ComfortNet™

# CTK03 ComfortNet™

## Prestige Communicating Control for Residential and Light Commercial Applications

The ComfortNet™ brand touch-screen digital control works with both the Amana® brand and Goodman® brand ComfortNet-ready heating and cooling systems.

### Feature Factors

- Advanced ventilation control
- Heat pump balance point
- Auxiliary heat lock-out
- Continuous fan speed (high, medium, low)
- Full-color display
- Commercial / residential selection option
- On-board dehumidification capability
- Humidification control
- Humidifier type selection
- Wireless humidification option
- Window frost / condensation protection
- Southern dehumidification control
- Multiple commercial dehumidification options
- Indoor temperature averaging
- Device naming option
- Outdoor temperature display
- Outdoor humidity display (with RedLink)
- Wireless accessory capability
- Multi-lingual (English, French, Spanish)
- Air filter maintenance reminder
- UV lamp maintenance reminder
- Humidifier pad maintenance reminder
- Electronic air cleaner maintenance reminder
- Continuous backlight
- Adjustable backlight & contrast
- Temperature display adjustment
- Humidity display adjustment
- Temperature display °F or °C
- Max heat & min. cool set-point temps
- Max / min temperature / humidity alerts

### Programming

- User instruction log (historical)
- Advanced staging control
- Heat and cool cycle rate adjustable
- Energy management recovery
- Internet access
- Home screen theme options
- Customizable home screen
- Keypad lock-out options
- Auto-display dimming option
- Dealer information capability
- USB upload dealer information & set-up

### Specifications

| | ENERGY STAR GSH13A | ENERGY STAR GSH16A | ENERGY STAR GH13A | ENERGY STAR GH16A |
|---|---|---|---|---|
| **Capacities and Ratings** | | | | |
| Nominal Cooling (BTU/h) | 24,000 | 36,000 | 48,000 | 60,000 |
| Nominal Heating (BTU/h) | 24,000 | 36,000 | 48,000 | 60,000 |
| Decibels | 72 | 73 | 74 | 75 |
| **Compressor** | | | | |
| RLA | 11.7 | 15.3 | 21.2 | 28.8 |
| LRA | 58.3 | 83.0 | 104.0 | 117.9 |
| **Condenser Fan Motor** | | | | |
| Horsepower | 1/8 | 1/8 | 1/4 | 1/4 |
| FLA | 1.2 | 1.2 | 1.2 | 1.2 |
| **Refrigeration System** | | | | |
| Refrigerant Line Size[2] | | | | |
| Liquid Line Size (*O.D.) | ¼" | ¼" | ¼" | ¼" |
| Suction Line Size (*O.D.) | ¾" | ¾" | ⅞" | ⅞" |
| Refrigerant Connection Size | | | | |
| Liquid Valve Size (*O.D.) | ¼" | ¼" | ¼" | ¼" |
| Suction Valve Size (*O.D.) | ¾" | ¾" | ¾" | ¾" |
| Valve Connection Type | Sweat | Sweat | Sweat | Sweat |
| Refrigerant Charge | 155 | 205 | 243 | 273 |
| Shipped with Oil/Per Size | NA | NA | NA | NA |
| **Electrical Data** | | | | |
| Volts - Hz | 208/230-60 | 208/230-60 | 208/230-60 | 208/230-60 |
| Minimum Circuit Ampacity[3] | 15.8 | 20.5 | 27.7 | 37.2 |
| Max. Overcurrent Protection[3] | 25 | 35 | 45 | 60 |
| Min / Max Volts | 197/253 | 197/253 | 197/253 | 197/253 |
| Power Supply Conduit Size | ½" or ¾" | ½" or ¾" | ½" or ¾" | ½" or ¾" |
| **Equipment Weight** | 217 | 224 | 288 | 288 |
| **Ship Weight (lbs)** | 230 | 286 | 310 | 310 |

[1] Tested and rated in accordance with AHRI Standard 210/240
[2] Wire size should be determined in accordance with National Electrical Code(s). excessive wire runs will require larger wire sizes
[3] Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.

**Notes:**

- Always check the rating plate for electrical data on the unit being installed.
- Installer will need to supply ¼" to ⅜" adapters for suction line connection.
- Do not install TXV kit on units with 5/8" sweat suction line. System charge must be adjusted per installation Instruction Final Charge Procedure.
- Installation of these units requires the specified TXV kit to be installed on the indoor coil. THE SPECIFIED TXV IS DETERMINED BY THE OUTDOOR UNIT NOT THE INDOOR COIL.

### Specifications

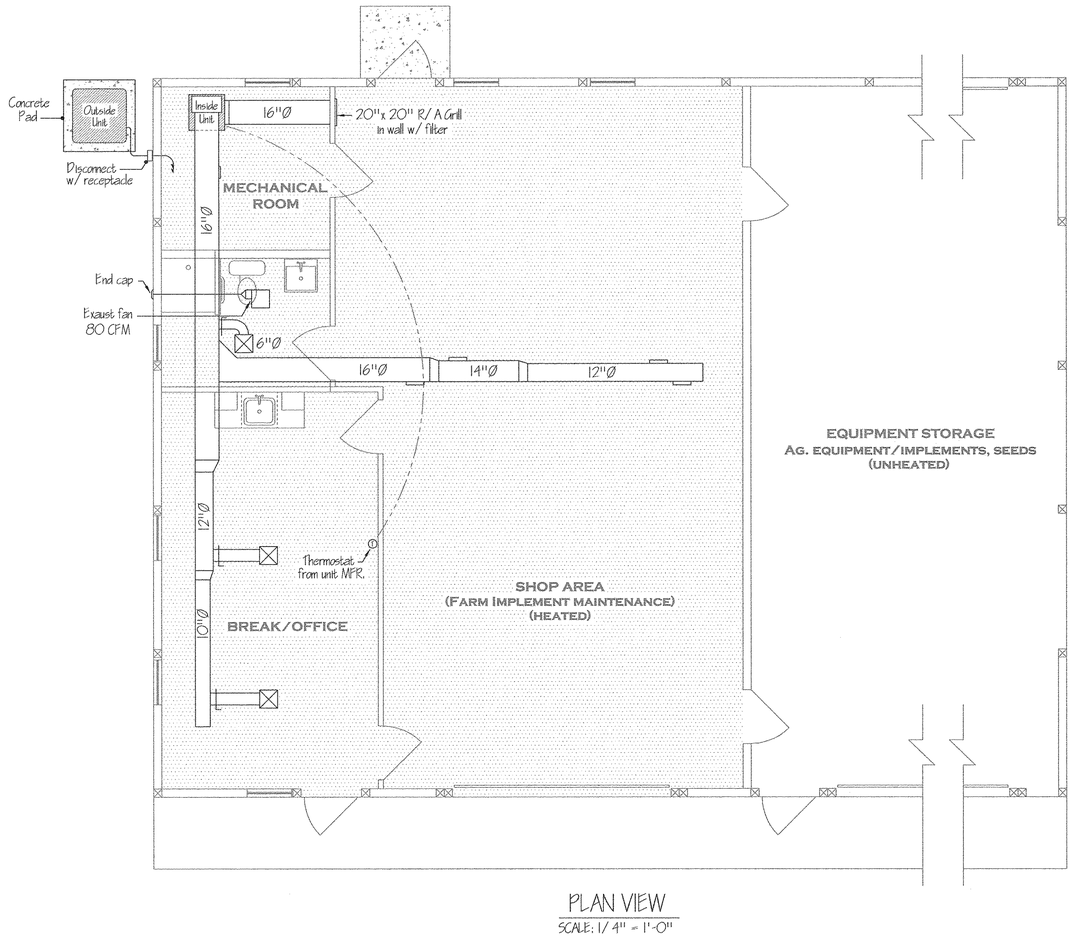
| | AVPTC 183014 | AVPTC 313714 | AVPTC 426014 |
|---|---|---|---|
| **Nominal Ratings** | | | |
| Cooling (BTU/h) | 18,000-30,000 | 30,000-36-000 | 42,000-60,000 |
| CFM (High/ Low) | 1,200/ 600 | 1,200/ 600 | 1,800/ 1,200 |
| **Blower** | | | |
| Diameter | 9½" | 10½" | 10½" |
| Width | 8" | 10½" | 10½" |
| Coil Drain Connection FPT | ¾" | ¾" | ¾" |
| **Service Valve** | | | |
| Liquid | ⅜" | ⅜" | ⅜" |
| Suction | ¾" | ¾" | ¾" |
| **Electrical Data** | | | |
| Voltage | 208/240 | 208/240 | 208/240 |
| Electric Heat Capacity (kW) | 3, 5, 8, 10 | 3, 5, 6, 8, 10, 15 | 3, 5, 6, 8, 10, 15, 20 |
| Min Circuit Ampacity | 4.9/4.9 | 6.5/6.5 | 8.6/8.6 |
| Max. Overcurrent Device (amps) | 15/15 | 15/15 | 15/15 |
| Minimum VAC | 197 | 197 | 197 |
| Maximum VAC | 253 | 253 | 253 |
| **Blower Motor** | | | |
| FLA | 3.9 | 5.2 | 6.9 |
| HP | ½ | ¾ | 1 |
| **Ship Weight (lbs)** | 127 | 178 | 197 |

NOTE:

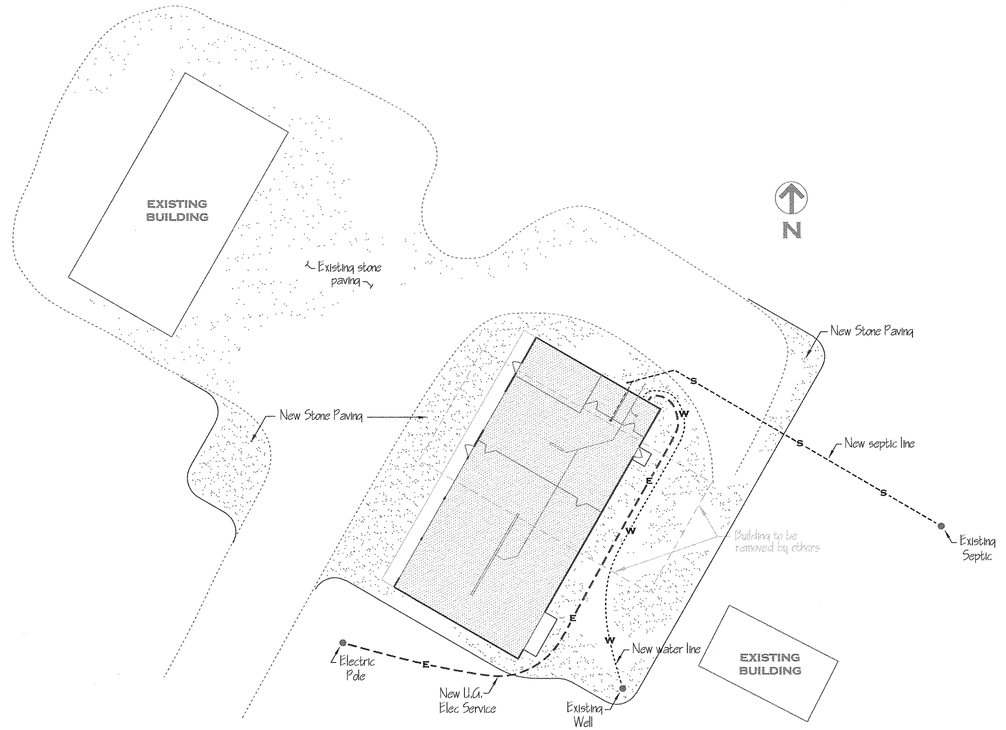
LAYOUT OF DUCTS, DUCT SIZES AND DIFFUSERS ARE MEANT TO BE USED AS A GUIDELINE.
ACTUAL RUNS, SIZES AND LOCATIONS TO BE DETERMINED BY MANUFACTURER'S MODEL.
THE FOLLOWING STEPS SHOULD BE FOLLOWED IN THE DESIGN AND INSTALLATION OF THE HVAC SYSTEM TO ENSURE EFFICIENCY AND COMFORT.

1. DETERMINE ROOM-BY-ROOM AND AIR-FLOWS USING ACCA MANUAL J CALCULATION PROCEDURES. (OR SUBSTANTIALLY EQUIVALENT)
2. SIZE DUCT SYSTEM ACCORDING TO ACCA MANUAL D CALCULATION PROCEDURES. (OR SUBSTANTIALLY EQUIVALENT)
3. SIZE HVAC EQUIPMENT TO SENSIBLE LOAD USING ACCA MANUAL S CALCULATION PROCEDURES (OR SUBSTANTIALLY EQUIVALENT).
4. INSTALL EQUIPMENT & DUCTS ACCORDING TO DESIGN SPECIFICATIONS USING INSTALLATION REQUIREMENTS AND PROCEDURES FROM SMACNA AND MANUFACTURERS' SPECIFICATIONS.
5. INSTALL SO STATIC AIR PRESSURE DROP ACROSS THE AIR HANDLER IS WITHIN MANUFACTURER AND DESIGN SPECIFICATIONS.
6. PROVIDE BALANCED AIR FLOWS BETWEEN SUPPLY AND RETURN SYSTEMS TO MAINTAIN NEUTRAL PRESSURE.
7. EQUIPMENT AND ASSOCIATED ITEMS MUST BE APPROVED BY PGC HARRISBURG ENGINEERING DIVISION BEFORE START OF INSTALLATION.

HEAT PUMP TO BE A GOODMAN 4 TON DS2C1 6 OUTSIDE CONDENSER WITH MATCHED INDOOR AIR HANDLER / COIL TO ACHIEVE A MINIMUM 16 SEER AND 9.5 HSPF (OR SUBSTANTIALLY EQUIVALENT).
OUTSIDE UNIT TO HAVE A TWO STAGE SCROLL COMPRESSOR AND MATCHED TO INSIDE UNIT W/ VARIABLE SPEED MOTOR TO PROVIDE OPTIMUM EFFICIENCY.




PLAN VIEW
SCALE: 1/ 4" = 1'-0"




SITE PLAN
SCALE: 1" = 20'

Approximate Distances from building to property line

| | |
|---|---|
| North | 830 ft. |
| South | 2,120 ft. |
| East | 2,850 ft. |
| West | 620 ft. |

Site located @ 540 Game Farm Road, approximately 1.2 miles south of Harlansburg, PA 16101 in Scott Twp., Lawrence County.

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
FOSTER R. SCHAFFER
ENGINEER No. PE-039260-E

1/4/18

# PENNSYLVANIA GAME COMMISSION

| STATE GAME LANDS #216 | SCOTT TWP. | LAWRENCE CO. |
|---|---|---|

HVAC DETAILS and SITE PLAN

| REVISIONS | | |
|---|---|---|
| | PROJECT NO. | PGC-216-18-1 |
| | DRAWING NO. | 216-HVAC-5 |
| | DRAWN BY: | JBM |
| | DATE: | 12-27-17 |
| | SHEET NO. | 5 OF 5 |