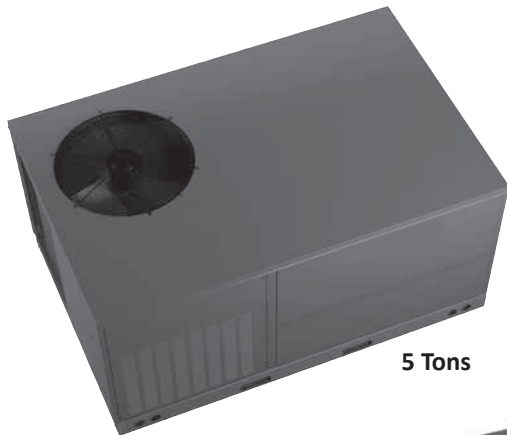


COOLING CAPACITY: 24,000 - 58,000 BTU/H

HEATING CAPACITY: 22,800 - 55,000 BTU/H

HIGH-EFFICIENCY PACKAGED HEAT PUMPS UP TO 16 SEER & 8.2 HSPF 2 THROUGH 5 TONS



5 Tons



2 - 4 Tons



Contents

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Standard Features

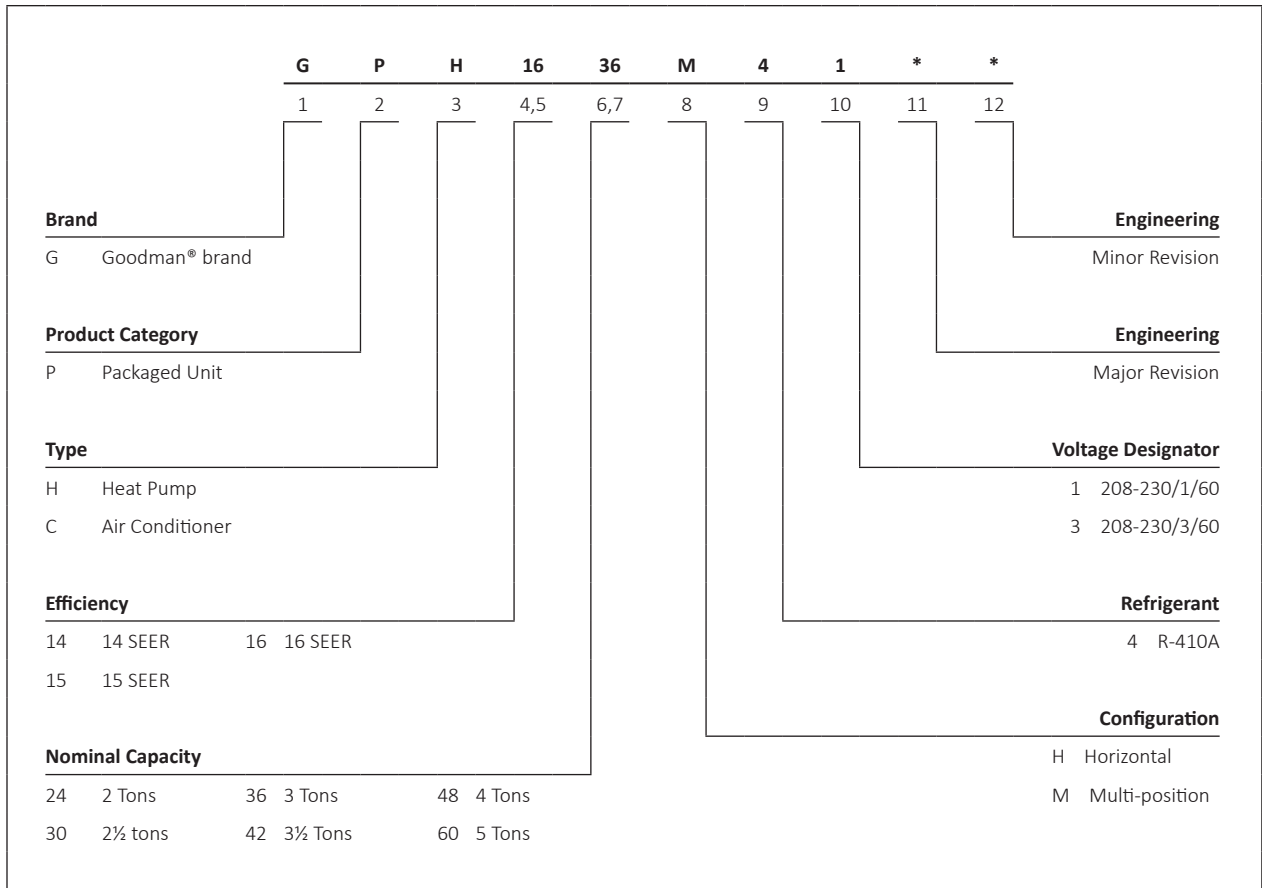
- Energy-efficient compressor with internal relief valve
- Two-stage heating and cooling
- Multi-Speed EEM indoor blower motor
- Liquid-line filter drier
- Convertible airflow: horizontal or downflow
- Copper tube/aluminum fin condenser coils
- All-aluminum evaporator coil on 2- to 4-ton units
- Aluminum-copper evaporator coil on 5-ton units
- Totally enclosed, permanently lubricated condenser fan motor
- Electric heat kit available as a field-installed option


Cabinet Features

- Heavy-gauge galvanized-steel cabinet with attractive two-tone Architectural Gray powder-paint finish
- Fully insulated air-handling compartment with convenient access panels
- Louvered condenser coil protection
- One footprint; two heights



* Complete warranty details available from your local dealer or at www.goodmanmfg.com. To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration not required in California or Québec.



| | GPH16 24M41A* | GPH16 30M41A* | GPH16 36M41A* | GPH16 42M41A* | GPH16 48M41C* | GPH16 60M41A* |
|--|------------------|------------------|------------------|------------------|------------------|---|
| COOLING CAPACITY | | | | | | |
| Total BTU/h | 24,000 | 29,000 | 33,600 | 41,000 | 47,000 | 58,000 |
| Sensible BTU/h | 18,200 | 22,000 | 25,200 | 30,000 | 35,800 | 44,000 |
| SEER / EER | 16.0/ 12.5 | 15.5/ 12.0 | 16.0/ 12.0 | 16.0/ 12.0 | 16.0/ 12.0 | 16.0/ 12.0 |
| Decibels | 76 | 76 | 76 | 78 | 78 | 78 |
| AHRI #s | 8143312 | 8143313 | 8143314 | 8143315 | 8143316 | 9134480 |
| HEATING CAPACITY | | | | | | |
| BTU/h (47°F) | 22,800 | 28,400 | 33,600 | 38,000 | 45,500 | 55,000 |
| C.O.P (47°F) | 3.6 | 3.5 | 3.6 | 3.6 | 3.7 | 3.8 |
| BTU/h (17°F) | 12,500 | 16,600 | 19,400 | 21,600 | 27,000 | 30,000 |
| C.O.P (17°F) | 2.3 | 2.4 | 2.4 | 2.3 | 2.4 | 2.4 |
| HSPF | 8.0 | 8.0 | 8.2 | 8.2 | 8.2 | 8.2 |
| EVAPORATOR MOTOR | | | | | | |
| Type | EEM | EEM | EEM | EEM | EEM | EEM |
| Wheel (D x W) | 10 x 9 | 10 x 9 | 10 x 9 | 10 x 9 | 10 x 9 | 11x 10 |
| Nominal Cooling CFM | 850 | 1,050 | 1,200 | 1,300 | 1,600 | 2,000 |
| FLA | 4.3 | 4.3 | 4.3 | 5.8 | 5.8 | 6.9 |
| No. of Speeds | Variable | Variable | Variable | Variable | Variable | 5 |
| Horsepower - RPM | ½ -1,050 | ½ -1,050 | ½ -1,050 | ¾ - 1,050 | ¾ - 1,050 | 1 - 1,050 |
| EVAPORATOR COIL | | | | | | |
| Face Area (ft²) | 4.5 | 4.5 | 4.5 | 6.2 | 6.2 | 8.9 |
| Rows Deep/ Fin per Inch | 4/ 14 | 4/ 14 | 4/ 14 | 4/ 14 | 4/ 14 | 4/ 16 |
| Expansion Device | TXV | TXV | TXV | TXV | TXV | TXV |
| Drain Size (NPT) | ¾" | ¾" | ¾" | ¾" | ¾" | ¾" |
| R-410A Refrigerant Charge (oz.) | 137 | 137 | 137 | 170 | 170 | 240 |
| CONDENSER FAN / COIL | | | | | | |
| Horsepower - RPM | ¼ - 850 | ¼ - 850 | ¼ - 850 | ¼ - 1,075 | ¼ - 1,075 | 1/3 - 1,090 |
| FLA/LRA | 1.5/ 3.0 | 1.5/ 3.0 | 1.5/ 3.0 | 1.4 / 2.9 | 1.4 / 2.9 | 2/ 4.4 |
| Fan Diameter / # Fan Blades | 22 / 3 | 22 / 3 | 22 / 3 | 22 / 3 | 22 / 3 | 22 / 4 |
| Expansion Device | TXV | TXV | TXV | TXV | TXV | TXV |
| Face Area (ft²) | 15.5 | 15.5 | 15.5 | 19.4 | 19.4 | 19 |
| Rows Deep/ Fin per Inch | 2 / 16 | 2 / 16 | 2 / 16 | 2 / 16 | 2 / 16 | 2 / 20 |
| COMPRESSOR | | | | | | |
| Quantity | 1 | 1 | 1 | 1 | 1 | 1 |
| Type | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll |
| Stage | Two | Two | Two | Two | Two | Two |
| ELECTRICAL DATA | | | | | | |
| Voltage/ Phase/ Hz | 208-230/ 1 | 208-230/ 1 | 208-230/ 1 | 208-230/ 1 | 208-230/ 1 | 208-230/ 1 |
| Compressor RLA/ LRA | 11.7 / 58.3 | 13.1 / 73 | 15.3 / 83 | 17.9 / 96 | 21.2 / 104 | 26.9/ 152.9 |
| Indoor Blower FLA | 4.3 | 4.3 | 4.3 | 5.8 | 5.8 | 6.9 |
| Total Unit Amps | 17.5 | 18.9 | 21.1 | 25.1 | 28.4 | 35.8 |
| Min. Circuit Ampacity ¹ | 20.4 | 22.2 | 24.9 | 29.6 | 33.7 | 42.5 |
| Max. Overcurrent Protection ² | 30 | 35 | 40 | 45 | 50 | 60 |
| SHIPPING WEIGHT (LBS) | | | | | | |
| | 366 | 375 | 428 | 472 | 470 | 620 |
| ENERGY STAR® CERTIFIED | | | | | | |
| | NO | NO | NO | NO | NO |  |

¹ Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

² May use fuses or HACR-type circuit breakers of the same size as noted.

Note: Always check the S&R plate for electrical data on the unit being installed.

| IDB | | OUTDOOR AMBIENT TEMPERATURE | | | | | | | | | | | | | | | | | | | | | | | |
|------------|---------|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|-------|------|------|------|
| | | 65°F | | | | 75°F | | | | 85°F | | | | 95°F | | | | 105°F | | | | 115°F | | | |
| | | 59 | 63 | 67 | 71 | 59 | 63 | 67 | 71 | 59 | 63 | 67 | 71 | 59 | 63 | 67 | 71 | 59 | 63 | 67 | 71 | 59 | 63 | 67 | 71 |
| 950 | Airflow | 24.0 | 24.5 | 26.2 | 28.0 | 23.4 | 23.9 | 25.6 | 27.3 | 22.9 | 23.4 | 25.0 | 26.7 | 22.3 | 22.8 | 24.4 | 26.0 | 21.2 | 21.7 | 23.1 | 24.7 | 20.6 | 21.1 | 22.8 | 24.4 |
| | MBh | 0.95 | 0.89 | 0.72 | 0.54 | 0.98 | 0.92 | 0.75 | 0.56 | 1.00 | 0.94 | 0.77 | 0.57 | 1.00 | 0.97 | 0.79 | 0.59 | 1.00 | 1.00 | 0.82 | 0.62 | 1.00 | 1.00 | 0.83 | 0.62 |
| | S/T | 22 | 21 | 18 | 15 | 22 | 21 | 19 | 15 | 22 | 21 | 19 | 15 | 22 | 21 | 19 | 15 | 22 | 21 | 18 | 15 | 21 | 19 | 17 | 14 |
| | ΔT | 1.50 | 1.53 | 1.58 | 1.63 | 1.61 | 1.65 | 1.70 | 1.76 | 1.71 | 1.75 | 1.81 | 1.87 | 1.80 | 1.84 | 1.90 | 1.97 | 1.88 | 1.92 | 1.99 | 2.05 | 1.95 | 1.99 | 2.06 | 2.13 |
| | kW | 6.7 | 6.8 | 7.0 | 7.2 | 7.1 | 7.3 | 7.5 | 7.7 | 7.6 | 7.8 | 8.0 | 8.3 | 8.1 | 8.2 | 8.5 | 8.8 | 8.5 | 8.7 | 9.0 | 9.3 | 9.0 | 9.2 | 9.4 | 9.7 |
| 80 | Amps | 221 | 237 | 251 | 261 | 248 | 266 | 281 | 293 | 282 | 303 | 320 | 334 | 321 | 345 | 364 | 380 | 361 | 388 | 410 | 428 | 399 | 429 | 453 | 472 |
| | Hi PR | 113 | 120 | 132 | 140 | 120 | 127 | 139 | 148 | 124 | 132 | 144 | 154 | 131 | 139 | 152 | 162 | 137 | 146 | 159 | 169 | 142 | 151 | 164 | 175 |
| | Lo PR | 23.6 | 24.1 | 25.8 | 27.6 | 23.1 | 23.6 | 25.2 | 26.9 | 22.5 | 23.0 | 24.6 | 26.3 | 22.0 | 22.5 | 24.0 | 25.7 | 20.9 | 21.3 | 22.8 | 24.4 | 19.3 | 19.8 | 21.1 | 22.6 |
| | MBh | 0.91 | 0.85 | 0.69 | 0.52 | 0.94 | 0.88 | 0.72 | 0.54 | 0.96 | 0.90 | 0.74 | 0.55 | 0.99 | 0.93 | 0.76 | 0.57 | 1.00 | 0.97 | 0.79 | 0.59 | 1.00 | 0.98 | 0.79 | 0.59 |
| | S/T | 23 | 22 | 19 | 15 | 23 | 22 | 20 | 16 | 23 | 23 | 20 | 16 | 24 | 23 | 20 | 16 | 24 | 23 | 22 | 19 | 21 | 21 | 18 | 15 |
| 750 | ΔT | 1.49 | 1.52 | 1.57 | 1.62 | 1.60 | 1.64 | 1.69 | 1.75 | 1.70 | 1.74 | 1.80 | 1.86 | 1.79 | 1.83 | 1.89 | 1.96 | 1.87 | 1.91 | 1.97 | 2.04 | 1.93 | 1.98 | 2.04 | 2.11 |
| | kW | 6.6 | 6.8 | 7.0 | 7.2 | 7.1 | 7.2 | 7.4 | 7.7 | 7.6 | 7.7 | 8.0 | 8.2 | 8.0 | 8.2 | 8.4 | 8.7 | 8.5 | 8.7 | 8.9 | 9.2 | 8.9 | 9.1 | 9.4 | 9.7 |
| | Amps | 219 | 236 | 249 | 260 | 246 | 265 | 279 | 291 | 280 | 301 | 318 | 331 | 318 | 343 | 362 | 377 | 358 | 386 | 407 | 425 | 396 | 426 | 450 | 469 |
| | Hi PR | 112 | 120 | 131 | 139 | 119 | 126 | 138 | 147 | 123 | 131 | 143 | 153 | 130 | 138 | 151 | 160 | 136 | 145 | 158 | 168 | 141 | 150 | 163 | 174 |
| | Lo PR | 22.5 | 22.9 | 24.5 | 26.2 | 21.9 | 22.4 | 23.9 | 25.6 | 21.4 | 21.9 | 23.4 | 25.0 | 20.9 | 21.3 | 22.8 | 24.4 | 19.8 | 20.3 | 21.7 | 23.2 | 18.4 | 18.8 | 20.1 | 21.4 |

| IDB | | OUTDOOR AMBIENT TEMPERATURE | | | | | | | | | | | | | | | | | | | | | | | |
|------------|---------|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|-------|------|------|------|
| | | 65°F | | | | 75°F | | | | 85°F | | | | 95°F | | | | 105°F | | | | 115°F | | | |
| | | 59 | 63 | 67 | 71 | 59 | 63 | 67 | 71 | 59 | 63 | 67 | 71 | 59 | 63 | 67 | 71 | 59 | 63 | 67 | 71 | 59 | 63 | 67 | 71 |
| 950 | Airflow | 24.0 | 24.5 | 26.1 | 27.8 | 23.8 | 24.3 | 25.5 | 27.2 | 23.3 | 23.7 | 24.8 | 26.5 | 22.7 | 23.1 | 24.2 | 25.9 | 21.6 | 22.0 | 23.0 | 24.6 | 20.0 | 20.4 | 21.3 | 22.8 |
| | MBh | 0.99 | 0.96 | 0.86 | 0.70 | 1.00 | 0.99 | 0.90 | 0.73 | 1.00 | 1.00 | 0.92 | 0.75 | 1.00 | 1.00 | 0.95 | 0.77 | 1.00 | 1.00 | 0.98 | 0.80 | 1.00 | 1.00 | 0.99 | 0.81 |
| | S/T | 23 | 23 | 22 | 19 | 23 | 23 | 22 | 19 | 23 | 23 | 22 | 19 | 22 | 22 | 22 | 19 | 21 | 21 | 22 | 19 | 19 | 20 | 20 | 18 |
| | ΔT | 1.51 | 1.54 | 1.59 | 1.64 | 1.63 | 1.66 | 1.71 | 1.77 | 1.73 | 1.77 | 1.82 | 1.88 | 1.82 | 1.86 | 1.92 | 1.98 | 1.90 | 1.94 | 2.00 | 2.07 | 1.96 | 2.01 | 2.07 | 2.14 |
| | kW | 6.7 | 6.9 | 7.0 | 7.3 | 7.2 | 7.3 | 7.5 | 7.8 | 7.7 | 7.9 | 8.1 | 8.3 | 8.1 | 8.3 | 8.6 | 8.8 | 8.6 | 8.8 | 9.0 | 9.3 | 9.0 | 9.2 | 9.5 | 9.8 |
| 85 | Amps | 223 | 240 | 253 | 264 | 250 | 269 | 284 | 296 | 284 | 306 | 323 | 337 | 324 | 349 | 368 | 384 | 364 | 392 | 414 | 432 | 403 | 433 | 457 | 477 |
| | Hi PR | 114 | 122 | 133 | 141 | 121 | 129 | 140 | 149 | 126 | 134 | 146 | 155 | 132 | 140 | 153 | 163 | 138 | 147 | 161 | 171 | 143 | 152 | 166 | 177 |
| | Lo PR | 24.0 | 24.5 | 25.7 | 27.4 | 23.5 | 23.9 | 25.1 | 26.8 | 22.9 | 23.4 | 24.5 | 26.1 | 22.4 | 22.8 | 23.9 | 25.5 | 21.2 | 21.7 | 22.7 | 24.2 | 19.7 | 20.1 | 21.0 | 22.4 |
| | MBh | 0.95 | 0.92 | 0.83 | 0.67 | 0.99 | 0.95 | 0.86 | 0.70 | 1.00 | 0.97 | 0.88 | 0.71 | 1.00 | 1.00 | 0.91 | 0.74 | 1.00 | 1.00 | 0.94 | 0.76 | 1.00 | 1.00 | 0.95 | 0.77 |
| | S/T | 25 | 24 | 23 | 20 | 25 | 25 | 23 | 20 | 25 | 25 | 23 | 20 | 24 | 25 | 23 | 20 | 23 | 23 | 23 | 20 | 21 | 22 | 22 | 19 |
| 750 | ΔT | 1.50 | 1.53 | 1.58 | 1.63 | 1.62 | 1.65 | 1.70 | 1.76 | 1.72 | 1.76 | 1.81 | 1.87 | 1.81 | 1.85 | 1.91 | 1.97 | 1.88 | 1.93 | 1.99 | 2.06 | 1.95 | 1.99 | 2.06 | 2.13 |
| | kW | 6.7 | 6.8 | 7.0 | 7.2 | 7.1 | 7.3 | 7.5 | 7.7 | 7.7 | 7.8 | 8.0 | 8.3 | 8.1 | 8.3 | 8.5 | 8.8 | 8.5 | 8.7 | 9.0 | 9.3 | 9.0 | 9.2 | 9.4 | 9.8 |
| | Amps | 221 | 238 | 251 | 262 | 248 | 267 | 282 | 294 | 282 | 304 | 321 | 335 | 322 | 346 | 365 | 381 | 362 | 389 | 411 | 429 | 400 | 430 | 454 | 474 |
| | Hi PR | 114 | 121 | 132 | 140 | 120 | 128 | 139 | 148 | 125 | 133 | 145 | 154 | 131 | 139 | 152 | 162 | 137 | 146 | 159 | 170 | 142 | 151 | 165 | 176 |
| | Lo PR | 22.8 | 23.3 | 24.4 | 26.0 | 22.3 | 22.7 | 23.8 | 25.4 | 21.8 | 22.2 | 23.3 | 24.8 | 21.2 | 21.7 | 22.7 | 24.2 | 20.2 | 20.6 | 21.6 | 23.0 | 18.7 | 19.1 | 20.0 | 21.3 |

kW = Total system power
Amps = outdoor unit amps (comp.+fan)

IDB: Entering Indoor Dry Bulb Temperature
High and low pressures are measured at the liquid and suction service valves.
Design Subcooling 8 ± 2 °F @ the liquid access fitting connection AHR1 95 test conditions. Design Superheat 15 ± 2 °F @ the compressor suction access fitting connection.
Shaded area reflects AHR1 conditions.

| | | OUTDOOR AMBIENT TEMPERATURE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---------|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|-------|------|------|------|------|
| | | 65°F | | | | | 75°F | | | | | 85°F | | | | | 95°F | | | | | 105°F | | | | | 115°F | | | | |
| IDB | AIRFLOW | ENTERING INDOOR WET BULB TEMPERATURE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 59 | 63 | 67 | 71 | 75 | 59 | 63 | 67 | 71 | 75 | 59 | 63 | 67 | 71 | 75 | 59 | 63 | 67 | 71 | 75 | 59 | 63 | 67 | 71 | 75 | 59 | 63 | 67 | 71 | 75 |
| 1175 | MBh | 29.0 | 29.6 | 31.6 | 33.8 | 33.0 | 28.3 | 28.9 | 30.9 | 33.0 | 33.0 | 27.6 | 28.2 | 30.2 | 32.3 | 32.3 | 27.0 | 27.6 | 29.4 | 31.5 | 31.5 | 25.6 | 26.2 | 28.0 | 29.9 | 29.9 | 23.7 | 24.2 | 25.9 | 27.7 | 27.7 |
| | S/T | 0.94 | 0.88 | 0.72 | 0.54 | 0.55 | 0.97 | 0.91 | 0.74 | 0.55 | 0.55 | 1.00 | 0.93 | 0.76 | 0.57 | 0.57 | 1.00 | 0.96 | 0.79 | 0.59 | 0.59 | 1.00 | 1.00 | 0.82 | 0.61 | 0.61 | 1.00 | 1.00 | 0.82 | 0.61 | 0.61 |
| | ΔT | 21 | 20 | 18 | 14 | 14 | 22 | 21 | 18 | 14 | 14 | 21 | 21 | 18 | 14 | 14 | 23 | 23 | 21 | 18 | 14 | 24.3 | 24.8 | 25.7 | 26.6 | 26.6 | 25.2 | 25.7 | 26.6 | 27.5 | 27.5 |
| | kW | 1.93 | 1.97 | 2.03 | 2.10 | 2.19 | 2.08 | 2.12 | 2.19 | 2.27 | 2.27 | 2.21 | 2.26 | 2.33 | 2.41 | 2.41 | 2.33 | 2.38 | 2.46 | 2.54 | 2.54 | 2.43 | 2.48 | 2.57 | 2.66 | 2.66 | 2.52 | 2.57 | 2.66 | 2.75 | 2.75 |
| | Amps | 8.4 | 8.6 | 8.9 | 9.1 | 9.1 | 9.0 | 9.2 | 9.5 | 9.8 | 9.8 | 9.7 | 9.9 | 10.2 | 10.5 | 10.5 | 10.3 | 10.5 | 10.8 | 11.2 | 11.2 | 10.9 | 11.1 | 11.4 | 11.8 | 11.8 | 11.5 | 11.7 | 12.1 | 12.5 | 12.5 |
| 80 | MBh | 28.6 | 29.2 | 31.2 | 33.3 | 33.0 | 27.9 | 28.5 | 30.5 | 32.6 | 32.6 | 27.2 | 27.8 | 29.7 | 31.8 | 31.8 | 26.6 | 27.1 | 29.0 | 31.0 | 31.0 | 25.2 | 25.8 | 27.6 | 29.5 | 29.5 | 23.4 | 23.9 | 25.5 | 27.3 | 27.3 |
| | S/T | 0.90 | 0.84 | 0.69 | 0.51 | 0.53 | 0.93 | 0.87 | 0.71 | 0.53 | 0.53 | 0.95 | 0.90 | 0.73 | 0.54 | 0.54 | 0.99 | 0.92 | 0.75 | 0.56 | 0.56 | 1.00 | 0.96 | 0.78 | 0.58 | 0.58 | 1.00 | 0.97 | 0.79 | 0.59 | 0.59 |
| | ΔT | 22 | 22 | 19 | 15 | 15 | 23 | 22 | 19 | 15 | 15 | 23 | 22 | 19 | 15 | 15 | 23 | 22 | 19 | 15 | 15 | 22 | 22 | 19 | 15 | 15 | 20 | 20 | 18 | 14 | 14 |
| | kW | 1.92 | 1.96 | 2.02 | 2.09 | 2.18 | 2.07 | 2.11 | 2.18 | 2.25 | 2.25 | 2.20 | 2.25 | 2.32 | 2.40 | 2.40 | 2.31 | 2.37 | 2.45 | 2.53 | 2.53 | 2.41 | 2.47 | 2.55 | 2.64 | 2.64 | 2.50 | 2.56 | 2.64 | 2.73 | 2.73 |
| | Amps | 8.4 | 8.6 | 8.8 | 9.1 | 9.1 | 9.0 | 9.2 | 9.4 | 9.7 | 9.7 | 9.7 | 9.9 | 10.1 | 10.5 | 10.5 | 10.2 | 10.5 | 10.8 | 11.1 | 11.1 | 10.8 | 11.1 | 11.4 | 11.8 | 11.8 | 11.4 | 11.6 | 12.0 | 12.4 | 12.4 |
| 925 | MBh | 27.1 | 27.7 | 29.6 | 31.7 | 30.9 | 26.5 | 27.1 | 28.9 | 30.9 | 30.9 | 25.9 | 26.4 | 28.2 | 30.2 | 30.2 | 25.2 | 25.8 | 27.6 | 29.5 | 29.5 | 24.0 | 24.5 | 26.2 | 28.0 | 28.0 | 22.2 | 22.7 | 24.2 | 25.9 | 25.9 |
| | S/T | 0.86 | 0.81 | 0.66 | 0.49 | 0.51 | 0.89 | 0.84 | 0.68 | 0.51 | 0.51 | 0.91 | 0.86 | 0.70 | 0.52 | 0.52 | 0.94 | 0.88 | 0.72 | 0.54 | 0.54 | 0.98 | 0.92 | 0.75 | 0.56 | 0.56 | 0.99 | 0.93 | 0.75 | 0.56 | 0.56 |
| | ΔT | 23 | 22 | 19 | 15 | 15 | 23 | 23 | 20 | 16 | 16 | 24 | 23 | 20 | 16 | 16 | 24 | 23 | 20 | 16 | 16 | 23 | 22 | 19 | 16 | 16 | 22 | 21 | 18 | 15 | 15 |
| | kW | 1.88 | 1.92 | 1.99 | 2.05 | 2.14 | 2.03 | 2.08 | 2.14 | 2.21 | 2.21 | 2.16 | 2.21 | 2.28 | 2.36 | 2.36 | 2.28 | 2.33 | 2.40 | 2.49 | 2.49 | 2.37 | 2.43 | 2.51 | 2.59 | 2.59 | 2.46 | 2.51 | 2.60 | 2.69 | 2.69 |
| | Amps | 8.3 | 8.4 | 8.7 | 9.0 | 9.0 | 8.8 | 9.0 | 9.3 | 9.6 | 9.6 | 9.5 | 9.7 | 10.0 | 10.3 | 10.3 | 10.1 | 10.3 | 10.6 | 10.9 | 10.9 | 10.6 | 10.9 | 11.2 | 11.6 | 11.6 | 11.2 | 11.4 | 11.8 | 12.2 | 12.2 |
| 85 | MBh | 29.1 | 29.6 | 31.0 | 33.1 | 32.3 | 28.4 | 28.9 | 30.3 | 32.3 | 32.3 | 27.7 | 28.2 | 29.6 | 31.6 | 31.6 | 27.0 | 27.6 | 28.9 | 30.8 | 30.8 | 25.7 | 26.2 | 27.4 | 29.2 | 29.2 | 23.8 | 24.2 | 25.4 | 27.1 | 27.1 |
| | S/T | 0.94 | 0.91 | 0.82 | 0.67 | 0.69 | 0.98 | 0.94 | 0.85 | 0.69 | 0.69 | 1.00 | 0.97 | 0.87 | 0.71 | 0.71 | 1.00 | 1.00 | 0.90 | 0.73 | 0.73 | 1.00 | 1.00 | 0.93 | 0.76 | 0.76 | 1.00 | 1.00 | 0.94 | 0.76 | 0.76 |
| | ΔT | 24 | 24 | 22 | 19 | 19 | 24 | 24 | 23 | 20 | 20 | 24 | 24 | 23 | 20 | 20 | 24 | 24 | 23 | 20 | 20 | 22 | 22 | 20 | 19 | 19 | 21 | 21 | 21 | 18 | 18 |
| | kW | 1.93 | 1.97 | 2.04 | 2.10 | 2.20 | 2.08 | 2.13 | 2.20 | 2.27 | 2.27 | 2.22 | 2.27 | 2.34 | 2.42 | 2.42 | 2.33 | 2.39 | 2.47 | 2.55 | 2.55 | 2.43 | 2.49 | 2.57 | 2.66 | 2.66 | 2.52 | 2.58 | 2.67 | 2.76 | 2.76 |
| | Amps | 8.5 | 8.6 | 8.9 | 9.2 | 9.2 | 9.1 | 9.2 | 9.5 | 9.8 | 9.8 | 9.7 | 9.9 | 10.2 | 10.6 | 10.6 | 10.3 | 10.5 | 10.9 | 11.2 | 11.2 | 10.9 | 11.1 | 11.5 | 11.9 | 11.9 | 11.5 | 11.7 | 12.1 | 12.5 | 12.5 |

IDB: Entering Indoor Dry Bulb Temperature
 High and low pressures are measured at the liquid and suction service valves.
 Design Subcooling, 10.±2 °F @ the liquid access fitting, connection AHRI 95 test conditions. Design Superheat 15.±2 °F @ the compressor suction access fitting connection.
 Shaded area reflects AHRI conditions.
 kW = Total system power
 Amps = outdoor unit amps (comp.+fan)

GPH1624M41*

| HORIZONTAL POSITION | MOTOR SPEED | VOLTS | STATIC | | | | | | | | | |
|---------------------|-------------|-------|--------|------|------|------|------|------|------|-----|-----|-----|
| | | | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| | T1 | 230 | CFM | 671 | 616 | 567 | --- | --- | --- | --- | --- | --- |
| WATTS | | | 51 | 57 | 72 | --- | --- | --- | --- | --- | --- | --- |
| T2/T3 | 230 | CFM | 941 | 872 | 777 | 746 | 614 | --- | --- | --- | --- | --- |
| | | WATTS | 105 | 112 | 113 | 128 | 138 | --- | --- | --- | --- | --- |
| T4/T5 | 230 | CFM | 1347 | 1315 | 1256 | 1194 | 1152 | 1096 | 1051 | 972 | 891 | --- |
| | | WATTS | 239 | 256 | 265 | 271 | 282 | 286 | 293 | 297 | 305 | --- |

| DOWNSHOT POSITION | MOTOR SPEED | VOLTS | STATIC | | | | | | | | | |
|-------------------|-------------|-------|--------|------|------|------|------|------|-----|-----|-----|-----|
| | | | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| | T1 | 230 | CFM | 699 | 595 | 523 | --- | --- | --- | --- | --- | --- |
| WATTS | | | 57 | 61 | 72 | --- | --- | --- | --- | --- | --- | --- |
| T2/T3 | 230 | CFM | 919 | 855 | 782 | 695 | 631 | 578 | 523 | --- | --- | --- |
| | | WATTS | 108 | 117 | 121 | 132 | 143 | 144 | 149 | --- | --- | --- |
| T4/T5 | 230 | CFM | 1312 | 1275 | 1216 | 1153 | 1096 | 1028 | 943 | 869 | 816 | --- |
| | | WATTS | 260 | 269 | 274 | 285 | 295 | 300 | 304 | 310 | 316 | --- |

GPH1630M41*

| HORIZONTAL POSITION | MOTOR SPEED | VOLTS | STATIC | | | | | | | | | |
|---------------------|-------------|-------|--------|------|------|------|------|------|------|------|------|-----|
| | | | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| | T1 | 230 | CFM | 743 | 707 | 595 | 513 | --- | --- | --- | --- | --- |
| WATTS | | | 61 | 73 | 77 | 85 | --- | --- | --- | --- | --- | --- |
| T2/T3 | 230 | CFM | 1146 | 1098 | 1044 | 991 | 934 | 817 | 764 | 698 | 653 | --- |
| | | WATTS | 157 | 170 | 176 | 186 | 194 | 201 | 210 | 215 | 215 | --- |
| T4/T5 | 230 | CFM | 1440 | 1418 | 1364 | 1307 | 1265 | 1219 | 1168 | 1094 | 1049 | --- |
| | | WATTS | 290 | 306 | 312 | 321 | 326 | 332 | 348 | 353 | 360 | --- |

| DOWNSHOT POSITION | MOTOR SPEED | VOLTS | STATIC | | | | | | | | | |
|-------------------|-------------|-------|--------|------|------|------|------|------|------|-----|-----|-----|
| | | | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| | T1 | 230 | CFM | 722 | 672 | 574 | 509 | --- | --- | --- | --- | --- |
| WATTS | | | 60 | 74 | 80 | 89 | --- | --- | --- | --- | --- | --- |
| T2/T3 | 230 | CFM | 1103 | 1038 | 978 | 922 | 806 | 731 | 676 | 622 | 564 | --- |
| | | WATTS | 162 | 168 | 179 | 188 | 199 | 205 | 208 | 214 | 219 | --- |
| T4/T5 | 230 | CFM | 1401 | 1357 | 1305 | 1244 | 1179 | 1118 | 1046 | 934 | 884 | --- |
| | | WATTS | 311 | 326 | 318 | 334 | 341 | 349 | 353 | 352 | 357 | --- |

GPH1636M41*

| HORIZONTAL POSITION | MOTOR SPEED | VOLTS | STATIC | | | | | | | | | |
|---------------------|-------------|-------|--------|------|------|------|------|------|------|------|------|-----|
| | | | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| | T1 | 230 | CFM | 846 | 762 | 716 | 585 | 519 | --- | --- | --- | --- |
| WATTS | | | 74 | 83 | 94 | 98 | 108 | --- | --- | --- | --- | --- |
| T2/T3 | 230 | CFM | 1278 | 1214 | 1182 | 1129 | 1072 | 1013 | 950 | 853 | 788 | --- |
| | | WATTS | 221 | 218 | 232 | 245 | 253 | 264 | 265 | 275 | 272 | --- |
| T4/T5 | 230 | CFM | 1604 | 1560 | 1507 | 1468 | 1415 | 1364 | 1321 | 1276 | 1218 | --- |
| | | WATTS | 396 | 402 | 408 | 424 | 426 | 423 | 444 | 454 | 454 | --- |

| DOWNSHOT POSITION | MOTOR SPEED | VOLTS | STATIC | | | | | | | | | |
|-------------------|-------------|-------|--------|------|------|------|------|------|------|------|------|-----|
| | | | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| | T1 | 230 | CFM | 809 | 730 | 623 | 542 | 485 | 441 | --- | --- | --- |
| Watts | | | 73 | 85 | 92 | 98 | 107 | 112 | --- | --- | --- | --- |
| T2/T3 | 230 | CFM | 1284 | 1223 | 1175 | 1097 | 1031 | 974 | 871 | 804 | 761 | --- |
| | | Watts | 220 | 227 | 241 | 247 | 255 | 262 | 272 | 277 | 285 | --- |
| T4/T5 | 230 | CFM | 1578 | 1539 | 1498 | 1452 | 1396 | 1332 | 1279 | 1224 | 1161 | --- |
| | | Watts | 401 | 409 | 421 | 425 | 438 | 439 | 452 | 453 | 455 | --- |

GPH1642M41*

| HORIZONTAL POSITION | MOTOR SPEED | VOLTS | STATIC | | | | | | | | | |
|---------------------|-------------|-------|--------|------|------|------|------|------|------|------|------|-----|
| | | | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| | T1 | 230 | CFM | 1030 | 955 | 908 | 826 | 761 | 678 | 633 | 563 | 504 |
| WATTS | | | 130 | 126 | 139 | 143 | 154 | 168 | 171 | 181 | 185 | |
| T2/T3 | 230 | CFM | 1425 | 1373 | 1303 | 1250 | 1228 | 1158 | 1109 | 1042 | 982 | |
| | | WATTS | 234 | 246 | 248 | 262 | 280 | 290 | 298 | 308 | 322 | |
| T4/T5 | 230 | CFM | 1775 | 1718 | 1673 | 1643 | 1588 | 1532 | 1482 | 1431 | 1369 | |
| | | WATTS | 416 | 424 | 430 | 454 | 458 | 466 | 478 | 488 | 490 | |

| DOWNSHOT POSITION | MOTOR SPEED | VOLTS | STATIC | | | | | | | | | |
|-------------------|-------------|-------|--------|------|------|------|------|------|------|------|------|-----|
| | | | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| | T1 | 230 | CFM | 1001 | 936 | 852 | 810 | 700 | 643 | 579 | 526 | 491 |
| WATTS | | | 125 | 133 | 136 | 154 | 160 | 166 | 172 | 177 | 185 | |
| T2/T3 | 230 | CFM | 1411 | 1361 | 1299 | 1240 | 1173 | 1112 | 1048 | 955 | 887 | |
| | | WATTS | 281 | 294 | 301 | 309 | 312 | 320 | 327 | 335 | 339 | |
| T4/T5 | 230 | CFM | 1745 | 1690 | 1615 | 1580 | 1530 | 1470 | 1420 | 1370 | 1310 | |
| | | WATTS | 425 | 435 | 440 | 465 | 468 | 476 | 488 | 498 | 500 | |

DPH1648M41*

| HORIZONTAL POSITION | MOTOR SPEED | VOLTS | STATIC | | | | | | | | | |
|---------------------|-------------|-------|--------|------|------|------|------|------|------|------|------|-----|
| | | | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| | T1 | 230 | CFM | 1167 | 1101 | 1045 | 992 | 939 | 870 | 802 | 732 | 681 |
| WATTS | | | 139 | 144 | 156 | 165 | 177 | 193 | 203 | 217 | 223 | |
| T2/T3 | 230 | CFM | 1723 | 1637 | 1598 | 1554 | 1509 | 1467 | 1420 | 1361 | 1295 | |
| | | WATTS | 372 | 370 | 381 | 390 | 404 | 411 | 420 | 427 | 441 | |
| T4/T5 | 230 | CFM | 2012 | 1965 | 1912 | 1871 | 1809 | 1770 | 1741 | 1691 | 1635 | |
| | | WATTS | 578 | 593 | 599 | 606 | 610 | 627 | 626 | 634 | 638 | |

| DOWNSHOT POSITION | MOTOR SPEED | VOLTS | STATIC | | | | | | | | | |
|-------------------|-------------|-------|--------|------|------|------|------|------|------|------|------|-----|
| | | | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| | T1 | 230 | CFM | 1155 | 1074 | 1023 | 969 | 896 | 805 | 755 | 667 | 626 |
| WATTS | | | 153 | 156 | 169 | 180 | 195 | 205 | 216 | 226 | 230 | |
| T2/T3 | 230 | CFM | 1670 | 1596 | 1558 | 1484 | 1467 | 1383 | 1339 | 1259 | 1168 | |
| | | WATTS | 383 | 392 | 399 | 408 | 419 | 434 | 436 | 447 | 449 | |
| T4/T5 | 230 | CFM | 1949 | 1881 | 1853 | 1792 | 1753 | 1699 | 1621 | 1561 | 1522 | |
| | | WATTS | 603 | 607 | 608 | 616 | 622 | 626 | 648 | 650 | 645 | |

GPG1660***M41**

DOWNSHOT

| SPEED TAP | STATIC | CFM | AMPS | WATTS | RPM |
|-----------|--------|------|------|-------|------|
| T1 | 0.1 | 1334 | 1.65 | 180 | 627 |
| | 0.2 | 1286 | 1.75 | 192 | 665 |
| | 0.3 | 1212 | 1.83 | 202 | 715 |
| | 0.4 | 1144 | 1.94 | 216 | 759 |
| | 0.5 | 1077 | 1.99 | 222 | 792 |
| | 0.6 | 1039 | 2.10 | 238 | 830 |
| | 0.7 | 953 | 2.17 | 248 | 874 |
| | 0.8 | 904 | 2.27 | 258 | 913 |
| | 0.9 | 825 | 2.30 | 266 | 940 |
| T2 | 0.1 | 1512 | 2.12 | 240 | 682 |
| | 0.2 | 1469 | 2.24 | 254 | 720 |
| | 0.3 | 1397 | 2.31 | 264 | 759 |
| | 0.4 | 1333 | 2.44 | 282 | 803 |
| | 0.5 | 1285 | 2.54 | 296 | 836 |
| | 0.6 | 1221 | 2.59 | 304 | 874 |
| | 0.7 | 1173 | 2.72 | 322 | 913 |
| | 0.8 | 1118 | 2.77 | 328 | 946 |
| | 0.9 | 1049 | 2.90 | 344 | 984 |
| T3 | 0.1 | 2053 | 4.27 | 540 | 869 |
| | 0.2 | 2014 | 4.39 | 558 | 896 |
| | 0.3 | 1999 | 4.60 | 576 | 929 |
| | 0.4 | 1947 | 4.68 | 588 | 957 |
| | 0.5 | 1897 | 4.79 | 608 | 989 |
| | 0.6 | 1857 | 4.87 | 620 | 1012 |
| | 0.7 | 1763 | 4.99 | 640 | 1050 |
| | 0.8 | 1741 | 5.06 | 650 | 1072 |
| | 0.9 | 1669 | 5.19 | 668 | 1105 |
| T4 | 0.1 | 2137 | 4.95 | 634 | 913 |
| | 0.2 | 2093 | 5.07 | 652 | 940 |
| | 0.3 | 2095 | 5.19 | 670 | 962 |
| | 0.4 | 2026 | 5.28 | 682 | 990 |
| | 0.5 | 1980 | 5.40 | 698 | 1018 |
| | 0.6 | 1961 | 5.49 | 720 | 1039 |
| | 0.7 | 1914 | 5.58 | 732 | 1072 |
| | 0.8 | 1845 | 5.70 | 742 | 1100 |
| | 0.9 | 1766 | 5.69 | 740 | 1127 |
| T5 | 0.1 | 2299 | 5.70 | 742 | 942 |
| | 0.2 | 2233 | 5.80 | 748 | 969 |
| | 0.3 | 2217 | 5.90 | 768 | 990 |
| | 0.4 | 2157 | 6.07 | 786 | 1018 |
| | 0.5 | 2131 | 6.12 | 804 | 1045 |
| | 0.6 | 2060 | 6.21 | 816 | 1073 |
| | 0.7 | 2015 | 6.30 | 820 | 1095 |
| | 0.8 | 1940 | 6.27 | 816 | 1111 |
| | 0.9 | 1862 | 6.13 | 790 | 1128 |

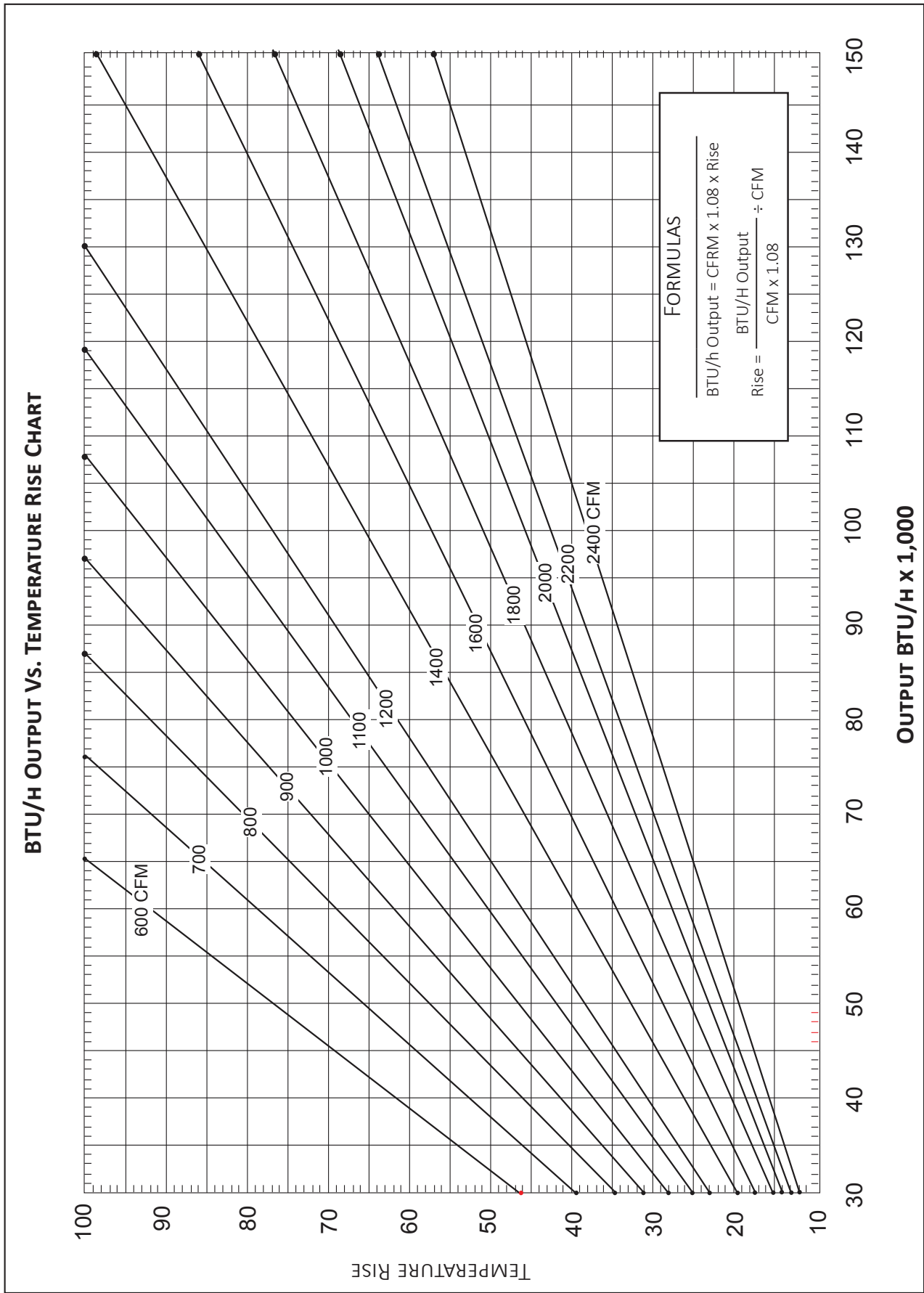
HORIZONTAL

| SPEED TAP | ESP IN W.C. | CFM | AMPS | WATTS | RPM |
|-----------|-------------|------|------|-------|------|
| T1 | 0.1 | 1355 | 1.57 | 174 | 599 |
| | 0.2 | 1281 | 1.66 | 182 | 651 |
| | 0.3 | 1235 | 1.76 | 196 | 693 |
| | 0.4 | 1168 | 1.81 | 202 | 726 |
| | 0.5 | 1118 | 1.94 | 218 | 775 |
| | 0.6 | 1049 | 2.03 | 232 | 819 |
| | 0.7 | 982 | 2.10 | 240 | 858 |
| | 0.8 | 922 | 2.14 | 246 | 885 |
| | 0.9 | 871 | 2.25 | 260 | 927 |
| T2 | 0.1 | 1544 | 2.04 | 234 | 660 |
| | 0.2 | 1490 | 2.17 | 250 | 704 |
| | 0.3 | 1427 | 2.25 | 260 | 742 |
| | 0.4 | 1370 | 2.35 | 276 | 781 |
| | 0.5 | 1319 | 2.42 | 282 | 809 |
| | 0.6 | 1274 | 2.52 | 296 | 849 |
| | 0.7 | 1210 | 2.62 | 316 | 891 |
| | 0.8 | 1137 | 2.73 | 326 | 935 |
| | 0.9 | 1106 | 2.77 | 336 | 957 |
| T3 | 0.1 | 2099 | 4.13 | 516 | 825 |
| | 0.2 | 2068 | 4.25 | 536 | 852 |
| | 0.3 | 2029 | 4.37 | 552 | 885 |
| | 0.4 | 1971 | 4.48 | 568 | 913 |
| | 0.5 | 1911 | 4.61 | 586 | 950 |
| | 0.6 | 1876 | 4.73 | 604 | 973 |
| | 0.7 | 1821 | 4.86 | 622 | 1012 |
| | 0.8 | 1792 | 4.91 | 630 | 1028 |
| | 0.9 | 1740 | 5.03 | 648 | 1067 |
| T4 | 0.1 | 2233 | 4.76 | 608 | 863 |
| | 0.2 | 2168 | 4.91 | 628 | 896 |
| | 0.3 | 2125 | 5.02 | 640 | 924 |
| | 0.4 | 2070 | 5.14 | 660 | 951 |
| | 0.5 | 2050 | 5.27 | 678 | 979 |
| | 0.6 | 1980 | 5.41 | 696 | 1012 |
| | 0.7 | 1954 | 5.47 | 704 | 1034 |
| | 0.8 | 1893 | 5.60 | 724 | 1067 |
| | 0.9 | 1852 | 5.70 | 736 | 1089 |
| T5 | 0.1 | 2322 | 5.44 | 710 | 904 |
| | 0.2 | 2294 | 5.55 | 726 | 934 |
| | 0.3 | 2254 | 5.68 | 742 | 958 |
| | 0.4 | 2201 | 5.80 | 766 | 990 |
| | 0.5 | 2147 | 5.93 | 782 | 1017 |
| | 0.6 | 2117 | 6.01 | 788 | 1039 |
| | 0.7 | 2081 | 6.12 | 808 | 1060 |
| | 0.8 | 2017 | 6.22 | 822 | 1094 |
| | 0.9 | 1932 | 6.10 | 804 | 1111 |

NOTES

- Table represent dry coil without filter, to compensate for filter add 0.08" to measured E.S.P..
- SCFM correction for wet coil = 4%.
- 5-ton models are shipped from the factory with speed tap set on T4.

| AIRFLOW PRESSURE DROP OF DOWNFLOW ECONOMIZER FOR 3 TO 6 TON ROOFTOP UNITS (100% RETURN AIR) | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|------|------|
| SCFM | 800 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 |
| in. WG | 0.02 | 0.04 | 0.05 | 0.07 | 0.09 | 0.12 | 0.14 | 0.17 | 0.21 | 0.24 | 0.28 |



EXPANDED HEATING DATA

GPH1624M41**

| | OUTDOOR AMBIENT TEMPERATURE | | | | | | | | | | | | | | | | | |
|-------|-----------------------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 65 | 60 | 55 | 50 | 47 | 45 | 40 | 35 | 30 | 25 | 20 | 17 | 15 | 10 | 5 | 0 | -5 | -10 |
| MBh | 28.7 | 27.1 | 25.5 | 23.9 | 22.8 | 22.1 | 20.5 | 18.9 | 15.6 | 14.4 | 13.2 | 12.5 | 12.0 | 10.8 | 9.6 | 8.4 | 7.1 | 5.8 |
| T/R | 31.2 | 29.6 | 27.8 | 26.0 | 24.8 | 24.1 | 22.4 | 20.6 | 17.0 | 15.7 | 14.4 | 13.6 | 13.1 | 11.8 | 10.4 | 9.1 | 7.8 | 6.4 |
| kW | 1.96 | 1.92 | 1.88 | 1.84 | 1.82 | 1.80 | 1.76 | 1.72 | 1.68 | 1.64 | 1.60 | 1.58 | 1.56 | 1.52 | 1.49 | 1.45 | 1.41 | 1.37 |
| amps | 10.0 | 9.4 | 8.8 | 8.4 | 8.1 | 8.0 | 7.6 | 7.3 | 7.0 | 6.7 | 6.5 | 6.3 | 6.3 | 6.0 | 5.7 | 5.4 | 5.1 | 4.7 |
| COP | 4.28 | 4.14 | 3.98 | 3.80 | 3.67 | 3.59 | 3.41 | 3.21 | 2.71 | 2.57 | 2.42 | 2.32 | 2.25 | 2.07 | 1.89 | 1.69 | 1.48 | 1.25 |
| EER | 15 | 14 | 14 | 13 | 13 | 12 | 12 | 11 | 9 | 9 | 8 | 8 | 8 | 7 | 6 | 6 | 5 | 4 |
| HI PR | 397 | 381 | 366 | 350 | 342 | 336 | 323 | 310 | 297 | 283 | 272 | 265 | 261 | 251 | 241 | 231 | 223 | 215 |
| LO PR | 141.8 | 131.6 | 123.3 | 113.1 | 106.9 | 102.8 | 94.6 | 84.2 | 76.0 | 67.9 | 59.6 | 55.5 | 53.4 | 45.2 | 39.0 | 32.9 | 28.7 | 22.5 |

GPH1630M41**

| | OUTDOOR AMBIENT TEMPERATURE | | | | | | | | | | | | | | | | | |
|-------|-----------------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 65 | 60 | 55 | 50 | 47 | 45 | 40 | 35 | 30 | 25 | 20 | 17 | 15 | 10 | 5 | 0 | -5 | -10 |
| MBh | 35.7 | 33.8 | 31.8 | 29.7 | 28.4 | 27.5 | 25.6 | 23.6 | 20.7 | 19.1 | 17.6 | 16.6 | 16.0 | 14.3 | 12.7 | 11.1 | 9.5 | 7.8 |
| T/R | 31.5 | 29.8 | 28.0 | 26.2 | 25.0 | 24.3 | 22.5 | 20.8 | 18.2 | 16.8 | 15.5 | 14.6 | 14.1 | 12.6 | 11.2 | 9.8 | 8.3 | 6.8 |
| kW | 2.56 | 2.51 | 2.45 | 2.40 | 2.37 | 2.35 | 2.30 | 2.25 | 2.25 | 2.20 | 2.15 | 2.12 | 2.09 | 2.04 | 1.99 | 1.94 | 1.88 | 1.83 |
| amps | 12.9 | 12.0 | 11.3 | 10.7 | 10.4 | 10.2 | 9.7 | 9.2 | 8.9 | 8.5 | 8.2 | 8.0 | 7.9 | 7.6 | 7.2 | 6.8 | 6.4 | 5.9 |
| COP | 4.08 | 3.95 | 3.79 | 3.62 | 3.50 | 3.43 | 3.25 | 3.07 | 2.69 | 2.54 | 2.40 | 2.30 | 2.23 | 2.06 | 1.87 | 1.68 | 1.47 | 1.24 |
| EER | 14 | 13 | 13 | 12 | 12 | 12 | 11 | 10 | 9 | 9 | 8 | 8 | 8 | 7 | 6 | 6 | 5 | 4 |
| HI PR | 416 | 399 | 383 | 366 | 358 | 351 | 337 | 324 | 310 | 296 | 284 | 278 | 273 | 262 | 252 | 242 | 233 | 225 |
| LO PR | 134.9 | 125.2 | 117.3 | 107.6 | 101.7 | 97.8 | 90.0 | 80.1 | 72.3 | 64.6 | 56.7 | 52.8 | 50.8 | 43.0 | 37.1 | 31.3 | 27.3 | 21.5 |

GPH1636M41**

| | OUTDOOR AMBIENT TEMPERATURE | | | | | | | | | | | | | | | | | |
|-------|-----------------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 65 | 60 | 55 | 50 | 47 | 45 | 40 | 35 | 30 | 25 | 20 | 17 | 15 | 10 | 5 | 0 | -5 | -10 |
| MBh | 42.1 | 39.9 | 37.5 | 35.1 | 33.5 | 32.5 | 30.2 | 27.8 | 24.2 | 22.4 | 20.6 | 19.4 | 18.7 | 16.8 | 14.9 | 13.0 | 11.1 | 9.1 |
| T/R | 32.5 | 30.8 | 29.0 | 27.1 | 25.8 | 25.0 | 23.3 | 21.5 | 18.7 | 17.2 | 15.9 | 15.0 | 14.4 | 13.0 | 11.5 | 10.0 | 8.5 | 7.0 |
| kW | 2.85 | 2.79 | 2.73 | 2.67 | 2.64 | 2.62 | 2.56 | 2.50 | 2.48 | 2.42 | 2.37 | 2.33 | 2.31 | 2.25 | 2.19 | 2.14 | 2.08 | 2.02 |
| amps | 14.5 | 13.6 | 12.8 | 12.1 | 11.7 | 11.5 | 11.0 | 10.5 | 10.1 | 9.7 | 9.3 | 9.1 | 9.0 | 8.7 | 8.2 | 7.8 | 7.3 | 6.7 |
| COP | 4.33 | 4.18 | 4.02 | 3.84 | 3.71 | 3.63 | 3.45 | 3.25 | 2.85 | 2.70 | 2.54 | 2.44 | 2.37 | 2.18 | 1.99 | 1.78 | 1.56 | 1.31 |
| EER | 15 | 14 | 14 | 13 | 13 | 12 | 12 | 11 | 10 | 9 | 9 | 8 | 8 | 7 | 7 | 6 | 5 | 4 |
| HI PR | 399 | 383 | 368 | 352 | 344 | 337 | 324 | 311 | 298 | 285 | 273 | 267 | 262 | 252 | 242 | 232 | 224 | 216 |
| LO PR | 133.8 | 124.1 | 116.4 | 106.7 | 100.9 | 97.0 | 89.3 | 79.5 | 71.7 | 64.0 | 56.3 | 52.3 | 50.4 | 42.7 | 36.8 | 31.1 | 27.1 | 21.3 |

Notes

Above information is for nominal CFM and 70-degree indoor dry bulb. Instantaneous capacity listed.

High pressure is measured at the liquid line access fitting.

Low pressure is measured at the compressor suction access fitting.

Amps: Unit amps (comp.+ evaporator motor + condenser fan motor)

kW = Total system power

GPH1642M41

| | OUTDOOR AMBIENT TEMPERATURE | | | | | | | | | | | | | | | | | |
|-------|-----------------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 65 | 60 | 55 | 50 | 47 | 45 | 40 | 35 | 30 | 25 | 20 | 17 | 15 | 10 | 5 | 0 | -5 | -10 |
| MBh | 47.8 | 45.2 | 42.6 | 39.8 | 38.0 | 36.8 | 34.2 | 31.5 | 26.8 | 24.7 | 22.8 | 21.5 | 20.7 | 18.6 | 16.5 | 14.4 | 12.3 | 10.0 |
| T/R | 34.0 | 32.2 | 30.3 | 28.3 | 27.1 | 26.2 | 24.4 | 22.5 | 19.1 | 17.6 | 16.2 | 15.3 | 14.7 | 13.2 | 11.7 | 10.2 | 8.7 | 7.2 |
| kW | 3.53 | 3.46 | 3.38 | 3.31 | 3.27 | 3.24 | 3.17 | 3.10 | 2.94 | 2.87 | 2.80 | 2.76 | 2.73 | 2.66 | 2.59 | 2.53 | 2.46 | 2.39 |
| amps | 17.8 | 16.6 | 15.6 | 14.8 | 14.3 | 14.0 | 13.3 | 12.7 | 12.2 | 11.7 | 11.2 | 11.0 | 10.9 | 10.4 | 9.8 | 9.3 | 8.7 | 8.0 |
| COP | 3.96 | 3.83 | 3.68 | 3.51 | 3.40 | 3.33 | 3.16 | 2.98 | 2.67 | 2.52 | 2.38 | 2.28 | 2.22 | 2.04 | 1.86 | 1.66 | 1.46 | 1.23 |
| EER | 14 | 13 | 13 | 12 | 12 | 11 | 11 | 10 | 9 | 9 | 8 | 8 | 8 | 7 | 6 | 6 | 5 | 4 |
| HI PR | 417 | 399 | 384 | 367 | 359 | 352 | 338 | 324 | 311 | 297 | 285 | 278 | 273 | 263 | 253 | 242 | 234 | 226 |
| LO PR | 134.9 | 125.1 | 117.3 | 107.5 | 101.7 | 97.8 | 90.0 | 80.1 | 72.3 | 64.5 | 56.7 | 52.8 | 50.8 | 43.0 | 37.1 | 31.3 | 27.3 | 21.4 |

GPH1648M41

| | OUTDOOR AMBIENT TEMPERATURE | | | | | | | | | | | | | | | | | |
|-------|-----------------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 65 | 60 | 55 | 50 | 47 | 45 | 40 | 35 | 30 | 25 | 20 | 17 | 15 | 10 | 5 | 0 | -5 | -10 |
| MBh | 57.2 | 54.1 | 51.0 | 47.6 | 45.5 | 44.1 | 41.0 | 37.8 | 33.6 | 31.1 | 28.6 | 27.0 | 26.0 | 23.3 | 20.7 | 18.0 | 15.4 | 12.6 |
| T/R | 33.1 | 31.3 | 29.5 | 27.6 | 26.3 | 25.5 | 23.7 | 21.9 | 19.5 | 18.0 | 16.5 | 15.6 | 15.0 | 13.5 | 12.0 | 10.4 | 8.9 | 7.3 |
| kW | 3.94 | 3.86 | 3.78 | 3.71 | 3.66 | 3.63 | 3.55 | 3.47 | 3.36 | 3.28 | 3.21 | 3.16 | 3.13 | 3.05 | 2.98 | 2.90 | 2.82 | 2.75 |
| amps | 20.8 | 19.4 | 18.2 | 17.2 | 16.6 | 16.3 | 15.5 | 14.8 | 14.2 | 13.6 | 13.0 | 12.7 | 12.6 | 12.0 | 11.3 | 10.7 | 10.0 | 9.1 |
| COP | 4.25 | 4.10 | 3.94 | 3.76 | 3.64 | 3.56 | 3.37 | 3.18 | 2.93 | 2.77 | 2.61 | 2.50 | 2.43 | 2.24 | 2.03 | 1.82 | 1.59 | 1.34 |
| EER | 15 | 14 | 13 | 13 | 12 | 12 | 12 | 11 | 10 | 9 | 9 | 9 | 8 | 8 | 7 | 6 | 5 | 5 |
| HI PR | 404 | 387 | 372 | 356 | 348 | 341 | 328 | 315 | 301 | 288 | 276 | 270 | 265 | 255 | 245 | 235 | 227 | 219 |
| LO PR | 133.3 | 123.7 | 115.9 | 106.3 | 100.5 | 96.6 | 88.9 | 79.2 | 71.4 | 63.8 | 56.1 | 52.1 | 50.2 | 42.5 | 36.7 | 30.9 | 27.0 | 21.2 |

GPH1660M41

| | OUTDOOR AMBIENT TEMPERATURE | | | | | | | | | | | | | | | | | |
|-------|-----------------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 65 | 60 | 55 | 50 | 47 | 45 | 40 | 35 | 30 | 25 | 20 | 17 | 15 | 10 | 5 | 0 | -5 | -10 |
| MBh | 69.7 | 66.0 | 62.1 | 58.0 | 55.4 | 53.7 | 49.9 | 46.0 | 38.2 | 35.3 | 32.5 | 30.7 | 29.5 | 26.5 | 23.5 | 20.5 | 17.5 | 14.3 |
| T/R | 32.9 | 31.1 | 29.3 | 27.4 | 26.2 | 25.4 | 23.5 | 21.7 | 18.0 | 16.6 | 15.3 | 14.5 | 13.9 | 12.5 | 11.1 | 9.7 | 8.3 | 6.8 |
| kW | 4.54 | 4.45 | 4.36 | 4.28 | 4.23 | 4.19 | 4.11 | 4.02 | 3.94 | 3.85 | 3.77 | 3.72 | 3.68 | 3.59 | 3.51 | 3.42 | 3.34 | 3.25 |
| amps | 23.7 | 22.1 | 20.8 | 19.7 | 19.0 | 18.7 | 17.8 | 17.0 | 16.3 | 15.7 | 15.0 | 14.7 | 14.6 | 13.9 | 13.1 | 12.5 | 11.7 | 10.7 |
| COP | 4.49 | 4.34 | 4.16 | 3.97 | 3.84 | 3.75 | 3.56 | 3.35 | 2.84 | 2.68 | 2.52 | 2.42 | 2.35 | 2.16 | 1.96 | 1.75 | 1.53 | 1.29 |
| EER | 15 | 15 | 14 | 14 | 13 | 13 | 12 | 11 | 10 | 9 | 9 | 8 | 8 | 7 | 7 | 6 | 5 | 4 |
| HI PR | 295 | 283 | 272 | 260 | 254 | 249 | 239 | 230 | 220 | 210 | 202 | 197 | 193 | 186 | 179 | 171 | 165 | 160 |
| LO PR | 133.4 | 123.7 | 116.0 | 106.3 | 100.5 | 96.7 | 88.9 | 79.2 | 71.5 | 63.8 | 56.1 | 52.2 | 50.3 | 42.5 | 36.7 | 31.0 | 27.0 | 21.2 |

Notes

Above information is for nominal CFM and 70-degree indoor dry bulb. Instantaneous capacity listed.

High pressure is measured at the liquid line access fitting.

Low pressure is measured at the compressor suction access fitting.

Amps: Unit amps (comp.+ evaporator motor + condenser fan motor)

kW = Total system power

AUXILIARY HEATING DATA

| GPH1624M41 | | | | | | |
|---|-------------------------------|------|---|-------|------|------|
| CONDITIONS: 850 CFM; INDOOR AIR @ 70°F DB | | | | | | |
| OUTDOOR AMBIENT °F. | BASIC UNIT W/O AUXILIARY HEAT | | UNIT CAPACITY WITH KW OF AUXILIARY HEAT | | | |
| | CAPACITY* | COP | 4.8 | 9.6 | 14.4 | 19.2 |
| 65 | 28.66 | 4.28 | 45.04 | 61.42 | - | - |
| 60 | 27.13 | 4.14 | 43.51 | 59.90 | - | - |
| 55 | 25.54 | 3.97 | 41.92 | 58.30 | - | - |
| 50 | 23.87 | 3.79 | 40.25 | 56.64 | - | - |
| 45 | 22.09 | 3.58 | 38.48 | 54.86 | - | - |
| 40 | 20.52 | 3.40 | 36.90 | 53.28 | - | - |
| 35 | 18.92 | 3.21 | 35.31 | 51.69 | - | - |
| 30 | 15.58 | 2.72 | 31.96 | 48.34 | - | - |
| 25 | 14.38 | 2.57 | 30.76 | 47.14 | - | - |
| 20 | 13.24 | 2.42 | 29.62 | 46.00 | - | - |
| 15 | 12.04 | 2.25 | 28.42 | 44.80 | - | - |
| 10 | 10.80 | 2.07 | 27.18 | 43.56 | - | - |
| 5 | 9.58 | 1.88 | 25.96 | 42.34 | - | - |
| 0 | 8.35 | 1.68 | 24.73 | 41.11 | - | - |
| -5 | 7.13 | 1.48 | 23.51 | 39.89 | - | - |
| -10 | 5.84 | 1.24 | 22.22 | 38.60 | - | - |

| GPH1630M41 | | | | | | |
|--|-------------------------------|------|---|-------|---------|------|
| CONDITIONS: 1050 CFM; INDOOR AIR @ 70°F DB | | | | | | |
| OUTDOOR AMBIENT °F. | BASIC UNIT W/O AUXILIARY HEAT | | UNIT CAPACITY WITH KW OF AUXILIARY HEAT | | | |
| | CAPACITY* | COP | 4.8 | 9.6 | 14.4 | 19.2 |
| 65 | 35.70 | 4.09 | 52.08 | 68.46 | 84.846 | - |
| 60 | 33.80 | 3.95 | 50.18 | 66.56 | 82.9432 | - |
| 55 | 31.81 | 3.80 | 48.19 | 64.57 | 80.9552 | - |
| 50 | 29.73 | 3.63 | 46.12 | 62.50 | 78.882 | - |
| 45 | 27.52 | 3.43 | 43.90 | 60.28 | 76.6668 | - |
| 40 | 25.56 | 3.26 | 41.94 | 58.32 | 74.7072 | - |
| 35 | 23.57 | 3.07 | 39.95 | 56.34 | 72.7192 | - |
| 30 | 20.68 | 2.68 | 37.07 | 53.45 | 69.8308 | - |
| 25 | 19.09 | 2.53 | 35.47 | 51.85 | 68.2372 | - |
| 20 | 17.58 | 2.39 | 33.96 | 50.34 | 66.7266 | - |
| 15 | 15.99 | 2.23 | 32.37 | 48.75 | 65.133 | - |
| 10 | 14.34 | 2.05 | 30.72 | 47.11 | 63.4896 | - |
| 5 | 12.72 | 1.87 | 29.10 | 45.48 | 61.8628 | - |
| 0 | 11.09 | 1.67 | 27.47 | 43.85 | 60.236 | - |
| -5 | 9.46 | 1.47 | 25.84 | 42.23 | 58.6092 | - |
| -10 | 7.75 | 1.24 | 24.13 | 40.52 | 56.8994 | - |

| GPH1636M41 | | | | | | |
|--|-------------------------------|------|---|-------|-------|------|
| CONDITIONS: 1200 CFM; INDOOR AIR @ 70°F DB | | | | | | |
| OUTDOOR AMBIENT °F. | BASIC UNIT W/O AUXILIARY HEAT | | UNIT CAPACITY WITH KW OF AUXILIARY HEAT | | | |
| | CAPACITY* | COP | 4.8 | 9.6 | 14.4 | 19.2 |
| 65 | 42.11 | 4.33 | 58.49 | 74.87 | 91.27 | - |
| 60 | 39.87 | 4.18 | 56.25 | 72.63 | 89.01 | - |
| 55 | 37.52 | 4.02 | 53.90 | 70.28 | 86.67 | - |
| 50 | 35.07 | 3.84 | 51.46 | 67.84 | 84.22 | - |
| 45 | 32.46 | 3.63 | 48.84 | 65.23 | 81.61 | - |
| 40 | 30.15 | 3.45 | 46.53 | 62.91 | 79.30 | - |
| 35 | 27.81 | 3.25 | 44.19 | 60.57 | 76.95 | - |
| 30 | 24.22 | 2.86 | 40.60 | 56.99 | 73.37 | - |
| 25 | 22.36 | 2.70 | 38.74 | 55.12 | 71.50 | - |
| 20 | 20.59 | 2.55 | 36.97 | 53.35 | 69.73 | - |
| 15 | 18.72 | 2.37 | 35.10 | 51.49 | 67.87 | - |
| 10 | 16.80 | 2.19 | 33.18 | 49.56 | 65.94 | - |
| 5 | 14.89 | 1.99 | 31.27 | 47.66 | 64.04 | - |
| 0 | 12.99 | 1.78 | 29.37 | 45.75 | 62.13 | - |
| -5 | 11.08 | 1.56 | 27.46 | 43.85 | 60.23 | - |
| -10 | 9.08 | 1.32 | 25.46 | 41.84 | 58.23 | - |

| GPH1642M41 | | | | | | |
|--|-------------------------------|------|---|-------|-------|------|
| CONDITIONS: 1300 CFM; INDOOR AIR @ 70°F DB | | | | | | |
| OUTDOOR AMBIENT °F. | BASIC UNIT W/O AUXILIARY HEAT | | UNIT CAPACITY WITH KW OF AUXILIARY HEAT | | | |
| | CAPACITY* | COP | 4.8 | 9.6 | 14.4 | 19.2 |
| 65 | 47.77 | 3.99 | 64.15 | 80.53 | 96.91 | - |
| 60 | 45.22 | 3.85 | 61.60 | 77.98 | 94.37 | - |
| 55 | 42.56 | 3.69 | 58.94 | 75.32 | 91.71 | - |
| 50 | 39.79 | 3.52 | 56.17 | 72.55 | 88.93 | - |
| 45 | 36.82 | 3.32 | 53.20 | 69.59 | 85.97 | - |
| 40 | 34.20 | 3.15 | 50.58 | 66.96 | 83.35 | - |
| 35 | 31.54 | 2.96 | 47.92 | 64.30 | 80.69 | - |
| 30 | 26.91 | 2.70 | 43.30 | 59.68 | 76.06 | - |
| 25 | 24.84 | 2.55 | 41.22 | 57.60 | 73.99 | - |
| 20 | 22.87 | 2.39 | 39.26 | 55.64 | 72.02 | - |
| 15 | 20.80 | 2.22 | 37.18 | 53.57 | 69.95 | - |
| 10 | 18.66 | 2.04 | 35.04 | 51.43 | 67.81 | - |
| 5 | 16.55 | 1.85 | 32.93 | 49.31 | 65.69 | - |
| 0 | 14.43 | 1.65 | 30.81 | 47.19 | 63.58 | - |
| -5 | 12.31 | 1.44 | 28.69 | 45.08 | 61.46 | - |
| -10 | 10.09 | 1.21 | 26.47 | 42.85 | 59.23 | - |

| GPH1648M41 | | | | | | |
|--|-------------------------------|------|---|-------|--------|--------|
| CONDITIONS: 1600 CFM; INDOOR AIR @ 70°F DB | | | | | | |
| OUTDOOR AMBIENT °F. | BASIC UNIT W/O AUXILIARY HEAT | | UNIT CAPACITY WITH KW OF AUXILIARY HEAT | | | |
| | CAPACITY* | COP | 4.8 | 9.6 | 14.4 | 19.2 |
| 65 | 57.19 | 4.25 | 73.58 | 89.96 | 106.34 | 122.72 |
| 60 | 54.15 | 4.10 | 70.53 | 86.91 | 103.29 | 119.67 |
| 55 | 50.96 | 3.94 | 67.34 | 83.72 | 100.11 | 116.49 |
| 50 | 47.64 | 3.76 | 64.02 | 80.40 | 96.78 | 113.17 |
| 45 | 44.09 | 3.56 | 60.47 | 76.85 | 93.24 | 109.62 |
| 40 | 40.95 | 3.37 | 57.33 | 73.71 | 90.10 | 106.48 |
| 35 | 37.77 | 3.18 | 54.15 | 70.53 | 86.91 | 103.29 |
| 30 | 33.64 | 2.93 | 50.02 | 66.41 | 82.79 | 99.17 |
| 25 | 31.05 | 2.77 | 47.43 | 63.81 | 80.20 | 96.58 |
| 20 | 28.59 | 2.61 | 44.98 | 61.36 | 77.74 | 94.12 |
| 15 | 26.00 | 2.43 | 42.38 | 58.77 | 75.15 | 91.53 |
| 10 | 23.33 | 2.24 | 39.71 | 56.09 | 72.48 | 88.86 |
| 5 | 20.68 | 2.03 | 37.06 | 53.45 | 69.83 | 86.21 |
| 0 | 18.04 | 1.82 | 34.42 | 50.80 | 67.18 | 83.57 |
| -5 | 15.39 | 1.60 | 31.77 | 48.15 | 64.54 | 80.92 |
| -10 | 12.61 | 1.34 | 28.99 | 45.37 | 61.76 | 78.14 |

| GPH1660M41 | | | | | |
|---|-------------------------------|------|------------------------------------|--------|--------|
| CONDITION : 2000 CMF; INDOOR AIR @ 70 °F DB | | | | | |
| OUTDOOR AMBIENT °F. | BASIC UNIT W/O AUXILIARY HEAT | | UNIT CAPACITY WITH KW OF AUX. HEAT | | |
| | CAPACITY* | COP | 10 | 15 | 20 |
| 65 | 69.70 | 4.49 | 103.82 | 120.88 | 137.94 |
| 60 | 66.00 | 4.34 | 100.12 | 117.18 | 134.24 |
| 55 | 62.10 | 4.16 | 96.22 | 113.28 | 130.34 |
| 50 | 58.00 | 3.97 | 92.22 | 109.28 | 126.34 |
| 45 | 53.70 | 3.75 | 87.82 | 104.88 | 121.94 |
| 40 | 49.90 | 3.56 | 84.02 | 101.08 | 118.14 |
| 35 | 46.00 | 3.35 | 80.12 | 97.18 | 114.24 |
| 30 | 38.20 | 2.84 | 71.82 | 88.88 | 105.94 |
| 25 | 35.30 | 2.68 | 68.92 | 85.98 | 103.04 |
| 20 | 32.50 | 2.52 | 66.22 | 83.28 | 100.34 |
| 15 | 29.50 | 2.35 | 63.32 | 80.38 | 97.44 |
| 10 | 26.50 | 2.16 | 60.32 | 77.38 | 94.44 |
| 5 | 23.50 | 1.96 | 57.32 | 74.38 | 91.44 |
| 0 | 20.50 | 1.75 | 54.32 | 71.38 | 88.44 |
| -5 | 17.50 | 1.53 | 51.42 | 68.48 | 85.54 |
| -10 | 14.30 | 1.29 | 48.22 | 65.28 | 82.34 |

NOTES

- COP: Coefficient of performance
- To obtain BTU capacity of the unit with Kw of auxiliary heat, multiply by 1000 (example 39.01 x 1000 = 39,010 BTU'S)

| MODEL AND HEAT KIT USAGE | CIRCUIT #1 | | CIRCUIT #2 | | ACTUAL kW / BTU@ 460V |
|--------------------------|------------------|------------------|------------------|------------------|-----------------------|
| | MCA ¹ | MOD ² | MCA ¹ | MOD ² | |
| GPH1624M41** | 4.3 / 4.3 | -- | -- | -- | -- |
| HKP-05C* | 24 / 27 | 30 / 30 | -- | -- | 4.75 / 16,200 |
| HKR-08*, HKR-08C* | 34 / 39 | 40 / 40 | -- | -- | 7.0 / 23,800 |
| HKP-10C* | 45 / 52 | 60 / 60 | -- | -- | 9.5 / 32,400 |
| GPH1630M41** | 4.3 / 4.3 | -- | -- | -- | -- |
| HKP-05C* | 24 / 27 | 30 / 30 | -- | -- | 4.75 / 16,200 |
| HKR-08*, HKR-08C* | 34 / 39 | 40 / 40 | -- | -- | 7.0 / 23,800 |
| HKP-10C* | 45 / 52 | 60 / 60 | -- | -- | 9.5 / 32,400 |
| HKP-15C* | 45 / 52 | 60 / 60 | 22 / 25 | 30 / 30 | 14.25 / 48,600 |
| GPH1636M41** | 4.3 / 4.3 | -- | -- | -- | -- |
| HKP-05C* | 24 / 27 | 30 / 30 | -- | -- | 4.75 / 16,200 |
| HKR-08*, HKR-08C* | 34 / 39 | 40 / 40 | -- | -- | 7.0 / 23,800 |
| HKP-10C* | 45 / 52 | 60 / 60 | -- | -- | 9.5 / 32,400 |
| HKP-15C* | 45 / 52 | 60 / 60 | 22 / 25 | 30 / 30 | 14.25 / 48,600 |
| GPH1642M41** | 5.8/5.8 | -- | -- | -- | -- |
| HKP-05C* | 24 / 27 | 30 / 30 | -- | -- | 4.75 / 16,200 |
| HKR08A,CA | 34 / 39 | 40 / 40 | -- | -- | 7.0 / 23,800 |
| HKP-10C* | 45 / 52 | 60 / 60 | -- | -- | 9.5 / 32,400 |
| HKP-15C* | 45 / 52 | 60 / 60 | 22 / 25 | 30 / 30 | 14.25 / 48,600 |
| GPH1648M41* * | 5.8/5.8 | -- | -- | -- | -- |
| HKP-05C* | 25 / 28 | 30 / 30 | ---- | ---- | 4.75 / 16,200 |
| HKR08A,CA | 34 / 40 | 40 / 40 | ---- | ---- | 7.00 / 23,800 |
| HKP-10C* | 46 / 53 | 60 / 60 | ---- | ---- | 9.50 / 32,400 |
| HKP-15C* | 46 / 52 | 60 / 60 | 22 / 25 | 30 / 30 | 14.25 / 48,600 |
| HKP-20C* | 46 / 52 | 60 / 60 | 43 / 49 | 60 / 60 | 19.50 / 66,500 |

¹ Minimum Circuit Ampacity @ 240 V
² Maximum Overcurrent Protection device @ 240 V
* Revision level that may or may not be designated
C Circuit Breaker option

| MODEL AND HEAT KIT USAGE | MCA ¹ @ 208 / 240V | MOP ² (AMPS) @ 208 / 240V | ACTUAL kW & BTU @ 240V | RECOMMENDED AIRFLOW RANGE |
|--------------------------|-------------------------------|--------------------------------------|------------------------|---------------------------|
| GPH1660M41* * | 42 | 60 | --- | --- |
| EHK1-10 | 82 / 94 | 90 / 110 | 10 | 1750-2250 CFM |
| EHK1-15 | 104 / 120 | 110 / 125 | 15 | 1750-2250 CFM |
| EHK1-20 | 127 / 146 | 150 / 150 | 20 | 1850-2250 CFM |

¹ Minimum Circuit Ampacity
² Maximum Overcurrent Protection Device

KW CORRECTION FACTORS

| kW CORRECTION FACTOR FOR 1- & 3-PHASE UNITS | | | | | |
|---|-----|------|------|------|------|
| SUPPLY VOLTAGE | 240 | 230 | 220 | 210 | 208 |
| CORRECTION FACTOR | 1 | 0.93 | 0.82 | 0.78 | 0.76 |

Multiply rated kW by correction factor to get actual kW

MINIMUM AIRFLOW FOR ELECTRIC HEAT

| HEATER SIZE | MINIMUM CFM |
|-------------|-------------|
| 10 kW | 1,250 |
| 15 kW | 1,400 |
| 20 kW | 1,850 |

| ECN | REV | ZONE | DESCRIPTION | CHK | ID | DATE |
|--------|-----|------|-------------|-----|----|------|
| XXXXXX | A | XXXX | | - | GL | |

| MODEL | W" | D' | H' |
|--------------|----|----|-----|
| GPH1624M41** | 47 | 51 | 34¾ |
| GPH1630M41** | 47 | 51 | 34¾ |
| GPH1636M41** | 47 | 51 | 34¾ |
| GPH1642M41** | 47 | 51 | 42¼ |
| GPH1648M41** | 47 | 51 | 42¼ |

| MODEL | B | H | CHASSIS |
|--------------|-----|------|---------|
| GPH1624M41** | 16" | 32½" | Med. |
| GPH1630M41** | 16" | 32½" | Med. |
| GPH1636M41** | 16" | 32½" | Med. |
| GPH1642M41** | 18" | 40" | Large |
| GPH1648M41** | 18" | 40" | Large |

SPECIAL CHARACTERISTICS:

- ⊕ = 6SIGMA
- ⊕ = CRITICAL CHARACTERISTIC
- ⊕ = SIGNIFICANT CHARACTERISTIC

Goodman Company, L.C.

GPH16M

DWN BY: _____ ENG: _____

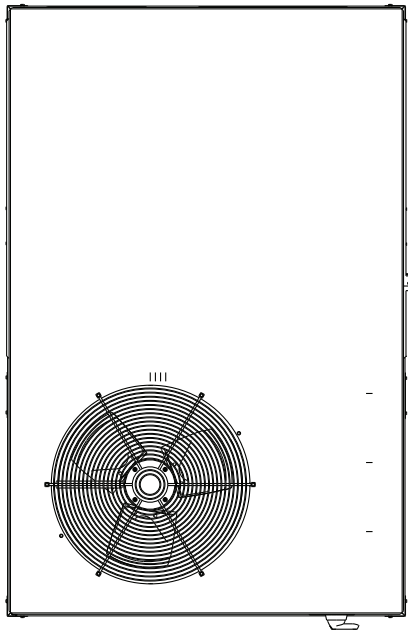
DRAWING TO BE INTERPRETED IN ACCORDANCE WITH ASME Y14.100 DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES: .XXX ± .015 .X ± .1 .XX ± .03 .X ± .1 .XX ± .03 TUBE CUT TO ± .003

DO NOT SCALE DRAWING

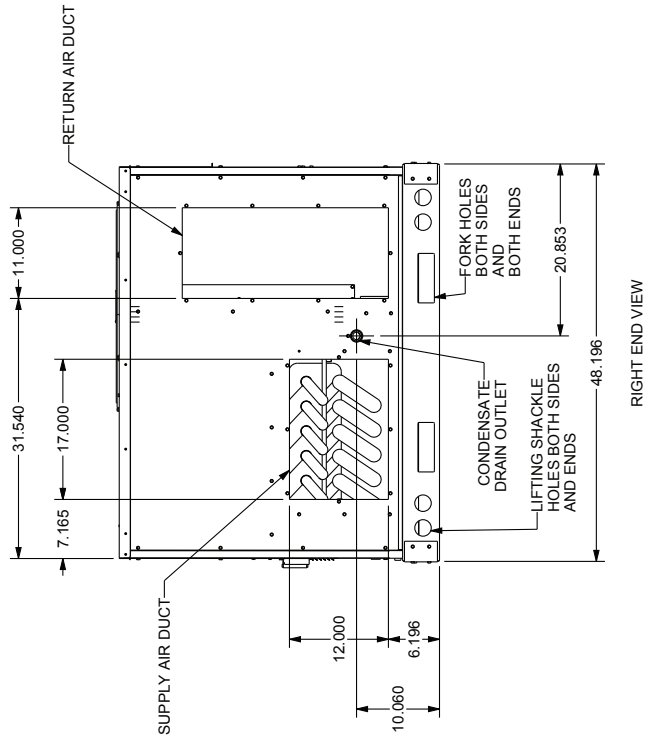
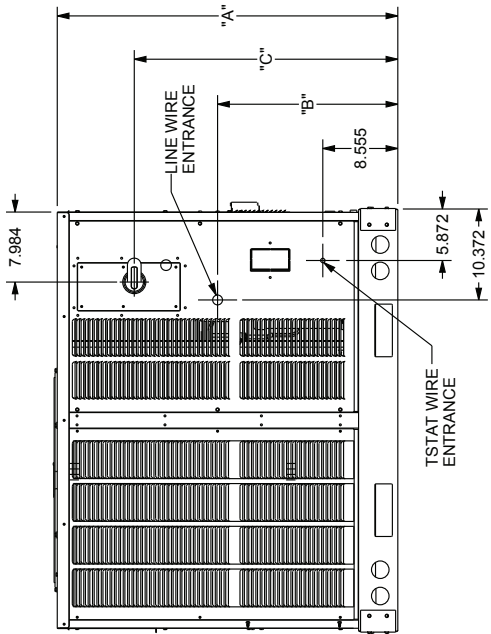
SHEET 1 OF 1

REV A

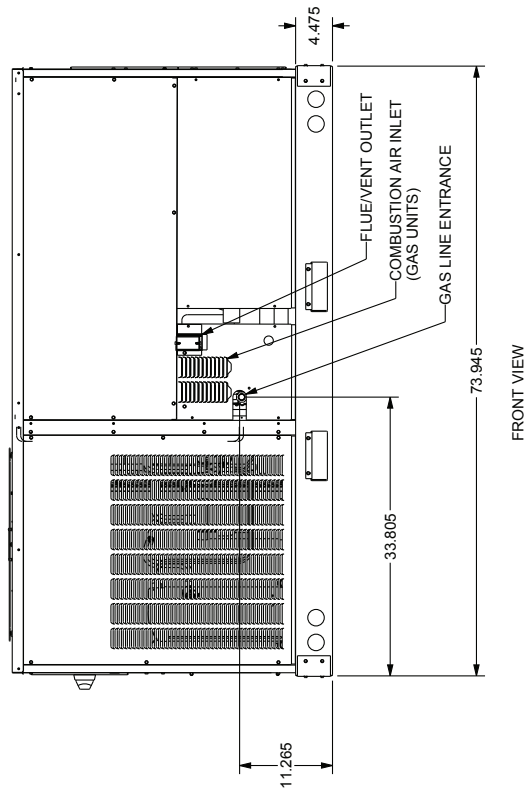
| MODEL | A DIMENS | B DIMENS | C DIMENS |
|--------------|----------|----------|----------|
| GPH1660M41** | 42.840 | 20.555 | 30.055 |



TOP VIEW



RIGHT END VIEW



FRONT VIEW

ALL DIMENSIONS GIVEN ARE IN INCHES
ALL DIMENSIONS AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

Provisions for forks have been included in the unit base frame. No other fork locations are approved.

- Unit must be lifted by the four lifting holes located at the base frame corners.
- Lifting cables should be attached to the unit with shackles.
- The distance between the crane hook and the top of the unit must not be less than 60”.
- Two spreader bars must span over the unit to prevent damage to the cabinet by the lift cables. Spreader bars must be of sufficient length so that cables do not come in contact with the unit during transport. Remove wood struts mounted beneath unit base frame before setting unit on roof curb. These struts are intended to protect unit base frame from fork lift damage. To remove the struts, extract the sheet metal retainers and pull the struts through the base of the unit. Refer to rigging label on the unit.

Important: If using bottom discharge with roof curb, duct-work should be attached to the curb prior to installing the unit. Duct-work dimensions are shown in Roof Curb Installation Instructions Manual.

Refer to the Roof Curb Installation Instructions for proper curb installation. Curbing must be installed in compliance with the National Roofing Contractors Association Manual.

Lower unit carefully onto roof mounting curb. While rigging the unit, the center of gravity will cause the condenser end to be lower than the supply air end.

Bring condenser end of unit into alignment with the curb. With condenser end of the unit resting on curb member and using curb as a fulcrum, lower opposite end of the unit until entire unit is seated on the curb. When a rectangular cantilever curb is used, take care to center the unit. Check for proper alignment and orientation of supply and return openings with duct.

To assist in determining rigging requirements, unit weights are shown on the following page.

Curb installations must comply with local codes and should follow the established guidelines of the National Roofing Contractors Association.

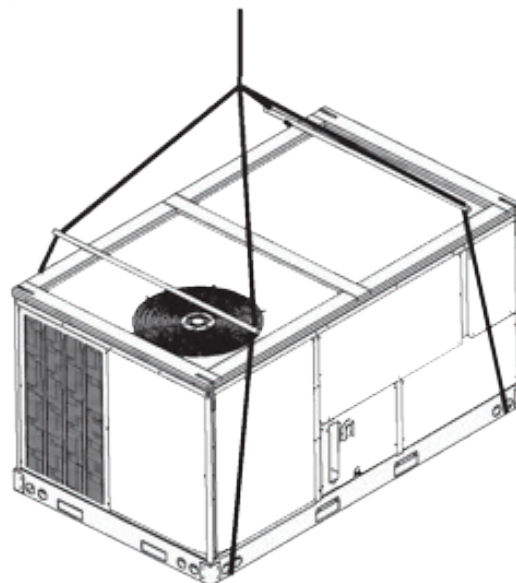
Proper unit installation requires that the roof curb be firmly and permanently attached to the roof structure. Check for adequate fastening method prior to setting the unit on the curb.

Full perimeter roof curbs are available from the factory and are shipped unassembled. The installing contractor is responsible for field assembly, squaring, leveling, and mounting on the roof structure. All required hardware necessary for the assembly of the sheet metal curb is included in the curb accessory package.

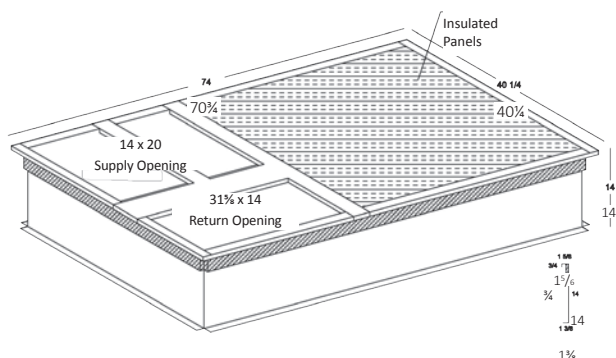
- Determine sufficient structural support before locating and mounting the curb and package unit.
- Duct-work must be constructed using industry guidelines. The duct-work must be placed into the roof curb before mounting the package unit. Our full perimeter curbs include duct connection frames to be assembled with the curb. Cantilevered-type curbs are not available from the factory.
- Contractor furnishes curb insulation, cant strips, flashing, and general roofing material.
- Support curbs on parallel sides with roof members. To prevent damage to the unit, the roof members cannot penetrate supply and return duct openings.

Note: The unit and curb accessories are designed to allow vertical duct installation before unit placement. Duct installation after unit placement is not recommended.

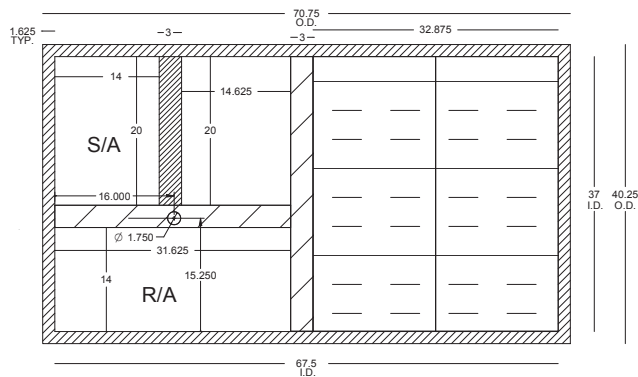
See the manual shipped with the roof curb for assembly and installation instructions.



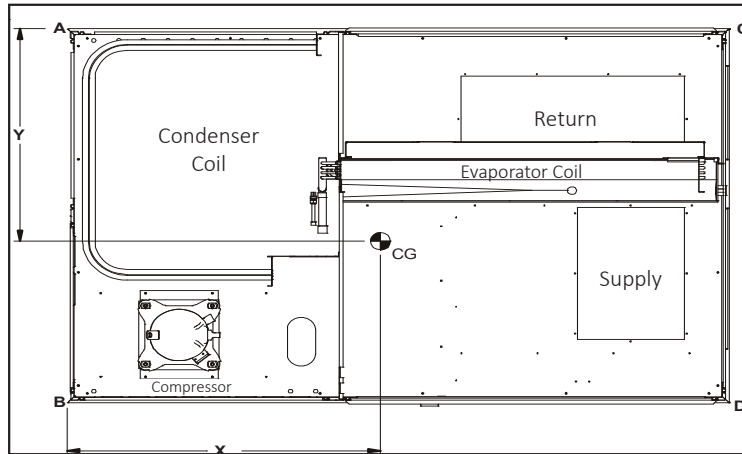
3-D VIEW



TOP VIEW



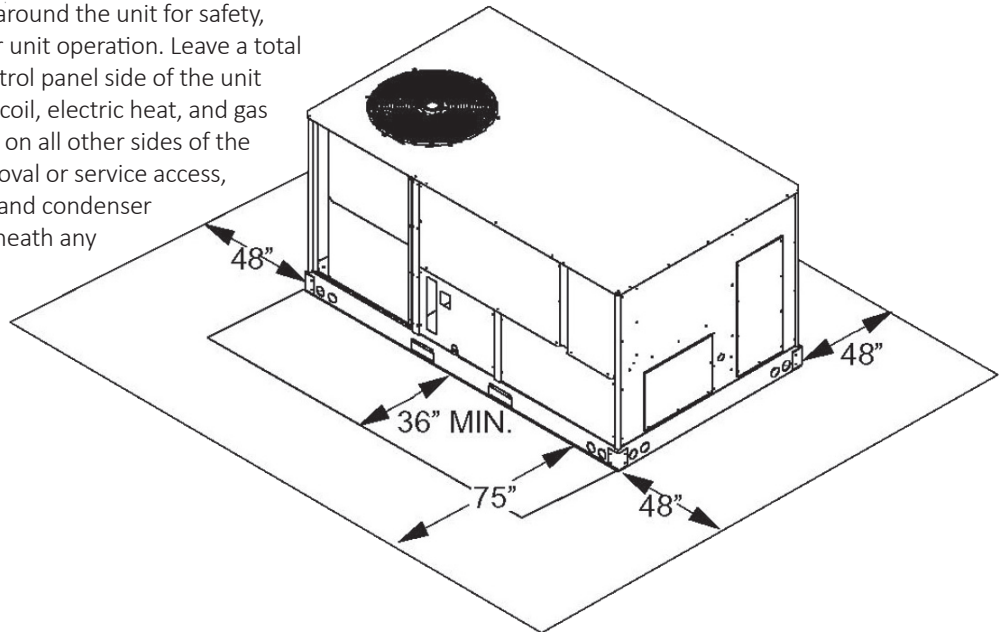
CORNER & CENTER-OF-GRAVITY LOCATIONS

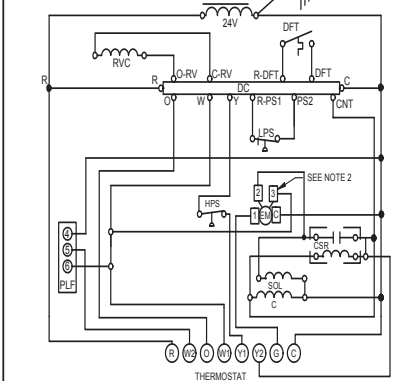
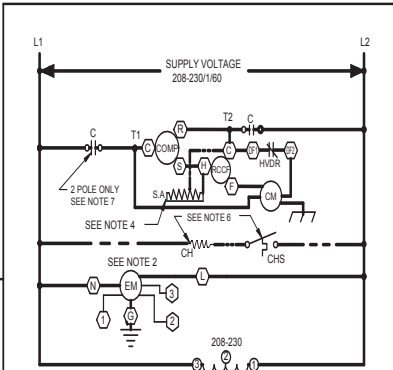
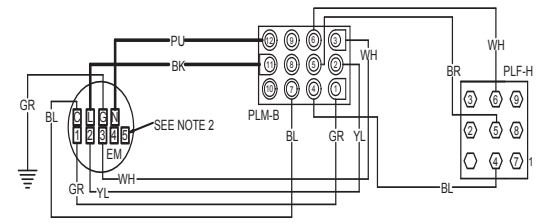
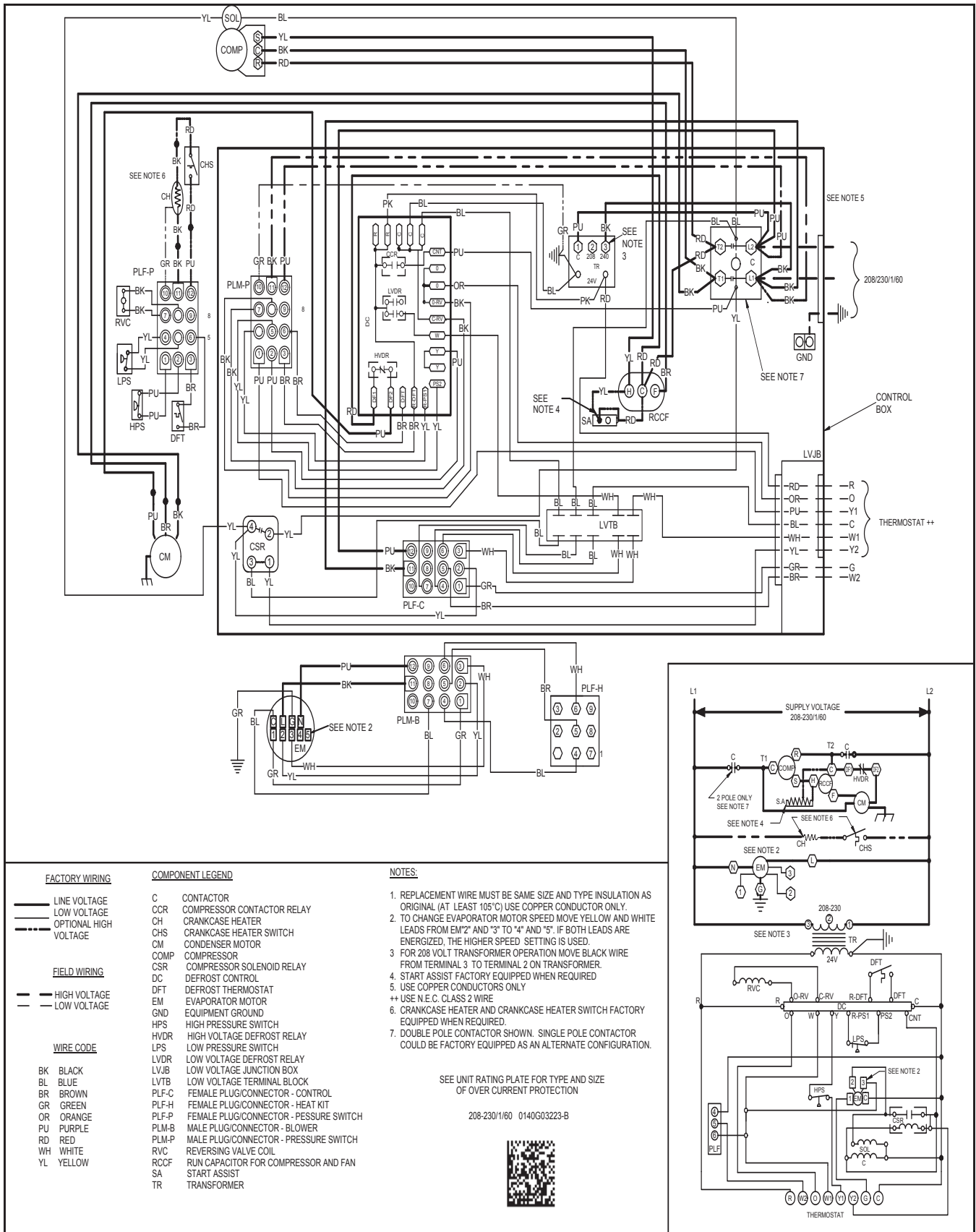


| MODEL | X (IN) | Y (IN) | SHIPPING WEIGHT (LBS) | OPERATING WEIGHT (LBS) | CORNER WEIGHTS (LBS.) | | | |
|--------------|--------|--------|-----------------------|------------------------|-----------------------|-----|----|-----|
| | | | | | A | B | C | D |
| GPH1660M41** | 40.0 | 25.1 | 612 | 583 | 204 | 113 | 72 | 194 |

UNIT CLEARANCES

Maintain an adequate clearance around the unit for safety, service, maintenance, and proper unit operation. Leave a total clearance of 75" on the main control panel side of the unit for possible removal of fan shaft, coil, electric heat, and gas furnace. Leave a clearance of 48" on all other sides of the unit for possible compressor removal or service access, and to ensure proper ventilation and condenser airflow. Do not install the unit beneath any obstruction. Install the unit away from all building exhausts to inhibit ingestion of exhaust air into the unit's fresh-air intake.





FACTORY WIRING

- LINE VOLTAGE
- LOW VOLTAGE
- OPTIONAL HIGH VOLTAGE

FIELD WIRING

- HIGH VOLTAGE
- LOW VOLTAGE

WIRE CODE

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

COMPONENT LEGEND

- C CONTACTOR
- CCR COMPRESSOR CONTACTOR RELAY
- CH CRANKCASE HEATER
- CHS CRANKCASE HEATER SWITCH
- CM CONDENSER MOTOR
- COMP COMPRESSOR
- CSR COMPRESSOR SOLENOID RELAY
- DC DEFROST CONTROL
- DFT DEFROST THERMOSTAT
- DFT DEFROST THERMOSTAT
- EM EVAPORATOR MOTOR
- GND EQUIPMENT GROUND
- HPS HIGH PRESSURE SWITCH
- HVDR HIGH VOLTAGE DEFROST RELAY
- LPS LOW PRESSURE SWITCH
- LVDL LOW VOLTAGE DEFROST RELAY
- LVJB LOW VOLTAGE JUNCTION BOX
- LVTB LOW VOLTAGE TERMINAL BLOCK
- PLF-C FEMALE PLUG/CONNECTOR - CONTROL
- PLF-H FEMALE PLUG/CONNECTOR - HEAT KIT
- PLF-P FEMALE PLUG/CONNECTOR - PEASURE SWITCH
- PLM-B MALE PLUG/CONNECTOR - BLOWER
- PLM-P MALE PLUG/CONNECTOR - PEASURE SWITCH
- RVC REVERSING VALVE COIL
- RCCF RUN CAPACITOR FOR COMPRESSOR AND FAN
- SA START ASSIST
- TR TRANSFORMER

NOTES:

1. REPLACEMENT WIRE MUST BE SAME SIZE AND TYPE INSULATION AS ORIGINAL (AT LEAST 105°C) USE COPPER CONDUCTOR ONLY.
2. TO CHANGE EVAPORATOR MOTOR SPEED MOVE YELLOW AND WHITE LEADS FROM EM"2" AND "3" TO "4" AND "5". IF BOTH LEADS ARE ENERGIZED, THE HIGHER SPEED SETTING IS USED.
3. FOR 208 VOLT TRANSFORMER OPERATION MOVE BLACK WIRE FROM TERMINAL 3 TO TERMINAL 2 ON TRANSFORMER.
4. START ASSIST FACTORY EQUIPPED WHEN REQUIRED
5. USE COPPER CONDUCTORS ONLY
- ++ USE N.E.C. CLASS 2 WIRE
6. CRANKCASE HEATER AND CRANKCASE HEATER SWITCH FACTORY EQUIPPED WHEN REQUIRED.
7. DOUBLE POLE CONTACTOR SHOWN. SINGLE POLE CONTACTOR COULD BE FACTORY EQUIPPED AS AN ALTERNATE CONFIGURATION.

SEE UNIT RATING PLATE FOR TYPE AND SIZE OF OVER CURRENT PROTECTION

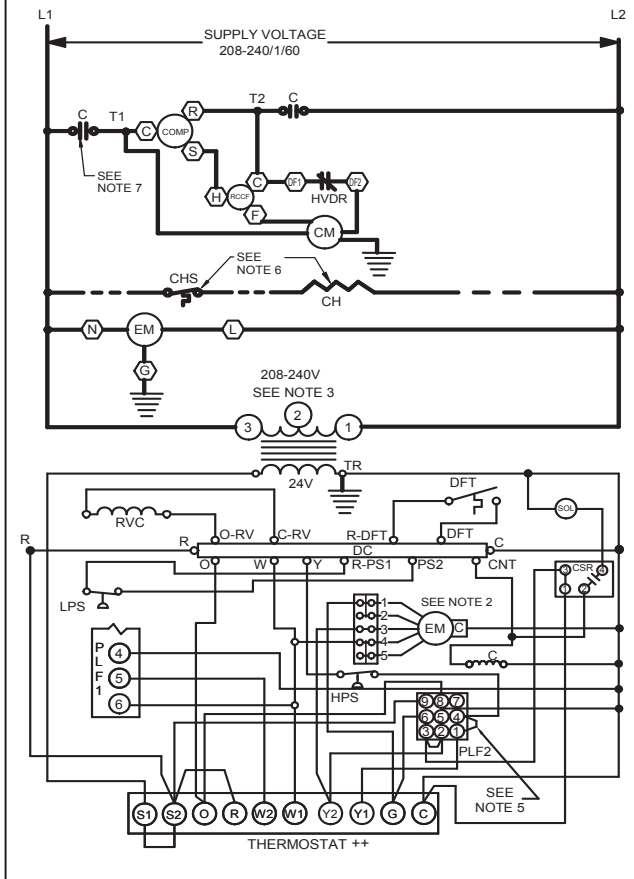
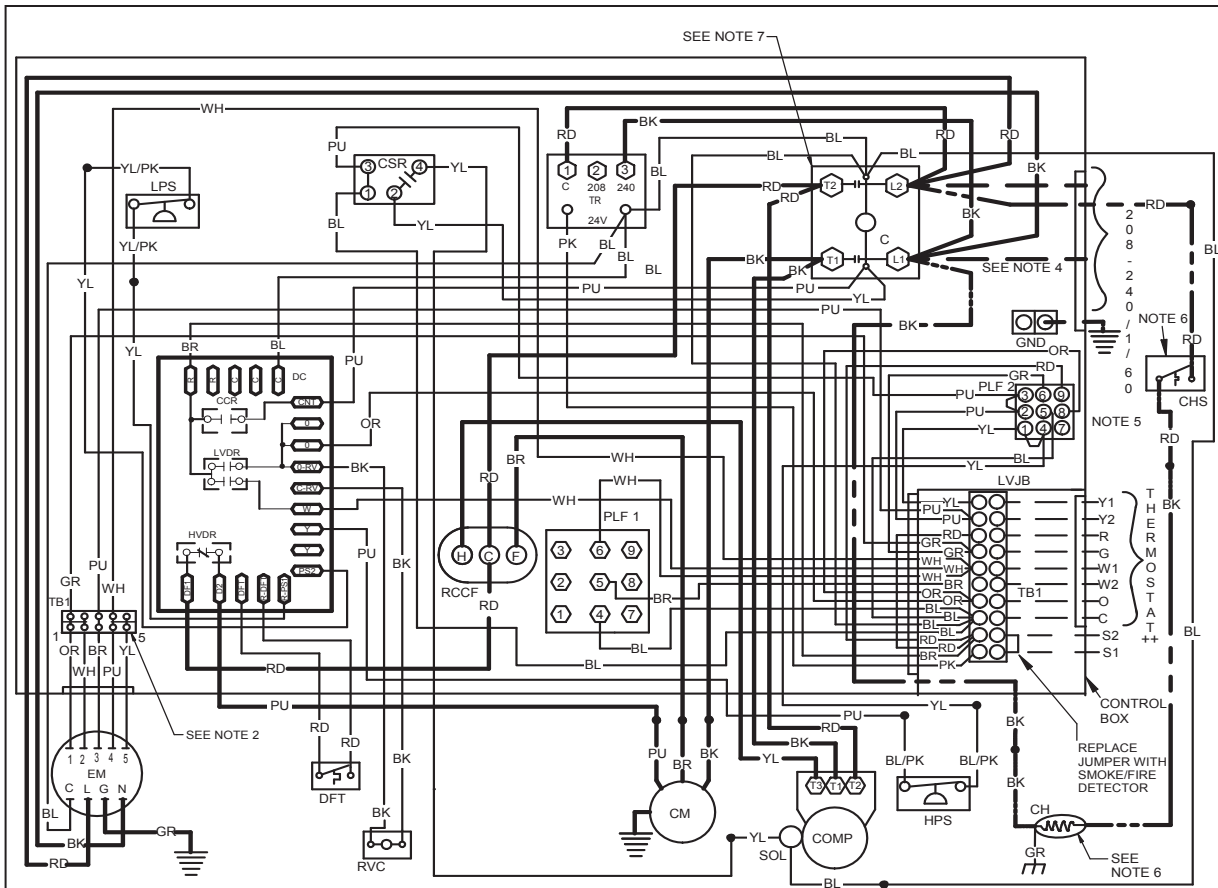
208-230/1/60 0140G03223-B



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



High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.



COMPONENT LEGEND

- C CONTACTOR
- CCR COMPRESSOR CONTACTOR RELAY
- CH CRANKCASE HEATER
- CHS CRANKCASE HEATER SWITCH
- CM CONDENSER MOTOR
- COMP COMPRESSOR
- DC DEFROST CONTROL
- DFT DEFROST THERMOSTAT
- ECON ECONOMIZER
- EM EVAPORATOR MOTOR
- GND EQUIPMENT GROUND
- HPS HIGH PRESSURE SWITCH
- HVDR LOW VOLTAGE DEFROST RELAY
- LPS LOW PRESSURE SWITCH
- LVDR LOW VOLTAGE DEFROST RELAY
- LVJB LOW VOLTAGE JUNCTION BOX
- PLF FEMALE PLUG / CONNECTOR
- RVC REVERSING VALVE COIL
- RCCF RUN CAPACITOR FOR COMPRESSOR AND FAN TRANSFORMER
- TB1 TERMINAL BLOCK (24V SIGNAL)
- TR TRANSFORMER

NOTES:

- REPLACEMENT WIRE MUST BE SAME SIZE AND TYPE INSULATION AS ORIGINAL (AT LEAST 105°C) USE COPPER CONDUCTOR ONLY.
- TO CHANGE EVAPORATOR MOTOR SPEED MOVE WHITE AND YELLOW LEADS FROM "3" AND "4" TO "4" AND "5". IF BOTH LEADS ARE ENERGIZED, THE HIGHER SPEED SETTING IS USED.
- FOR 208 VOLT TRANSFORMER OPERATION MOVE BLACK WIRE FROM TERMINAL 3 TO TERMINAL 2 ON TRANSFORMER.
- USE COPPER CONDUCTORS ONLY
- ++ USE N.E.C. CLASS 2 WIRE
- ECONOMIZER PLUG LOCATED IN THE RETURN AIR COMPARTMENT. REMOVE MALE PLUG AND ATTACH FEMALE PLUG TO ECONOMIZER ACCESSORY.
- CRANKCASE HEATER AND CRANKCASE HEATER SWITCH FACTORY EQUIPPED WHEN REQUIRED.
- DOUBLE POLE CONTACTOR SHOWN. SINGLE POLE CONTACTOR COULD BE FACTORY EQUIPPED AS AN ALTERNATE CONFIGURATION.

SEE UNIT RATING PLATE FOR TYPE AND SIZE OF OVER CURRENT PROTECTION

| | |
|--------------------------------|------------------|
| JUNCTION | EQUIPMENT GROUND |
| TERMINAL | FIELD GROUND |
| INTERNAL TO INTEGRATED CONTROL | FIELD SPLICE |
| PLUG CONNECTION | SWITCH (TEMP) |
| SWITCH (PRESS.) | SWITCH (TEMP) |
| OVERCURRENT PROT. DEVICE | IGNITER |

208-240/1/60 0140G0447-B

FACTORY WIRING

- LINE VOLTAGE
- LOW VOLTAGE
- - - OPTIONAL HIGH VOLTAGE
- - - OPTIONAL LOW VOLTAGE

FIELD WIRING

- - - HIGH VOLTAGE
- - - LOW VOLTAGE

WIRE CODE

- BK BLACK
- BL BLUE
- BR BROWN
- GR GREEN
- OR ORANGE
- PK PINK
- RD RED
- PU PURPLE
- YL YELLOW
- WH WHITE
- BL/PK BLUE WITH PINK STRIP
- YL/PK YELLOW WITH PINK STRIP

High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

WARNING

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

FOR THE GPH1624-48M41** UNITS

| ACCESSORY DESCRIPTION | ITEM NUMBER | |
|---|----------------|---------------|
| | MEDIUM CHASSIS | LARGE CHASSIS |
| Concentric Kit | CDK36 | CDK4872 |
| Downflow Economizer | GPJMED102 | GPJMED103 |
| Downflow Internal Filter Rack | DDNIFRPGMM | DDNIFRPGML |
| Downflow Manual Damper | PGMDD102 | PGMDD103 |
| Downflow Motorized Damper | PGMDMD102 | PGMDMD103 |
| Downflow Square to Round | SQRPG102 | SQRPG103 |
| Economizer Wiring Harness | 0259L00411 | 0259L00411 |
| External Horizontal Filter Rack | GPGHFR102 | GPGHFR103 |
| Horizontal Duct Cover | 20464501PDGK | 20464502PDGK |
| Horizontal Economizer | DHZECNJPCHM | DHZECNJPCHL |
| Horizontal Manual Damper | PGMDH102 | PGMDH103 |
| Horizontal Motorized Damper | PGMDMH102 | PGMDMH103 |
| Horizontal Square to Round | SQRPGH102 | SQRPGH103 |
| Outdoor Thermostat & Emergency Heat Relay Kit | OT/EHR18-60 | OT/EHR18-60 |
| Outdoor Thermostat Kit w/ Lockout Stat | OT18-60A | OT18-60A |
| Roof Curb | D14CRBPGCHMA | D14CRBPGCHMA |

FOR THE GPH1660M41 UNITS**

| DAIKIN MASTER ITEM # | DESCRIPTION |
|-------------------------|--|
| 14CURB3672 | 14" Roof Curb |
| D25FD3672 | 25% Manual Fresh Air Damper |
| D25MFD3672 | 25% Motorized Fresh Air Damper |
| CDK4872 | Concentric Duct Kit |
| DDNECNJ3672B | Low-leak Downflow Economizer |
| DDNECNJ3672NR | Downflow Economizer w/o Barometric Relief |
| DDNSQRD487218 | Downflow Square-to-Round Adapter (18" Round) |
| DHZECNJ3672 | Horizontal Economizer |
| GHRC-1 | Hurricane Restraint Clips |
| DBRD3672 | Barometric Relief Damper |
| LAKT01 | Low-Ambient Kit |

SINGLE-POINT KIT ACCESSORY KITS

Select the single-point kit accessory based on the unit model.

| MODEL | SINGLE-POINT KIT |
|--------------|------------------|
| GPH1624M41** | SPK-30 |
| GPH1630M41** | SPK-35 |
| GPH1636M41** | SPK-40 |
| GPH1642M41** | SPK-45 |
| GPH1648M41** | SPK-50 |
| GPH1660M41** | SPKT01/02 |

Horizontal lines for notes, with three binder holes on the right side.