 | 211 |
| 42TW/TDS-06          | 42TW/TD4-05 | 275 | 600 | 1052 | 814  | 906  | 219 | 255 | 447 | 228 | 160 | 211 |
| 42TW/TDS-07          | 42TW/TD4-06 | 275 | 600 | 1262 | 1024 | 1116 | 219 | 255 | 447 | 228 | 160 | 211 |
| 42TW/TDS-09          | 42TW/TD4-08 | 275 | 600 | 1472 | 1234 | 1326 | 219 | 255 | 447 | 228 | 160 | 211 |
| 42TW/TDS-11          | 42TW/TD4-10 | 275 | 600 | 1472 | 1234 | 1326 | 219 | 255 | 447 | 228 | 160 | 211 |
| 42TW/TDS-12          | 42TW/TD4-11 | 375 | 600 | 1472 | 1234 | 1326 | 319 | 355 | 447 | 228 | 160 | 211 |
| 42TW/TDS-16          | 42TW/TD4-14 | 375 | 600 | 1682 | 1444 | 1536 | 319 | 355 | 447 | 228 | 160 | 211 |

| All Dimensions in mm |             | H   | E   | W    | A    | B    | C   | D   | F   | I   | J   | K   |
|----------------------|-------------|-----|-----|------|------|------|-----|-----|-----|-----|-----|-----|
| 42MW/MDS-16          | 42MW/MD4-14 | 375 | 656 | 1472 | 1234 | 1326 | 319 | 355 | 504 | 245 | 216 | 195 |
| 42MW/MDS-20          | 42MW/MD4-18 | 375 | 656 | 1682 | 1444 | 1536 | 319 | 355 | 504 | 245 | 216 | 195 |

# Performance Data – 42TW.

## 42TW – 3 ROW – Cooling.

| Rating: 0 Pa External Static Pressure | Fan Speed           | 42TW3 - 03 - 2 |       |      | 42TW3 - 05 - 2 |       |       | 42TW3 - 06 - 2 |       |       | 42TW3 - 07 - 2 |       |       |
|---------------------------------------|---------------------|----------------|-------|------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|
|                                       | Capacity (KW)       | High           | Med.  | Low  | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KBtu/Hr)  | 3.42           | 3.12  | 2.91 | 6.06           | 5.39  | 4.76  | 7.49           | 6.39  | 6.20  | 8.93           | 8.04  | 7.25  |
|                                       | CFM                 | 11.67          | 10.65 | 9.93 | 20.68          | 18.39 | 16.24 | 25.56          | 21.80 | 21.15 | 30.47          | 27.43 | 24.74 |
|                                       | L/sec Air           | 348            | 303   | 274  | 592            | 498   | 408   | 692            | 586   | 548   | 780            | 691   | 607   |
|                                       | SHR(Sensible/Total) | 164            | 143   | 129  | 279            | 235   | 193   | 327            | 276   | 259   | 368            | 326   | 286   |
|                                       | Air DB Ent          | 75%            | 74%   | 73%  | 74%            | 72%   | 70%   | 72%            | 72%   | 71%   | 71%            | 71%   | 70%   |
|                                       | Air WB Ent          | 26.7           | 26.7  | 26.7 | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air DB Lvng.        | 19.4           | 19.4  | 19.4 | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air WB Lvng.        | 13.8           | 13.3  | 13.1 | 13.5           | 13.0  | 12.3  | 13.0           | 12.9  | 12.5  | 12.5           | 12.3  | 12.1  |
|                                       | N Circuits          | 13.3           | 13.0  | 12.8 | 13.1           | 12.7  | 12.1  | 12.6           | 12.6  | 12.3  | 12.1           | 12.0  | 11.8  |
|                                       | Face Tubes          | 2              | 2     | 2    | 2              | 2     | 2     | 3              | 3     | 3     | 4              | 4     | 4     |
|                                       | Water In C          | 10             | 10    | 10   | 10             | 10    | 10    | 10             | 10    | 10    | 10             | 10    | 10    |
|                                       | Water Lvng C        | 6.7            | 6.7   | 6.7  | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   |
| 25 Pa. External Static Pressure       | Gal/Min             | 12.7           | 12.7  | 12.7 | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  |
|                                       | L/sec Water         | 2.16           | 1.96  | 1.84 | 3.82           | 3.40  | 3.00  | 4.72           | 4.03  | 3.91  | 5.63           | 5.07  | 4.58  |
|                                       | DP PSI              | 0.14           | 0.12  | 0.12 | 0.24           | 0.21  | 0.19  | 0.30           | 0.25  | 0.25  | 0.36           | 0.32  | 0.29  |
|                                       | DP K Pa             | 2.5            | 2.1   | 1.9  | 9.4            | 7.6   | 6.1   | 5.7            | 4.3   | 4.1   | 9.5            | 7.9   | 6.6   |
|                                       | Fan Speed           | 17.4           | 14.8  | 13.1 | 64.7           | 52.6  | 42.3  | 39.4           | 29.9  | 28.3  | 65.5           | 54.6  | 45.6  |
|                                       | Capacity (KW)       | 3.23           | 2.81  | 2.50 | 5.51           | 4.59  | 4.08  | 7.09           | 5.90  | 5.32  | 8.52           | 7.17  | 6.23  |
|                                       | Capacity (KBtu/Hr)  | 11.02          | 9.59  | 8.53 | 18.80          | 15.66 | 13.92 | 24.19          | 20.13 | 18.15 | 29.07          | 24.46 | 21.26 |
|                                       | CFM                 | 320            | 263   | 224  | 515            | 398   | 332   | 640            | 524   | 447   | 732            | 592   | 497   |
|                                       | L/sec Air           | 151            | 124   | 106  | 243            | 188   | 157   | 302            | 247   | 211   | 345            | 279   | 235   |
|                                       | SHR                 | 74%            | 73%   | 72%  | 72%            | 71%   | 69%   | 72%            | 72%   | 70%   | 70%            | 70%   | 69%   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7 | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4 | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 13.6           | 13.0  | 12.7 | 13.1           | 12.4  | 11.8  | 12.8           | 12.6  | 12.1  | 12.3           | 11.9  | 11.6  |
|                                       | Air WB Lvng.        | 13.1           | 12.7  | 12.4 | 12.7           | 12.1  | 11.6  | 12.4           | 12.3  | 11.8  | 11.9           | 11.6  | 11.4  |
| 50 Pa. External Static Pressure       | Water In C          | 6.7            | 6.7   | 6.7  | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   |
|                                       | Water Lvng C        | 12.7           | 12.7  | 12.7 | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  |
|                                       | Gal/Min             | 2.04           | 1.77  | 1.58 | 3.47           | 2.89  | 2.57  | 4.47           | 3.72  | 3.36  | 5.38           | 4.52  | 3.93  |
|                                       | L/sec Water         | 0.13           | 0.11  | 0.10 | 0.22           | 0.18  | 0.16  | 0.28           | 0.24  | 0.21  | 0.34           | 0.29  | 0.25  |
|                                       | DP PSI              | 2.3            | 1.8   | 1.5  | 7.9            | 5.7   | 4.7   | 5.2            | 3.8   | 3.2   | 8.8            | 6.5   | 5.1   |
|                                       | DP K Pa             | 15.8           | 12.3  | 10.2 | 54.7           | 39.6  | 32.3  | 35.8           | 26.1  | 21.8  | 60.4           | 44.6  | 35.0  |
|                                       | Fan Speed           | High           | Med.  | Low  | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 2.87           | 2.38  | 1.78 | 4.78           | 3.88  | 3.04  | 6.27           | 5.00  | 3.83  | 7.42           | 5.93  | 4.96  |
|                                       | Capacity (KBtu/Hr)  | 9.79           | 8.12  | 6.07 | 16.31          | 13.24 | 10.37 | 21.39          | 17.06 | 13.07 | 25.32          | 20.23 | 16.92 |
|                                       | CFM                 | 271            | 211   | 147  | 423            | 318   | 229   | 541            | 421   | 294   | 607            | 464   | 373   |
|                                       | L/sec Air           | 128            | 99    | 69   | 199            | 150   | 108   | 255            | 199   | 139   | 286            | 219   | 176   |
|                                       | SHR                 | 73%            | 71%   | 70%  | 71%            | 70%   | 67%   | 71%            | 70%   | 68%   | 69%            | 68%   | 68%   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7 | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4 | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 13.1           | 12.5  | 11.9 | 12.6           | 11.8  | 11.0  | 12.3           | 12.1  | 11.2  | 11.8           | 11.4  | 11.0  |
|                                       | Air WB Lvng.        | 12.7           | 12.2  | 11.7 | 12.2           | 11.5  | 10.8  | 12.0           | 11.8  | 10.9  | 11.5           | 11.1  | 10.7  |
|                                       | Water In C          | 6.7            | 6.7   | 6.7  | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   |
|                                       | Water Lvng C        | 12.7           | 12.7  | 12.7 | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  |
|                                       | Gal/Min             | 1.81           | 1.50  | 1.12 | 3.02           | 2.45  | 1.92  | 3.95           | 3.16  | 2.42  | 4.68           | 3.74  | 3.13  |
|                                       | L/sec Water         | 0.11           | 0.09  | 0.07 | 0.19           | 0.15  | 0.12  | 0.25           | 0.20  | 0.15  | 0.30           | 0.24  | 0.20  |
|                                       | DP PSI              | 1.9            | 1.3   | 0.8  | 6.2            | 4.3   | 2.8   | 4.2            | 2.8   | 1.8   | 6.9            | 4.7   | 3.4   |
|                                       | DP K Pa             | 12.8           | 9.26  | 5.31 | 42.7           | 29.6  | 19.4  | 28.9           | 19.6  | 12.3  | 47.4           | 32.1  | 23.5  |

Note: Table intended for quick selection, for other conditions use selection software.

# Performance Data – 42TW (Cont.)

## 42TW – 3 ROW – Cooling (Cont.)

| Rating: 0 Pa External Static Pressure | Fan Speed           | 42TW3 - 09 - 2 |       |       | 42TW3 - 11 - 2 |       |       | 42TW3 - 12 - 2 |       |       | 42TW3 - 16 - 2 |       |       |
|---------------------------------------|---------------------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|
|                                       | Capacity (KW)       | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KBtu/Hr)  | 9.90           | 8.89  | 8.02  | 11.5           | 10.3  | 8.90  | 14.5           | 13.8  | 12.6  | 16.9           | 15.9  | 14.3  |
|                                       | CFM                 | 33.78          | 30.33 | 27.36 | 39.24          | 35.14 | 30.37 | 49.47          | 47.09 | 42.99 | 57.66          | 54.25 | 48.79 |
|                                       | L/sec Air           | 883            | 756   | 659   | 1181           | 995   | 815   | 1385           | 1172  | 1096  | 1572           | 1383  | 1214  |
|                                       | SHR(Sensible/Total) | 417            | 357   | 311   | 557            | 469   | 385   | 654            | 553   | 517   | 742            | 652   | 573   |
|                                       | Air DB Ent          | 71%            | 70%   | 69%   | 75%            | 74%   | 72%   | 73%            | 70%   | 71%   | 73%            | 70%   | 70%   |
|                                       | Air WB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air DB Lvng.        | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air WB Lvng.        | 12.7           | 12.2  | 11.9  | 13.9           | 13.3  | 12.9  | 13.3           | 12.2  | 12.4  | 13.0           | 12.5  | 12.2  |
|                                       | N Circuits          | 12.3           | 11.9  | 11.6  | 13.4           | 13.0  | 12.6  | 12.9           | 11.9  | 12.2  | 12.6           | 12.2  | 12.0  |
|                                       | Face Tubes          | 4              | 4     | 4     | 5              | 5     | 5     | 6              | 6     | 6     | 7              | 7     | 7     |
|                                       | Water In C          | 10             | 10    | 10    | 10             | 10    | 10    | 14             | 14    | 14    | 14             | 14    | 14    |
| 25 Pa. External Static Pressure       | Water Lvng C        | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   |
|                                       | Gal/Min             | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  |
|                                       | L/sec Water         | 6.25           | 5.61  | 5.05  | 7.26           | 6.49  | 5.61  | 9.12           | 8.72  | 7.94  | 10.67          | 10.04 | 9.02  |
|                                       | DP PSI              | 0.39           | 0.35  | 0.32  | 0.46           | 0.41  | 0.35  | 0.58           | 0.55  | 0.50  | 0.67           | 0.63  | 0.57  |
|                                       | DP K Pa             | 6.0            | 5.0   | 4.2   | 4.3            | 3.5   | 2.7   | 5.3            | 4.9   | 4.2   | 5.4            | 4.8   | 4.0   |
|                                       | Fan Speed           | 41.5           | 34.4  | 28.7  | 29.5           | 24.3  | 18.8  | 36.7           | 34    | 28.9  | 37             | 33.3  | 27.7  |
|                                       | Capacity (KW)       | 9.12           | 7.74  | 6.77  | 10.5           | 8.78  | 7.67  | 13.7           | 12.7  | 10.8  | 16.0           | 14.2  | 12.3  |
|                                       | Capacity (KBtu/Hr)  | 31.12          | 26.41 | 23.10 | 35.83          | 29.96 | 26.17 | 46.74          | 43.33 | 36.85 | 54.59          | 48.45 | 41.97 |
|                                       | CFM                 | 789            | 630   | 531   | 1031           | 796   | 665   | 1281           | 1048  | 893   | 1452           | 1184  | 995   |
|                                       | L/sec Air           | 372            | 297   | 251   | 486            | 376   | 314   | 605            | 495   | 422   | 685            | 559   | 469   |
|                                       | SHR                 | 71%            | 69%   | 68%   | 74%            | 72%   | 71%   | 73%            | 70%   | 70%   | 72%            | 70%   | 69%   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 12.4           | 11.8  | 11.4  | 13.5           | 12.7  | 12.3  | 13.1           | 11.9  | 11.9  | 12.8           | 12.0  | 11.7  |
| 50 Pa. External Static Pressure       | Air WB Lvng.        | 12.0           | 11.5  | 11.2  | 13.1           | 12.4  | 12.1  | 12.7           | 11.6  | 11.7  | 12.4           | 11.7  | 11.5  |
|                                       | Water In C          | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   |
|                                       | Water Lvng C        | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  |
|                                       | Gal/Min             | 5.75           | 4.88  | 4.27  | 6.60           | 5.54  | 4.83  | 8.63           | 8.02  | 6.81  | 10.08          | 8.94  | 7.75  |
|                                       | L/sec Water         | 0.36           | 0.31  | 0.27  | 0.42           | 0.35  | 0.31  | 0.54           | 0.51  | 0.43  | 0.64           | 0.56  | 0.49  |
|                                       | DP PSI              | 5.2            | 3.9   | 3.1   | 3.6            | 2.7   | 2.1   | 4.8            | 4.3   | 3.2   | 4.9            | 3.9   | 3.1   |
|                                       | DP K Pa             | 36.0           | 27.1  | 21.4  | 25             | 18.4  | 14.6  | 33.4           | 29.4  | 22.1  | 33.5           | 27.2  | 21.3  |
|                                       | Fan Speed           | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 7.97           | 6.54  | 5.19  | 9.08           | 7.44  | 5.71  | 12.1           | 10.7  | 7.71  | 14.0           | 11.8  | 9.81  |
|                                       | Capacity (KBtu/Hr)  | 27.19          | 22.31 | 17.71 | 30.98          | 25.39 | 19.48 | 41.29          | 36.51 | 26.31 | 47.77          | 40.26 | 33.47 |
|                                       | CFM                 | 659            | 509   | 383   | 846            | 637   | 457   | 1082           | 842   | 587   | 1214           | 927   | 746   |
|                                       | L/sec Air           | 311            | 240   | 181   | 399            | 301   | 216   | 511            | 397   | 277   | 573            | 437   | 352   |
|                                       | SHR                 | 70%            | 68%   | 67%   | 73%            | 71%   | 69%   | 72%            | 69%   | 68%   | 71%            | 68%   | 68%   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 11.9           | 11.3  | 10.7  | 13.0           | 12.2  | 11.6  | 12.6           | 11.4  | 11.1  | 12.4           | 11.5  | 11.1  |
|                                       | Air WB Lvng.        | 11.6           | 11.0  | 10.5  | 12.6           | 11.9  | 11.4  | 12.3           | 11.1  | 10.8  | 12.0           | 11.2  | 10.9  |
|                                       | Water In C          | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   |
|                                       | Water Lvng C        | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  |
|                                       | Gal/Min             | 5.03           | 4.13  | 3.27  | 5.73           | 4.69  | 3.60  | 7.64           | 6.76  | 4.86  | 8.83           | 7.41  | 6.18  |
|                                       | L/sec Water         | 0.32           | 0.26  | 0.21  | 0.36           | 0.30  | 0.23  | 0.48           | 0.43  | 0.31  | 0.56           | 0.47  | 0.39  |
|                                       | DP PSI              | 4.1            | 2.9   | 2.0   | 2.8            | 2.0   | 1.3   | 3.9            | 3.2   | 1.8   | 3.9            | 2.9   | 2.1   |
|                                       | DP K Pa             | 28.4           | 20.2  | 13.5  | 19.6           | 13.8  | 8.82  | 27.0           | 21.8  | 12.5  | 26.7           | 19.7  | 14.4  |

Note: Table intended for quick selection, for other conditions use selection software.

# Performance Data – 42TW (Cont.)

## 42TW – 4 Row – 2 Pipe – Cooling.

| Rating: 0 Pa External Static Pressure | Fan Speed           | 42TW4 - 03 - 2 |       |       | 42TW4 - 04 - 2 |       |       | 42TW4 - 05 - 2 |       |       | 42TW4 - 06 - 2 |       |       |
|---------------------------------------|---------------------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|
|                                       |                     | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 3.84           | 3.48  | 3.24  | 6.17           | 5.4   | 4.63  | 7.74           | 6.82  | 6.58  | 8.95           | 8.20  | 7.43  |
|                                       | Capacity (KBtu/Hr)  | 13.1           | 11.87 | 11.05 | 21.05          | 18.42 | 15.8  | 26.41          | 23.27 | 22.45 | 30.54          | 27.98 | 25.35 |
|                                       | CFM                 | 313            | 273   | 247   | 533            | 450   | 368   | 623            | 527   | 494   | 702            | 623   | 548   |
|                                       | L/sec Air           | 148            | 129   | 116   | 251            | 212   | 174   | 294            | 249   | 233   | 331            | 294   | 259   |
|                                       | SHR(Sensible/Total) | 69%            | 68%   | 67%   | 71%            | 70%   | 69%   | 69%            | 68%   | 67%   | 68%            | 68%   | 67%   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 11.9           | 11.4  | 11.2  | 12.4           | 12.0  | 11.5  | 11.7           | 11.3  | 11.0  | 11.4           | 11.1  | 10.8  |
|                                       | Air WB Lvng.        | 11.6           | 11.3  | 11.1  | 12.2           | 11.9  | 11.4  | 11.5           | 11.1  | 10.9  | 11.2           | 10.9  | 10.7  |
|                                       | N Circuits          | 2              | 2     | 2     | 3              | 3     | 3     | 3              | 3     | 3     | 4              | 4     | 4     |
|                                       | Face Tubes          | 10             | 10    | 10    | 10             | 10    | 10    | 10             | 10    | 10    | 10             | 10    | 10    |
| 25 Pa. External Static Pressure       | Water In C          | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   |
|                                       | Water Lvng C        | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  |
|                                       | Gal/Min             | 2.42           | 2.19  | 2.04  | 3.89           | 3.40  | 2.92  | 4.88           | 4.29  | 4.15  | 5.64           | 5.17  | 4.68  |
|                                       | L/sec Water         | 0.15           | 0.14  | 0.13  | 0.25           | 0.21  | 0.18  | 0.31           | 0.27  | 0.26  | 0.36           | 0.33  | 0.30  |
|                                       | DP PSI              | 4.1            | 3.5   | 3.1   | 4.2            | 3.3   | 2.6   | 8.1            | 6.5   | 6.1   | 5.8            | 5.0   | 4.2   |
|                                       | DP K Pa             | 28.5           | 23.9  | 21.2  | 29             | 23    | 17.7  | 55.8           | 44.5  | 42.0  | 39.7           | 34.3  | 28.8  |
|                                       | Fan Speed           | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 3.66           | 3.14  | 2.77  | 5.65           | 4.61  | 4.00  | 7.41           | 6.36  | 5.67  | 8.67           | 7.38  | 6.41  |
|                                       | Capacity (KBtu/Hr)  | 12.49          | 10.71 | 9.451 | 19.28          | 15.73 | 13.65 | 25.28          | 21.7  | 19.35 | 29.58          | 25.18 | 21.87 |
|                                       | CFM                 | 295            | 242   | 206   | 474            | 366   | 305   | 589            | 483   | 411   | 673            | 545   | 457   |
|                                       | L/sec Air           | 139            | 114   | 97    | 224            | 173   | 144   | 278            | 228   | 194   | 318            | 257   | 216   |
|                                       | SHR                 | 69%            | 68%   | 67%   | 70%            | 69%   | 68%   | 69%            | 68%   | 67%   | 68%            | 67%   | 66%   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 11.7           | 11.3  | 10.9  | 12.1           | 11.5  | 11.1  | 11.6           | 11.1  | 10.6  | 11.3           | 10.8  | 10.4  |
|                                       | Air WB Lvng.        | 11.5           | 11.1  | 10.8  | 11.9           | 11.3  | 11.0  | 11.4           | 10.9  | 10.5  | 11.1           | 10.6  | 10.3  |
| 50 Pa. External Static Pressure       | Water In C          | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   |
|                                       | Water Lvng C        | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  |
|                                       | Gal/Min             | 2.31           | 1.98  | 1.75  | 3.56           | 2.91  | 2.52  | 4.67           | 4.01  | 3.58  | 5.46           | 4.65  | 4.05  |
|                                       | L/sec Water         | 0.15           | 0.12  | 0.11  | 0.22           | 0.18  | 0.16  | 0.29           | 0.25  | 0.23  | 0.34           | 0.29  | 0.26  |
|                                       | DP PSI              | 3.8            | 2.9   | 2.3   | 3.6            | 2.5   | 2.0   | 7.5            | 5.7   | 4.7   | 5.5            | 4.1   | 3.2   |
|                                       | DP K Pa             | 26.2           | 20    | 16.1  | 25.0           | 17.5  | 13.7  | 51.6           | 39.5  | 32.4  | 37.6           | 28.5  | 22.3  |
|                                       | Fan Speed           | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 3.23           | 2.63  | 1.93  | 4.95           | 3.94  | 2.98  | 6.62           | 5.42  | 4.07  | 7.61           | 6.16  | 5.13  |
|                                       | Capacity (KBtu/Hr)  | 11.02          | 8.974 | 6.585 | 16.89          | 13.44 | 10.17 | 22.59          | 18.49 | 13.89 | 25.97          | 21.02 | 17.5  |
|                                       | CFM                 | 255            | 198   | 138   | 397            | 300   | 215   | 509            | 396   | 276   | 570            | 436   | 351   |
|                                       | L/sec Air           | 120            | 93    | 65    | 187            | 141   | 102   | 240            | 187   | 130   | 269            | 206   | 166   |
|                                       | SHR                 | 68%            | 67%   | 66%   | 69%            | 68%   | 67%   | 68%            | 67%   | 65%   | 67%            | 66%   | 65%   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 11.5           | 11.0  | 10.6  | 11.6           | 11.1  | 10.5  | 11.2           | 10.6  | 9.8   | 11.0           | 10.3  | 9.9   |
|                                       | Air WB Lvng.        | 11.3           | 10.8  | 10.5  | 11.4           | 10.9  | 10.4  | 11.0           | 10.5  | 9.7   | 10.8           | 10.2  | 9.8   |
|                                       | Water In C          | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   |
|                                       | Water Lvng C        | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  |
|                                       | Gal/Min             | 2.04           | 1.66  | 1.22  | 3.12           | 2.48  | 1.88  | 4.17           | 3.42  | 2.57  | 4.79           | 3.88  | 3.24  |
|                                       | L/sec Water         | 0.13           | 0.10  | 0.08  | 0.20           | 0.16  | 0.12  | 0.26           | 0.22  | 0.16  | 0.30           | 0.25  | 0.20  |
|                                       | DP PSI              | 3.0            | 2.1   | 1.2   | 2.9            | 1.9   | 1.2   | 6.1            | 4.3   | 2.6   | 4.4            | 3.0   | 2.2   |
|                                       | DP K Pa             | 21.0           | 14.7  | 8.37  | 19.8           | 13.3  | 8.01  | 42.4           | 29.9  | 18.2  | 30.0           | 20.8  | 15.2  |

Note: Table intended for quick selection, for other conditions use selection software.



# Performance Data – 42TW (Cont.)

## 42TW – 4 Row – 2 Pipe – Cooling - (Cont.)

| Rating: 0 Pa External Static Pressure | Fan Speed           | 42TW4 - 08 - 2 |       |       | 42TW4 - 10 - 2 |       |       | 42TW4 - 11 - 2 |       |       | 42TW4 - 14 - 2 |       |       |
|---------------------------------------|---------------------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|
|                                       | Capacity (KW)       | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KBtu/Hr)  | 9.94           | 8.84  | 7.95  | 12.7           | 11.3  | 9.61  | 15.7           | 13.7  | 13.0  | 17.6           | 16.0  | 14.5  |
|                                       | CFM                 | 33.92          | 30.16 | 27.13 | 43.33          | 38.56 | 32.79 | 53.57          | 46.74 | 44.36 | 60.05          | 54.59 | 49.47 |
|                                       | L/sec Air           | 795            | 680   | 593   | 1065           | 897   | 735   | 1247           | 1055  | 988   | 1416           | 1247  | 1094  |
|                                       | SHR(Sensible/Total) | 375            | 321   | 280   | 502            | 423   | 347   | 589            | 498   | 466   | 668            | 588   | 516   |
|                                       | Air DB Ent          | 69%            | 68%   | 67%   | 70%            | 68%   | 68%   | 68%            | 68%   | 68%   | 69%            | 68%   | 67%   |
|                                       | Air WB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air DB Lvng.        | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air WB Lvng.        | 11.6           | 11.2  | 10.9  | 12.1           | 11.6  | 11.2  | 11.6           | 11.2  | 11.1  | 11.7           | 11.4  | 11.0  |
|                                       | N Circuits          | 11.4           | 11.1  | 10.8  | 11.9           | 11.4  | 11.1  | 11.4           | 11.1  | 11.0  | 11.5           | 11.2  | 10.9  |
|                                       | Face Tubes          | 5              | 5     | 5     | 5              | 5     | 5     | 7              | 7     | 7     | 8              | 8     | 8.0   |
|                                       | Water In C          | 10             | 10    | 10    | 10             | 10    | 10    | 14             | 14    | 14    | 14             | 14    | 14    |
| 25 Pa. External Static Pressure       | Water Lvng C        | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   |
|                                       | Gal/Min             | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  |
|                                       | L/sec Water         | 6.27           | 5.57  | 5.01  | 7.99           | 7.11  | 6.06  | 9.89           | 8.63  | 8.23  | 11.11          | 10.11 | 9.12  |
|                                       | DP PSI              | 0.40           | 0.35  | 0.32  | 0.50           | 0.45  | 0.38  | 0.62           | 0.54  | 0.52  | 0.70           | 0.64  | 0.58  |
|                                       | DP K Pa             | 4.4            | 3.6   | 3.0   | 6.8            | 5.5   | 4.2   | 5.5            | 4.3   | 4.0   | 5.3            | 4.5   | 3.7   |
|                                       | Fan Speed           | 30.6           | 25.0  | 20.7  | 46.7           | 38.1  | 28.9  | 37.7           | 29.7  | 27.4  | 36.3           | 30.8  | 25.7  |
|                                       | Capacity (KW)       | 9.26           | 7.79  | 6.79  | 11.6           | 9.62  | 8.31  | 15.0           | 12.8  | 11.3  | 16.9           | 14.4  | 12.5  |
|                                       | Capacity (KBtu/Hr)  | 31.6           | 26.58 | 23.17 | 39.58          | 32.82 | 28.35 | 51.18          | 43.67 | 38.56 | 57.66          | 49.13 | 42.65 |
|                                       | CFM                 | 725            | 581   | 489   | 948            | 732   | 612   | 1179           | 965   | 822   | 1336           | 1089  | 915   |
|                                       | L/sec Air           | 342            | 274   | 231   | 447            | 346   | 289   | 556            | 455   | 388   | 631            | 514   | 432   |
|                                       | SHR                 | 68%            | 67%   | 67%   | 69%            | 68%   | 67%   | 68%            | 67%   | 67%   | 69%            | 68%   | 67%   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 11.4           | 10.9  | 10.5  | 11.8           | 11.1  | 10.8  | 11.5           | 11.0  | 10.6  | 11.5           | 11.0  | 10.7  |
| 50 Pa. External Static Pressure       | Air WB Lvng.        | 11.2           | 10.7  | 10.4  | 11.6           | 10.9  | 10.6  | 11.3           | 10.9  | 10.5  | 11.3           | 10.9  | 10.6  |
|                                       | Water In C          | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   |
|                                       | Water Lvng C        | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  |
|                                       | Gal/Min             | 5.83           | 4.91  | 4.28  | 7.33           | 6.06  | 5.24  | 9.46           | 8.04  | 7.12  | 10.62          | 9.08  | 7.89  |
|                                       | L/sec Water         | 0.37           | 0.31  | 0.27  | 0.46           | 0.38  | 0.33  | 0.60           | 0.51  | 0.45  | 0.67           | 0.57  | 0.50  |
|                                       | DP PSI              | 3.9            | 2.9   | 2.3   | 5.8            | 4.2   | 3.2   | 5.0            | 3.8   | 3.1   | 4.9            | 3.7   | 2.9   |
|                                       | DP K Pa             | 27.0           | 20.1  | 15.8  | 40.2           | 28.9  | 22.4  | 34.8           | 26.3  | 21.3  | 33.6           | 25.6  | 20.0  |
|                                       | Fan Speed           | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 8.24           | 6.64  | 5.15  | 10.1           | 8.21  | 6.2   | 13.4           | 10.9  | 8.06  | 14.9           | 12    | 10    |
|                                       | Capacity (KBtu/Hr)  | 28.11          | 22.66 | 17.57 | 34.46          | 28.01 | 21.15 | 45.72          | 37.19 | 27.5  | 50.84          | 40.94 | 34.12 |
|                                       | CFM                 | 626            | 479   | 354   | 795            | 599   | 430   | 1018           | 791   | 551   | 1141           | 872   | 702   |
|                                       | L/sec Air           | 295            | 226   | 167   | 375            | 282   | 203   | 480            | 373   | 260   | 538            | 411   | 331   |
|                                       | SHR                 | 68%            | 67%   | 66%   | 69%            | 67%   | 66%   | 67%            | 67%   | 66%   | 68%            | 67%   | 66%   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 11.1           | 10.5  | 10.0  | 11.4           | 10.6  | 10.0  | 11.1           | 10.6  | 9.9   | 11.2           | 10.6  | 10.2  |
|                                       | Air WB Lvng.        | 10.9           | 10.3  | 9.9   | 11.2           | 10.5  | 9.9   | 10.9           | 10.5  | 9.8   | 11.0           | 10.4  | 10.1  |
| 50 Pa. External Static Pressure       | Water In C          | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   |
|                                       | Water Lvng C        | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  |
|                                       | Gal/Min             | 5.20           | 4.19  | 3.24  | 6.39           | 5.17  | 3.91  | 8.44           | 6.86  | 5.09  | 9.39           | 7.58  | 6.31  |
|                                       | L/sec Water         | 0.33           | 0.26  | 0.20  | 0.40           | 0.33  | 0.25  | 0.53           | 0.43  | 0.32  | 0.59           | 0.48  | 0.40  |
|                                       | DP PSI              | 3.2            | 2.2   | 1.4   | 4.6            | 3.2   | 2.0   | 4.1            | 2.9   | 1.7   | 3.9            | 2.7   | 2.0   |
|                                       | DP K Pa             | 22.1           | 15.3  | 9.58  | 31.6           | 21.9  | 13.5  | 28.6           | 20.0  | 12.0  | 27.1           | 18.7  | 13.7  |

Note: Table intended for quick selection, for other conditions use selection software.

# Performance Data – 42TW (Cont.)

## 42TW – 4 Row – 4 Pipe – Cooling.

| Rating: 0 Pa External Static Pressure | Fan Speed           | 42TW4 - 03 |       |       | 42TW4 - 04 |       |       | 42TW4 - 05 |       |       | 42TW4 - 06 |       |       |
|---------------------------------------|---------------------|------------|-------|-------|------------|-------|-------|------------|-------|-------|------------|-------|-------|
|                                       | Capacity (KW)       | High       | Med.  | Low   | High       | Med.  | Low   | High       | Med.  | Low   | High       | Med.  | Low   |
|                                       | Capacity (KBtu/Hr)  | 3.37       | 3.08  | 2.87  | 5.33       | 4.80  | 4.13  | 6.93       | 6.11  | 5.88  | 8.03       | 7.34  | 6.64  |
|                                       | CFM                 | 11.5       | 10.51 | 9.792 | 18.19      | 16.38 | 14.09 | 23.65      | 20.85 | 20.06 | 27.4       | 25.04 | 22.66 |
|                                       | L/sec Air           | 313        | 273   | 247   | 533        | 450   | 368   | 623        | 527   | 494   | 702        | 623   | 548   |
|                                       | SHR(Sensible/Total) | 148        | 129   | 116   | 251        | 212   | 174   | 294        | 249   | 233   | 331        | 294   | 259   |
|                                       | Air DB Ent          | 72%        | 71%   | 70%   | 74%        | 72%   | 71%   | 71%        | 70%   | 69%   | 70%        | 70%   | 69%   |
|                                       | Air WB Ent          | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  |
|                                       | Air DB Lvng.        | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  |
|                                       | Air WB Lvng.        | 13.0       | 12.6  | 12.3  | 13.8       | 13.2  | 12.7  | 12.9       | 12.5  | 12.2  | 12.6       | 12.3  | 12.0  |
|                                       | N Circuits          | 12.8       | 12.4  | 12.2  | 13.5       | 13.0  | 12.6  | 12.6       | 12.3  | 12.1  | 12.4       | 12.1  | 11.9  |
|                                       | Face Tubes          | 2          | 2     | 2     | 2          | 2     | 2     | 3          | 3     | 3     | 3          | 3     | 3     |
|                                       | Water In C          | 10         | 10    | 10    | 10         | 10    | 10    | 10         | 10    | 10    | 10         | 10    | 10    |
| 25 Pa. External Static Pressure       | Water Lvng C        | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   |
|                                       | Gal/Min             | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  |
|                                       | L/sec Water         | 2.13       | 1.94  | 1.81  | 3.36       | 3.02  | 2.60  | 4.37       | 3.85  | 3.70  | 5.06       | 4.63  | 4.19  |
|                                       | DP PSI              | 0.13       | 0.12  | 0.11  | 0.21       | 0.19  | 0.16  | 0.28       | 0.24  | 0.23  | 0.32       | 0.29  | 0.26  |
|                                       | DP K Pa             | 2.9        | 2.5   | 2.2   | 6.5        | 5.4   | 4.2   | 4.5        | 3.6   | 3.3   | 6.8        | 5.8   | 4.9   |
|                                       | Fan Speed           | 20.1       | 17.1  | 15.2  | 44.9       | 37.3  | 28.7  | 30.9       | 24.7  | 23.1  | 46.6       | 39.9  | 33.5  |
|                                       | Capacity (KW)       | 3.23       | 2.81  | 2.50  | 4.93       | 4.15  | 3.60  | 6.67       | 5.72  | 5.11  | 7.79       | 6.64  | 5.78  |
|                                       | Capacity (KBtu/Hr)  | 11.02      | 9.588 | 8.53  | 16.82      | 14.16 | 12.28 | 22.76      | 19.52 | 17.44 | 26.58      | 22.66 | 19.72 |
|                                       | CFM                 | 295        | 242   | 206   | 474        | 366   | 305   | 589        | 483   | 411   | 673        | 545   | 457   |
|                                       | L/sec Air           | 139        | 114   | 97    | 224        | 173   | 144   | 278        | 228   | 194   | 318        | 257   | 216   |
|                                       | SHR                 | 72%        | 70%   | 70%   | 73%        | 71%   | 70%   | 70%        | 70%   | 68%   | 70%        | 69%   | 68%   |
|                                       | Air DB Ent          | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 12.9       | 12.3  | 11.9  | 13.4       | 12.7  | 12.2  | 12.7       | 12.2  | 11.8  | 12.5       | 12.0  | 11.6  |
| 50 Pa. External Static Pressure       | Air WB Lvng.        | 12.6       | 12.2  | 11.8  | 13.2       | 12.5  | 12.1  | 12.5       | 12.1  | 11.6  | 12.3       | 11.8  | 11.5  |
|                                       | Water In C          | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   |
|                                       | Water Lvng C        | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  |
|                                       | Gal/Min             | 2.04       | 1.77  | 1.58  | 3.11       | 2.62  | 2.27  | 4.20       | 3.61  | 3.22  | 4.91       | 4.19  | 3.65  |
|                                       | L/sec Water         | 0.13       | 0.11  | 0.10  | 0.20       | 0.17  | 0.14  | 0.27       | 0.23  | 0.20  | 0.31       | 0.26  | 0.23  |
|                                       | DP PSI              | 2.7        | 2.1   | 1.8   | 5.7        | 4.2   | 3.3   | 4.2        | 3.2   | 2.6   | 6.4        | 4.9   | 3.8   |
|                                       | DP K Pa             | 18.7       | 14.6  | 12.1  | 39.1       | 28.9  | 22.5  | 28.8       | 22.1  | 18.1  | 44.3       | 33.5  | 26.3  |
|                                       | Fan Speed           | High       | Med.  | Low   | High       | Med.  | Low   | High       | Med.  | Low   | High       | Med.  | Low   |
|                                       | Capacity (KW)       | 2.89       | 2.40  | 1.79  | 4.35       | 3.57  | 2.75  | 5.99       | 4.92  | 3.73  | 6.89       | 5.59  | 4.68  |
|                                       | Capacity (KBtu/Hr)  | 9.861      | 8.189 | 6.107 | 14.84      | 12.18 | 9.383 | 20.44      | 16.79 | 12.73 | 23.51      | 19.07 | 15.97 |
|                                       | CFM                 | 255        | 198   | 138   | 397        | 300   | 215   | 509        | 396   | 276   | 570        | 436   | 351   |
|                                       | L/sec Air           | 120        | 93    | 65    | 187        | 141   | 102   | 240        | 187   | 130   | 269        | 206   | 166   |
|                                       | SHR                 | 71%        | 70%   | 68%   | 71%        | 70%   | 68%   | 70%        | 68%   | 67%   | 69%        | 68%   | 67%   |
|                                       | Air DB Ent          | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 12.5       | 11.9  | 11.2  | 13.0       | 12.1  | 11.4  | 12.3       | 11.8  | 10.9  | 12.1       | 11.4  | 11.0  |
|                                       | Air WB Lvng.        | 12.3       | 11.7  | 11.1  | 12.7       | 12.0  | 11.3  | 12.1       | 11.6  | 10.8  | 11.8       | 11.3  | 10.9  |
|                                       | Water In C          | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   |
|                                       | Water Lvng C        | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  |
|                                       | Gal/Min             | 1.82       | 1.51  | 1.13  | 2.74       | 2.25  | 1.73  | 3.78       | 3.10  | 2.35  | 4.34       | 3.53  | 2.95  |
|                                       | L/sec Water         | 0.12       | 0.10  | 0.07  | 0.17       | 0.14  | 0.11  | 0.24       | 0.20  | 0.15  | 0.27       | 0.22  | 0.19  |
|                                       | DP PSI              | 2.2        | 1.6   | 0.9   | 4.6        | 3.2   | 2.0   | 3.5        | 2.5   | 1.5   | 5.2        | 3.6   | 2.6   |
|                                       | DP K Pa             | 15.4       | 11.2  | 6.35  | 31.4       | 22.2  | 14.1  | 23.9       | 17    | 10.5  | 35.7       | 24.9  | 18.2  |

Note: Table intended for quick selection, for other conditions use selection software.

# Performance Data – 42TW (Cont.)

## 42TW – 4 Row – 4 Pipe – Cooling - (Cont.)

| Rating: 0 Pa External Static Pressure | Fan Speed           | 42TW4 - 08 |       |       | 42TW4 - 10 |       |       | 42TW4 - 11 |       |       | 42TW4 - 14 |       |       |
|---------------------------------------|---------------------|------------|-------|-------|------------|-------|-------|------------|-------|-------|------------|-------|-------|
|                                       | Capacity (KW)       | High       | Med.  | Low   | High       | Med.  | Low   | High       | Med.  | Low   | High       | Med.  | Low   |
|                                       | Capacity (KBtu/Hr)  | 8.90       | 7.89  | 7.08  | 11.2       | 10.0  | 8.59  | 14.1       | 12.3  | 11.7  | 15.9       | 14.3  | 12.9  |
|                                       | CFM                 | 30.37      | 26.92 | 24.16 | 38.21      | 34.12 | 29.31 | 48.11      | 41.97 | 39.92 | 54.25      | 48.79 | 44.01 |
|                                       | L/sec Air           | 795        | 680   | 593   | 1065       | 897   | 735   | 1247       | 1055  | 988   | 1416       | 1247  | 1094  |
|                                       | SHR(Sensible/Total) | 375        | 321   | 280   | 502        | 423   | 347   | 589        | 498   | 466   | 668        | 588   | 516   |
|                                       | Air DB Ent          | 71%        | 70%   | 70%   | 72%        | 71%   | 70%   | 70%        | 70%   | 69%   | 70%        | 71%   | 70%   |
|                                       | Air WB Ent          | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  |
|                                       | Air DB Lvng.        | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  |
|                                       | Air WB Lvng.        | 12.8       | 12.4  | 12.1  | 13.4       | 12.8  | 12.4  | 12.8       | 12.4  | 12.3  | 12.8       | 12.5  | 12.3  |
|                                       | N Circuits          | 12.5       | 12.2  | 12.0  | 13.1       | 12.6  | 12.3  | 12.5       | 12.2  | 12.1  | 12.6       | 12.3  | 12.2  |
|                                       | Face Tubes          | 4          | 4     | 4     | 4          | 4     | 4     | 6          | 6     | 6     | 6          | 6     | 6     |
|                                       | Water In C          | 10         | 10    | 10    | 10         | 10    | 10    | 14         | 14    | 14    | 14         | 14    | 14    |
| 25 Pa. External Static Pressure       | Water Lvng C        | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   |
|                                       | Gal/Min             | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  |
|                                       | L/sec Water         | 5.62       | 4.98  | 4.46  | 7.09       | 6.34  | 5.42  | 8.86       | 7.77  | 7.37  | 10.00      | 9.04  | 8.13  |
|                                       | DP PSI              | 0.35       | 0.31  | 0.28  | 0.45       | 0.40  | 0.34  | 0.56       | 0.49  | 0.47  | 0.63       | 0.57  | 0.51  |
|                                       | DP K Pa             | 4.6        | 3.8   | 3.1   | 3.8        | 3.1   | 2.4   | 4.7        | 3.7   | 3.4   | 4.5        | 3.7   | 3.1   |
|                                       | Fan Speed           | 32         | 25.9  | 21.4  | 26.2       | 21.6  | 16.4  | 32.4       | 25.8  | 23.5  | 30.7       | 25.7  | 21.4  |
|                                       | Capacity (KW)       | 8.33       | 7.01  | 6.11  | 10.4       | 8.66  | 7.48  | 13.5       | 11.5  | 10.2  | 15.2       | 13.0  | 11.2  |
|                                       | Capacity (KBtu/Hr)  | 28.42      | 23.92 | 20.85 | 35.48      | 29.55 | 25.52 | 46.06      | 39.24 | 34.8  | 51.86      | 44.36 | 38.21 |
|                                       | CFM                 | 725        | 581   | 489   | 948        | 732   | 612   | 1179       | 965   | 822   | 1336       | 1089  | 915   |
|                                       | L/sec Air           | 342        | 274   | 231   | 447        | 346   | 289   | 556        | 455   | 388   | 631        | 514   | 432   |
|                                       | SHR                 | 70%        | 69%   | 69%   | 71%        | 70%   | 69%   | 70%        | 69%   | 68%   | 70%        | 69%   | 69%   |
|                                       | Air DB Ent          | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 12.5       | 12.0  | 11.7  | 13.0       | 12.3  | 11.9  | 12.6       | 12.2  | 11.8  | 12.7       | 12.2  | 11.8  |
| 50 Pa. External Static Pressure       | Air WB Lvng.        | 12.3       | 11.9  | 11.6  | 12.7       | 12.1  | 11.8  | 12.4       | 12.0  | 11.7  | 12.4       | 12.0  | 11.7  |
|                                       | Water In C          | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   |
|                                       | Water Lvng C        | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  |
|                                       | Gal/Min             | 5.26       | 4.42  | 3.85  | 6.58       | 5.46  | 4.72  | 8.52       | 7.26  | 6.41  | 9.59       | 8.18  | 7.10  |
|                                       | L/sec Water         | 0.33       | 0.28  | 0.24  | 0.42       | 0.34  | 0.30  | 0.54       | 0.46  | 0.40  | 0.61       | 0.52  | 0.45  |
|                                       | DP PSI              | 4.1        | 3.1   | 2.4   | 3.3        | 2.4   | 1.9   | 4.4        | 3.3   | 2.7   | 4.1        | 3.1   | 2.5   |
|                                       | DP K Pa             | 28.5       | 21.1  | 16.6  | 23.1       | 16.7  | 12.9  | 30.2       | 22.9  | 18.5  | 28.5       | 21.6  | 16.9  |
|                                       | Fan Speed           | High       | Med.  | Low   | High       | Med.  | Low   | High       | Med.  | Low   | High       | Med.  | Low   |
|                                       | Capacity (KW)       | 7.46       | 6.04  | 4.71  | 9.20       | 7.44  | 5.65  | 12.1       | 9.90  | 7.39  | 13.5       | 10.9  | 9.13  |
|                                       | Capacity (KBtu/Hr)  | 25.45      | 20.61 | 16.07 | 31.39      | 25.39 | 19.28 | 41.29      | 33.78 | 25.21 | 46.06      | 37.19 | 31.15 |
|                                       | CFM                 | 626        | 479   | 354   | 795        | 599   | 430   | 1018       | 791   | 551   | 1141       | 872   | 702   |
|                                       | L/sec Air           | 295        | 226   | 167   | 375        | 282   | 203   | 480        | 373   | 260   | 538        | 411   | 331   |
|                                       | SHR                 | 70%        | 68%   | 67%   | 70%        | 69%   | 67%   | 69%        | 68%   | 67%   | 70%        | 69%   | 68%   |
|                                       | Air DB Ent          | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  | 26.7       | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  | 19.4       | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 12.1       | 11.6  | 11.0  | 12.5       | 11.8  | 11.1  | 12.2       | 11.7  | 10.9  | 12.2       | 11.6  | 11.2  |
|                                       | Air WB Lvng.        | 11.9       | 11.4  | 10.9  | 12.3       | 11.6  | 11.0  | 12.0       | 11.5  | 10.8  | 12.0       | 11.5  | 11.1  |
| 50 Pa. External Static Pressure       | Water In C          | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   | 6.7        | 6.7   | 6.7   |
|                                       | Water Lvng C        | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  | 12.7       | 12.7  | 12.7  |
|                                       | Gal/Min             | 4.71       | 3.80  | 2.97  | 5.80       | 4.69  | 3.57  | 7.64       | 6.24  | 4.66  | 8.54       | 6.89  | 5.76  |
|                                       | L/sec Water         | 0.30       | 0.24  | 0.19  | 0.37       | 0.30  | 0.23  | 0.48       | 0.39  | 0.29  | 0.54       | 0.44  | 0.36  |
|                                       | DP PSI              | 3.4        | 2.4   | 1.5   | 2.7        | 1.9   | 1.2   | 3.6        | 2.6   | 1.6   | 3.4        | 2.3   | 1.7   |
| 50 Pa. External Static Pressure       | DP K Pa             | 23.5       | 16.3  | 10.6  | 18.5       | 12.8  | 8.0   | 25.0       | 17.6  | 10.7  | 23.3       | 16.1  | 11.8  |

Note: Table intended for quick selection, for other conditions use selection software.

# Performance Data – 42TW (Cont.)

## 42TW – 4 Row – 4 Pipe - Heating

| Rating: 0 Pa External Static Pressure | Fan Speed          | 42TW4 - 03 |      |      | 42TW4 - 04 |       |       | 42TW4 - 05 |       |       | 42TW4 - 06 |       |       |
|---------------------------------------|--------------------|------------|------|------|------------|-------|-------|------------|-------|-------|------------|-------|-------|
|                                       |                    | High       | Med. | Low  | High       | Med.  | Low   | High       | Med.  | Low   | High       | Med.  | Low   |
|                                       | Capacity (KW)      | 2.94       | 2.73 | 2.60 | 5.47       | 5.32  | 4.87  | 6.78       | 6.16  | 5.90  | 7.85       | 7.41  | 6.89  |
|                                       | Capacity (KBtu/Hr) | 10.03      | 9.31 | 8.87 | 18.66      | 18.15 | 16.62 | 23.13      | 21.02 | 20.13 | 26.78      | 25.28 | 23.51 |
|                                       | CFM                | 313        | 273  | 247  | 533        | 450   | 368   | 623        | 527   | 494   | 702        | 623   | 548   |
|                                       | L/sec Air          | 148        | 129  | 116  | 251        | 212   | 174   | 294        | 249   | 233   | 331        | 294   | 259   |
|                                       | Air DB Ent         | 20         | 20   | 20   | 20         | 20    | 20    | 20         | 20    | 20    | 20         | 20    | 20    |
|                                       | Air DB Lvng.       | 36.4       | 37.5 | 38.4 | 37.9       | 40.7  | 43.1  | 39.0       | 40.4  | 40.8  | 39.5       | 40.8  | 42.0  |
|                                       | N Circuits         | 2          | 2    | 2    | 2          | 2     | 2     | 2          | 2     | 2     | 2          | 2     | 2     |
|                                       | Face Tubes         | 10         | 10   | 10   | 10         | 10    | 10    | 10         | 10    | 10    | 10         | 10    | 10    |
|                                       | Water In C         | 70         | 70   | 70   | 70         | 70    | 70    | 70         | 70    | 70    | 70         | 70    | 70    |
|                                       | Water Lvng C       | 61.6       | 61.6 | 61.6 | 61.6       | 61.6  | 61.6  | 61.6       | 61.6  | 61.6  | 61.6       | 61.6  | 61.6  |
|                                       | Gal/Min            | 1.93       | 1.75 | 1.64 | 2.73       | 2.45  | 2.25  | 3.18       | 2.87  | 2.75  | 3.83       | 3.54  | 3.25  |
|                                       | L/sec Water        | 0.12       | 0.11 | 0.10 | 0.17       | 0.15  | 0.14  | 0.20       | 0.18  | 0.17  | 0.24       | 0.22  | 0.21  |
| 25 Pa. External Static Pressure       | DP PSI             | 4.2        | 3.5  | 3.1  | 7.8        | 6.4   | 5.5   | 2.0        | 1.7   | 1.6   | 3.3        | 2.9   | 2.5   |
|                                       | DP K Pa            | 28.8       | 24.3 | 21.5 | 53.5       | 44.3  | 37.8  | 13.9       | 11.5  | 10.7  | 22.7       | 19.7  | 16.9  |
|                                       | Fan Speed          | High       | Med. | Low  | High       | Med.  | Low   | High       | Med.  | Low   | High       | Med.  | Low   |
|                                       | Capacity (KW)      | 2.83       | 2.52 | 2.29 | 5.09       | 4.65  | 4.29  | 6.54       | 5.81  | 5.22  | 7.64       | 6.77  | 6.09  |
|                                       | Capacity (KBtu/Hr) | 9.66       | 8.60 | 7.81 | 17.37      | 15.87 | 14.64 | 22.31      | 19.82 | 17.81 | 26.07      | 23.10 | 20.78 |
|                                       | CFM                | 295        | 242  | 206  | 474        | 366   | 305   | 589        | 483   | 411   | 673        | 545   | 457   |
|                                       | L/sec Air          | 139        | 114  | 97   | 224        | 173   | 144   | 278        | 228   | 194   | 318        | 257   | 216   |
|                                       | Air DB Ent         | 20         | 20   | 20   | 20         | 20    | 20    | 20         | 20    | 20    | 20         | 20    | 20    |
|                                       | Air DB Lvng.       | 36.7       | 38.2 | 39.4 | 38.8       | 42.2  | 44.5  | 39.4       | 41.0  | 42.2  | 39.8       | 41.7  | 43.3  |
|                                       | Water In C         | 70         | 70   | 70   | 70         | 70    | 70    | 70         | 70    | 70    | 70         | 70    | 70    |
|                                       | Water Lvng C       | 61.6       | 61.6 | 61.6 | 61.6       | 61.6  | 61.6  | 61.6       | 61.6  | 61.6  | 61.6       | 61.6  | 61.6  |
|                                       | Gal/Min            | 1.85       | 1.61 | 1.44 | 2.53       | 2.14  | 1.98  | 3.07       | 2.70  | 2.43  | 3.73       | 3.24  | 2.88  |
|                                       | L/sec Water        | 0.12       | 0.10 | 0.09 | 0.16       | 0.14  | 0.12  | 0.19       | 0.17  | 0.15  | 0.24       | 0.20  | 0.18  |
|                                       | DP PSI             | 3.9        | 3.0  | 2.5  | 6.8        | 5.1   | 4.4   | 1.9        | 1.5   | 1.2   | 3.1        | 2.4   | 2.0   |
|                                       | DP K Pa            | 26.9       | 21   | 17.1 | 46.9       | 34.9  | 30.1  | 13         | 10.4  | 8.56  | 21.6       | 16.8  | 13.6  |
| 50 Pa. External Static Pressure       | Fan Speed          | High       | Med. | Low  | High       | Med.  | Low   | High       | Med.  | Low   | High       | Med.  | Low   |
|                                       | Capacity (KW)      | 2.55       | 2.18 | 1.71 | 4.54       | 4.06  | 3.35  | 5.95       | 5.08  | 3.96  | 6.84       | 5.81  | 5.05  |
|                                       | Capacity (KBtu/Hr) | 8.70       | 7.44 | 5.83 | 15.49      | 13.85 | 11.43 | 20.30      | 17.33 | 13.51 | 23.34      | 19.82 | 17.23 |
|                                       | CFM                | 255        | 198  | 138  | 397        | 300   | 215   | 509        | 396   | 276   | 570        | 436   | 351   |
|                                       | L/sec Air          | 120        | 93   | 65   | 187        | 141   | 102   | 240        | 187   | 130   | 269        | 206   | 166   |
|                                       | Air DB Ent         | 20         | 20   | 20   | 20         | 20    | 20    | 20         | 20    | 20    | 20         | 20    | 20    |
|                                       | Air DB Lvng.       | 37.5       | 39.2 | 41.6 | 40.0       | 43.7  | 47.2  | 40.4       | 42.4  | 45.1  | 40.9       | 43.3  | 45.1  |
|                                       | Water In C         | 70         | 70   | 70   | 70         | 70    | 70    | 70         | 70    | 70    | 70         | 70    | 70    |
|                                       | Water Lvng C       | 61.6       | 61.6 | 61.6 | 61.6       | 61.6  | 61.6  | 61.6       | 61.6  | 61.6  | 61.6       | 61.6  | 61.6  |
|                                       | Gal/Min            | 1.67       | 1.40 | 1.07 | 2.26       | 1.87  | 1.55  | 2.80       | 2.36  | 1.84  | 3.34       | 2.78  | 2.39  |
|                                       | L/sec Water        | 0.11       | 0.09 | 0.07 | 0.14       | 0.12  | 0.10  | 0.18       | 0.15  | 0.12  | 0.21       | 0.18  | 0.15  |
|                                       | DP PSI             | 3.2        | 2.3  | 1.5  | 5.6        | 4.0   | 2.8   | 1.6        | 1.2   | 0.8   | 2.6        | 1.9   | 1.4   |
|                                       | DP K Pa            | 22.4       | 16.2 | 10.2 | 38.4       | 27.4  | 19.4  | 11         | 8.18  | 5.26  | 17.8       | 12.8  | 9.78  |

Note: Table intended for quick selection, for other conditions use selection software.

# Performance Data – 42TW (Cont.)

## 42TW – 4 Row – 4 Pipe – Heating (Cont.)

| Rating: 0 Pa External Static Pressure | Fan Speed          | 42TW4 - 08 |       |       | 42TW4-10 |       |       | 42TW4 - 11 |       |       | 42TW4 - 14 |       |       |
|---------------------------------------|--------------------|------------|-------|-------|----------|-------|-------|------------|-------|-------|------------|-------|-------|
|                                       | Capacity (KW)      | High       | Med.  | Low   | High     | Med.  | Low   | High       | Med.  | Low   | High       | Med.  | Low   |
|                                       | Capacity (KBtu/Hr) | 9.39       | 8.78  | 7.98  | 12.2     | 11.4  | 10.2  | 13.9       | 12.7  | 12.2  | 17.5       | 16.3  | 15.1  |
|                                       | CFM                | 32.04      | 29.96 | 27.23 | 41.63    | 38.90 | 34.80 | 47.43      | 43.33 | 41.63 | 59.71      | 55.62 | 51.52 |
|                                       | L/sec Air          | 795        | 680   | 593   | 1065     | 897   | 735   | 1247       | 1055  | 988   | 1416       | 1247  | 1094  |
|                                       | Air DB Ent         | 375        | 321   | 280   | 502      | 423   | 347   | 589        | 498   | 466   | 668        | 588   | 516   |
|                                       | Air DB Lvng.       | 20         | 20    | 20    | 20       | 20    | 20    | 20         | 20    | 20    | 20         | 20    | 20    |
|                                       | N Circuits         | 40.6       | 42.5  | 43.5  | 40.0     | 42.2  | 44.2  | 39.5       | 41.0  | 41.6  | 41.6       | 42.8  | 44.1  |
|                                       | Face Tubes         | 2          | 2     | 2     | 2        | 2     | 2     | 3          | 3     | 3     | 3          | 3     | 3     |
|                                       | Water In C         | 10         | 10    | 10    | 10       | 10    | 10    | 14         | 14    | 14    | 14         | 14    | 14    |
|                                       | Water Lvng C       | 70         | 70    | 70    | 70       | 70    | 70    | 70         | 70    | 70    | 70         | 70    | 70    |
|                                       | Gal/Min            | 61.6       | 61.6  | 61.6  | 61.6     | 61.6  | 61.6  | 61.6       | 61.6  | 61.6  | 61.6       | 61.6  | 61.6  |
|                                       | L/sec Water        | 4.51       | 4.07  | 3.70  | 5.61     | 5.25  | 4.68  | 6.76       | 6.06  | 5.80  | 8.05       | 7.52  | 6.97  |
|                                       | DP PSI             | 0.28       | 0.26  | 0.23  | 0.35     | 0.33  | 0.30  | 0.43       | 0.38  | 0.37  | 0.51       | 0.47  | 0.44  |
|                                       | DP K Pa            | 4.8        | 4.0   | 3.4   | 7.1      | 6.3   | 5.1   | 4.7        | 3.8   | 3.6   | 7.0        | 6.2   | 5.4   |
|                                       |                    | 33         | 27.5  | 23.2  | 48.7     | 43.3  | 35.2  | 32.1       | 26.5  | 24.5  | 48.4       | 42.8  | 37.5  |
| 25 Pa. External Static Pressure       | Fan Speed          | High       | Med.  | Low   | High     | Med.  | Low   | High       | Med.  | Low   | High       | Med.  | Low   |
|                                       | Capacity (KW)      | 8.83       | 7.88  | 6.98  | 11.3     | 9.96  | 8.94  | 13.5       | 11.9  | 10.7  | 16.8       | 14.9  | 13.4  |
|                                       | Capacity (KBtu/Hr) | 30.13      | 26.89 | 23.82 | 38.56    | 33.98 | 30.50 | 46.06      | 40.60 | 36.51 | 57.32      | 50.84 | 45.72 |
|                                       | CFM                | 725        | 581   | 489   | 948      | 732   | 612   | 1179       | 965   | 822   | 1336       | 1089  | 915   |
|                                       | L/sec Air          | 342        | 274   | 231   | 447      | 346   | 289   | 556        | 455   | 388   | 631        | 514   | 432   |
|                                       | Air DB Ent         | 20         | 20    | 20    | 20       | 20    | 20    | 20         | 20    | 20    | 20         | 20    | 20    |
|                                       | Air DB Lvng.       | 41.3       | 43.7  | 44.9  | 40.8     | 43.8  | 45.5  | 40.0       | 41.5  | 42.7  | 42.0       | 43.9  | 45.6  |
|                                       | Water In C         | 70         | 70    | 70    | 70       | 70    | 70    | 70         | 70    | 70    | 70         | 70    | 70    |
|                                       | Water Lvng C       | 61.6       | 61.6  | 61.6  | 61.6     | 61.6  | 61.6  | 61.6       | 61.6  | 61.6  | 61.6       | 61.6  | 61.6  |
|                                       | Gal/Min            | 4.24       | 3.65  | 3.24  | 5.21     | 4.59  | 4.12  | 6.53       | 5.71  | 5.12  | 7.75       | 6.86  | 6.16  |
|                                       | L/sec Water        | 0.27       | 0.23  | 0.20  | 0.33     | 0.29  | 0.26  | 0.41       | 0.36  | 0.32  | 0.49       | 0.43  | 0.39  |
|                                       | DP PSI             | 4.3        | 3.3   | 2.7   | 6.2      | 4.9   | 4.1   | 4.4        | 3.5   | 2.8   | 6.6        | 5.3   | 4.4   |
|                                       | DP K Pa            | 29.6       | 22.7  | 18.3  | 42.7     | 34.1  | 28.1  | 30.2       | 23.8  | 19.6  | 45.2       | 36.4  | 30.1  |
|                                       |                    |            |       |       |          |       |       |            |       |       |            |       |       |
| 50 Pa. External Static Pressure       | Fan Speed          | High       | Med.  | Low   | High     | Med.  | Low   | High       | Med.  | Low   | High       | Med.  | Low   |
|                                       | Capacity (KW)      | 7.99       | 6.89  | 5.54  | 10.1     | 8.67  | 6.94  | 12.2       | 10.4  | 8.11  | 15.1       | 12.7  | 11.0  |
|                                       | Capacity (KBtu/Hr) | 27.26      | 23.51 | 18.90 | 34.46    | 29.58 | 23.68 | 41.63      | 35.48 | 27.67 | 51.52      | 43.33 | 37.53 |
|                                       | CFM                | 626        | 479   | 354   | 795      | 599   | 430   | 1018       | 791   | 551   | 1141       | 872   | 702   |
|                                       | L/sec Air          | 295        | 226   | 167   | 375      | 282   | 203   | 480        | 373   | 260   | 538        | 411   | 331   |
|                                       | Air DB Ent         | 20         | 20    | 20    | 20       | 20    | 20    | 20         | 20    | 20    | 20         | 20    | 20    |
|                                       | Air DB Lvng.       | 42.3       | 45.1  | 47.3  | 42.2     | 45.3  | 48.2  | 40.9       | 43.0  | 45.7  | 43.1       | 45.4  | 47.4  |
|                                       | Water In C         | 70         | 70    | 70    | 70       | 70    | 70    | 70         | 70    | 70    | 70         | 70    | 70    |
|                                       | Water Lvng C       | 61.6       | 61.6  | 61.6  | 61.6     | 61.6  | 61.6  | 61.6       | 61.6  | 61.6  | 61.6       | 61.6  | 61.6  |
|                                       | Gal/Min            | 3.84       | 3.19  | 2.57  | 4.65     | 3.99  | 3.20  | 5.92       | 4.99  | 3.87  | 6.97       | 5.87  | 5.09  |
|                                       | L/sec Water        | 0.24       | 0.20  | 0.16  | 0.29     | 0.25  | 0.20  | 0.37       | 0.31  | 0.24  | 0.44       | 0.37  | 0.32  |
|                                       | DP PSI             | 3.6        | 2.6   | 1.8   | 5.1      | 3.9   | 2.6   | 3.7        | 2.7   | 1.7   | 5.4        | 4.0   | 3.1   |
|                                       | DP K Pa            | 24.8       | 17.8  | 12.2  | 34.9     | 26.6  | 17.9  | 25.4       | 18.7  | 11.9  | 37.4       | 27.6  | 21.4  |
|                                       |                    |            |       |       |          |       |       |            |       |       |            |       |       |

Note: Table intended for quick selection, for other conditions use selection software.

# Performance Data – 42MW.

## 42MW – 3 Row – Cooling.

| Model                        | 42MW3 - 16 - 2 |      |      |       |      |      | 42MW3 - 20 - 2 |       |       |       |       |      |
|------------------------------|----------------|------|------|-------|------|------|----------------|-------|-------|-------|-------|------|
| External Static pressure(Pa) | 0              |      |      | 25    |      |      | 0              |       |       | 25    |       |      |
| Fan Speed                    | High           | Med. | Low  | High  | Med. | Low  | High           | Med.  | Low   | High  | Med.  | Low  |
| Capacity (KW)                | 17.3           | 15.4 | 13.3 | 16.5  | 14.6 | 12.7 | 22.0           | 20.3  | 17.0  | 20.4  | 18.8  | 15.5 |
| Capacity (KBtu/Hr)           | 59.0           | 52.5 | 45.4 | 56.3  | 49.8 | 43.3 | 75.1           | 69.3  | 58.0  | 69.6  | 64.1  | 52.9 |
| CFM                          | 1642           | 1398 | 1138 | 1532  | 1299 | 1068 | 2121           | 1884  | 1468  | 1899  | 1685  | 1297 |
| L/sec Air                    | 775            | 660  | 537  | 723   | 613  | 504  | 1001           | 889   | 693   | 896   | 795   | 612  |
| SHR(Sensible/Total)          | 73%            | 71%  | 70%  | 72%   | 71%  | 70%  | 73%            | 72%   | 71%   | 73%   | 71%   | 70%  |
| Air DB Ent                   | 26.7           | 26.7 | 26.7 | 26.7  | 26.7 | 26.7 | 26.7           | 26.7  | 26.7  | 26.7  | 26.7  | 26.7 |
| Air WB Ent                   | 19.4           | 19.4 | 19.4 | 19.4  | 19.4 | 19.4 | 19.4           | 19.4  | 19.4  | 19.4  | 19.4  | 19.4 |
| Air DB Lvng.                 | 13.2           | 12.7 | 12.2 | 13.0  | 12.5 | 12.0 | 13.3           | 13.0  | 12.3  | 13.0  | 12.6  | 11.9 |
| Air WB Lvng.                 | 12.7           | 12.4 | 11.9 | 12.6  | 12.2 | 11.8 | 12.8           | 12.6  | 12.0  | 12.6  | 12.3  | 11.7 |
| N Circuits                   | 6              | 6    | 6    | 6     | 6    | 6    | 7              | 7     | 7     | 7     | 7     | 7    |
| Face Tubes                   | 14             | 14   | 14   | 14    | 14   | 14   | 14             | 14    | 14    | 14    | 14    | 14   |
| Water In C                   | 6.7            | 6.7  | 6.7  | 6.7   | 6.7  | 6.7  | 6.7            | 6.7   | 6.7   | 6.7   | 6.7   | 6.7  |
| Water Lvng C                 | 12.7           | 12.7 | 12.7 | 12.7  | 12.7 | 12.7 | 12.7           | 12.7  | 12.7  | 12.7  | 12.7  | 12.7 |
| Gal/Min                      | 10.90          | 9.67 | 8.35 | 10.37 | 9.22 | 7.96 | 13.88          | 12.80 | 10.70 | 12.86 | 11.82 | 9.77 |
| L/sec Water                  | 0.69           | 0.61 | 0.53 | 0.65  | 0.58 | 0.50 | 0.88           | 0.81  | 0.68  | 0.81  | 0.75  | 0.62 |
| DP PSI                       | 6.2            | 5.1  | 3.9  | 5.7   | 4.6  | 3.6  | 7.3            | 6.4   | 4.6   | 6.4   | 5.5   | 3.9  |
| DP K Pa                      | 43.0           | 35.0 | 27.0 | 39.0  | 32.0 | 25.0 | 50.0           | 44.0  | 32.0  | 44.0  | 38.0  | 27.0 |
| External Static pressure(Pa) | 50             |      |      | 75    |      |      | 50             |       |       | 75    |       |      |
| Fan Speed                    | High           | Med. | Low  | High  | Med. | Low  | High           | Med.  | Low   | High  | Med.  | Low  |
| Capacity (KW)                | 15.6           | 13.8 | 12.0 | 14.7  | 12.9 | 11.2 | 18.8           | 17.0  | 14.1  | 16.8  | 15.0  | 12.2 |
| Capacity (KBtu/Hr)           | 53.2           | 47.1 | 40.9 | 50.2  | 44.0 | 38.2 | 64.1           | 58.0  | 48.1  | 57.3  | 51.2  | 41.6 |
| CFM                          | 1422           | 1210 | 996  | 1301  | 1108 | 913  | 1691           | 1475  | 1140  | 1449  | 1235  | 943  |
| L/sec Air                    | 671            | 571  | 470  | 614   | 523  | 431  | 798            | 696   | 538   | 684   | 583   | 445  |
| SHR                          | 72%            | 71%  | 70%  | 71%   | 71%  | 69%  | 71%            | 71%   | 69%   | 70%   | 69%   | 68%  |
| Air DB Ent                   | 26.7           | 26.7 | 26.7 | 26.7  | 26.7 | 26.7 | 26.7           | 26.7  | 26.7  | 26.7  | 26.7  | 26.7 |
| Air WB Ent                   | 19.4           | 19.4 | 19.4 | 19.4  | 19.4 | 19.4 | 19.4           | 19.4  | 19.4  | 19.4  | 19.4  | 19.4 |
| Air DB Lvng.                 | 12.8           | 12.3 | 11.8 | 12.5  | 12.1 | 11.6 | 12.6           | 12.3  | 11.6  | 12.2  | 11.1  | 11.6 |
| Air WB Lvng.                 | 12.4           | 12.0 | 11.6 | 12.2  | 11.9 | 11.5 | 12.3           | 12.0  | 11.4  | 11.8  | 11.9  | 11.0 |
| Water In C                   | 6.7            | 6.7  | 6.7  | 6.7   | 6.7  | 6.7  | 6.7            | 6.7   | 6.7   | 6.7   | 6.7   | 6.7  |
| Water Lvng C                 | 12.7           | 12.7 | 12.7 | 12.7  | 12.7 | 12.7 | 12.7           | 12.7  | 12.7  | 12.7  | 12.7  | 12.7 |
| Gal/Min                      | 9.84           | 8.75 | 7.54 | 9.24  | 8.15 | 7.06 | 11.85          | 10.73 | 8.87  | 11.60 | 9.42  | 7.66 |
| L/sec Water                  | 0.62           | 0.55 | 0.48 | 0.58  | 0.51 | 0.45 | 0.75           | 0.68  | 0.56  | 0.73  | 0.59  | 0.48 |
| DP PSI                       | 5.2            | 4.2  | 3.3  | 4.6   | 3.8  | 2.9  | 5.5            | 4.6   | 3.3   | 4.5   | 3.8   | 2.6  |
| DP K Pa                      | 36.0           | 29.0 | 23.0 | 32.0  | 26.0 | 20.0 | 38.0           | 32.0  | 23.0  | 31.0  | 26.0  | 18.0 |
| External Static pressure(Pa) | 100            |      |      | 125   |      |      | 100            |       |       | 125   |       |      |
| Fan Speed                    | High           | Med. | Low  | High  | Med. | Low  | High           | Med.  | Low   | High  | Med.  | Low  |
| Capacity (KW)                | 13.5           | 11.8 | 10.1 | 11.9  | 10.0 | 8.1  | 14.9           | 12.9  | 9.8   | 12.0  | 9.9   | 6.4  |
| Capacity (KBtu/Hr)           | 46.1           | 40.3 | 34.5 | 40.6  | 34.0 | 27.6 | 50.8           | 44.0  | 33.4  | 40.9  | 33.9  | 21.8 |
| CFM                          | 1163           | 983  | 797  | 983   | 790  | 608  | 1231           | 1017  | 720   | 928   | 735   | 443  |
| L/sec Air                    | 549            | 464  | 376  | 464   | 373  | 287  | 581            | 480   | 340   | 438   | 347   | 209  |
| SHR                          | 71%            | 70%  | 68%  | 70%   | 69%  | 68%  | 70%            | 68%   | 67%   | 68%   | 67%   | 66%  |
| Air DB Ent                   | 26.7           | 26.7 | 26.7 | 26.7  | 26.7 | 26.7 | 26.7           | 26.7  | 26.7  | 26.7  | 26.7  | 26.7 |
| Air WB Ent                   | 19.4           | 19.4 | 19.4 | 19.4  | 19.4 | 19.4 | 19.4           | 19.4  | 19.4  | 19.4  | 19.4  | 19.4 |
| Air DB Lvng.                 | 12.2           | 11.8 | 11.3 | 11.8  | 11.3 | 10.8 | 11.8           | 11.3  | 10.5  | 11.1  | 10.6  | 9.8  |
| Air WB Lvng.                 | 12.0           | 11.6 | 11.2 | 11.6  | 11.2 | 10.7 | 11.6           | 11.2  | 10.5  | 11.0  | 10.5  | 9.7  |
| Water In C                   | 6.7            | 6.7  | 6.7  | 6.7   | 6.7  | 6.7  | 6.7            | 6.7   | 6.7   | 6.7   | 6.7   | 6.7  |
| Water Lvng C                 | 12.7           | 12.7 | 12.7 | 12.7  | 12.7 | 12.7 | 12.7           | 12.7  | 12.7  | 12.7  | 12.7  | 12.7 |
| Gal/Min                      | 8.49           | 7.47 | 6.34 | 8.50  | 6.30 | 5.09 | 1.15           | 0.95  | 0.70  | 7.56  | 6.26  | 4.04 |
| L/sec Water                  | 0.54           | 0.47 | 0.40 | 0.54  | 0.40 | 0.32 | 0.07           | 0.06  | 0.04  | 0.48  | 0.39  | 0.26 |
| DP PSI                       | 4.1            | 3.2  | 2.5  | 3.2   | 2.3  | 1.7  | 3.6            | 2.9   | 1.7   | 2.5   | 1.9   | 0.9  |
| DP K Pa                      | 28.0           | 22.0 | 17.0 | 22.0  | 16.0 | 12.0 | 25.0           | 20.0  | 12.0  | 17.0  | 13.0  | 6.0  |

\* Should not Exceed 125 Pa External Static Pressure

# Performance Data – 42MW (Cont.).

## 42MW – 4 Row – 2 Pipe – Cooling.

| Model                        | 42MW4 - 14 - 2 |       |      |       |       |       | 42MW4 - 18 - 2 |       |       |       |       |       |
|------------------------------|----------------|-------|------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|
| External Static pressure(Pa) | 0              |       |      | 25    |       |       | 0              |       |       | 25    |       |       |
| Fan Speed                    | High           | Med.  | Low  | High  | Med.  | Low   | High           | Med.  | Low   | High  | Med.  | Low   |
| Capacity (KW)                | 19.6           | 17.3  | 14.3 | 18.6  | 16.3  | 13.9  | 24.4           | 22.2  | 18.3  | 22.4  | 20.4  | 16.6  |
| Capacity (KBtu/Hr)           | 66.9           | 59.0  | 48.8 | 63.5  | 55.7  | 47.4  | 83.3           | 75.7  | 62.4  | 76.4  | 69.6  | 56.6  |
| CFM                          | 1511           | 1286  | 1013 | 1409  | 1195  | 983   | 1951           | 1733  | 1352  | 1748  | 1551  | 1193  |
| L/sec Air                    | 713            | 607   | 478  | 665   | 564   | 464   | 921            | 818   | 638   | 825   | 732   | 563   |
| SHR(Sensible/Total)          | 68%            | 67%   | 66%  | 67%   | 66%   | 66%   | 68%            | 68%   | 67%   | 68%   | 68%   | 66%   |
| Air DB Ent                   | 26.7           | 26.7  | 26.7 | 26.7  | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7  | 26.7  | 26.7  |
| Air WB Ent                   | 19.4           | 19.4  | 19.4 | 19.4  | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4  | 19.4  | 19.4  |
| Air DB Lvng.                 | 11.0           | 10.7  | 10.2 | 10.9  | 10.5  | 10.1  | 11.4           | 11.1  | 10.6  | 11.2  | 10.9  | 10.3  |
| Air WB Lvng.                 | 10.9           | 10.6  | 10.1 | 10.8  | 10.4  | 10.0  | 11.3           | 11.0  | 10.5  | 11.1  | 10.8  | 10.2  |
| N Circuits                   | 7              | 7     | 7    | 7     | 7     | 7     | 8              | 8     | 8     | 8     | 8     | 8     |
| Face Tubes                   | 14             | 14    | 14   | 14    | 14    | 14    | 14             | 14    | 14    | 14    | 14    | 14    |
| Water In C                   | 6.7            | 6.7   | 6.7  | 6.7   | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7   | 6.7   | 6.7   |
| Water Lvng C                 | 12.7           | 12.7  | 12.7 | 12.7  | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  |
| Gal/Min                      | 12.37          | 10.90 | 8.97 | 11.70 | 10.28 | 10.95 | 15.36          | 14.01 | 11.53 | 14.10 | 12.88 | 10.42 |
| L/sec Water                  | 0.78           | 0.69  | 0.57 | 0.74  | 0.65  | 0.69  | 0.97           | 0.88  | 0.73  | 0.89  | 0.81  | 0.66  |
| DP PSI                       | 7.0            | 5.5   | 3.9  | 6.2   | 5.1   | 3.8   | 8.0            | 6.7   | 4.8   | 6.8   | 5.8   | 4.1   |
| DP K Pa                      | 48.0           | 38.0  | 27.0 | 43.0  | 35.0  | 26.0  | 55.0           | 46.0  | 33.0  | 47.0  | 40.0  | 28.0  |
|                              |                |       |      |       |       |       |                |       |       |       |       |       |
| External Static pressure(Pa) | 50             |       |      | 75    |       |       | 50             |       |       | 75    |       |       |
| Fan Speed                    | High           | Med.  | Low  | High  | Med.  | Low   | High           | Med.  | Low   | High  | Med.  | Low   |
| Capacity (KW)                | 17.6           | 15.4  | 13.1 | 16.4  | 14.4  | 12.2  | 20.5           | 18.4  | 14.9  | 18.1  | 15.9  | 12.7  |
| Capacity (KBtu/Hr)           | 60.1           | 52.5  | 44.7 | 56.0  | 49.1  | 41.6  | 69.9           | 62.8  | 50.8  | 61.8  | 54.3  | 43.3  |
| CFM                          | 1307           | 1115  | 915  | 1197  | 1019  | 841   | 1555           | 1356  | 1049  | 1333  | 1138  | 869   |
| L/sec Air                    | 617            | 526   | 432  | 565   | 481   | 397   | 734            | 640   | 495   | 629   | 537   | 410   |
| SHR                          | 67%            | 66%   | 66%  | 66%   | 66%   | 66%   | 67%            | 67%   | 66%   | 67%   | 66%   | 66%   |
| Air DB Ent                   | 26.7           | 26.7  | 26.7 | 26.7  | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7  | 26.7  | 26.7  |
| Air WB Ent                   | 19.4           | 19.4  | 19.4 | 19.4  | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4  | 19.4  | 19.4  |
| Air DB Lvng.                 | 10.7           | 10.4  | 10.0 | 10.6  | 10.2  | 9.8   | 10.9           | 10.6  | 10.1  | 10.6  | 10.2  | 9.8   |
| Air WB Lvng.                 | 10.6           | 10.3  | 9.9  | 10.5  | 10.1  | 9.7   | 10.8           | 10.5  | 10.0  | 10.5  | 10.1  | 9.7   |
| Water In C                   | 6.7            | 6.7   | 6.7  | 6.7   | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7   | 6.7   | 6.7   |
| Water Lvng C                 | 12.7           | 12.7  | 12.7 | 12.7  | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  |
| Gal/Min                      | 11.05          | 9.71  | 8.27 | 10.29 | 9.03  | 7.69  | 12.90          | 11.57 | 10.95 | 11.40 | 10.02 | 7.97  |
| L/sec Water                  | 0.70           | 0.61  | 0.52 | 0.65  | 0.57  | 0.49  | 0.81           | 0.73  | 0.69  | 0.72  | 0.63  | 0.50  |
| DP PSI                       | 5.7            | 4.5   | 3.5  | 5.1   | 4.1   | 3.0   | 5.8            | 4.8   | 3.3   | 4.8   | 3.8   | 2.6   |
| DP K Pa                      | 39.0           | 31.0  | 24.0 | 35.0  | 28.0  | 21.0  | 40.0           | 33.0  | 23.0  | 33.0  | 26.0  | 18.0  |
|                              |                |       |      |       |       |       |                |       |       |       |       |       |
| External Static pressure(Pa) | 100            |       |      | 125   |       |       | 100            |       |       | 125   |       |       |
| Fan Speed                    | High           | Med.  | Low  | High  | Med.  | Low   | High           | Med.  | Low   | High  | Med.  | Low   |
| Capacity (KW)                | 15.0           | 13.0  | 10.9 | 13.1  | 10.8  | 8.6   | 15.9           | 13.5  | 10.1  | 12.5  | 10.2  | 6.5   |
| Capacity (KBtu/Hr)           | 51.2           | 44.4  | 37.2 | 44.7  | 36.8  | 29.5  | 54.3           | 46.1  | 34.5  | 42.6  | 34.8  | 22.1  |
| CFM                          | 1070           | 903   | 733  | 905   | 727   | 559   | 1134           | 934   | 663   | 854   | 676   | 407   |
| L/sec Air                    | 505            | 426   | 346  | 427   | 343   | 264   | 535            | 441   | 313   | 403   | 319   | 192   |
| SHR                          | 66%            | 66%   | 65%  | 65%   | 65%   | 64%   | 66%            | 66%   | 65%   | 66%   | 65%   | 64%   |
| Air DB Ent                   | 26.7           | 26.7  | 26.7 | 26.7  | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7  | 26.7  | 26.7  |
| Air WB Ent                   | 19.4           | 19.4  | 19.4 | 19.4  | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4  | 19.4  | 19.4  |
| Air DB Lvng.                 | 10.3           | 9.9   | 9.6  | 10.0  | 9.5   | 9.2   | 10.2           | 9.9   | 9.3   | 9.7   | 9.4   | 8.8   |
| Air WB Lvng.                 | 10.2           | 9.8   | 9.5  | 9.9   | 9.4   | 9.1   | 10.1           | 9.8   | 9.2   | 9.6   | 9.3   | 8.7   |
| Water In C                   | 6.7            | 6.7   | 6.7  | 6.7   | 6.7   | 6.7   | 6.7            | 6.7   | 6.7   | 6.7   | 6.7   | 6.7   |
| Water Lvng C                 | 12.7           | 12.7  | 12.7 | 12.7  | 12.7  | 12.7  | 12.7           | 12.7  | 12.7  | 12.7  | 12.7  | 12.7  |
| Gal/Min                      | 9.40           | 8.18  | 6.84 | 8.19  | 6.79  | 5.41  | 9.99           | 8.50  | 6.31  | 7.86  | 6.42  | 4.04  |
| L/sec Water                  | 0.59           | 0.52  | 0.43 | 0.52  | 0.43  | 0.34  | 0.63           | 0.54  | 0.40  | 0.50  | 0.41  | 0.26  |
| DP PSI                       | 4.4            | 3.3   | 2.5  | 3.3   | 2.5   | 1.7   | 3.8            | 2.9   | 1.7   | 2.5   | 1.7   | 0.7   |
| DP K Pa                      | 30.0           | 23.0  | 17.0 | 23.0  | 17.0  | 12.0  | 26.0           | 20.0  | 12.0  | 17.0  | 12.0  | 5.0   |

\* Should not Exceed 125 Pa External Static Pressure

# Performance Data – 42TD.

## 42TD – 3 Row – Cooling.

| Rating: 0 Pa External Static Pressure | Fan Speed           | 42TD3 - 03 - 2 |       |       | 42TD3 - 05 - 2 |       |       | 42TD3 - 06 - 2 |       |       | 42TD3 - 07 - 2 |       |       |
|---------------------------------------|---------------------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|
|                                       |                     | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 3.3            | 3.0   | 2.8   | 5.7            | 5.1   | 4.4   | 7.4            | 6.5   | 6.2   | 8.9            | 8.1   | 7.3   |
|                                       | Capacity (KBtu/Hr)  | 11.3           | 10.2  | 9.5   | 19.5           | 17.3  | 15.0  | 25.2           | 22.3  | 21.3  | 30.2           | 27.7  | 25.0  |
|                                       | CFM                 | 348            | 303   | 274   | 592            | 498   | 408   | 692            | 586   | 548   | 780            | 691   | 607   |
|                                       | L/sec Air           | 164            | 143   | 129   | 279            | 235   | 193   | 327            | 276   | 259   | 368            | 326   | 286   |
|                                       | SHR(Sensible/Total) | 0.8            | 0.8   | 0.7   | 0.8            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 14.2           | 13.9  | 13.7  | 14.2           | 13.8  | 13.3  | 13.4           | 13.0  | 12.8  | 12.8           | 12.5  | 12.2  |
|                                       | Air WB Lvng.        | 13.7           | 13.5  | 13.4  | 13.7           | 13.3  | 12.9  | 13.0           | 12.6  | 12.5  | 12.5           | 12.3  | 12.0  |
|                                       | N Circuits          | 2.0            | 2.0   | 2.0   | 2.0            | 2.0   | 2.0   | 2.0            | 2.0   | 2.0   | 2.0            | 2.0   | 2.0   |
|                                       | Face Tubes          | 10.0           | 10.0  | 10.0  | 10.0           | 10.0  | 10.0  | 10.0           | 10.0  | 10.0  | 10.0           | 10.0  | 10.0  |
| 25 Pa. External Static Pressure       | Water In C          | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   |
|                                       | Water Lvng C        | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  |
|                                       | Gal/Min             | 1.4            | 1.3   | 1.2   | 2.4            | 2.1   | 1.8   | 3.1            | 2.7   | 2.6   | 3.7            | 3.4   | 3.1   |
|                                       | L/sec Water         | 0.1            | 0.1   | 0.1   | 0.2            | 0.1   | 0.1   | 0.2            | 0.2   | 0.2   | 0.2            | 0.2   | 0.2   |
|                                       | DP PSI              | 1.0            | 0.9   | 0.7   | 3.6            | 2.9   | 2.3   | 7.3            | 5.8   | 5.4   | 12.0           | 10.3  | 8.7   |
|                                       | DP K Pa             | 7.0            | 6.0   | 5.0   | 25.0           | 20.0  | 16.0  | 50.0           | 40.0  | 37.0  | 83.0           | 71.0  | 60.0  |
|                                       | Fan Speed           | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 3.1            | 2.7   | 2.4   | 5.2            | 4.3   | 3.8   | 7.0            | 6.0   | 5.3   | 8.4            | 7.2   | 6.3   |
|                                       | Capacity (KBtu/Hr)  | 10.7           | 9.2   | 8.1   | 17.7           | 14.7  | 12.8  | 23.8           | 20.5  | 18.2  | 28.8           | 24.6  | 21.4  |
|                                       | CFM                 | 320            | 263   | 224   | 515            | 398   | 332   | 640            | 524   | 446   | 732            | 592   | 497   |
|                                       | L/sec Air           | 151.1          | 123.9 | 105.6 | 243.1          | 187.8 | 156.7 | 302.2          | 247.5 | 210.8 | 345.3          | 279.0 | 234.7 |
|                                       | SHR                 | 0.8            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 68.8  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 14.0           | 13.6  | 13.3  | 13.8           | 13.2  | 12.8  | 13.2           | 12.7  | 12.3  | 12.7           | 12.2  | 11.8  |
|                                       | Air WB Lvng.        | 13.6           | 13.3  | 13.1  | 13.4           | 12.9  | 12.5  | 12.8           | 12.4  | 12.1  | 12.4           | 11.9  | 11.6  |
| 50 Pa. External Static Pressure       | Water In C          | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   |
|                                       | Water Lvng C        | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  |
|                                       | Gal/Min             | 1.3            | 1.1   | 1.0   | 2.2            | 1.8   | 1.6   | 2.9            | 2.5   | 2.2   | 3.5            | 3.0   | 2.6   |
|                                       | L/sec Water         | 0.1            | 0.1   | 0.1   | 0.1            | 0.1   | 0.1   | 0.2            | 0.2   | 0.1   | 0.2            | 0.2   | 0.2   |
|                                       | DP PSI              | 0.9            | 0.7   | 0.6   | 3.0            | 2.2   | 1.7   | 6.5            | 5.1   | 4.1   | 11.0           | 8.4   | 6.5   |
|                                       | DP K Pa             | 6.0            | 5.0   | 4.0   | 21.0           | 15.0  | 12.0  | 45.0           | 35.0  | 28.0  | 76.0           | 58.0  | 45.0  |
|                                       | Fan Speed           | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 2.7            | 2.3   | 1.7   | 4.5            | 3.6   | 2.8   | 6.2            | 5.1   | 3.8   | 7.3            | 5.9   | 5.0   |
|                                       | Capacity (KBtu/Hr)  | 9.3            | 7.7   | 5.7   | 15.4           | 12.4  | 9.5   | 21.0           | 17.3  | 13.0  | 25.0           | 20.2  | 16.9  |
|                                       | CFM                 | 271            | 211   | 147   | 423            | 318   | 229   | 541            | 421   | 294   | 607            | 464   | 373   |
|                                       | L/sec Air           | 127.8          | 99.4  | 69.4  | 199.4          | 150.3 | 108.1 | 255.3          | 198.6 | 138.6 | 286.4          | 218.9 | 176.1 |
|                                       | SHR                 | 0.7            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 13.7           | 13.2  | 12.6  | 13.3           | 12.7  | 12.1  | 12.8           | 12.2  | 11.4  | 12.3           | 11.6  | 11.1  |
|                                       | Air WB Lvng.        | 13.3           | 13.0  | 12.5  | 13.0           | 12.5  | 11.9  | 12.5           | 12.0  | 11.3  | 12.0           | 11.5  | 11.0  |
|                                       | Water In C          | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   |
|                                       | Water Lvng C        | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  |
|                                       | Gal/Min             | 1.1            | 0.9   | 0.7   | 1.9            | 1.5   | 1.2   | 2.6            | 2.1   | 1.6   | 3.1            | 2.5   | 2.1   |
|                                       | L/sec Water         | 0.1            | 0.1   | 0.0   | 0.1            | 0.1   | 0.1   | 0.2            | 0.1   | 0.1   | 0.2            | 0.2   | 0.1   |
|                                       | DP PSI              | 0.7            | 0.4   | 0.3   | 2.3            | 1.6   | 1.0   | 5.2            | 3.8   | 2.3   | 8.6            | 5.9   | 4.4   |
|                                       | DP K Pa             | 5.0            | 3.0   | 2.0   | 16.0           | 11.0  | 7.0   | 36.0           | 26.0  | 16.0  | 59.0           | 41.0  | 30.0  |

\* Should not Exceed 62.5 Pa External Static Pressure



# Performance Data – 42TD (Cont.).

## 42TD – 3 Row – Cooling - (Cont.)

| Rating: 0 Pa External Static Pressure | Fan Speed           | 42TD3 - 09 - 2 |       |       | 42TD3 - 11 - 2 |       |       | 42TD3 - 12 - 2 |       |       | 42TD3 - 16 - 2 |       |       |
|---------------------------------------|---------------------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|
|                                       |                     | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 10.2           | 9.1   | 8.2   | 12.5           | 11.1  | 9.6   | 15.5           | 13.7  | 13.1  | 18.1           | 16.5  | 15.0  |
|                                       | Capacity (KBtu/Hr)  | 34.8           | 31.0  | 27.9  | 42.6           | 37.9  | 32.8  | 52.9           | 46.7  | 44.7  | 61.8           | 56.3  | 51.2  |
|                                       | CFM                 | 883            | 756   | 659   | 1181           | 995   | 815   | 1385           | 1172  | 1096  | 1572           | 1383  | 1214  |
|                                       | L/sec Air           | 417            | 357   | 311   | 557            | 469   | 385   | 654            | 553   | 517   | 742            | 652   | 573   |
|                                       | SHR(Sensible/Total) | 0.7            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 12.7           | 12.3  | 12.0  | 13.5           | 13.0  | 12.5  | 13.0           | 12.6  | 12.4  | 12.8           | 12.4  | 12.1  |
|                                       | Air WB Lvng.        | 12.4           | 12.1  | 11.8  | 13.1           | 12.7  | 12.2  | 12.6           | 12.3  | 12.1  | 12.4           | 12.1  | 11.8  |
|                                       | N Circuits          | 3.0            | 3.0   | 3.0   | 3.0            | 3.0   | 3.0   | 4.0            | 4.0   | 4.0   | 4.0            | 4.0   | 4.0   |
|                                       | Face Tubes          | 10.0           | 10.0  | 10.0  | 10.0           | 10.0  | 10.0  | 14.0           | 14.0  | 14.0  | 14.0           | 14.0  | 14.0  |
| 25 Pa. External Static Pressure       | Water In C          | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   |
|                                       | Water Lvng C        | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  |
|                                       | Gal/Min             | 4.3            | 3.8   | 3.4   | 5.3            | 4.7   | 4.0   | 6.5            | 5.8   | 5.5   | 7.6            | 6.9   | 6.3   |
|                                       | L/sec Water         | 0.3            | 0.2   | 0.2   | 0.3            | 0.3   | 0.3   | 0.4            | 0.4   | 0.3   | 0.5            | 0.4   | 0.4   |
|                                       | DP PSI              | 5.9            | 4.8   | 4.1   | 8.6            | 6.8   | 5.4   | 7.8            | 6.4   | 5.8   | 11.9           | 10.0  | 8.6   |
|                                       | DP K Pa             | 41.0           | 33.0  | 28.0  | 59.0           | 47.0  | 37.0  | 54.0           | 44.0  | 40.0  | 82.0           | 69.0  | 59.0  |
|                                       | Fan Speed           | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 9.4            | 7.9   | 6.9   | 11.4           | 9.4   | 8.2   | 14.6           | 12.6  | 11.2  | 17.1           | 14.7  | 12.8  |
|                                       | Capacity (KBtu/Hr)  | 32.0           | 26.9  | 23.6  | 38.9           | 32.1  | 28.1  | 49.8           | 43.0  | 38.2  | 58.3           | 50.2  | 43.7  |
|                                       | CFM                 | 789            | 630   | 531   | 1031           | 796   | 665   | 1281           | 1048  | 893   | 1452           | 1184  | 995   |
|                                       | L/sec Air           | 372.2          | 297.5 | 250.6 | 486.4          | 375.6 | 313.6 | 604.7          | 494.7 | 421.7 | 685.3          | 558.6 | 469.4 |
|                                       | SHR                 | 0.7            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
| 50 Pa. External Static Pressure       | Air DB Lvng.        | 12.4           | 11.9  | 11.5  | 13.1           | 12.5  | 12.0  | 12.8           | 11.7  | 11.9  | 12.5           | 12.0  | 11.6  |
|                                       | Air WB Lvng.        | 12.2           | 11.7  | 11.3  | 12.8           | 12.2  | 11.8  | 12.5           | 11.5  | 11.7  | 12.2           | 11.8  | 11.4  |
|                                       | Water In C          | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   |
|                                       | Water Lvng C        | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  |
|                                       | Gal/Min             | 3.9            | 3.3   | 2.9   | 4.8            | 4.0   | 3.5   | 6.2            | 5.6   | 4.7   | 7.2            | 6.2   | 5.4   |
|                                       | L/sec Water         | 0.2            | 0.2   | 0.2   | 0.3            | 0.2   | 0.2   | 0.4            | 0.4   | 0.3   | 0.5            | 0.4   | 0.3   |
|                                       | DP PSI              | 5.1            | 3.8   | 3.0   | 7.1            | 5.2   | 4.1   | 7.1            | 5.5   | 4.4   | 10.7           | 8.1   | 6.5   |
|                                       | DP K Pa             | 35.0           | 26.0  | 21.0  | 49.0           | 36.0  | 28.0  | 49.0           | 38.0  | 30.0  | 74.0           | 56.0  | 45.0  |
|                                       | Fan Speed           | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 8.2            | 6.7   | 5.3   | 9.8            | 7.9   | 6.1   | 12.9           | 10.6  | 8.0   | 14.9           | 12.1  | 10.2  |
|                                       | Capacity (KBtu/Hr)  | 27.9           | 22.8  | 18.0  | 33.5           | 27.1  | 20.9  | 44.0           | 36.2  | 27.2  | 50.8           | 41.3  | 34.8  |
|                                       | CFM                 | 659            | 509   | 383   | 846            | 637   | 457   | 1082           | 842   | 587   | 1214           | 927   | 746   |
|                                       | L/sec Air           | 310            | 240   | 181   | 399            | 301   | 216   | 511            | 397   | 277   | 573            | 438   | 352   |
|                                       | SHR                 | 0.7            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   | 0.7            | 0.7   | 0.7   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 12.0           | 11.4  | 10.8  | 12.6           | 11.9  | 11.1  | 12.4           | 11.7  | 11.0  | 12.1           | 11.4  | 10.9  |
|                                       | Air WB Lvng.        | 11.8           | 11.2  | 10.7  | 12.3           | 11.7  | 11.0  | 12.1           | 11.6  | 10.9  | 11.8           | 11.3  | 10.8  |
|                                       | Water In C          | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   |
|                                       | Water Lvng C        | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  |
|                                       | Gal/Min             | 3.4            | 2.8   | 2.2   | 4.1            | 3.4   | 2.6   | 5.4            | 4.5   | 3.4   | 6.3            | 5.1   | 4.3   |
|                                       | L/sec Water         | 0.2            | 0.2   | 0.1   | 0.3            | 0.2   | 0.2   | 0.3            | 0.3   | 0.2   | 0.4            | 0.3   | 0.3   |
|                                       | DP PSI              | 4.1            | 2.9   | 1.9   | 5.5            | 3.8   | 2.5   | 5.7            | 4.1   | 2.5   | 8.4            | 5.8   | 4.4   |
|                                       | DP K Pa             | 28.0           | 20.0  | 13.0  | 38.0           | 26.0  | 17.0  | 39.0           | 28.0  | 17.0  | 58.0           | 40.0  | 30.0  |

\* Should not Exceed 62.5 Pa External Static Pressure

# Performance Data – 42TD (Cont.).

## 42TD – 4 Row – 2 Pipe – Cooling.

|                     | 42TD4 - 03 - 2 |      |      | 42TD4 - 04 - 2 |      |      | 42TD4 - 05 - 2 |      |      | 42TD4 - 06 - 2 |      |      |
|---------------------|----------------|------|------|----------------|------|------|----------------|------|------|----------------|------|------|
| Fan Speed           | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  |
| Capacity (KW)       | 4.0            | 3.6  | 3.3  | 6.8            | 6.0  | 5.2  | 8.6            | 7.6  | 7.2  | 9.6            | 8.8  | 7.9  |
| Capacity (KBtu/Hr)  | 13.7           | 12.3 | 11.3 | 23.2           | 20.4 | 17.6 | 29.3           | 25.8 | 24.5 | 32.8           | 29.9 | 27.0 |
| CFM                 | 313            | 273  | 247  | 533            | 450  | 368  | 623            | 527  | 494  | 702            | 623  | 548  |
| L/sec Air           | 148            | 129  | 116  | 251            | 212  | 174  | 294            | 249  | 233  | 331            | 294  | 259  |
| SHR(Sensible/Total) | 68%            | 67%  | 67%  | 68%            | 67%  | 66%  | 66%            | 66%  | 66%  | 67%            | 66%  | 66%  |
| Air DB Ent          | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 |
| Air WB Ent          | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 |
| Air DB Lvng.        | 11.6           | 11.3 | 11.1 | 11.7           | 11.2 | 10.7 | 10.9           | 10.5 | 10.3 | 10.9           | 10.7 | 10.4 |
| Air WB Lvng.        | 11.5           | 11.2 | 11.0 | 11.5           | 11.1 | 10.6 | 10.8           | 10.4 | 10.2 | 10.8           | 10.6 | 10.3 |
| N Circuits          | 2              | 2    | 2    | 2              | 2    | 2    | 2              | 2    | 2    | 3              | 3    | 3    |
| Face Tubes          | 10             | 10   | 10   | 10             | 10   | 10   | 10             | 10   | 10   | 10             | 10   | 10   |
| Water In C          | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  |
| Water Lvng C        | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 |
| Gal/Min             | 1.68           | 1.51 | 1.40 | 2.86           | 2.51 | 2.16 | 3.61           | 3.18 | 3.01 | 4.04           | 3.68 | 3.33 |
| L/sec Water         | 0.11           | 0.10 | 0.09 | 0.18           | 0.16 | 0.14 | 0.23           | 0.20 | 0.19 | 0.26           | 0.23 | 0.21 |
| DP PSI              | 1.9            | 1.6  | 1.5  | 6.5            | 5.2  | 4.1  | 12.6           | 10.2 | 9.1  | 6.1            | 5.2  | 4.4  |
| DP K Pa             | 13.0           | 11.0 | 10.0 | 45.0           | 36.0 | 28.0 | 87.0           | 70.0 | 63.0 | 42.0           | 36.0 | 30.0 |
|                     |                |      |      |                |      |      |                |      |      |                |      |      |
| Fan Speed           | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  |
| Capacity (KW)       | 3.9            | 3.3  | 2.9  | 6.2            | 5.1  | 4.5  | 8.2            | 7.0  | 6.2  | 9.3            | 7.9  | 6.8  |
| Capacity (KBtu/Hr)  | 13.1           | 11.2 | 9.8  | 21.2           | 17.4 | 15.2 | 28.1           | 24.0 | 21.1 | 31.8           | 26.9 | 23.3 |
| CFM                 | 295            | 242  | 206  | 474            | 366  | 305  | 589            | 483  | 411  | 673            | 545  | 457  |
| L/sec Air           | 139            | 114  | 97   | 224            | 173  | 144  | 278            | 228  | 194  | 318            | 257  | 216  |
| SHR                 | 68%            | 67%  | 66%  | 68%            | 66%  | 66%  | 66%            | 65%  | 65%  | 66%            | 66%  | 65%  |
| Air DB Ent          | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 |
| Air WB Ent          | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 |
| Air DB Lvng.        | 11.5           | 11.1 | 10.8 | 11.4           | 10.7 | 10.4 | 10.8           | 10.3 | 10.0 | 10.9           | 10.4 | 10.1 |
| Air WB Lvng.        | 11.4           | 11.0 | 10.7 | 11.3           | 10.6 | 10.3 | 10.7           | 10.2 | 9.9  | 10.8           | 10.3 | 9.9  |
| Water In C          | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  |
| Water Lvng C        | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 |
| Gal/Min             | 1.61           | 1.36 | 1.20 | 2.61           | 2.15 | 1.86 | 3.46           | 2.96 | 2.60 | 3.91           | 3.31 | 2.86 |
| L/sec Water         | 0.10           | 0.09 | 0.08 | 0.16           | 0.14 | 0.12 | 0.22           | 0.19 | 0.16 | 0.25           | 0.21 | 0.18 |
| DP PSI              | 1.7            | 1.3  | 1.0  | 5.7            | 3.9  | 3.2  | 11.7           | 9.0  | 7.1  | 5.8            | 4.4  | 3.3  |
| DP K Pa             | 12.0           | 9.0  | 7.0  | 39.0           | 27.0 | 22.0 | 81.0           | 62.0 | 49.0 | 40.0           | 30.0 | 23.0 |
|                     |                |      |      |                |      |      |                |      |      |                |      |      |
| Fan Speed           | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  |
| Capacity (KW)       | 3.4            | 2.8  | 2.0  | 5.4            | 4.4  | 3.3  | 7.3            | 6.0  | 4.4  | 8.2            | 6.6  | 5.5  |
| Capacity (KBtu/Hr)  | 11.7           | 9.5  | 7.0  | 18.5           | 14.8 | 11.4 | 25.0           | 20.4 | 15.1 | 27.8           | 22.4 | 18.6 |
| CFM                 | 255            | 198  | 138  | 397            | 300  | 215  | 509            | 396  | 276  | 570            | 436  | 351  |
| L/sec Air           | 120            | 93   | 65   | 187            | 141  | 102  | 240            | 187  | 130  | 269            | 206  | 166  |
| SHR                 | 67%            | 66%  | 65%  | 67%            | 66%  | 64%  | 66%            | 65%  | 64%  | 66%            | 65%  | 64%  |
| Air DB Ent          | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 |
| Air WB Ent          | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 |
| Air DB Lvng.        | 11.2           | 10.8 | 10.2 | 10.9           | 10.3 | 9.8  | 10.4           | 9.9  | 9.1  | 10.5           | 10.0 | 9.5  |
| Air WB Lvng.        | 11.1           | 10.7 | 10.1 | 10.8           | 10.2 | 9.7  | 10.3           | 9.8  | 9.0  | 10.4           | 9.9  | 9.4  |
| Water In C          | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  |
| Water Lvng C        | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 |
| Gal/Min             | 1.43           | 1.15 | 0.85 | 2.30           | 1.83 | 1.40 | 3.08           | 2.53 | 1.86 | 3.45           | 2.76 | 2.30 |
| L/sec Water         | 0.09           | 0.07 | 0.05 | 0.14           | 0.12 | 0.09 | 0.19           | 0.16 | 0.12 | 0.22           | 0.17 | 0.14 |
| DP PSI              | 1.5            | 1.0  | 0.6  | 4.5            | 3.0  | 1.9  | 9.6            | 6.7  | 3.9  | 4.5            | 3.2  | 2.3  |
| DP K Pa             | 10.0           | 7.0  | 4.0  | 31.0           | 21.0 | 13.0 | 66.0           | 46.0 | 27.0 | 31.0           | 22.0 | 16.0 |

\* Should not Exceed 62.5 Pa External Static Pressure

# Performance Data – 42TD (Cont.).

## 42TD – 4 Row – 2 Pipe – Cooling - (Cont.)

| Fan Speed           | 42TD4 - 08 - 2 |      |      | 42TD4 - 10 - 2 |      |      | 42TD4 - 11 - 2 |      |      | 42TD4 - 14 - 2 |      |      |
|---------------------|----------------|------|------|----------------|------|------|----------------|------|------|----------------|------|------|
|                     | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  |
| Capacity (KW)       | 11.3           | 10.0 | 9.0  | 13.6           | 12.0 | 10.3 | 17.6           | 15.4 | 14.7 | 19.3           | 17.5 | 15.8 |
| Capacity (KBtu/Hr)  | 38.6           | 34.1 | 30.5 | 46.4           | 40.9 | 35.1 | 60.1           | 52.5 | 50.2 | 65.9           | 59.7 | 53.9 |
| CFM                 | 795            | 680  | 593  | 1065           | 897  | 735  | 1247           | 1055 | 988  | 1416           | 1247 | 1094 |
| L/sec Air           | 375            | 321  | 280  | 502            | 423  | 347  | 589            | 498  | 466  | 668            | 588  | 516  |
| SHR(Sensible/Total) | 66%            | 65%  | 65%  | 68%            | 67%  | 66%  | 66%            | 66%  | 65%  | 67%            | 66%  | 66%  |
| Air DB Ent          | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 |
| Air WB Ent          | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 |
| Air DB Lvng.        | 10.5           | 10.2 | 9.9  | 11.6           | 11.2 | 10.7 | 10.6           | 10.2 | 10.1 | 11.0           | 10.7 | 10.4 |
| Air WB Lvng.        | 10.4           | 10.1 | 9.8  | 11.5           | 11.1 | 10.6 | 10.5           | 10.1 | 10.0 | 10.9           | 10.6 | 10.3 |
| N Circuits          | 3              | 3    | 3    | 4              | 4    | 4    | 4              | 4    | 4    | 6              | 6    | 6    |
| Face Tubes          | 10             | 10   | 10   | 10             | 10   | 10   | 14             | 14   | 14   | 14             | 14   | 14   |
| Water In C          | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  |
| Water Lvng C        | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 |
| Gal/Min             | 4.74           | 4.19 | 3.76 | 5.74           | 5.03 | 4.31 | 7.41           | 6.47 | 6.14 | 8.11           | 7.36 | 6.66 |
| L/sec Water         | 0.30           | 0.26 | 0.24 | 0.36           | 0.32 | 0.27 | 0.47           | 0.41 | 0.39 | 0.51           | 0.46 | 0.42 |
| DP PSI              | 9.4            | 7.7  | 6.4  | 5.9            | 4.8  | 3.6  | 13.2           | 10.4 | 9.6  | 5.8            | 4.8  | 4.1  |
| DP K Pa             | 65.0           | 53.0 | 44.0 | 41.0           | 33.0 | 25.0 | 91.0           | 72.0 | 66.0 | 40.0           | 33.0 | 28.0 |
|                     |                |      |      |                |      |      |                |      |      |                |      |      |
| Fan Speed           | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  |
|                     | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  |
| Capacity (KW)       | 10.5           | 8.8  | 7.6  | 12.5           | 10.2 | 8.9  | 16.9           | 14.4 | 12.6 | 18.4           | 15.8 | 13.7 |
| Capacity (KBtu/Hr)  | 35.8           | 29.9 | 26.0 | 42.6           | 34.8 | 30.2 | 57.7           | 49.1 | 43.0 | 62.8           | 53.9 | 46.7 |
| CFM                 | 725            | 581  | 489  | 948            | 732  | 612  | 1179           | 965  | 822  | 1336           | 1089 | 915  |
| L/sec Air           | 342            | 274  | 231  | 447            | 346  | 289  | 556            | 455  | 388  | 631            | 514  | 432  |
| SHR                 | 66%            | 65%  | 64%  | 67%            | 66%  | 66%  | 66%            | 65%  | 65%  | 67%            | 65%  | 65%  |
| Air DB Ent          | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 |
| Air WB Ent          | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 |
| Air DB Lvng.        | 10.4           | 9.9  | 9.6  | 11.3           | 10.7 | 10.4 | 10.5           | 10.2 | 9.7  | 10.9           | 10.4 | 10.0 |
| Air WB Lvng.        | 10.3           | 9.8  | 9.5  | 11.2           | 10.6 | 10.3 | 10.4           | 10.0 | 9.6  | 10.8           | 10.3 | 9.9  |
| Water In C          | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  |
| Water Lvng C        | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 |
| Gal/Min             | 4.41           | 3.69 | 3.20 | 5.26           | 4.33 | 3.73 | 7.07           | 6.04 | 5.31 | 7.77           | 6.62 | 5.78 |
| L/sec Water         | 0.28           | 0.23 | 0.20 | 0.33           | 0.27 | 0.24 | 0.45           | 0.38 | 0.33 | 0.49           | 0.42 | 0.36 |
| DP PSI              | 8.4            | 6.1  | 4.8  | 5.1            | 3.6  | 2.8  | 12.2           | 9.3  | 7.4  | 5.4            | 4.1  | 3.2  |
| DP K Pa             | 58.0           | 42.0 | 33.0 | 35.0           | 25.0 | 19.0 | 84.0           | 64.0 | 51.0 | 37.0           | 28.0 | 22.0 |
|                     |                |      |      |                |      |      |                |      |      |                |      |      |
| Fan Speed           | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  |
|                     | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  |
| Capacity (KW)       | 9.3            | 7.5  | 5.8  | 10.9           | 8.7  | 6.6  | 15.0           | 12.2 | 9.0  | 16.2           | 13.1 | 10.9 |
| Capacity (KBtu/Hr)  | 31.8           | 25.4 | 19.7 | 37.2           | 29.7 | 22.5 | 51.2           | 41.6 | 30.6 | 55.3           | 44.7 | 37.2 |
| CFM                 | 626            | 479  | 354  | 795            | 599  | 430  | 1018           | 791  | 551  | 1141           | 872  | 702  |
| L/sec Air           | 295            | 226  | 167  | 375            | 282  | 203  | 480            | 373  | 260  | 538            | 411  | 331  |
| SHR                 | 65%            | 64%  | 64%  | 67%            | 66%  | 64%  | 65%            | 65%  | 63%  | 66%            | 65%  | 64%  |
| Air DB Ent          | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 |
| Air WB Ent          | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 |
| Air DB Lvng.        | 10.1           | 9.5  | 8.9  | 10.9           | 10.3 | 9.7  | 10.2           | 9.7  | 9.0  | 10.5           | 9.9  | 9.5  |
| Air WB Lvng.        | 10.0           | 9.4  | 8.8  | 10.8           | 10.2 | 9.6  | 10.1           | 9.5  | 8.8  | 10.4           | 9.8  | 9.4  |
| Water In C          | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  |
| Water Lvng C        | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 |
| Gal/Min             | 3.91           | 3.15 | 2.43 | 4.61           | 3.66 | 2.78 | 6.29           | 5.14 | 3.78 | 6.87           | 5.54 | 4.63 |
| L/sec Water         | 0.25           | 0.20 | 0.15 | 0.29           | 0.23 | 0.18 | 0.40           | 0.32 | 0.24 | 0.43           | 0.35 | 0.29 |
| DP PSI              | 6.8            | 4.6  | 2.9  | 4.1            | 2.8  | 1.7  | 10.0           | 7.0  | 4.1  | 4.2            | 2.9  | 2.2  |
| DP K Pa             | 47.0           | 32.0 | 20.0 | 28.0           | 19.0 | 12.0 | 69.0           | 48.0 | 28.0 | 29.0           | 20.0 | 15.0 |

\* Should not Exceed 62.5 Pa External Static Pressure.

# Performance Data – 42TD (Cont.).

## 42TD – 4 Row – 4 Pipe – Cooling.

| Rating: 0 Pa External Static Pressure | Fan Speed           | 42TD4 - 03 - 4 |       |       | 42TD4 - 04 - 4 |       |       | 42TD4 - 05 - 4 |       |       | 42TD4 - 06 - 4 |       |       |
|---------------------------------------|---------------------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|
|                                       |                     | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 3.32           | 3.00  | 2.77  | 5.71           | 5.07  | 4.40  | 7.39           | 6.54  | 6.24  | 8.86           | 8.11  | 7.34  |
|                                       | Capacity (KBtu/Hr)  | 11.33          | 10.24 | 9.451 | 19.48          | 17.3  | 15.01 | 25.21          | 22.31 | 21.29 | 30.23          | 27.67 | 25.04 |
|                                       | CFM                 | 348            | 303   | 274   | 592            | 498   | 408   | 692            | 586   | 548   | 780            | 691   | 607   |
|                                       | L/sec Air           | 164            | 143   | 129   | 279            | 235   | 193   | 327            | 276   | 259   | 368            | 326   | 286   |
|                                       | SHR(Sensible/Total) | 76%            | 75%   | 75%   | 75%            | 74%   | 73%   | 73%            | 72%   | 71%   | 71%            | 70%   | 70%   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 14.2           | 13.9  | 13.7  | 14.2           | 13.8  | 13.3  | 13.4           | 13.0  | 12.8  | 12.8           | 12.5  | 12.2  |
|                                       | Air WB Lvng.        | 13.7           | 13.5  | 13.4  | 13.7           | 13.3  | 12.9  | 13.0           | 12.6  | 12.5  | 12.5           | 12.3  | 12.0  |
|                                       | N Circuits          | 2              | 2     | 2     | 2              | 2     | 2     | 2              | 2     | 2     | 2              | 2     | 2     |
|                                       | FPI                 | 12             | 12    | 12    | 12             | 12    | 12    | 12             | 12    | 12    | 12             | 12    | 12    |
|                                       | Face Tubes          | 10             | 10    | 10    | 10             | 10    | 10    | 10             | 10    | 10    | 10             | 10    | 10    |
| 25 Pa. External Static Pressure       | Water In C          | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   |
|                                       | Water Lvng C        | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  |
|                                       | Gal/Min             | 1.40           | 1.26  | 1.16  | 2.40           | 2.13  | 1.85  | 3.11           | 2.75  | 2.61  | 3.73           | 3.41  | 3.08  |
|                                       | L/sec Water         | 0.09           | 0.08  | 0.07  | 0.15           | 0.13  | 0.12  | 0.20           | 0.17  | 0.16  | 0.24           | 0.22  | 0.19  |
|                                       | DP PSI              | 1.0            | 0.9   | 0.7   | 3.6            | 2.9   | 2.3   | 7.3            | 5.8   | 5.4   | 12.0           | 10.3  | 8.7   |
|                                       | DP K Pa             | 7.0            | 6.0   | 5.0   | 25.0           | 20.0  | 16.0  | 50.0           | 40.0  | 37.0  | 83.0           | 71.0  | 60.0  |
|                                       | Fan Speed           | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 3.12           | 2.69  | 2.36  | 5.19           | 4.31  | 3.76  | 6.98           | 6.02  | 5.33  | 8.44           | 7.20  | 6.27  |
|                                       | Capacity (KBtu/Hr)  | 10.65          | 9.178 | 8.052 | 17.71          | 14.71 | 12.83 | 23.82          | 20.54 | 18.19 | 28.8           | 24.57 | 21.39 |
|                                       | CFM                 | 320            | 263   | 224   | 515            | 398   | 332   | 640            | 524   | 446   | 732            | 592   | 497   |
|                                       | L/sec Air           | 151            | 124   | 106   | 243            | 188   | 157   | 302            | 247   | 211   | 345            | 279   | 235   |
|                                       | SHR                 | 76%            | 74%   | 74%   | 74%            | 73%   | 72%   | 72%            | 71%   | 70%   | 71%            | 70%   | 69%   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 68.8  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 14.0           | 13.6  | 13.3  | 13.8           | 13.2  | 12.8  | 13.2           | 12.7  | 12.3  | 12.7           | 12.2  | 11.8  |
|                                       | Air WB Lvng.        | 13.6           | 13.3  | 13.1  | 13.4           | 12.9  | 12.5  | 12.8           | 12.4  | 12.1  | 12.4           | 11.9  | 11.6  |
| 50 Pa. External Static Pressure       | Water In C          | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   |
|                                       | Water Lvng C        | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  |
|                                       | Gal/Min             | 1.31           | 1.13  | 1.00  | 2.18           | 1.81  | 1.58  | 2.93           | 2.53  | 2.25  | 3.54           | 3.03  | 2.65  |
|                                       | L/sec Water         | 0.08           | 0.07  | 0.06  | 0.14           | 0.11  | 0.10  | 0.18           | 0.16  | 0.14  | 0.22           | 0.19  | 0.17  |
|                                       | DP PSI              | 0.9            | 0.7   | 0.6   | 3.0            | 2.2   | 1.7   | 6.5            | 5.1   | 4.1   | 11.0           | 8.4   | 6.5   |
|                                       | DP K Pa             | 6.0            | 5.0   | 4.0   | 21.0           | 15.0  | 12.0  | 45.0           | 35.0  | 28.0  | 76.0           | 58.0  | 45.0  |
|                                       | Fan Speed           | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 2.74           | 2.26  | 1.68  | 4.50           | 3.63  | 2.78  | 6.16           | 5.07  | 3.80  | 7.32           | 5.92  | 4.96  |
|                                       | Capacity (KBtu/Hr)  | 9.349          | 7.711 | 5.732 | 15.35          | 12.39 | 9.485 | 21.02          | 17.3  | 12.97 | 24.98          | 20.2  | 16.92 |
|                                       | CFM                 | 271            | 211   | 147   | 423            | 318   | 229   | 541            | 421   | 294   | 607            | 464   | 373   |
|                                       | L/sec Air           | 128            | 99    | 69    | 199            | 150   | 108   | 255            | 199   | 139   | 286            | 219   | 176   |
|                                       | SHR                 | 75%            | 73%   | 71%   | 73%            | 71%   | 70%   | 71%            | 70%   | 68%   | 70%            | 69%   | 68%   |
|                                       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 13.7           | 13.2  | 12.6  | 13.3           | 12.7  | 12.1  | 12.8           | 12.2  | 11.4  | 12.3           | 11.6  | 11.1  |
|                                       | Air WB Lvng.        | 13.3           | 13.0  | 12.5  | 13.0           | 12.5  | 11.9  | 12.5           | 12.0  | 11.3  | 12.0           | 11.5  | 11.0  |
|                                       | Water In C          | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   |
|                                       | Water Lvng C        | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  |
|                                       | Gal/Min             | 1.15           | 0.95  | 0.70  | 1.90           | 1.53  | 1.16  | 2.60           | 2.15  | 1.61  | 3.13           | 2.50  | 2.10  |
|                                       | L/sec Water         | 0.07           | 0.06  | 0.04  | 0.12           | 0.10  | 0.07  | 0.16           | 0.14  | 0.10  | 0.20           | 0.16  | 0.13  |
|                                       | DP PSI              | 0.7            | 0.4   | 0.3   | 2.3            | 1.6   | 1.0   | 5.2            | 3.8   | 2.3   | 8.6            | 5.9   | 4.4   |
|                                       | DP K Pa             | 5.0            | 3.0   | 2.0   | 16.0           | 11.0  | 7.0   | 36.0           | 26.0  | 16.0  | 59.0           | 41.0  | 30.0  |

# Performance Data – 42TD (Cont.).

## 42TD – 4 Row – 4 Pipe – Cooling - (Cont.)

| Rating: 0 Pa External Static Pressure | Fan Speed           | 42TD4 - 08 - 4 |       |       | 42TD4 - 10 - 4 |       |       | 42TD4 - 11 - 4 |       |       | 42TD4 - 14 - 4 |       |       |
|---------------------------------------|---------------------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|----------------|-------|-------|
|                                       | Capacity (KW)       | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KBtu/Hr)  | 10.20          | 9.08  | 8.19  | 12.50          | 11.10 | 9.61  | 15.50          | 13.70 | 13.10 | 18.10          | 16.50 | 15.00 |
|                                       | CFM                 | 34.8           | 30.98 | 27.94 | 42.65          | 37.87 | 32.79 | 52.89          | 46.74 | 44.7  | 61.76          | 56.3  | 51.18 |
|                                       | L/sec Air           | 883            | 756   | 659   | 1181           | 995   | 815   | 1385           | 1172  | 1096  | 1572           | 1383  | 1214  |
|                                       | SHR(Sensible/Total) | 417            | 357   | 311   | 557            | 469   | 385   | 654            | 553   | 517   | 742            | 652   | 573   |
|                                       | Air DB Ent          | 71%            | 70%   | 69%   | 73%            | 71%   | 70%   | 72%            | 70%   | 70%   | 71%            | 70%   | 69%   |
|                                       | Air WB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air DB Lvng.        | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air WB Lvng.        | 12.7           | 12.3  | 12.0  | 13.5           | 13.0  | 12.5  | 13.0           | 12.6  | 12.4  | 12.8           | 12.4  | 12.1  |
|                                       | N Circuits          | 12.4           | 12.1  | 11.8  | 13.1           | 12.7  | 12.2  | 12.6           | 12.3  | 12.1  | 12.4           | 12.1  | 11.8  |
|                                       | FPI                 | 3              | 3     | 3     | 3              | 3     | 3     | 4              | 4     | 4     | 4              | 4     | 4     |
|                                       | Face Tubes          | 12             | 12    | 12    | 12             | 12    | 12    | 12             | 12    | 12    | 12             | 12    | 12    |
| 25 Pa. External Static Pressure       | Water In C          | 10             | 10    | 10    | 10             | 10    | 10    | 14             | 14    | 14    | 14             | 14    | 14    |
|                                       | Water Lvng C        | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   |
|                                       | Gal/Min             | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  |
|                                       | L/sec Water         | 4.28           | 3.81  | 3.45  | 5.26           | 4.66  | 4.03  | 6.51           | 5.76  | 5.48  | 7.62           | 6.94  | 6.29  |
|                                       | DP PSI              | 0.27           | 0.24  | 0.22  | 0.33           | 0.29  | 0.25  | 0.41           | 0.36  | 0.35  | 0.48           | 0.44  | 0.40  |
|                                       | DP K Pa             | 5.9            | 4.8   | 4.1   | 8.6            | 6.8   | 5.4   | 7.8            | 6.4   | 5.8   | 11.9           | 10.0  | 8.6   |
|                                       |                     | 41.0           | 33.0  | 28.0  | 59.0           | 47.0  | 37.0  | 54.0           | 44.0  | 40.0  | 82.0           | 69.0  | 59.0  |
|                                       | Fan Speed           | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 9.37           | 7.89  | 6.91  | 11.40          | 9.40  | 8.23  | 14.60          | 12.60 | 11.20 | 17.10          | 14.70 | 12.80 |
|                                       | Capacity (KBtu/Hr)  | 31.97          | 26.92 | 23.58 | 38.9           | 32.07 | 28.08 | 49.82          | 42.99 | 38.21 | 58.35          | 50.16 | 43.67 |
|                                       | CFM                 | 789            | 630   | 531   | 1031           | 796   | 665   | 1281           | 1048  | 893   | 1452           | 1184  | 995   |
|                                       | L/sec Air           | 372            | 297   | 251   | 486            | 376   | 314   | 605            | 495   | 422   | 685            | 559   | 469   |
|                                       | SHR                 | 70%            | 69%   | 68%   | 71%            | 70%   | 69%   | 71%            | 70%   | 69%   | 70%            | 69%   | 68%   |
| 50 Pa. External Static Pressure       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 12.4           | 11.9  | 11.5  | 13.1           | 12.5  | 12.0  | 12.8           | 11.7  | 11.9  | 12.5           | 12.0  | 11.6  |
|                                       | Air WB Lvng.        | 12.2           | 11.7  | 11.3  | 12.8           | 12.2  | 11.8  | 12.5           | 11.5  | 11.7  | 12.2           | 11.8  | 11.4  |
|                                       | Water In C          | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   |
|                                       | Water Lvng C        | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  |
|                                       | Gal/Min             | 3.93           | 3.33  | 2.91  | 4.78           | 3.96  | 3.46  | 6.16           | 5.64  | 4.71  | 7.19           | 6.17  | 5.41  |
|                                       | L/sec Water         | 0.25           | 0.21  | 0.18  | 0.30           | 0.25  | 0.22  | 0.39           | 0.36  | 0.30  | 0.45           | 0.39  | 0.34  |
|                                       | DP PSI              | 5.1            | 3.8   | 3.0   | 7.1            | 5.2   | 4.1   | 7.1            | 5.5   | 4.4   | 10.7           | 8.1   | 6.5   |
|                                       | DP K Pa             | 35.0           | 26.0  | 21.0  | 49.0           | 36.0  | 28.0  | 49.0           | 38.0  | 30.0  | 74.0           | 56.0  | 45.0  |
|                                       | Fan Speed           | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   | High           | Med.  | Low   |
|                                       | Capacity (KW)       | 8.17           | 6.67  | 5.28  | 9.83           | 7.93  | 6.12  | 12.90          | 10.60 | 7.96  | 14.90          | 12.10 | 10.20 |
|                                       | Capacity (KBtu/Hr)  | 27.88          | 22.76 | 18.02 | 33.54          | 27.06 | 20.88 | 44.01          | 36.17 | 27.16 | 50.84          | 41.29 | 34.8  |
|                                       | CFM                 | 659            | 509   | 383   | 846            | 637   | 457   | 1082           | 842   | 587   | 1214           | 927   | 746   |
|                                       | L/sec Air           | 310            | 240   | 181   | 399            | 301   | 216   | 511            | 397   | 277   | 573            | 437   | 352   |
|                                       | SHR                 | 69%            | 68%   | 67%   | 70%            | 69%   | 67%   | 70%            | 69%   | 67%   | 69%            | 68%   | 67%   |
| 50 Pa. External Static Pressure       | Air DB Ent          | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  | 26.7           | 26.7  | 26.7  |
|                                       | Air WB Ent          | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  | 19.4           | 19.4  | 19.4  |
|                                       | Air DB Lvng.        | 12.0           | 11.4  | 10.8  | 12.6           | 11.9  | 11.1  | 12.4           | 11.7  | 11.0  | 12.1           | 11.4  | 10.9  |
|                                       | Air WB Lvng.        | 11.8           | 11.2  | 10.7  | 12.3           | 11.7  | 11.0  | 12.1           | 11.6  | 10.9  | 11.8           | 11.3  | 10.8  |
|                                       | Water In C          | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   | 5.5            | 5.5   | 5.5   |
|                                       | Water Lvng C        | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  | 14.5           | 14.5  | 14.5  |
|                                       | Gal/Min             | 3.45           | 2.81  | 2.23  | 4.14           | 3.36  | 2.60  | 5.44           | 4.49  | 3.38  | 6.29           | 5.11  | 4.31  |
|                                       | L/sec Water         | 0.22           | 0.18  | 0.14  | 0.26           | 0.21  | 0.16  | 0.34           | 0.28  | 0.21  | 0.40           | 0.32  | 0.27  |
|                                       | DP PSI              | 4.1            | 2.9   | 1.9   | 5.5            | 3.8   | 2.5   | 5.7            | 4.1   | 2.5   | 8.4            | 5.8   | 4.4   |
|                                       | DP K Pa             | 28.0           | 20.0  | 13.0  | 38.0           | 26.0  | 17.0  | 39.0           | 28.0  | 17.0  | 58.0           | 40.0  | 30.0  |

# Performance Data – 42TD (Cont.).

## 42TD – 4 Row – 4 Pipe – Heating.

| Rating: 0 Pa External Static Pressure | Fan Speed          | 42TD4 - 03 - 4 |      |      | 42TD4 - 04 - 4 |      |      | 42TD4 - 05 - 4 |      |      | 42TD4 - 06 - 4 |      |      |
|---------------------------------------|--------------------|----------------|------|------|----------------|------|------|----------------|------|------|----------------|------|------|
|                                       |                    | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  |
|                                       | Capacity (KW)      | 4.0            | 3.7  | 3.4  | 6.3            | 5.5  | 4.8  | 7.5            | 6.8  | 6.5  | 9.9            | 9.1  | 8.4  |
|                                       | Capacity (KBtu/Hr) | 13.6           | 12.5 | 11.7 | 21.6           | 18.7 | 16.5 | 25.7           | 23.1 | 22.1 | 33.8           | 31.2 | 28.6 |
|                                       | CFM                | 348            | 303  | 274  | 592            | 498  | 408  | 692            | 586  | 548  | 780            | 691  | 607  |
|                                       | L/sec Air          | 164            | 143  | 129  | 279            | 235  | 193  | 327            | 276  | 259  | 368            | 326  | 286  |
|                                       | Air DB Ent         | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 |
|                                       | Air DB Lvng.       | 40.2           | 41.2 | 41.9 | 38.8           | 39.4 | 40.7 | 39.1           | 40.3 | 40.8 | 42.3           | 43.2 | 44.2 |
|                                       | N Circuits         | 1              | 1    | 1    | 1              | 1    | 1    | 2              | 2    | 2    | 2              | 2    | 2    |
|                                       | FPI                | 12             | 12   | 12   | 12             | 12   | 12   | 12             | 12   | 12   | 12             | 12   | 12   |
|                                       | Face Tubes         | 10             | 10   | 10   | 10             | 10   | 10   | 10             | 10   | 10   | 10             | 10   | 10   |
|                                       | Water In C         | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 |
|                                       | Water Lvng C       | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 |
| 25 Pa. External Static Pressure       | Gal/Min            | 1.84           | 1.68 | 1.58 | 2.91           | 2.53 | 2.22 | 3.46           | 3.12 | 2.99 | 4.56           | 4.21 | 3.86 |
|                                       | L/sec Water        | 0.12           | 0.11 | 0.10 | 0.18           | 0.16 | 0.14 | 0.22           | 0.20 | 0.19 | 0.29           | 0.27 | 0.24 |
|                                       | DP PSI             | 3.2            | 2.8  | 2.4  | 9.1            | 7.1  | 5.6  | 2.2            | 1.8  | 1.7  | 4.3            | 3.7  | 3.2  |
|                                       | DP K Pa            | 22.3           | 19.0 | 16.9 | 62.9           | 49.0 | 38.8 | 15.0           | 12.4 | 11.5 | 29.7           | 25.8 | 22.0 |
|                                       | Fan Speed          | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  |
|                                       | Capacity (KW)      | 3.8            | 3.3  | 3.0  | 5.6            | 4.7  | 4.2  | 7.2            | 6.3  | 5.6  | 9.5            | 8.2  | 7.3  |
|                                       | Capacity (KBtu/Hr) | 12.9           | 11.4 | 10.2 | 19.1           | 16.2 | 14.3 | 24.5           | 21.5 | 19.3 | 32.4           | 28.1 | 24.8 |
|                                       | CFM                | 320            | 263  | 224  | 515            | 398  | 332  | 640            | 524  | 446  | 732            | 592  | 497  |
|                                       | L/sec Air          | 151            | 124  | 106  | 243            | 188  | 157  | 302            | 247  | 211  | 345            | 271  | 235  |
|                                       | Air DB Ent         | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 |
|                                       | Air DB Lvng.       | 40.8           | 42.3 | 43.5 | 39.1           | 40.9 | 42.2 | 39.7           | 41.1 | 42.2 | 42.8           | 44.4 | 45.7 |
|                                       | Water In C         | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 |
|                                       | Water Lvng C       | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 |
|                                       | Gal/Min            | 1.75           | 1.38 | 1.29 | 2.58           | 2.18 | 1.93 | 3.30           | 2.90 | 2.60 | 4.38           | 3.79 | 3.35 |
| 50 Pa. External Static Pressure       | L/sec Water        | 0.11           | 0.09 | 0.08 | 0.16           | 0.14 | 0.12 | 0.21           | 0.18 | 0.16 | 0.28           | 0.24 | 0.21 |
|                                       | DP PSI             | 2.9            | 2.3  | 1.9  | 7.4            | 5.5  | 4.4  | 2.0            | 1.6  | 1.3  | 4.0            | 3.1  | 2.5  |
|                                       | DP K Pa            | 20.2           | 16.0 | 13.2 | 50.9           | 37.7 | 30.3 | 13.7           | 10.9 | 9.0  | 27.6           | 21.3 | 17.2 |
|                                       | Fan Speed          | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  |
|                                       | Capacity (KW)      | 3.4            | 2.9  | 2.2  | 4.9            | 4.1  | 3.2  | 6.4            | 5.4  | 4.2  | 8.4            | 6.9  | 5.9  |
|                                       | Capacity (KBtu/Hr) | 11.6           | 9.8  | 7.6  | 16.9           | 13.9 | 11.1 | 22.0           | 18.6 | 14.5 | 28.6           | 23.7 | 20.2 |
|                                       | CFM                | 271            | 211  | 147  | 423            | 318  | 229  | 541            | 421  | 294  | 607            | 464  | 373  |
|                                       | L/sec Air          | 128            | 99   | 69   | 199            | 150  | 108  | 255            | 199  | 139  | 286            | 219  | 176  |
|                                       | Air DB Ent         | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 |
|                                       | Air DB Lvng.       | 42.0           | 43.9 | 46.5 | 40.5           | 42.5 | 44.9 | 40.9           | 42.7 | 45.4 | 44.2           | 46.3 | 47.9 |
|                                       | Water In C         | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 |
|                                       | Water Lvng C       | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 |
|                                       | Gal/Min            | 1.56           | 1.33 | 1.02 | 2.27           | 1.88 | 1.49 | 2.96           | 2.50 | 1.95 | 3.85           | 3.19 | 2.73 |
|                                       | L/sec Water        | 0.10           | 0.08 | 0.06 | 0.14           | 0.12 | 0.09 | 0.19           | 0.16 | 0.12 | 0.24           | 0.20 | 0.17 |
|                                       | DP PSI             | 2.4            | 1.8  | 1.1  | 5.9            | 4.2  | 2.8  | 1.6            | 1.2  | 0.8  | 3.2            | 2.3  | 1.7  |
|                                       | DP K Pa            | 16.6           | 12.3 | 7.8  | 40.5           | 28.8 | 19.1 | 11.3           | 8.4  | 5.4  | 22.0           | 15.8 | 11.9 |

\* Should not Exceed 62.5 Pa External Static Pressure

# Performance Data – 42TD (Cont.).

## 42TD – 4 Row – 4 Pipe – Heating - (Cont.)

| Rating: 0 Pa External Static Pressure | Fan Speed          | 42TD4 - 08 - 4 |      |      | 42TD4 - 10 - 4 |      |      | 42TD4 - 11 - 4 |      |      | 42TD4 - 14 - 4 |      |      |
|---------------------------------------|--------------------|----------------|------|------|----------------|------|------|----------------|------|------|----------------|------|------|
|                                       |                    | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  |
|                                       | Capacity (KW)      | 10.5           | 9.4  | 8.6  | 12.6           | 11.3 | 9.9  | 15.7           | 14.1 | 13.5 | 18.1           | 16.7 | 15.3 |
|                                       | Capacity (KBtu/Hr) | 35.7           | 32.2 | 29.3 | 42.9           | 38.5 | 33.8 | 53.5           | 48.1 | 46.0 | 61.9           | 56.9 | 52.2 |
|                                       | CFM                | 883            | 756  | 659  | 1181           | 995  | 815  | 1385           | 1172 | 1096 | 1572           | 1383 | 1214 |
|                                       | L/sec Air          | 417            | 357  | 311  | 557            | 469  | 385  | 654            | 553  | 517  | 742            | 652  | 573  |
|                                       | Air DB Ent         | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 |
|                                       | Air DB Lvng.       | 40.8           | 41.9 | 42.9 | 38.7           | 39.9 | 41.4 | 39.9           | 41.1 | 41.6 | 40.3           | 41.2 | 42.1 |
|                                       | N Circuits         | 2              | 2    | 2    | 2              | 2    | 2    | 3              | 3    | 3    | 3              | 3    | 3    |
|                                       | FPI                | 12             | 12   | 12   | 12             | 12   | 12   | 12             | 12   | 12   | 12             | 12   | 12   |
|                                       | Face Tubes         | 10             | 10   | 10   | 10             | 10   | 10   | 14             | 14   | 14   | 14             | 14   | 14   |
|                                       | Water In C         | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 |
|                                       | Water Lvng C       | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 |
| 25 Pa. External Static Pressure       | Gal/Min            | 4.81           | 4.34 | 3.96 | 5.78           | 5.19 | 4.57 | 7.22           | 6.49 | 6.21 | 8.35           | 7.68 | 7.04 |
|                                       | L/sec Water        | 0.30           | 0.27 | 0.25 | 0.36           | 0.33 | 0.29 | 0.46           | 0.41 | 0.39 | 0.53           | 0.48 | 0.44 |
|                                       | DP PSI             | 5.6            | 4.7  | 3.9  | 7.8            | 6.4  | 5.1  | 5.2            | 4.3  | 4.0  | 7.8            | 6.7  | 5.8  |
|                                       | DP K Pa            | 38.5           | 32.1 | 27.2 | 53.5           | 44.2 | 35.1 | 36.0           | 29.8 | 27.5 | 53.7           | 46.3 | 39.7 |
|                                       | Fan Speed          | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  |
|                                       | Capacity (KW)      | 9.7            | 8.3  | 7.4  | 11.5           | 9.8  | 8.7  | 14.9           | 13.1 | 11.7 | 17.2           | 15.0 | 13.4 |
|                                       | Capacity (KBtu/Hr) | 33.1           | 28.5 | 25.3 | 39.4           | 33.3 | 29.5 | 50.9           | 44.6 | 40.1 | 58.8           | 51.3 | 45.6 |
|                                       | CFM                | 789            | 630  | 531  | 1031           | 796  | 665  | 1281           | 1048 | 893  | 1452           | 1184 | 995  |
|                                       | L/sec Air          | 372            | 297  | 251  | 486            | 376  | 314  | 605            | 495  | 422  | 685            | 559  | 469  |
|                                       | Air DB Ent         | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 |
|                                       | Air DB Lvng.       | 41.6           | 43.2 | 44.5 | 39.7           | 41.5 | 42.9 | 40.5           | 41.9 | 43.1 | 40.8           | 42.3 | 43.6 |
|                                       | Water In C         | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 |
|                                       | Water Lvng C       | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 |
|                                       | Gal/Min            | 4.47           | 3.84 | 3.41 | 5.31           | 4.50 | 3.98 | 6.93           | 6.02 | 5.41 | 7.93           | 6.93 | 6.15 |
| 50 Pa. External Static Pressure       | L/sec Water        | 0.28           | 0.24 | 0.22 | 0.34           | 0.28 | 0.25 | 0.44           | 0.38 | 0.34 | 0.50           | 0.44 | 0.39 |
|                                       | DP PSI             | 4.9            | 3.7  | 3.0  | 6.7            | 4.9  | 4.0  | 4.8            | 3.8  | 3.1  | 7.1            | 5.6  | 4.5  |
|                                       | DP K Pa            | 33.8           | 25.8 | 20.9 | 46.0           | 34.1 | 27.5 | 33.0           | 26.1 | 21.5 | 49.0           | 38.5 | 31.2 |
|                                       | Fan Speed          | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  | High           | Med. | Low  |
|                                       | Capacity (KW)      | 8.6            | 7.2  | 5.9  | 10.2           | 8.4  | 6.7  | 13.4           | 11.3 | 8.8  | 15.3           | 12.7 | 10.9 |
|                                       | Capacity (KBtu/Hr) | 29.3           | 24.5 | 20.0 | 34.7           | 28.7 | 22.8 | 45.6           | 38.5 | 29.9 | 52.2           | 43.4 | 37.3 |
|                                       | CFM                | 659            | 509  | 383  | 846            | 637  | 457  | 1082           | 842  | 587  | 1214           | 927  | 746  |
|                                       | L/sec Air          | 311            | 240  | 181  | 399            | 301  | 216  | 511            | 397  | 277  | 573            | 437  | 352  |
|                                       | Air DB Ent         | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 | 20.0           | 20.0 | 20.0 |
|                                       | Air DB Lvng.       | 42.9           | 44.8 | 47.0 | 41.1           | 43.2 | 45.6 | 41.7           | 43.5 | 46.2 | 42.1           | 44.1 | 45.7 |
|                                       | Water In C         | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 | 70.0           | 70.0 | 70.0 |
|                                       | Water Lvng C       | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 | 61.6           | 61.6 | 61.6 |
|                                       | Gal/Min            | 3.96           | 3.31 | 2.70 | 4.68           | 3.87 | 3.07 | 6.15           | 5.19 | 4.03 | 7.04           | 5.86 | 5.03 |
|                                       | L/sec Water        | 0.25           | 0.21 | 0.17 | 0.30           | 0.24 | 0.19 | 0.39           | 0.33 | 0.25 | 0.44           | 0.37 | 0.32 |
|                                       | DP PSI             | 3.9            | 2.9  | 2.0  | 5.3            | 3.8  | 2.5  | 3.9            | 2.9  | 1.9  | 5.8            | 4.2  | 3.2  |
|                                       | DP K Pa            | 27.2           | 19.8 | 13.8 | 36.7           | 26.1 | 17.3 | 27.1           | 20.0 | 12.8 | 39.7           | 28.6 | 21.8 |

\* Should not Exceed 62.5 Pa External Static Pressure

# Performance Data – 42MD

## 42MD – 3 Row – 2 Pipe – Cooling.

| Model                        | 42MD3 - 16 - 2 |      |      |      |      |      | 42MD3 - 20 - 2 |      |      |      |      |      |
|------------------------------|----------------|------|------|------|------|------|----------------|------|------|------|------|------|
| External Static pressure(Pa) | 0              |      |      | 25   |      |      | 0              |      |      | 25   |      |      |
| Fan Speed                    | High           | Med. | Low  | High | Med. | Low  | High           | Med. | Low  | High | Med. | Low  |
| Capacity (KW)                | 16.9           | 15.1 | 13.0 | 16.1 | 14.3 | 12.4 | 21.7           | 19.9 | 16.7 | 20.1 | 18.4 | 15.2 |
| Capacity (KBtu/Hr)           | 57.7           | 51.4 | 44.4 | 54.9 | 48.8 | 42.3 | 74.0           | 67.9 | 57.0 | 68.6 | 62.8 | 51.9 |
| CFM                          | 1642           | 1398 | 1138 | 1532 | 1299 | 1068 | 2121           | 1884 | 1468 | 1899 | 1685 | 1297 |
| L/sec Air                    | 775            | 660  | 537  | 723  | 613  | 504  | 1001           | 889  | 693  | 896  | 795  | 612  |
| SHR(Sensible/Total)          | 73%            | 72%  | 71%  | 73%  | 71%  | 70%  | 73%            | 73%  | 71%  | 73%  | 72%  | 70%  |
| Air DB Ent                   | 26.7           | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 |
| Air WB Ent                   | 19.4           | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 |
| Air DB Lvng.                 | 13.4           | 12.9 | 12.4 | 13.2 | 12.7 | 12.2 | 13.5           | 13.1 | 12.4 | 13.1 | 12.8 | 12.1 |
| Air WB Lvng.                 | 12.9           | 12.6 | 12.1 | 12.8 | 12.4 | 12.0 | 13.0           | 12.7 | 12.1 | 12.7 | 12.4 | 11.9 |
| N Circuits                   | 4              | 4    | 4    | 4    | 4    | 4    | 4              | 4    | 4    | 4    | 4    | 4    |
| Face Tubes                   | 14             | 14   | 14   | 14   | 14   | 14   | 14             | 14   | 14   | 14   | 14   | 14   |
| Water In C                   | 5.5            | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  |
| Water Lvng C                 | 14.5           | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 |
| Gal/Min                      | 7.09           | 6.33 | 5.44 | 6.76 | 6.00 | 5.19 | 9.10           | 8.37 | 6.99 | 8.42 | 7.74 | 6.37 |
| L/sec Water                  | 0.45           | 0.40 | 0.34 | 0.43 | 0.38 | 0.33 | 0.57           | 0.53 | 0.44 | 0.53 | 0.49 | 0.40 |
| DP PSI                       | 9.1            | 7.4  | 5.8  | 8.3  | 6.8  | 5.2  | 16.2           | 14.1 | 10.3 | 14.2 | 12.2 | 8.7  |
| DP K Pa                      | 63.0           | 51.0 | 40.0 | 57.0 | 47.0 | 36.0 | 112.0          | 97.0 | 71.0 | 98.0 | 84.0 | 60.0 |

| External Static pressure(Pa) | 50   |      |      | 75   |      |      | 50   |      |      | 75   |      |      |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Fan Speed                    | High | Med. | Low  | High | Med. | Low  | High | Med. | Low  | High | Med. | Low  |
| Capacity (KW)                | 15.2 | 13.6 | 11.7 | 14.3 | 12.7 | 11.0 | 18.5 | 16.7 | 13.8 | 16.5 | 14.7 | 11.9 |
| Capacity (KBtu/Hr)           | 51.9 | 46.3 | 39.9 | 48.8 | 43.3 | 37.5 | 63.1 | 57.0 | 47.1 | 56.3 | 50.2 | 40.6 |
| CFM                          | 1422 | 1210 | 996  | 1301 | 1108 | 913  | 1691 | 1475 | 1140 | 1449 | 1235 | 943  |
| L/sec Air                    | 671  | 571  | 470  | 614  | 523  | 431  | 798  | 696  | 538  | 684  | 583  | 445  |
| SHR                          | 73%  | 71%  | 70%  | 72%  | 70%  | 70%  | 72%  | 71%  | 69%  | 71%  | 70%  | 69%  |
| Air DB Ent                   | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 |
| Air WB Ent                   | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 |
| Air DB Lvng.                 | 13.0 | 12.5 | 12.0 | 12.7 | 12.3 | 11.8 | 12.8 | 12.4 | 11.8 | 12.4 | 12.0 | 11.3 |
| Air WB Lvng.                 | 12.6 | 12.2 | 11.8 | 12.4 | 12.0 | 11.6 | 12.5 | 12.1 | 11.6 | 12.1 | 11.8 | 11.2 |
| Water In C                   | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  |
| Water Lvng C                 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 |
| Gal/Min                      | 6.41 | 5.70 | 4.91 | 6.01 | 5.33 | 4.61 | 7.76 | 7.02 | 5.79 | 6.92 | 6.14 | 4.99 |
| L/sec Water                  | 0.40 | 0.36 | 0.31 | 0.38 | 0.34 | 0.29 | 0.49 | 0.44 | 0.37 | 0.44 | 0.39 | 0.32 |
| DP PSI                       | 7.5  | 6.2  | 4.8  | 6.8  | 5.5  | 4.4  | 12.3 | 10.3 | 7.4  | 10.2 | 8.3  | 5.7  |
| DP K Pa                      | 52.0 | 43.0 | 33.0 | 47.0 | 38.0 | 30.0 | 85.0 | 71.0 | 51.0 | 70.0 | 57.0 | 39.0 |

| External Static pressure(Pa) | 100  |      |      | 125  |      |      | 100  |      |      | 125  |      |      |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Fan Speed                    | High | Med. | Low  | High | Med. | Low  | High | Med. | Low  | High | Med. | Low  |
| Capacity (KW)                | 13.2 | 11.6 | 9.9  | 11.6 | 9.8  | 8.0  | 14.6 | 12.6 | 9.6  | 11.7 | 9.8  | 6.3  |
| Capacity (KBtu/Hr)           | 45.0 | 39.6 | 33.6 | 39.6 | 33.4 | 27.1 | 49.8 | 43.0 | 32.7 | 39.9 | 33.3 | 21.5 |
| CFM                          | 1163 | 983  | 797  | 983  | 790  | 608  | 1231 | 1017 | 720  | 928  | 735  | 443  |
| L/sec Air                    | 549  | 464  | 376  | 464  | 373  | 287  | 581  | 480  | 340  | 438  | 347  | 209  |
| SHR                          | 71%  | 70%  | 69%  | 70%  | 69%  | 68%  | 70%  | 69%  | 68%  | 69%  | 68%  | 66%  |
| Air DB Ent                   | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 |
| Air WB Ent                   | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 |
| Air DB Lvng.                 | 12.4 | 12.0 | 11.5 | 12.0 | 11.5 | 10.9 | 12.0 | 11.5 | 10.8 | 11.3 | 10.8 | 9.9  |
| Air WB Lvng.                 | 12.2 | 11.8 | 11.4 | 11.8 | 11.3 | 10.8 | 11.8 | 11.3 | 10.7 | 11.2 | 10.7 | 9.8  |
| Water In C                   | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  |
| Water Lvng C                 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 |
| Gal/Min                      | 5.53 | 4.87 | 4.14 | 4.88 | 4.12 | 3.35 | 6.14 | 5.29 | 4.03 | 4.93 | 4.09 | 2.66 |
| L/sec Water                  | 0.35 | 0.31 | 0.26 | 0.31 | 0.26 | 0.21 | 0.39 | 0.33 | 0.25 | 0.31 | 0.26 | 0.17 |
| DP PSI                       | 5.9  | 4.8  | 3.6  | 4.8  | 3.5  | 2.5  | 8.1  | 6.4  | 3.9  | 5.5  | 4.1  | 1.9  |
| DP K Pa                      | 41.0 | 33.0 | 25.0 | 33.0 | 24.0 | 17.0 | 56.0 | 44.0 | 27.0 | 38.0 | 28.0 | 13.0 |

\* Should not Exceed 125 Pa External Static Pressure



# Performance Data – 42MD (Cont.).

## 42MD – 4 Row – 2 Pipe – Cooling.

| Model                        | 42MD4 - 14 - 2 |      |      |      |      |      | 42MD4 - 18 - 2 |      |      |      |      |      |
|------------------------------|----------------|------|------|------|------|------|----------------|------|------|------|------|------|
| External Static pressure(Pa) | 0              |      |      | 25   |      |      | 0              |      |      | 25   |      |      |
| Fan Speed                    | High           | Med. | Low  | High | Med. | Low  | High           | Med. | Low  | High | Med. | Low  |
| Capacity (KW)                | 18.9           | 16.7 | 13.9 | 17.9 | 15.8 | 13.6 | 23.6           | 21.6 | 17.9 | 21.8 | 19.9 | 16.2 |
| Capacity (KBtu/Hr)           | 64.5           | 57.0 | 47.4 | 61.1 | 53.9 | 46.4 | 80.5           | 73.7 | 61.1 | 74.4 | 67.9 | 55.3 |
| CFM                          | 1511           | 1286 | 1013 | 1409 | 1195 | 983  | 1951           | 1733 | 1352 | 1748 | 1551 | 1193 |
| L/sec Air                    | 713            | 607  | 478  | 665  | 564  | 464  | 921            | 818  | 638  | 825  | 732  | 563  |
| SHR(Sensible/Total)          | 68%            | 68%  | 67%  | 68%  | 68%  | 66%  | 69%            | 69%  | 68%  | 69%  | 68%  | 67%  |
| Air DB Ent                   | 26.7           | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 |
| Air WB Ent                   | 19.4           | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 |
| Air DB Lvng.                 | 11.4           | 11.0 | 10.5 | 11.2 | 10.4 | 10.4 | 11.8           | 11.4 | 10.8 | 11.5 | 11.1 | 10.5 |
| Air WB Lvng.                 | 11.3           | 10.9 | 10.4 | 11.1 | 10.3 | 10.3 | 11.6           | 11.3 | 10.7 | 11.3 | 11.0 | 10.4 |
| N Circuits                   | 5              | 5    | 5    | 5    | 5    | 5    | 6              | 6    | 6    | 6    | 6    | 6    |
| Face Tubes                   | 14             | 14   | 14   | 14   | 14   | 14   | 14             | 14   | 14   | 14   | 14   | 14   |
| Water In C                   | 5.5            | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  |
| Water Lvng C                 | 14.5           | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 |
| Gal/Min                      | 7.94           | 7.03 | 5.82 | 7.54 | 6.65 | 5.69 | 9.94           | 9.09 | 7.52 | 9.14 | 8.37 | 6.82 |
| L/sec Water                  | 0.50           | 0.44 | 0.37 | 0.48 | 0.42 | 0.36 | 0.63           | 0.57 | 0.47 | 0.58 | 0.53 | 0.43 |
| DP PSI                       | 8.0            | 6.5  | 4.6  | 7.3  | 5.8  | 4.5  | 8.3            | 7.1  | 5.1  | 7.1  | 6.1  | 4.2  |
| DP K Pa                      | 55.0           | 45.0 | 32.0 | 50.0 | 40.0 | 31.0 | 57.0           | 49.0 | 35.0 | 49.0 | 42.0 | 29.0 |
| External Static pressure(Pa) | 50             |      |      | 75   |      |      | 50             |      |      | 75   |      |      |
| Fan Speed                    | High           | Med. | Low  | High | Med. | Low  | High           | Med. | Low  | High | Med. | Low  |
| Capacity (KW)                | 17.0           | 15.0 | 12.8 | 15.9 | 14.0 | 12.0 | 20.0           | 18.0 | 14.7 | 17.8 | 15.7 | 12.6 |
| Capacity (KBtu/Hr)           | 58.0           | 51.2 | 43.7 | 54.3 | 47.8 | 40.9 | 68.2           | 61.4 | 50.2 | 60.7 | 53.6 | 43.0 |
| CFM                          | 1307           | 1115 | 915  | 1197 | 1019 | 841  | 1555           | 1356 | 1049 | 1333 | 1138 | 869  |
| L/sec Air                    | 617            | 526  | 432  | 565  | 481  | 397  | 734            | 640  | 495  | 629  | 537  | 410  |
| SHR                          | 68%            | 67%  | 66%  | 67%  | 67%  | 66%  | 68%            | 67%  | 66%  | 67%  | 66%  | 66%  |
| Air DB Ent                   | 26.7           | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 |
| Air WB Ent                   | 19.4           | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 |
| Air DB Lvng.                 | 11.0           | 10.7 | 10.2 | 10.8 | 10.5 | 10.1 | 11.1           | 10.8 | 10.3 | 10.8 | 10.4 | 9.9  |
| Air WB Lvng.                 | 10.9           | 10.6 | 10.1 | 10.7 | 10.4 | 10.0 | 11.0           | 10.7 | 10.2 | 10.7 | 10.3 | 9.8  |
| Water In C                   | 5.5            | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  |
| Water Lvng C                 | 14.5           | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 |
| Gal/Min                      | 7.12           | 6.29 | 5.38 | 6.66 | 5.86 | 5.03 | 8.39           | 7.54 | 6.16 | 7.44 | 6.56 | 5.26 |
| L/sec Water                  | 0.45           | 0.40 | 0.34 | 0.42 | 0.37 | 0.32 | 0.53           | 0.48 | 0.39 | 0.47 | 0.41 | 0.33 |
| DP PSI                       | 6.7            | 5.4  | 4.1  | 5.9  | 4.8  | 3.6  | 6.1            | 5.1  | 3.6  | 4.9  | 4.1  | 2.8  |
| DP K Pa                      | 46.0           | 37.0 | 28.0 | 41.0 | 33.0 | 25.0 | 42.0           | 35.0 | 25.0 | 34.0 | 28.0 | 19.0 |
| External Static pressure(Pa) | 100            |      |      | 125  |      |      | 100            |      |      | 125  |      |      |
| Fan Speed                    | High           | Med. | Low  | High | Med. | Low  | High           | Med. | Low  | High | Med. | Low  |
| Capacity (KW)                | 14.5           | 12.7 | 10.7 | 12.7 | 10.6 | 8.5  | 15.6           | 13.4 | 10.0 | 12.4 | 10.2 | 6.5  |
| Capacity (KBtu/Hr)           | 49.5           | 43.3 | 36.5 | 43.3 | 36.2 | 29.1 | 53.2           | 45.7 | 34.1 | 42.3 | 34.8 | 22.1 |
| CFM                          | 1070           | 905  | 733  | 905  | 727  | 559  | 1134           | 934  | 663  | 854  | 676  | 407  |
| L/sec Air                    | 505            | 427  | 346  | 427  | 343  | 264  | 535            | 441  | 313  | 403  | 319  | 192  |
| SHR                          | 67%            | 66%  | 65%  | 66%  | 66%  | 65%  | 67%            | 66%  | 65%  | 66%  | 65%  | 64%  |
| Air DB Ent                   | 26.7           | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7           | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 |
| Air WB Ent                   | 19.4           | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4           | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 |
| Air DB Lvng.                 | 10.6           | 10.2 | 9.8  | 10.2 | 9.7  | 9.3  | 10.4           | 10.0 | 9.4  | 9.8  | 9.4  | 8.7  |
| Air WB Lvng.                 | 10.5           | 10.1 | 9.7  | 10.1 | 9.6  | 9.2  | 10.3           | 9.9  | 9.3  | 9.7  | 9.3  | 8.6  |
| Water In C                   | 5.5            | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  | 5.5            | 5.5  | 5.5  | 5.5  | 5.5  | 5.5  |
| Water Lvng C                 | 14.5           | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 | 14.5           | 14.5 | 14.5 | 14.5 | 14.5 | 14.5 |
| Gal/Min                      | 6.09           | 5.33 | 4.48 | 5.34 | 4.56 | 3.56 | 6.54           | 5.59 | 4.21 | 5.19 | 4.26 | 2.71 |
| L/sec Water                  | 0.38           | 0.34 | 0.28 | 0.34 | 0.22 | 0.22 | 0.41           | 0.35 | 0.27 | 0.33 | 0.27 | 0.17 |
| DP PSI                       | 5.1            | 3.9  | 2.9  | 4.1  | 2.9  | 2.0  | 4.1            | 3.0  | 1.9  | 2.8  | 1.9  | 0.7  |
| DP K Pa                      | 35.0           | 27.0 | 20.0 | 28.0 | 20.0 | 14.0 | 28.0           | 21.0 | 13.0 | 19.0 | 13.0 | 5.0  |

\* Should not Exceed 125 Pa External Static Pressure

# Performance Data

## Fan Performance –42TW/TD – ENGLISH

| 42TW3/42TD3/42TD4 (4 Pipe Only) Air Flow (CFM) |      |      |      |      |      |      |      |      |     |      |      |     |
|------------------------------------------------|------|------|------|------|------|------|------|------|-----|------|------|-----|
| Ex. Static Pres. in wg                         | 0    |      |      | 0.05 |      |      | 0.1  |      |     | 0.15 |      |     |
| Unit Size                                      | H    | M    | L    | H    | M    | L    | H    | M    | L   | H    | M    | L   |
| 03                                             | 348  | 303  | 274  | 334  | 283  | 249  | 320  | 263  | 224 | 295  | 237  | 185 |
| 05                                             | 592  | 498  | 408  | 553  | 448  | 370  | 515  | 398  | 332 | 467  | 353  | 278 |
| 06                                             | 692  | 586  | 548  | 666  | 555  | 497  | 640  | 524  | 447 | 603  | 466  | 373 |
| 07                                             | 780  | 691  | 607  | 756  | 642  | 552  | 732  | 592  | 497 | 682  | 527  | 443 |
| 09                                             | 883  | 756  | 659  | 836  | 693  | 595  | 789  | 630  | 531 | 724  | 570  | 457 |
| 11                                             | 1181 | 995  | 815  | 1106 | 895  | 740  | 1031 | 796  | 665 | 935  | 706  | 557 |
| 12                                             | 1385 | 1172 | 1096 | 1333 | 1110 | 995  | 1281 | 1048 | 893 | 1205 | 931  | 746 |
| 16                                             | 1572 | 1383 | 1214 | 1512 | 1283 | 1104 | 1452 | 1184 | 995 | 1363 | 1054 | 885 |

| 42TW3/42TD3/42TD4 (4 Pipe Only) Air Flow (CFM) |      |     |     |      |     |   |     |   |   |
|------------------------------------------------|------|-----|-----|------|-----|---|-----|---|---|
| Ex. Static Pres. in wg                         | 0.2  |     |     | 0.25 |     |   | 0.3 |   |   |
| Unit Size                                      | H    | M   | L   | H    | M   | L | H   | M | L |
| 03                                             | 271  | 211 | 147 | 224  | 159 | – | 180 | – | – |
| 05                                             | 423  | 318 | 229 | 368  | 258 | – | 308 | – | – |
| 06                                             | 541  | 421 | 294 | 434  | 318 | – | 329 | – | – |
| 07                                             | 607  | 464 | 373 | 524  | 383 | – | 453 | – | – |
| 09                                             | 659  | 509 | 383 | 589  | 436 | – | 507 | – | – |
| 11                                             | 846  | 637 | 457 | 736  | 517 | – | 617 | – | – |
| 12                                             | 1082 | 842 | 587 | 846  | 621 | – | 642 | – | – |
| 16                                             | 1214 | 927 | 746 | 1042 | 762 | – | 901 | – | – |

## Fan Performance – ENGLISH

| 42TW4/42TD4 (2 Pipe Only) Air Flow (CFM) |      |      |      |      |      |      |      |      |     |      |     |     |
|------------------------------------------|------|------|------|------|------|------|------|------|-----|------|-----|-----|
| Ex. Static Pres. in wg                   | 0    |      |      | 0.05 |      |      | 0.1  |      |     | 0.15 |     |     |
| Unit Size                                | H    | M    | L    | H    | M    | L    | H    | M    | L   | H    | M   | L   |
| 03                                       | 313  | 273  | 247  | 304  | 257  | 225  | 295  | 242  | 206 | 275  | 220 | 172 |
| 05                                       | 533  | 450  | 368  | 503  | 408  | 337  | 474  | 366  | 305 | 434  | 328 | 259 |
| 06                                       | 623  | 527  | 494  | 606  | 505  | 453  | 589  | 483  | 411 | 560  | 433 | 347 |
| 07                                       | 702  | 623  | 548  | 687  | 584  | 503  | 673  | 545  | 457 | 634  | 490 | 411 |
| 09                                       | 795  | 680  | 593  | 760  | 631  | 541  | 725  | 581  | 489 | 676  | 530 | 422 |
| 10                                       | 1065 | 897  | 735  | 1006 | 815  | 673  | 948  | 732  | 612 | 870  | 657 | 518 |
| 11                                       | 1247 | 1055 | 988  | 1213 | 1010 | 905  | 1179 | 965  | 822 | 1121 | 866 | 694 |
| 14                                       | 1416 | 1247 | 1094 | 1376 | 1168 | 1005 | 1336 | 1089 | 915 | 1267 | 981 | 823 |

| 42TW4/42TD4 (2 Pipe Only) Air Flow (CFM) |      |     |     |      |     |   |     |   |   |
|------------------------------------------|------|-----|-----|------|-----|---|-----|---|---|
| Ex. Static Pres. in wg                   | 0.2  |     |     | 0.25 |     |   | 0.3 |   |   |
| Unit Size                                | H    | M   | L   | H    | M   | L | H   | M | L |
| 03                                       | 255  | 198 | 138 | 214  | 164 | – | 174 | – | – |
| 05                                       | 397  | 300 | 215 | 350  | 245 | – | 296 | – | – |
| 06                                       | 509  | 396 | 276 | 412  | 303 | – | 316 | – | – |
| 07                                       | 570  | 436 | 351 | 498  | 364 | – | 434 | – | – |
| 09                                       | 626  | 479 | 354 | 559  | 421 | – | 486 | – | – |
| 10                                       | 795  | 599 | 430 | 699  | 491 | – | 592 | – | – |
| 11                                       | 1018 | 791 | 551 | 803  | 590 | – | 616 | – | – |
| 14                                       | 1141 | 872 | 702 | 990  | 724 | – | 865 | – | – |

## Fan Performance – 42MW/MD – ENGLISH

| 42MW4/42MD4 Air Flow (CFM) |      |      |      |      |      |      |      |      |      |      |      |     |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Ex. Static Pres. inwg      | 0    |      |      | 0.1  |      |      | 0.2  |      |      | 0.3  |      |     |
| Unit Size 3Row/4Row        | H    | M    | L    | H    | M    | L    | H    | M    | L    | H    | M    | L   |
| 016/014                    | 1641 | 1398 | 1138 | 1531 | 1300 | 1069 | 1422 | 1211 | 995  | 1302 | 1108 | 914 |
| 020/018                    | 2186 | 1940 | 1513 | 1956 | 1736 | 1336 | 1741 | 1518 | 1175 | 1492 | 1273 | 972 |

| 42MW4/42MD4 Air Flow (CFM) |      |      |     |     |     |     |
|----------------------------|------|------|-----|-----|-----|-----|
| Ex. Static Pres. inwg      | 0.4  |      |     | 0.5 |     |     |
| Unit Size 3Row/4Row        | H    | M    | L   | H   | M   | L   |
| 016/014                    | 1163 | 983  | 796 | 984 | 790 | 609 |
| 020/018                    | 1263 | 1047 | 742 | 955 | 757 | 455 |

H – At High Fan Speed.

M – At Medium Fan Speed.

L – At Low Fan Speed.

# Performance Data

## Fan Performance – SI

| 42TW3/42TD3/42TD4 (4 Pipe Only) Air Flow (m³/hr) |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Ex. Static Pres. Pa                              | 0    |      |      | 12.5 |      |      | 25   |      |      | 37.5 |      |      |
| Unit Size                                        | H    | M    | L    | H    | M    | L    | H    | M    | L    | H    | M    | L    |
| 03                                               | 592  | 515  | 466  | 568  | 481  | 423  | 544  | 446  | 380  | 502  | 402  | 315  |
| 05                                               | 1005 | 846  | 694  | 940  | 761  | 629  | 875  | 676  | 564  | 794  | 600  | 473  |
| 06                                               | 1176 | 995  | 931  | 1132 | 943  | 845  | 1088 | 891  | 759  | 1024 | 791  | 634  |
| 07                                               | 1325 | 1174 | 1031 | 1284 | 1090 | 938  | 1243 | 1006 | 845  | 1158 | 896  | 752  |
| 09                                               | 1500 | 1285 | 1120 | 1420 | 1178 | 1011 | 1340 | 1071 | 902  | 1230 | 968  | 776  |
| 11                                               | 2007 | 1690 | 1385 | 1879 | 1521 | 1257 | 1751 | 1352 | 1129 | 1589 | 1200 | 946  |
| 12                                               | 2353 | 1991 | 1862 | 2265 | 1886 | 1690 | 2177 | 1781 | 1518 | 2048 | 1582 | 1268 |
| 16                                               | 2671 | 2349 | 2062 | 2569 | 2180 | 1876 | 2467 | 2011 | 1690 | 2315 | 1791 | 1504 |

| 42TW3/42TD3/42TD4 (4 Pipe Only) Air Flow (m³/hr) |      |      |      |      |      |   |      |   |   |
|--------------------------------------------------|------|------|------|------|------|---|------|---|---|
| Ex. Static Pres. Pa                              | 50   |      |      | 62.5 |      |   | 75   |   |   |
| Unit Size                                        | H    | M    | L    | H    | M    | L | H    | M | L |
| 03                                               | 460  | 358  | 250  | 380  | 270  | – | 305  | – | – |
| 05                                               | 718  | 541  | 389  | 625  | 439  | – | 524  | – | – |
| 06                                               | 919  | 715  | 499  | 737  | 541  | – | 559  | – | – |
| 07                                               | 1031 | 788  | 634  | 890  | 651  | – | 769  | – | – |
| 09                                               | 1120 | 865  | 650  | 1000 | 740  | – | 862  | – | – |
| 11                                               | 1437 | 1082 | 777  | 1251 | 879  | – | 1048 | – | – |
| 12                                               | 1839 | 1430 | 997  | 1437 | 1055 | – | 1091 | – | – |
| 16                                               | 2062 | 1575 | 1268 | 1770 | 1295 | – | 1530 | – | – |

## Fan Performance – SI

| 42TW4/42TD4 (2 Pipe Only) Air Flow (m³/hr) |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Ex. Static Pres. Pa                        | 0    |      |      | 12.5 |      |      | 25   |      |      | 37.5 |      |      |
| Unit Size                                  | H    | M    | L    | H    | M    | L    | H    | M    | L    | H    | M    | L    |
| 03                                         | 532  | 463  | 419  | 517  | 437  | 383  | 502  | 411  | 350  | 467  | 373  | 292  |
| 05                                         | 905  | 764  | 625  | 855  | 693  | 572  | 805  | 622  | 519  | 738  | 558  | 440  |
| 06                                         | 1059 | 896  | 840  | 1030 | 858  | 769  | 1001 | 820  | 698  | 952  | 736  | 590  |
| 07                                         | 1192 | 1058 | 931  | 1168 | 992  | 854  | 1144 | 926  | 777  | 1077 | 833  | 699  |
| 09                                         | 1350 | 1156 | 1007 | 1291 | 1072 | 919  | 1232 | 987  | 831  | 1148 | 900  | 717  |
| 10                                         | 1809 | 1524 | 1249 | 1710 | 1384 | 1144 | 1611 | 1244 | 1039 | 1478 | 1116 | 880  |
| 11                                         | 2119 | 1793 | 1679 | 2061 | 1716 | 1538 | 2003 | 1639 | 1397 | 1905 | 1471 | 1179 |
| 14                                         | 2406 | 2118 | 1859 | 2338 | 1984 | 1707 | 2270 | 1850 | 1555 | 2153 | 1666 | 1399 |

| 42TW4/42TD4 (2 Pipe Only) Air Flow (m³/hr) |      |      |      |      |      |   |      |   |   |
|--------------------------------------------|------|------|------|------|------|---|------|---|---|
| Ex. Static Pres. Pa                        | 50   |      |      | 62.5 |      |   | 75   |   |   |
| Unit Size                                  | H    | M    | L    | H    | M    | L | H    | M | L |
| 03                                         | 433  | 336  | 235  | 363  | 279  | – | 296  | – | – |
| 05                                         | 675  | 509  | 366  | 594  | 417  | – | 503  | – | – |
| 06                                         | 864  | 672  | 469  | 700  | 514  | – | 537  | – | – |
| 07                                         | 969  | 741  | 596  | 846  | 618  | – | 738  | – | – |
| 09                                         | 1063 | 813  | 602  | 950  | 715  | – | 825  | – | – |
| 10                                         | 1351 | 1017 | 730  | 1188 | 835  | – | 1006 | – | – |
| 11                                         | 1729 | 1344 | 937  | 1365 | 1002 | – | 1047 | – | – |
| 14                                         | 1938 | 1481 | 1192 | 1682 | 1230 | – | 1469 | – | – |

## Fan Performance – 42MW/MD – SI

| 42MW4/42MD4 Air Flow (m³/hr) |      |      |      |      |      |      |      |      |      |      |      |      |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Ex. Static Pres. Pa          | 0    |      |      | 25   |      |      | 50   |      |      | 75   |      |      |
| Unit Size 3Row/4Row          | H    | M    | L    | H    | M    | L    | H    | M    | L    | H    | M    | L    |
| 016/014                      | 2788 | 2374 | 1934 | 2601 | 2209 | 1816 | 2416 | 2057 | 1691 | 2212 | 1882 | 1552 |
| 020/018                      | 3711 | 3294 | 2569 | 3322 | 2947 | 2268 | 2957 | 2578 | 1994 | 2534 | 2161 | 1651 |

| 42MW4/42MD4 Air Flow (m³/hr) |      |      |      |      |      |      |
|------------------------------|------|------|------|------|------|------|
| Ex. Static Pres. Pa          | 100  |      |      | 125  |      |      |
| Unit Size 3Row/4Row          | H    | M    | L    | H    | M    | L    |
| 016/014                      | 1976 | 1670 | 1352 | 1672 | 1342 | 1035 |
| 020/018                      | 2154 | 1778 | 1260 | 1622 | 1285 | 773  |

H – At High Fan Speed.  
M – At Medium Fan Speed.  
L – At Low Fan Speed.

# Electrical Data

| 42TW/TD  |                         | Valve control input | Power Supply | Voltage |     | Motor Qty | Motor FLA( EACH) |
|----------|-------------------------|---------------------|--------------|---------|-----|-----------|------------------|
| 3 Row    | 4 Row(2/4 Pipes System) |                     |              | Min     | Max |           |                  |
| 03       | 03                      | 24 VAC              | 220-240/1/50 | 198     | 264 | 1         | 0.41             |
| 05       | 04                      |                     |              |         |     | 1         | 0.57             |
| 06/07/09 | 05/06/08                |                     |              |         |     | 1         | 0.82             |
| 11/12    | 10/11                   |                     |              |         |     | 2         | 0.57             |
| 16       | 14                      |                     |              |         |     | 2         | 0.82             |
| 03       | 03                      |                     | 208-230/1/60 | 198     | 264 | 1         | 0.52             |
| 05       | 04                      |                     |              |         |     | 1         | 0.77             |
| 06/07/09 | 05/06/08                |                     |              |         |     | 1         | 1                |
| 11/12    | 10/11                   |                     |              |         |     | 2         | 0.77             |
| 16       | 14                      |                     |              |         |     | 2         | 1                |

| 42MW/MD |       | Valve control input | Power Supply | Voltage |     | Motor Qty | Motor FLA( EACH) |
|---------|-------|---------------------|--------------|---------|-----|-----------|------------------|
| 3 Row   | 4 Row |                     |              | Min     | Max |           |                  |
| 16      | 14    | 24 VAC              | 220/1/50     | 198     | 264 | 1         | 3.3              |
| 20      | 18    |                     |              |         |     | 1         | 3.8              |
| 16      | 14    |                     | 208-230/1/60 | 198     | 264 | 1         | 3.0              |
| 20      | 18    |                     |              |         |     | 1         | 3.5              |

LEGEND

FLA — Full Load Amps

## Sound Data

### SOUND PRESSURE – 42TW/TD 3ROW

| External static Pressure | @ 0 Pa ESP |      |      | @ 25 Pa ESP |      |      | @ 50 Pa ESP |      |      |
|--------------------------|------------|------|------|-------------|------|------|-------------|------|------|
|                          | Hi         | Med  | Low  | Hi          | Med  | Low  | Hi          | Med  | Low  |
| 42TW/TD 3-03             | 47.5       | 45.5 | 43.5 | 46.5        | 44.0 | 42.5 | 45.5        | 42.5 | 41.0 |
| 42TW/TD 3-05             | 48.5       | 46.5 | 44.5 | 47.5        | 45.0 | 43.5 | 46.5        | 43.5 | 42.0 |
| 42TW/TD 3-06             | 50.0       | 48.0 | 46.0 | 49.0        | 46.5 | 45.0 | 48.0        | 45.0 | 43.5 |
| 42TW/TD 3-07             | 50.5       | 48.5 | 46.5 | 49.5        | 47.0 | 45.5 | 48.5        | 45.5 | 44.0 |
| 42TW/TD 3-09             | 50.0       | 48.0 | 46.0 | 49.5        | 47.0 | 45.5 | 48.5        | 45.5 | 43.5 |
| 42TW/TD 3-11             | 51.0       | 49.0 | 47.0 | 50.0        | 47.5 | 46.0 | 49.0        | 46.0 | 44.0 |
| 42TW/TD 3-12             | 51.0       | 49.0 | 47.0 | 50.0        | 47.5 | 46.0 | 49.0        | 46.0 | 44.5 |
| 42TW/TD 3-16             | 51.5       | 49.5 | 47.5 | 50.5        | 48.0 | 46.5 | 49.5        | 46.5 | 45.0 |

### SOUND PRESSURE – 42TW/TD 4ROW

| External static Pressure | @ 0 Pa ESP |      |      | @ 25 Pa ESP |      |      | @ 50 Pa ESP |      |      |
|--------------------------|------------|------|------|-------------|------|------|-------------|------|------|
|                          | Hi         | Med  | Low  | Hi          | Med  | Low  | Hi          | Med  | Low  |
| 42TW/TD4-03              | 46.5       | 44.5 | 42.5 | 46.0        | 43.5 | 42.0 | 45.0        | 42.0 | 40.5 |
| 42TW/TD 4-04             | 47.5       | 45.5 | 43.5 | 47.0        | 44.5 | 43.0 | 46.0        | 43.0 | 41.5 |
| 42TW/TD 4-05             | 49.0       | 47.0 | 45.0 | 48.5        | 46.0 | 44.5 | 47.5        | 44.5 | 43.0 |
| 42TW/TD 4-06             | 49.5       | 47.5 | 45.5 | 49.0        | 46.5 | 45.0 | 48.0        | 45.0 | 43.5 |
| 42TW/TD 4-08             | 49.0       | 47.0 | 45.0 | 49.0        | 46.5 | 45.0 | 48.0        | 45.0 | 43.0 |
| 42TW/TD 4-10             | 50.0       | 48.0 | 46.0 | 49.5        | 47.0 | 45.5 | 48.5        | 45.5 | 43.5 |
| 42TW/TD 4-11             | 50.0       | 48.0 | 46.0 | 49.5        | 47.0 | 45.5 | 48.5        | 45.5 | 44.0 |
| 42TW/TD 4-14             | 50.5       | 48.5 | 46.5 | 50.0        | 47.5 | 46.0 | 49.0        | 46.0 | 44.5 |

### SOUND PRESSURE – 42MW/MD

| External static Pressure | dBA @ 0 Pa ESP |      |      | dBA @ 50 Pa ESP |      |      | dBA @ 125 Pa ESP |      |      |
|--------------------------|----------------|------|------|-----------------|------|------|------------------|------|------|
|                          | Hi             | Med  | Low  | Hi              | Med  | Low  | Hi               | Med  | Low  |
| Unit Size 3Row/4Row      |                |      |      |                 |      |      |                  |      |      |
| 016/014                  | 52.5           | 48.0 | 42.7 | 50.8            | 45.0 | 40.8 | 48.3             | 43.8 | 38.2 |
| 020/018                  | 57.3           | 50.5 | 43.3 | 56.1            | 49.2 | 42.5 | 53.2             | 46.4 | 40.0 |

Note: Assumes "standard room ", 3 meters from exit, no ducts, ducts will further reduce sound

# Application Data

## Selection Procedure:

Tables in this publication are meant for quick selection (+/- 10%). For specific conditions user can use selection software available from Carrier dealer or seek application support from Carrier sales engineer.

## Quick Selection:

**EXAMPLE:** Customer requires fan coil having following performance:

1. CFM= 700 +/-5%, at 0.1 in.w.g. (25 Pa) pressure.
2. Cooling Capacity= 24,000 Btu/Hr
3. Entering Air= 24 DB, 18 WB
4. Water in = 6.7 C

Step 1:

From fan performance table at 0.1 in.w.g. we find that FCU 42TW3-07-2 will deliver 732 CFM at 0.1 in.w.g. & high speed.

Step 2:

From 42TW3 capacity tables we find the following performance at 26.7/19 DB/WB:

| Unit 42TW | Performance @26.7/19 | Correction @24/18 | Performance @24/18 |
|-----------|----------------------|-------------------|--------------------|
| Capacity  | 29070                | -12%              | 25581              |
| CFM       | 732                  | ***               | ***                |
| SHR       | 0.71                 | -1%               | 0.7                |
| Air In    | 26.7/19              | ***               | 24/18              |
| Air Out   | 12.3/11.9            | -0.7              | 11.6/11.3          |
| Water In  | 6.7                  | ***               | ***                |
| Water Out | 12.7                 | -0.7              | 12                 |
| Gal/Min   | 5.38                 | ***               | 5.38               |
| DP PSI    | 8.8                  | ***               | 8.8                |

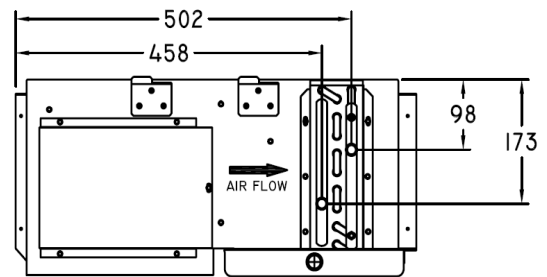
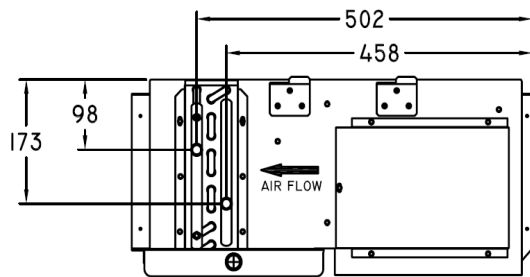
Note that tables yield performance within 5-10% of most requirements.

## Altitude Correction:

Altitude correction on performance is -1% for every 1000 ft above sea level.

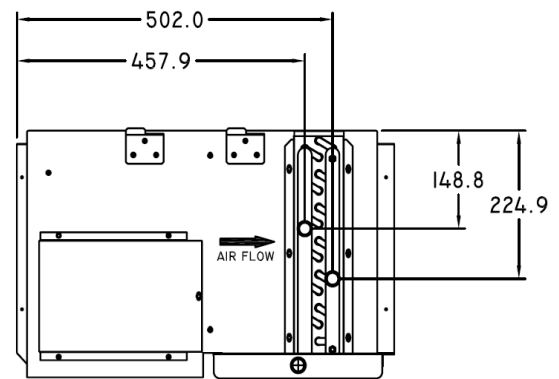
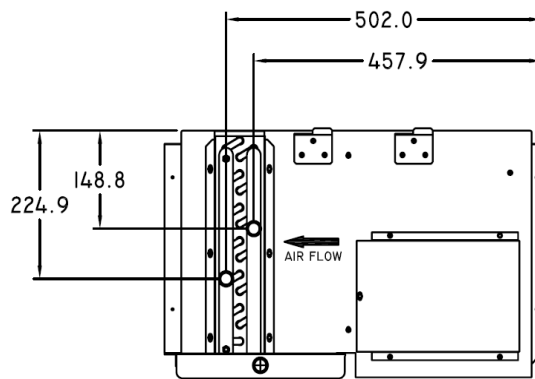
## Application Data (Continued)

### 2 Pipe System Right Hand – Left Hand Connection



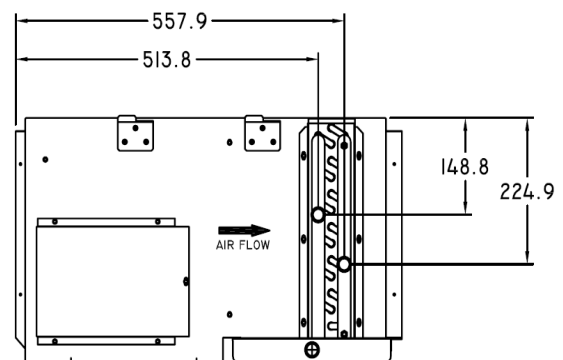
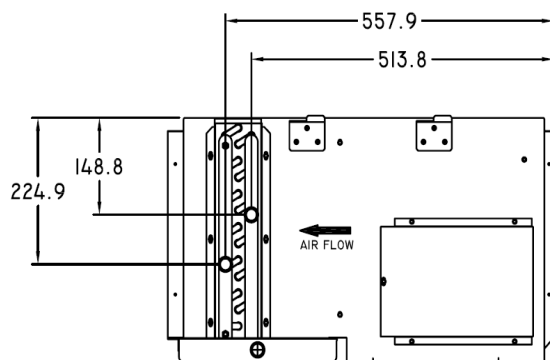
**42TW/TD3 - 03, 05, 06,07,09,11**

**42TW/TD4 - 03, 04, 05,06,08,10**



**42TW/TD3 Size – 12, 16**

**42TW/TD4 Size – 11, 14**

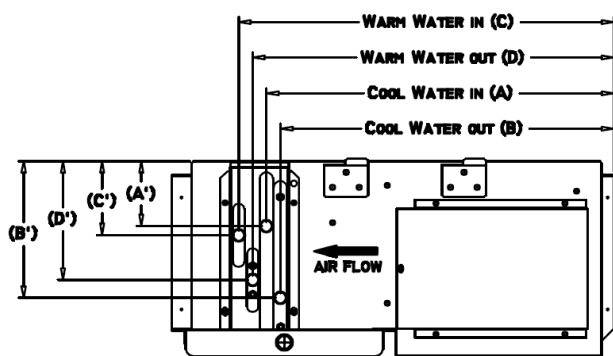


**42MW/MD3 Size – 16, 20**

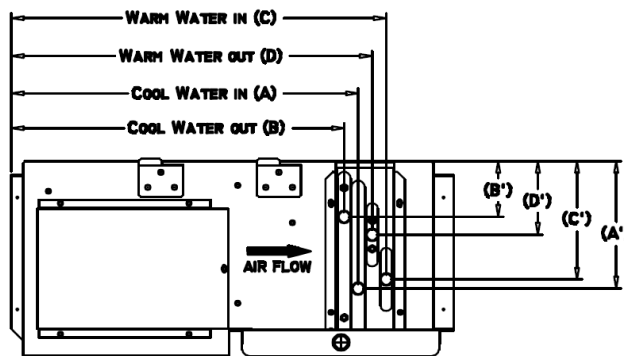
**42MW/MD4 Size – 14, 18**

# Application Data (Continued)

## 4 Pipe System Right Hand – Left Hand Connection



Right Hand Connection (Standard)



Left Hand Connection (Option)

| Dimensions in mm   | Right Hand Connection (Standard) |     |     |     |     |     |     |     |
|--------------------|----------------------------------|-----|-----|-----|-----|-----|-----|-----|
| 42TW 4 Rows 4 Pipe | A                                | B   | C   | D   | A'  | B'  | C'  | D'  |
| 42TW4-03-04        | 470                              | 452 | 510 | 490 | 92  | 194 | 105 | 168 |
| 42TW4-04-04        |                                  |     |     |     |     |     |     |     |
| 42TW4-05-04        |                                  |     |     |     |     |     |     |     |
| 42TW4-06-04        |                                  |     |     |     |     |     |     |     |
| 42TW4-08-04        |                                  |     |     |     |     |     |     |     |
| 42TW4-10-04        |                                  |     |     |     |     |     |     |     |
| 42TW4-11-04        |                                  |     |     | 154 | 232 | 89  | 282 |     |
| 42TW4-14-04        |                                  |     |     |     |     |     |     |     |

| Dimensions in mm   | Left Hand Connection (Option) |     |     |     |     |     |     |     |
|--------------------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|
| 42TW 4 Rows 4 Pipe | A                             | B   | C   | D   | A'  | B'  | C'  | D'  |
| 42TW4-03-04        | 470                           | 452 | 510 | 490 | 180 | 78  | 166 | 103 |
| 42TW4-04-04        |                               |     |     |     |     |     |     |     |
| 42TW4-05-04        |                               |     |     |     |     |     |     |     |
| 42TW4-06-04        |                               |     |     |     |     |     |     |     |
| 42TW4-08-04        |                               |     |     |     |     |     |     |     |
| 42TW4-10-04        |                               |     |     |     |     |     |     |     |
| 42TW4-11-04        |                               |     |     | 222 | 144 | 287 | 94  |     |
| 42TW4-14-04        |                               |     |     |     |     |     |     |     |

| Dimensions in mm   | Right Hand Connection (Standard) |     |     |     |     |     |     |     |
|--------------------|----------------------------------|-----|-----|-----|-----|-----|-----|-----|
| 42TD 4 Rows 4 Pipe | A                                | B   | C   | D   | A'  | B'  | C'  | D'  |
| 42TD4-03-04        | 470                              | 452 | 510 | 490 | 91  | 167 | 210 | 132 |
| 42TD4-04-04        |                                  |     |     |     |     |     |     |     |
| 42TD4-05-04        |                                  |     |     |     |     |     |     |     |
| 42TD4-06-04        |                                  |     |     |     | 142 | 167 | 167 | 104 |
| 42TD4-08-04        |                                  |     |     |     |     |     |     |     |
| 42TD4-10-04        |                                  |     |     |     |     |     |     |     |
| 42TD4-11-04        |                                  |     |     |     |     |     |     |     |
| 42TD4-14-04        |                                  |     |     |     | 130 | 168 | 219 | 155 |

| Dimensions in mm   | Left Hand Connection (Option) |     |     |     |     |     |     |     |
|--------------------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|
| 42TD 4 Rows 4 Pipe | A                             | B   | C   | D   | A'  | B'  | C'  | D'  |
| 42TD4-03-04        | 470                           | 452 | 510 | 490 | 108 | 104 | 62  | 140 |
| 42TD4-04-04        |                               |     |     |     |     |     |     |     |
| 42TD4-05-04        |                               |     |     |     |     |     |     |     |
| 42TD4-06-04        |                               |     |     |     | 229 | 104 | 104 | 167 |
| 42TD4-08-04        |                               |     |     |     |     |     |     |     |
| 42TD4-10-04        |                               |     |     |     |     |     |     |     |
| 42TD4-11-04        |                               |     |     |     | 243 | 205 | 155 | 219 |
| 42TD4-14-04        |                               |     |     |     |     |     |     |     |

# Controller For Ducted Fan Coil Units

**Features:** The controller is used to control (DX/CW) cooled ducted split unit, supports the following functions:

- Modes: Cool, Dry, Fan, Heat
- Indoor fan speed: Auto, High, Medium, Low
- Sleep mode
- Compressor protections:
  - Comp 3 minutes restart protection
  - Indoor coil anti-freeze
  - Room sensor and indoor coil sensor failure monitoring
- Non volatile memory – keep system settings
- Programmable On/Off timer
- Random restart to minimize voltage dip during compressor first cut in cycle upon power up.

**Hardware Setting:** A 2 way DIP switch is used to configure:

| DIP Switch | On           | Off       |
|------------|--------------|-----------|
| SW1        | Cool         | Cool-Heat |
| SW2        | Water System | DX System |

**Error Code:** If multiple faults happen at the same time, the corresponding error code will be shown one after another

| Fault                    | Error code |
|--------------------------|------------|
| Room sensor fault        | E1         |
| Indoor coil sensor fault | E2         |
| Comp fault               | E4         |

## Split System Description

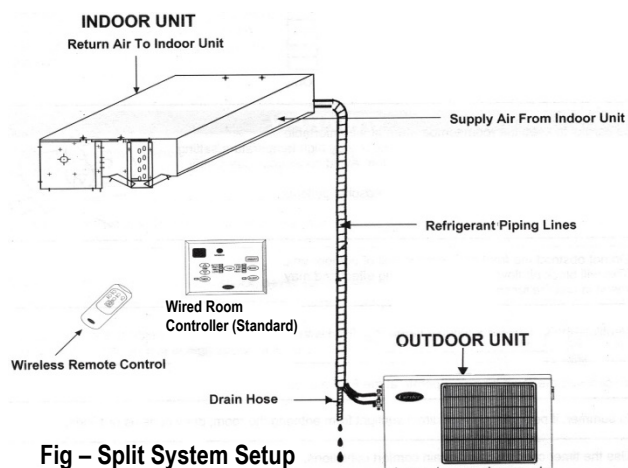


Fig – Split System Setup

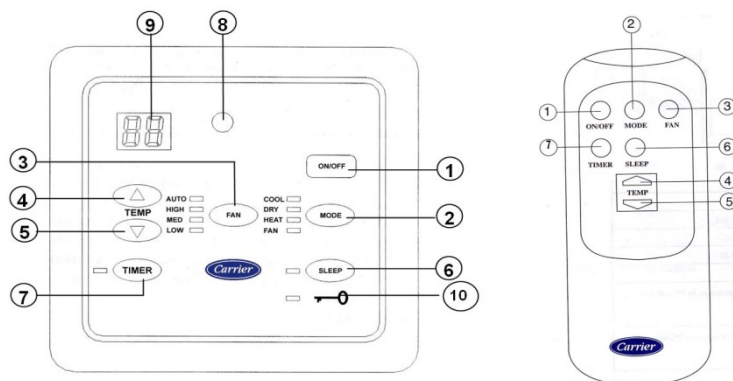


Fig - System Room Controllers

**Notes:** The wired room controller is mounted on the wall and can control all system functions without wireless remote control.

**1) On/Off Key:** If you press this key, the system will begin operation, Press the key again, and operation stops. (You can hear a receiving beep). If you press this key immediately after turning off the system, the compressor will not operate for 3 minutes to prevent overloading.

**2) Operation Mode Selection Key:** Toggles the operation mode: Cool, Dry, Heat, or Fan only

|            |                                     |            |                                     |
|------------|-------------------------------------|------------|-------------------------------------|
| "COOL" Led | Lights on when selecting COOL mode. | "HEAT" Led | Lights on when selecting Heat mode. |
| "DRY" Led  | Lights on when selecting DRY mode.  | "FAN" Led  | Lights on when selecting FAN mode.  |

**3) Fan Speed Selection Key:** Toggles the fan speed: Auto, High, Medium, or Low, Note: Fan key is invalid in Dry mode.

|            |                                          |           |                                         |
|------------|------------------------------------------|-----------|-----------------------------------------|
| "AUTO" Led | Lights on when selecting Auto fan speed. | "MED" Led | Lights on when selecting Med fan speed. |
| "HIGH" Led | Lights on when selecting High fan speed. | "LOW" Led | Lights on when selecting Low fan speed. |

**4) Temperature Up Key:** By pressing Temp Up  the setting temperature increases by 1°C with each press.

**5) Temperature Down Key:** By pressing Temp Down  the setting temperature decreases by 1°C with each press. If you set the desired room temperature, then system will maintain the room temperature as set. Upon setting the desired room temperature the system will maintain the room temperature



**Cool Mode:** If the room temperature is higher than the setting, the compressor will automatically turn on provide a cooling effect. On the hand, if the room temperature is lower than the setting, the compressor will automatically turn off to stop cooling operation. If indoor fan is programed to be turned off with compressor signal, it will turn off once compressor is cut off.

**Heat Mode:** If the room temperature is lower than the setting, the electric heater will automatically turn on to provide a heating effect. If the room temperature is higher than the setting, the heater will automatically turn off to stop heating operation. If indoor fan is programed to be turned off with heater signal, it will turn off once heater is cut off but subject to 30 sec dispersing remaining heat timing.

**Dry Mode:** The fan speed runs automatically at low speed and compressor stopping and running is controlled by the difference between room and setting temperatures and by continuous running time. If indoor fan is programed to be turned off with comp signal, it will turn off once comp is cut off, In Dry mode, the humidity is reduced in the space to be air-conditioned.

**Fan Mode:** There will be no cooling or heating effects; only the fans of indoor unit will run for ventilation at the selected speed (High, Med, and Low).

- In COOL or HEAT mode and if AUTO fan speed is selected; Fan speed is automatically selected by controller according to the difference between setting temperature and room temperature, fan will be continuously running at low speed after setting temperature is achieved.

**Notes:**

- Temperature setting range is 16°C to 30°C (60°F to 85°F). For ESMA regulated units the temperature setting range is from 20°C to 30°C (68°F to 85°F). **For optimum operation set the temperature between 21°C to 24°C (70 to 75°F)**
- Hold TEMP Down  at the same time for about 5 seconds, TEMP  down and fan  keys will toggle the temperature setting from degree C to degree F and vice versa.
- Press any temperature key will flash the current setting temperature for 4 seconds, with no further key press, it will revert to room temperature display. Temperature display range is 0°C to 50°C (32°F to 99°F).
- Temperature keys are invalid in Fan mode.

**6) Sleep Key:** Press SLEEP  key to set the timer turning the sleep led will light on, to cancel the timer press again.

- Sleep function for healthy sleep to control automatically the room temperature and stop automatically the operation of the air conditioner after certain set off time.
- Sleep mode is valid in cool or heat mode and invalid in Fan mode.

**7) Timer Key:** Upon count down of the set hours, the system will switch from OFF to ON or vice-versa.

- OFF Timer Function to stop automatically, the air conditioner after certain set OFF time.
  - ON Timer Function to start automatically, the air conditioner after certain set ON time.
  - \* Timer setting is 1 Hour to 24 Hour. The timer led will light on when operating the Timer Function
- First key press will flash the digital display and Timer Led for 3 seconds.

**Notes:**

- The digital displays show the number of hours previously set, only the Timer Led flashes.
- Subsequent 3 seconds will show the number of hours previously set; only the timer led flashes.
- Should there be no further key press, it will revert to normal mode.
- Should Timer key is not released timer setting will increase automatically every 0.5-second.

**8) Sensor:** Receives the remote controller's signal

**9) Display Screen:** Displays the set temperature and displays also the TIMER settings when adjusting it.

**10) Key Lock Mode:** In key lock mode, all keys are not valid except ON/OFF Key (1) to turn ON/OFF the system.

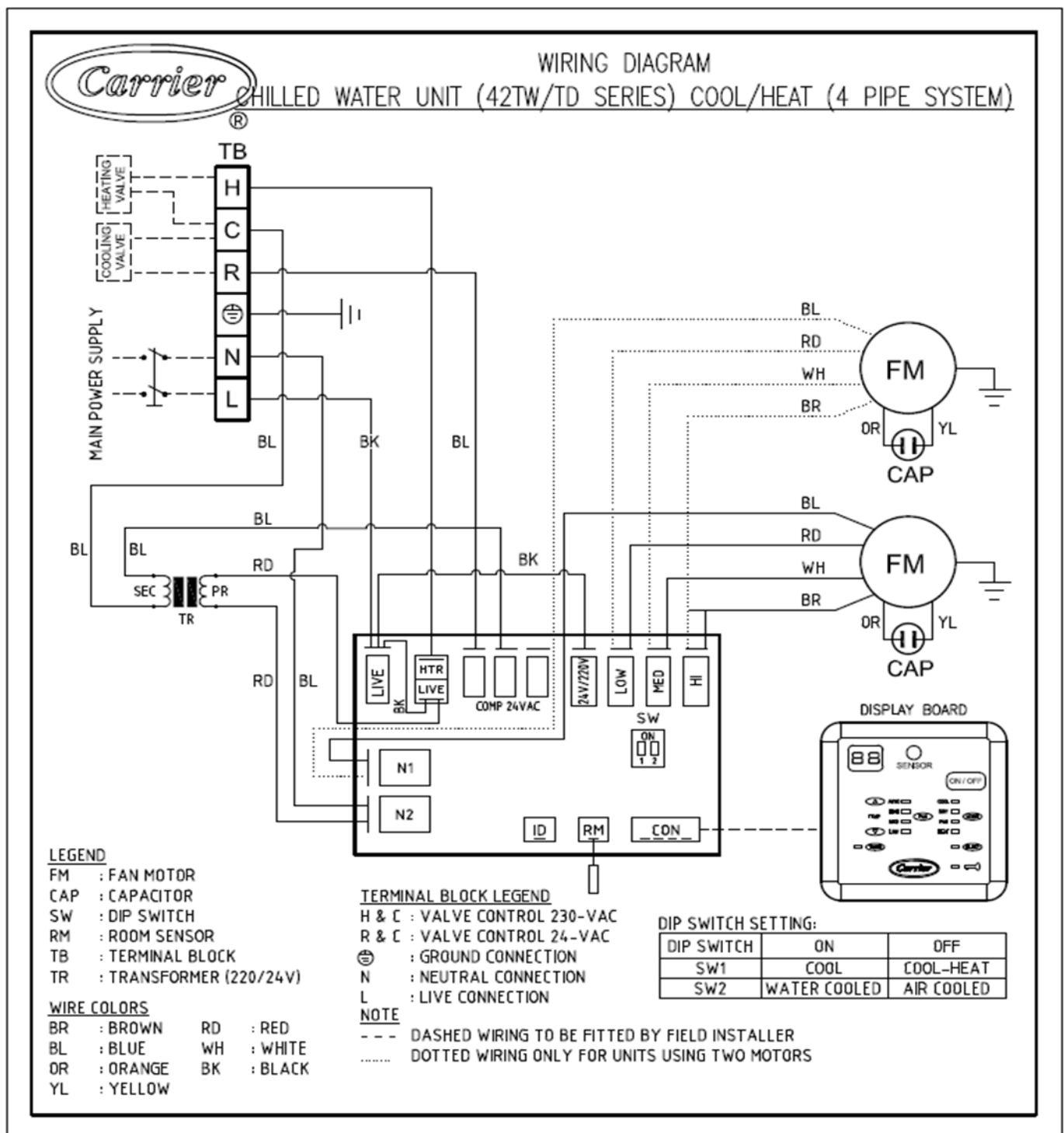
- Hold down TEMP Down  and MODE  keys together for 3 seconds to activate key lock mode – in that mode the light will come on for the KEY display .
- Hold down TEMP Down  and Fan  buttons together for 1 second to activate the system control parameter setting – AUTO (FAN) light will be flashing.
- Press TEMP key Up  or Down  to change the setting to 1 or 2

| Parameter            | Set range | Default value | Remarks                                                       |
|----------------------|-----------|---------------|---------------------------------------------------------------|
| AUTO Fan led flashes | 1 or 2    | 1             | 1 : Disable room temp display<br>2 : Enable room temp display |

- Finally de-activate the lock mode by hold down TEMP Down  and MODE  keys buttons for 3seconds to de-activate key lock mode – in that mode the light will come off for the KEY display .

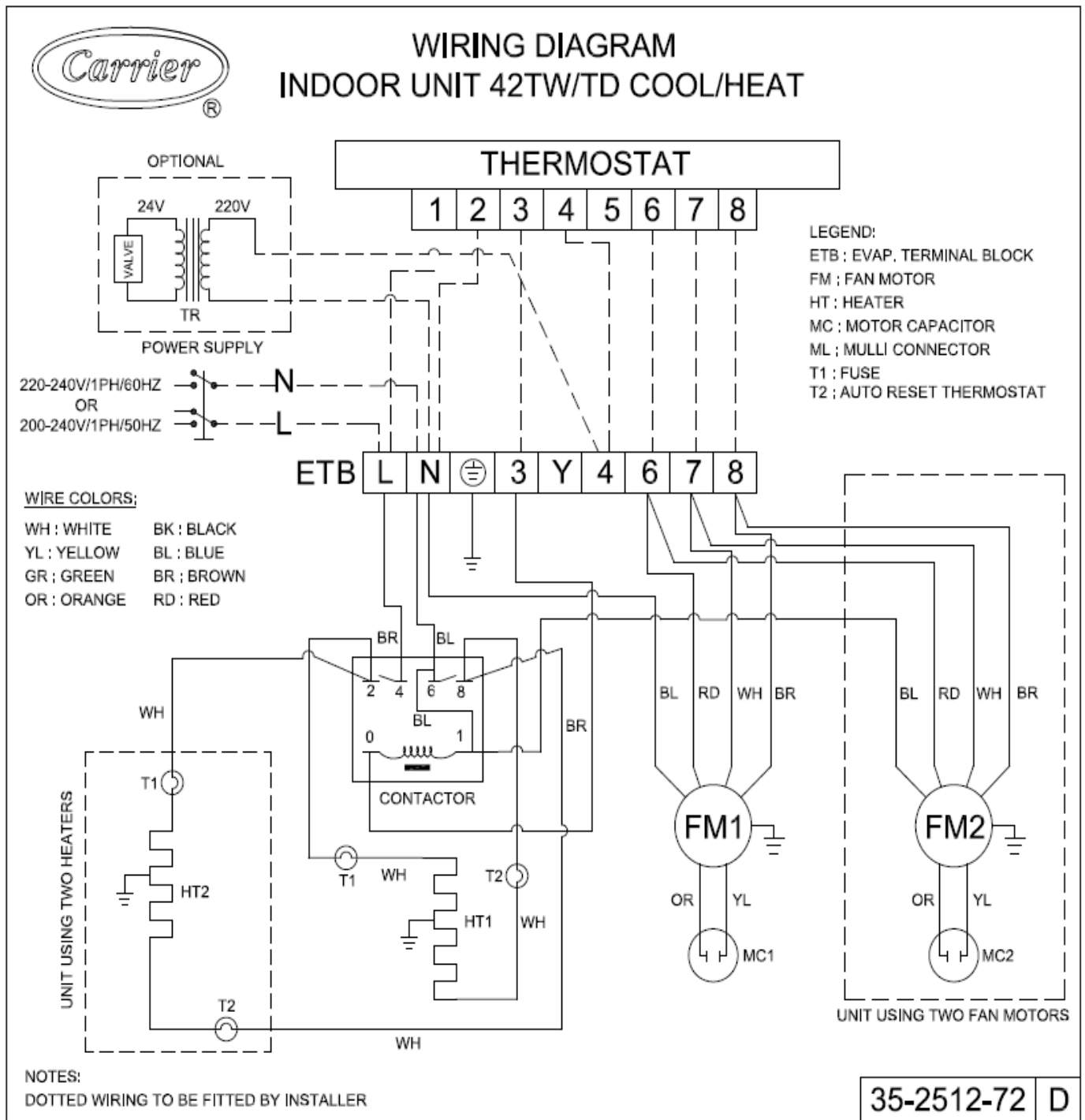
# Typical Wiring Schematic

## Wiring Schematic 42TW/TD Cool/Heat with Controls



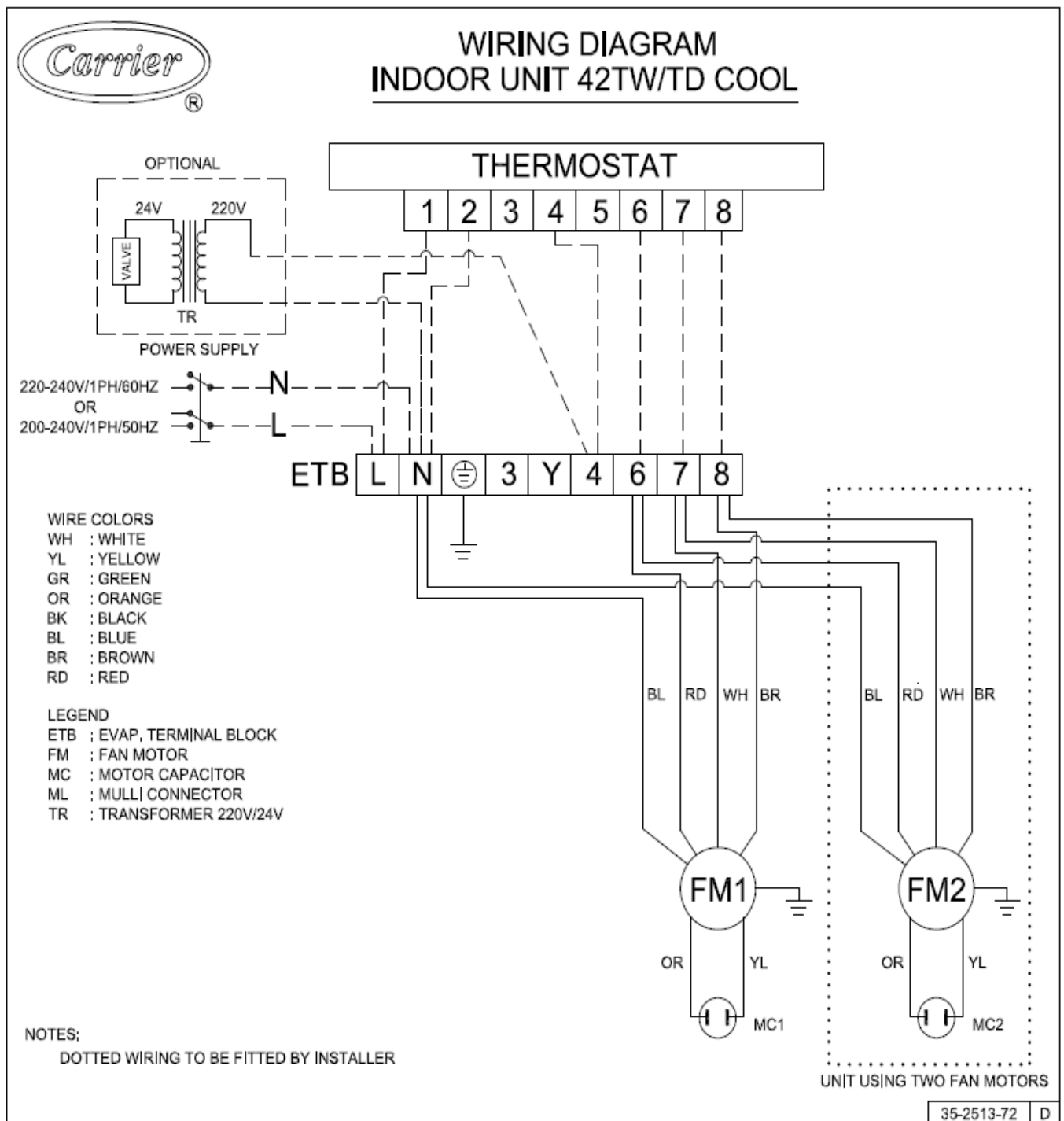
# Typical Wiring Schematic (Continued)

## Wiring Schematic 42TW/TD Cool/Heat without Control Option



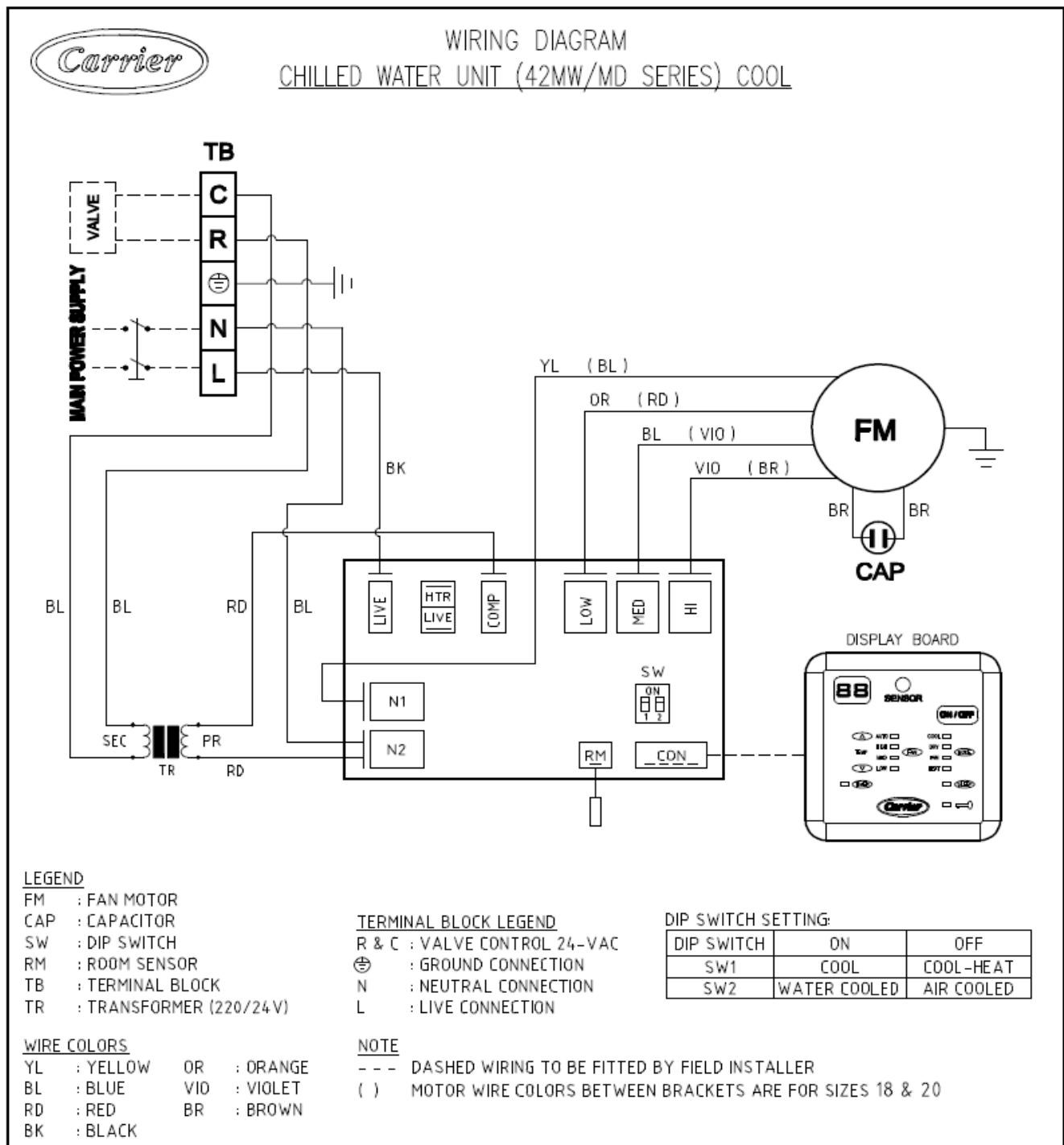
# Typical Wiring Schematic (Continued)

## Wiring Schematic 42TW/TD Cool Only without Control Option



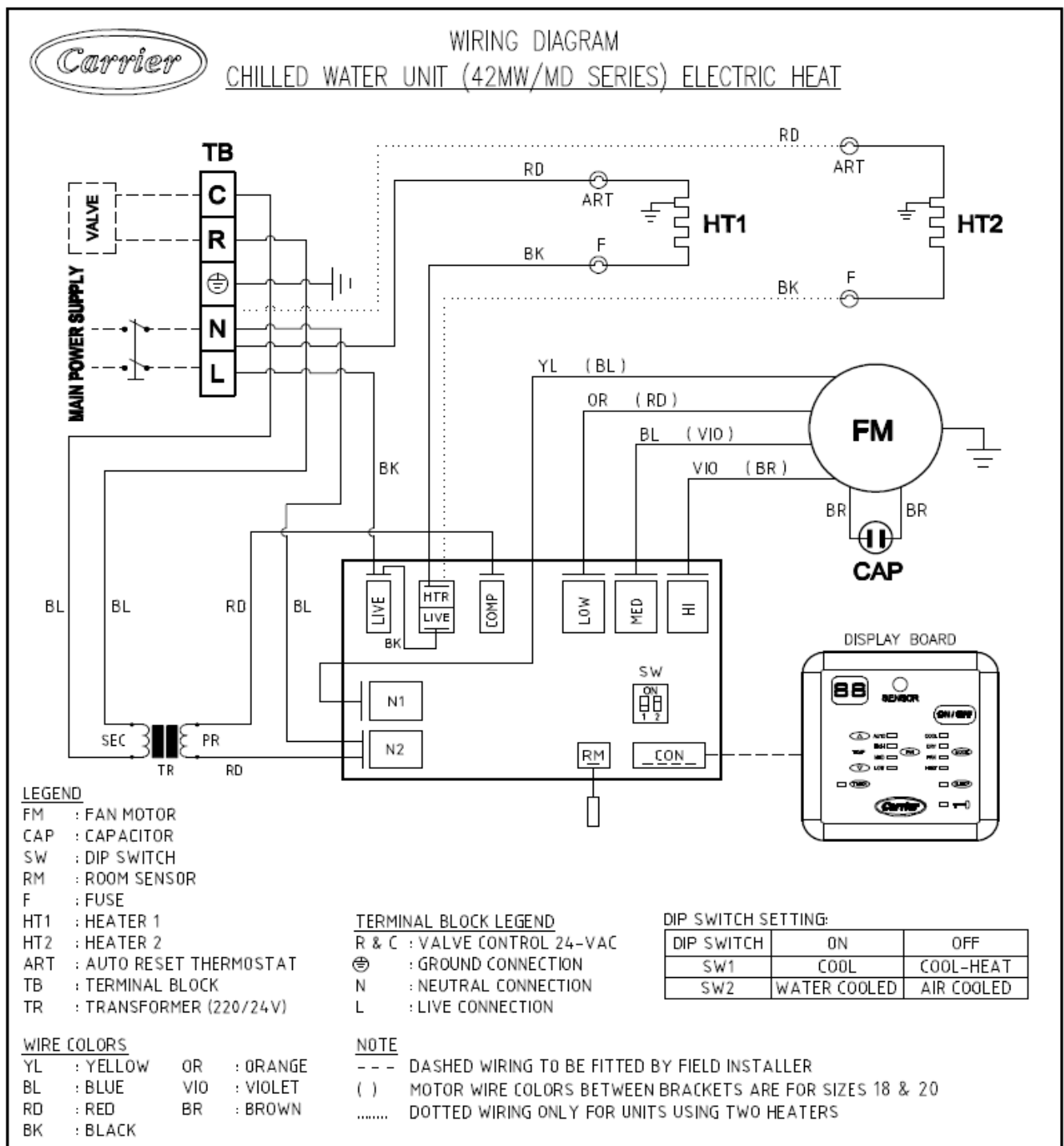
# Typical Wiring Schematic (Continued)

## Wiring Schematic 42MW/MD Cool Only with Controls



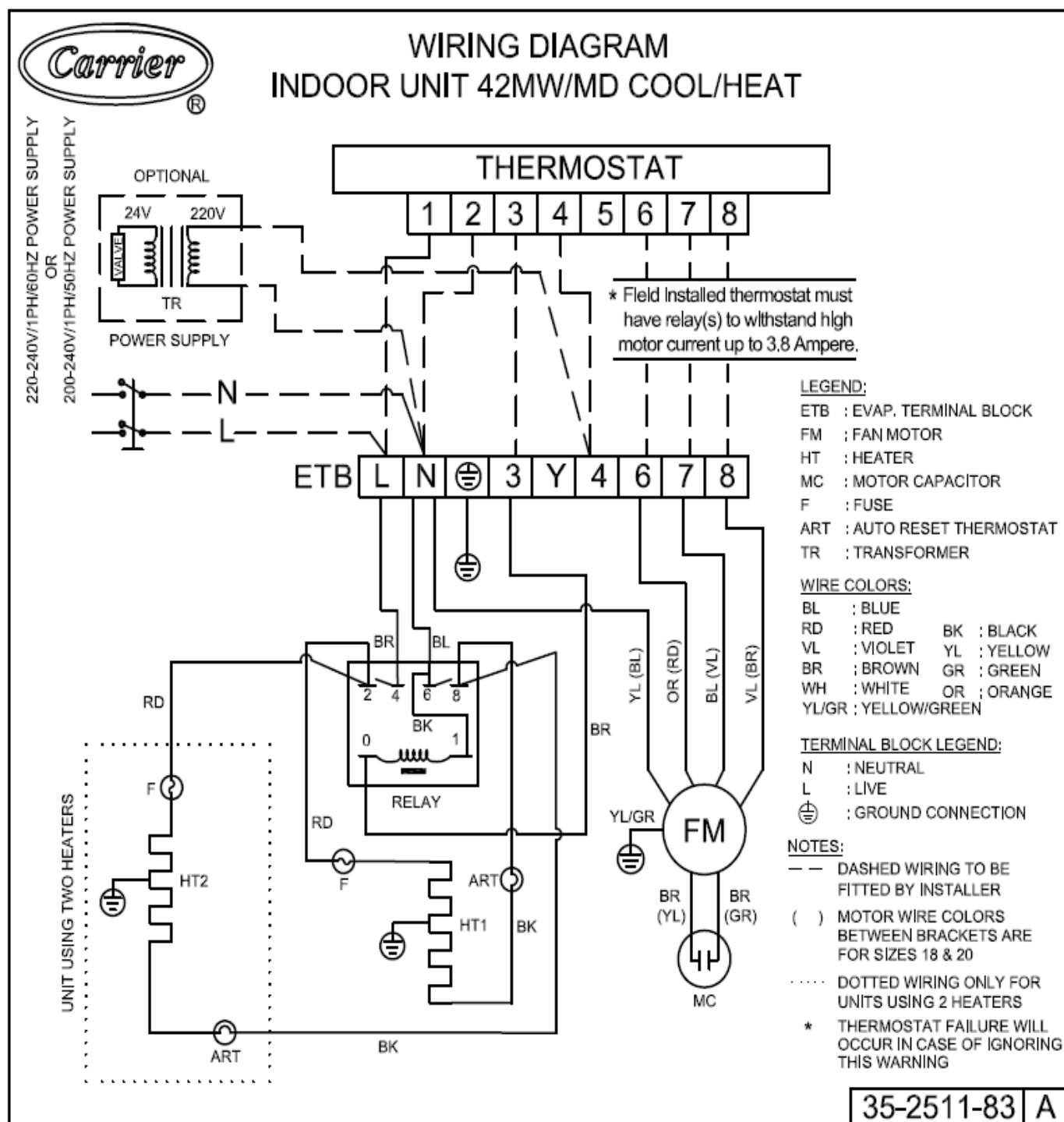
# Typical Wiring Schematic (Continued)

## Wiring Schematic 42MW/MD Cool/Heat with Controls



# Typical Wiring Schematic (Continued)

## Wiring Schematic 42MW/MD Cool/Heat without Control Option



# Options and Accessories

## Electric Heater Option (Factory Supplied - Factory Installed Option)

The electric heater is open type with thermal protection and fuse for more safety. Standard heater capacity and optional heater capacity option are available as shown in the following table::

| <b>Models Size<br/>42TW/TD</b> | <b>Standard Heater<br/>Total Heating Capacity kW</b> | <b>Optional Heater<br/>Total Heating Capacity kW</b> |
|--------------------------------|------------------------------------------------------|------------------------------------------------------|
| 03                             | 1.0                                                  | 1.5                                                  |
| 05 – 08                        | 1.5                                                  | 2.0                                                  |
| 09 – 11                        | 2.0                                                  | 2.5                                                  |
| 12 – 16                        | 2.0                                                  | 4.0                                                  |

| <b>Models Size<br/>42MW/MD</b> | <b>Standard Heater<br/>Total Heating Capacity kW</b> | <b>Optional Heater<br/>Total Heating Capacity kW</b> |
|--------------------------------|------------------------------------------------------|------------------------------------------------------|
| 14 – 20                        | 2.0                                                  | 4.0                                                  |

## Connection Side Option

Standard coil connection and electric box position is Right Hand facing air flow direction while the optional position is Left Hand facing the air flow for both coil connection and electric box. Customers can order this option directly from the factory also units are designed to be field exchangeable if needed in the field.

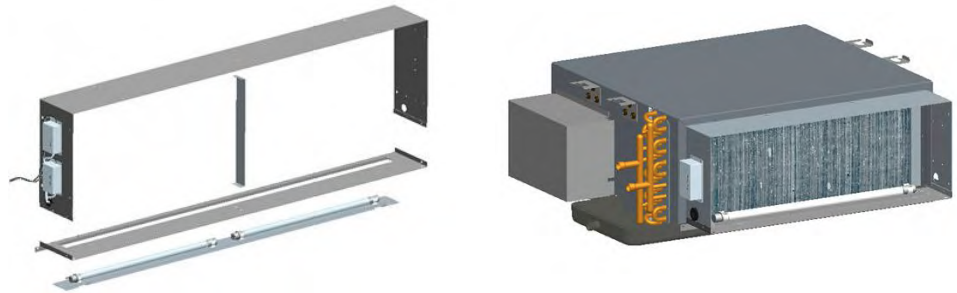
## Control Board Wire Extension

Standard wire length for control board is 15m optional extensions are available to enlarge the wire up to 30 m. if extension are required, please contact your local Carrier dealer.

## UV-C Ready (Factory Supplied - Field Installed Option)

Unit is UV-C Ready for easy installation, UV-C is factory supplied for field installation.

**UV-C  
READY**





# Guide Specifications

## Cooling Only Fan Coil Unit With Electric Heat Option

### 42TW/TD/MW/MD

#### General

##### System Description

The fan coil unit is designed for under ceiling installation, electrically controlled cooling and heating (option). Unit shall be designed horizontal installation. Standard unit shall include washable permanent aluminum filter. Unit shall be designed for external static pressure up to 0.5 inch water.

##### Quality Assurance

- A. Unit shall be designed/manufactured in accordance with ISO 9001:2015 facility.
- B. Unit will be designed to conform to ASHRAE safety standard.
- C. Unit will be rated in accordance with AHRI testing standard.
- D. Insulation and adhesive shall conform to NFPA 90A requirements for flame spread and smoke generation.
- E. Unit will be run tested before packing.

##### Delivery, Storage, and Handling

- A. Unit shall be stored and handled per manufacturer's recommendations.
- B. Lifted by crane requires either shipping top panel or spreader bars.
- C. Unit shall only be stored or positioned in the upright position.

##### Product

- A. The unit shall be factory assembled single piece cooling unit, with optional electric heat in case of 2 pipe system.
- B. Unit cabinet shall be constructed of galvanized steel. The unit shall be insulated with polyester urethane insulation that is 12 mm thickness & 33 kg/m<sup>3</sup> density, Unit cabinet panels shall be single skin.
- C. Unit shall have a permanent washable aluminum filter. Filter shall be flame retardant and easy accessible through an access panel.
- D. Units shall have external drain pan with 10 mm insulation, the drain pan shall be powder painted galvanized steel withstanding ASTM (American Society for Testing and Materials) B117 500 hour Salt Spray Test.
- E. The unit fan wheel shall be directly connected to the motor. The fan wheel shall be made from ABS, it shall be a dynamically balanced with double inlet forward curved type blower wheel.
- F. Unit coil shall have aluminum fins mechanically bonded to seamless smooth copper tubes 3/8 inch with all joints brazed. Unit coil shall be accessible for cleaning.
- G. The coil connection shall be sweat type; it shall be RH/LH exchangeable.
- H. The unit fan motor shall have permanently lubricated sleeve bearing and 3 speeds, the motor shall have overload protection and B class insulation.
- I. All electric parts shall be easy accessible for service.
- J. Unit with thermostat shall have a wired control board with a built-in thermostat to be installed in the air-conditioned area and it shall have the following Features:
  - a. Control Modes – Cool, Dry, Fan, Heat, Auto Cool-Heat and Sleep mode.
  - b. Indoor coil anti-freeze protection.
  - c. Failure monitoring for room sensor and indoor coil sensor.
  - d. Nonvolatile memory – keep system settings.
  - e. Programmable On/Off timer.
  - f. Random Restart Time Delay – to minimize voltage dip during compressor first cut in cycle upon power up for multiple units operation.
- K. Unit shall have a wireless remote to control all the functions of the control board at a distance.
- L. Unit control board shall be 230V/1Ph.

## Notes

