

Ceiling Mount systems Split 1.5–5 Tons

Precision cooling & humidity control for small to medium areas.



# MTE-P-212

Mini-Temp

**Evaporator** 

Plus

# **Nominal Tonnage**

1.5-2 Ton

# Voltage

2 - 208

3 - 380

4 - 460

7 - 277

## Phase

1-1 phase

3 - 3 phase

# **CFCU-212**

**CF** - Centrifugal Type

**PF** - Propeller Type

**WC** - Water Cooled Type

**CU-** Condensing Unit

# Nominal Tonnage

1.5-2 Ton

# Voltage

2 - 208

3 - 380

4 - 460

7 - 277

## Phase

1-1 phase

3 - 3 phase

### Standard Features

Precise environmental control systems are designed to protect sensitive electronic equipment. The Compu-Aire Mini-Temp Plus environmental control systems meet the demands of computer rooms, and other spot cooling operations, while offering the flexibility and convenience of an easy installation.

Installed above the ceiling, the Compu-Aire Mini-Temp Plus system maintains the temperature, wet bulb, and air distribution required.

## Computer Matched

The Compu-Aire Mini-Temp Plus system is designed to create the environment required for computers and other sensitive equipment. The Compu-Aire Mini-Temp Plus provides complete control of temperature and humidity, 24 hours a day, 7 days a week.

## **Easy Service**

Low maintenance components are easily accessible through removable panels, and they do not require disconnecting of piping or electrical wiring. Compu-Aire stocks spare parts in inventory and they are available on short notice.

**High Efficiency** 

A high sensible heat ratio, two selectable direct drive fan speeds (optional), and precise control allow the Compu-Aire Mini-Temp Plus to operate efficiently. The 5 ton Compu-Aire Mini-Temp Plus also has a belt drive motor, and a two stage cooling coil (optional), providing an extra step of control for energy efficiency.

**Quiet Operations** 

The hermetic scroll compressor is vibration isolated from the chassis. The zinc coated steel cabinet is insulated to ensure quiet operation. RELIABLE – The Compu-Aire Mini-Temp Plus installations are testimony to the system reliability. Components include a rugged hermetic scroll compressor, a high efficiency copper tube/aluminum fin evaporator coil, a double width/double inlet, 5 ton in belt drive, and a direct drive fan for 1.5 thru 3.0 ton system.

**Space Saving Design** 

All indoor components are installed above the ceiling; no floor space is required. The Compu-Aire Mini-Temp Plus units are available in a variety of configurations to provide application flexibility. Models include Air Cooled, Glycol Cooled, Water Cooled, and Chilled Water systems.

Units are available in a variety of flexible configurations: System available in Air, Water, Glycol, Water and Chilled Water.

### T-Stat

Thermostat continually samples temperature to regulate the individual system and automatically turns on cooling as needed. If optional humidifier is required, a humidistat shall be shipped for field installation.

- Programmable and or non-Programmable
- Wall mounted
- Back lit LCD



# OPTIONAL FEATURES Filter Box

The filter box is provided by the factory with a "V" filter bank and is provided with disposable filters rated at 30% efficiency based on ASHRAE 52-76 and are 2"thick.

## Steam Generating Humidifier

The Compu-Aire Mini-Temp Plus is equipped with a steam generating humidifier. It is complete with a disposable generator (cylinder), supply and drain valves, steam distributor, and electronic controls. When the cylinders need to be changed, it will be indicated to do so on the microprocessor control panel (when ordered).

### **Electric Reheat**

(5 TON) – The low watt density, finned tubular electric reheat coils help maintain room dry bulb conditions when the system is in dehumidification mode.

The reheat section includes U.L. approved temperature limits to protect the system from overheating.

### Air Distribution Plenum

An air discharge plenum may be attached to the Compu-Aire Mini-Temp Plus to fit through the 2' x 4' ceiling tile (1.5 thru 3 ton system only), eliminating the need for ductwork (not available with a 5 ton unit). The plenum includes an easily accessible filter compartment with disposable filter.

## **Condensate Pump**

A condensate pump with 35gph capacity and a 20ft. head is provided for field installation and is specially adapted to the unit. The power is either 115 or 23OV/1/6O and is for field installation.

### Low Ambient Control

FloodBack type (-30°F) FOR PFCU OR CFCU -The low ambient control system for the air cooled

condenser is a "floodback" type and it allows the startup and positive head pressure as low as -30°F. The "floodback" package includes a liquid receiver that is mounted in the main unit, a pressure relief valve, and a head pressure 3 way control valve for field mounting on the condenser.

### Low Ambient Control

Variable speed for PFCU (-20°F) – The PFCU condensing unit is provided with a vari-speed package for low ambient to -20°F.

It consists of a factory supplied, mounted, and wired weatherproof control panel and an SCR speed installed on the fan.

The speed controller modulates air delivery in direct response to head pressure and maintains the minimum head pressure required.



### **PFCU**

The Air Cooled Condenser Untit (PFCU) shall consist of Casing, Condenser Coil, and Direct-drive Propeller Fan(s) driven by individual Fan Motor(s), Fan Guard and Mounting Legs. All fan motors shall be factory wired to a common electrical control box.

The Air Cooled Condenser shall be arranged for Horizontal Air Flow. The Condenser will have Single Circuiting.

## Scroll Compressor

High efficiency Scroll compressor with internal muffler and spring for quiet, vibrationless performance.

Compressor rests on rubber isolators in an acoustically enclosed cabinet out of air stream.

- Phenolic Coating
- Electro Fin
- Blygold
- Weatherized Cabinet
- Stainless Steel

### **CFCU**

The Centrifugal Fan Condensing Unit (CFCU) Cabinet shall be constructed of heavy gage galvanized steel. Access panels shall be provided for ease of service.

The cabinet shall be designed for outdoor installation with a weatherized enamel finish.



## Interact and monitor remotely

Compu-Aire Inc. offers HVAC communication industry standard protocols that can adapt to you application needs.

Our controllers are capable to receive necessary sensor inputs from BMS and utilize it to control the equipment. The controls can monitor the BMS status and if BMS became offline, controller can seamlessly switchover to local sensors and set points to maintain your data center cooling demand.





Compu-Aire Inc. advanced microprocessing control system provides access to our equipment through building management system (BMS) supporting industrial standard protocols including Modbus, BACnet, and LonWorks. This ensures easy access to the remote management of the unit via modem and internet.

Available Communications Options:
Interfacing with the emerging protocols in the
HVAC sector and based on industry standards
supporting the following networks:
BACnet Over Ethernet
BACnet Over TCP/IP
BACnet MSTP
SNMP v1, v2, v3 networks with trap
Modbus
RS-485
LonWorks

# Compu-Aire Inc. 2200+ Series controlles



Compu-Aire Inc. 2200+ Series control provides a versatile approach to monitor the precise cooling and heating needs of your critical applications.

With the latest technology available to the customer, we are able to provide reliable and flexible features to allow the customer to manage even the most intricate application.

