

**CLIMA**  **COOL**®

A **NIBE** GROUP MEMBER



## **PW SERIES**

---

### WATER-SOURCE MODULAR CHILLERS

20-80 Tons





SPACE & COST  
SAVINGS



## WIDE VARIETY

of products and configurations to fulfill your application demands.

Climacool® is dedicated to providing flexible configurations to meet all your application needs, no compromises. These modular chillers are utilized in a wide variety of heating, cooling, and heat recovery applications in both commercial and industrial buildings. Whether the need is a dedicated chiller for off peak loads, comfort cooling, or heat recovery, the following fundamental design features are integral to providing a complete climate control solution.

**No compromises!**

## FEATURES AND BENEFITS

### Compact

The PW Series is ClimaCool's® latest innovation in our quest to provide the best in modular chiller solutions. The PW is available in cooling only, heat pump, and heat recovery applications. The all-new chassis is one of the most compact available with a maximum width of 30" for the 50-80 ton models. There is also a wealth of new options like lead/lag VFD compressor operation, 6" or 8" header racks or headerless, compressor sound blankets, and refrigerant pressure relief valves. The PW Series adds to the wealth ClimaCool provides as the ultimate advantage in environmentally friendly space conditioning product solutions.

### CoolLogic Touch™ Control System



The CoolLogic Touch Control System provides complete system

integration for ultimate chiller performance. It allows for control of modules via Ethernet cable and interfaces with native BACnet® communication. The CoolLogic Touch Control System governs all top-level events, timing and compressor staging and allows operator interface for all levels of setting and retrieving data. It maintains precise temperature control for cooling, heating, and simultaneous heating and cooling applications to ensure the highest building comfort for occupants.

### ELECTRIC HEATING TO MEET YOUR BUILDINGS' DECARBONIZATION & ELECTRIFICATION REQUIREMENTS

#### Energy Efficient

All Climacool modules are designed to meet or exceed ASHRAE 90.1 minimum efficiency requirements.

#### Environmentally Friendly

A micro charge of low GWP R-454B refrigerant offers better efficiency and minimal performance derate. With a GWP of 466, it fits well within current requirements.

### Expandable

Modular design allows for incremental system capacity to accommodate future growth.

### Service Friendly

Design allows easy access to major components making the models fully serviceable and maintainable without removing a module from the chiller bank or disassembling headers.

### Simple

Easy connect design simplifies installation, service and controls.

### Sustainable

Based on application, Climacool chillers can help meet LEED® prerequisites and contribute significant system points toward LEED building certification.

### True Redundancy

Separate module electrical feeds and dual independent refrigeration circuits provide true system redundancy.

### LEED® CATEGORIES SATISFIED BY CLIMACOOOL SYSTEMS:

#### Enhanced Commissioning and Measurement and Verification

CoolLogic Touch Control System provides maximum flexibility with BAS interface.

#### Optimized Energy Performance

Meets or exceeds ASHRAE 90.1 minimum efficiency requirements.

#### Thermal Comfort

Precise required heating and cooling ensures the highest comfort for building occupants.

# WATER-SOURCE MODULAR CHILLERS

## PW SERIES



All-new compact cabinet for maximum application flexibility and expandability to accommodate current and future needs. The PW Series is available in cooling only, heat pump, and heat recovery operation.

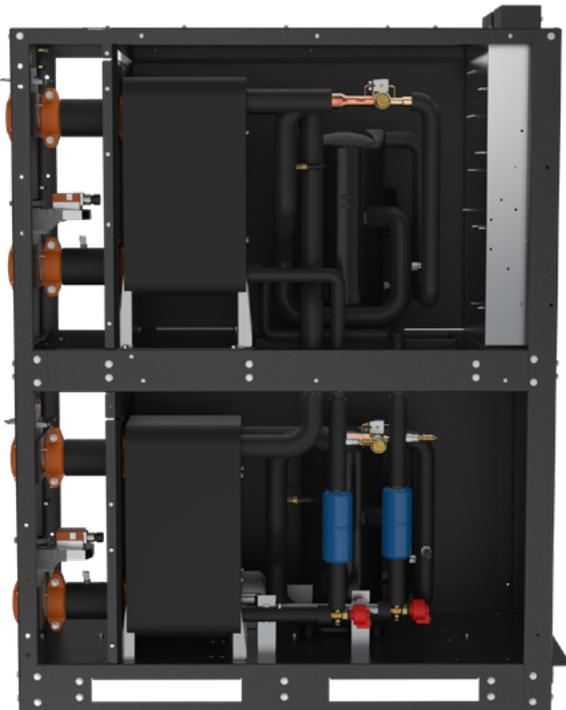
- **Tonnages:** 20, 30, 50, 65 & 80
- **Configurations:** From 20–960 tons per bank
- **Voltages:** 208, 230, 460, 575
- **Dimensions:**
  - 20 & 30 tons:
    - 24.75" w x 70.1" h x 55.0" d  
*(Add 9" d for 6" Header Rack or 11" d for 8" Header Rack)*
    - (62.87 cm x 178.05 cm x 129.70 cm)  
*(Add 22.86" cm for 6" Header Rack or 27.94" cm for 8" Header Rack)*
  - 50, 70 & 80 tons:
    - 30.75" w x 73.5" h x 60.0" d  
*(Add 9" d for 6" Header Rack or 11" d for 8" Header Rack)*
    - (78.11 cm x 186.69 cm x 152.40 cm)  
*(Add 22.86 cm d for 6" Header Rack or 27.94" cm for 8" Header Rack)*

## Standard Features and Advantages

- Rugged scroll compressors with optional lead/lag variable speed VFD.
- Bank controller supports up to 12 modules
- Removable design for service without interrupting operation of other modules in the bank
- Fully insulated cabinet with optional compressor sound blankets
- Application flexibility
  - Cooling
  - Heating
  - Heat Recovery
- Rated for 300 psi hydronic systems
- Integrated accessories to reduce field installation
- Digital controls with BMS integration and optional factory remote monitoring available

## MODULAR CONSTRUCTION

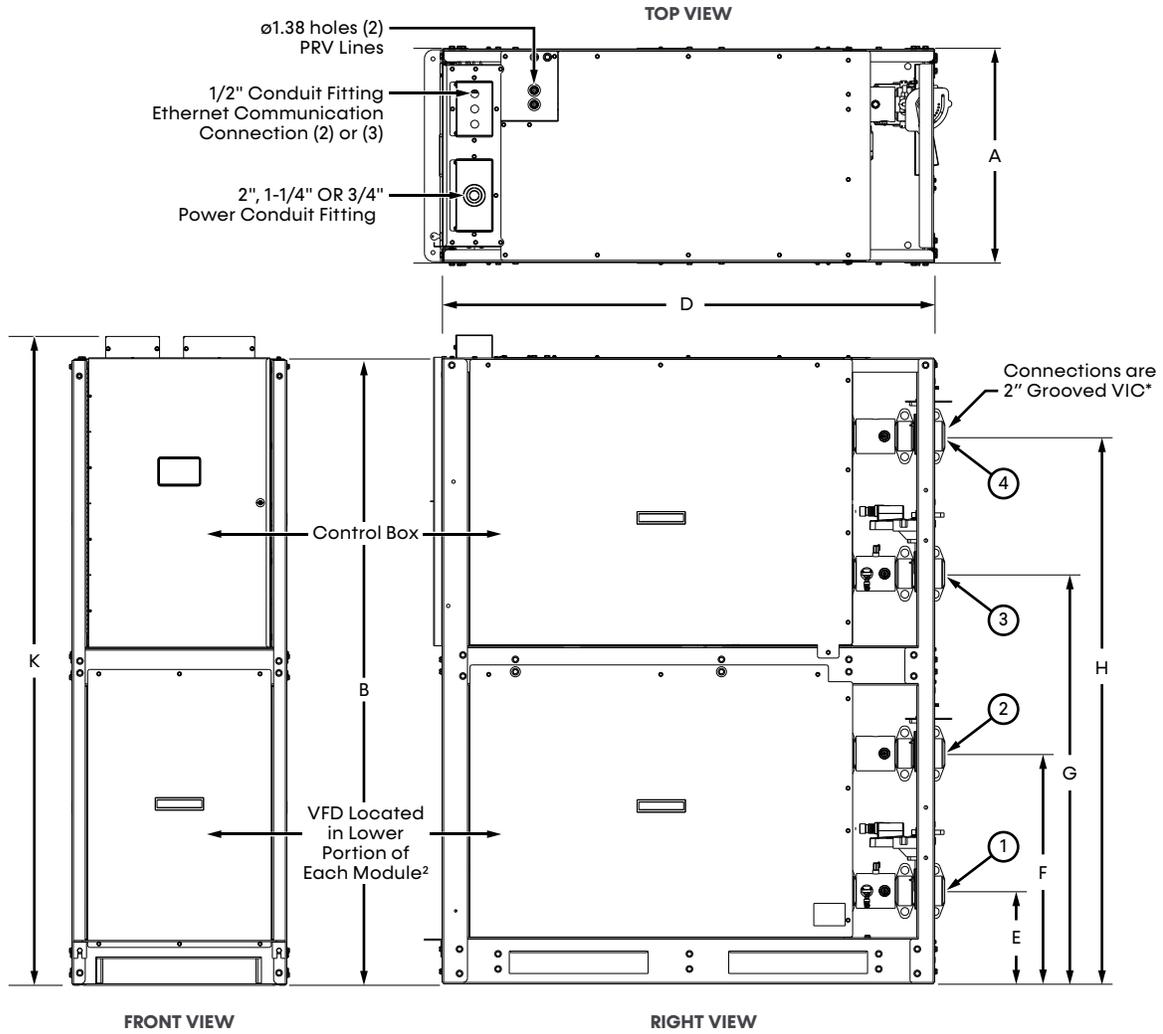
Modules can be added later as needed, or easily serviced due to its modular construction.



## MULTIPLE SERVICE ACCESS AREAS AND PANELS

At just 30" wide for the largest model, the PW easily fits through doorways and into freight elevators for even the most challenging retrofit. Because of its modular design, up to twelve modules and 960 nominal tons of capacity can be controlled in a single bank. Another advantage of our modular construction is redundancy in the event of an equipment service issue. Rather than one large chiller that could potentially go down, smaller modules can easily be removed from the bank while the bank is still in-service.

Chillers PWC, Heat Pumps PWT, and Heat Recovery PWH, 20-30 Ton, with no Header Rack



**NOTES**

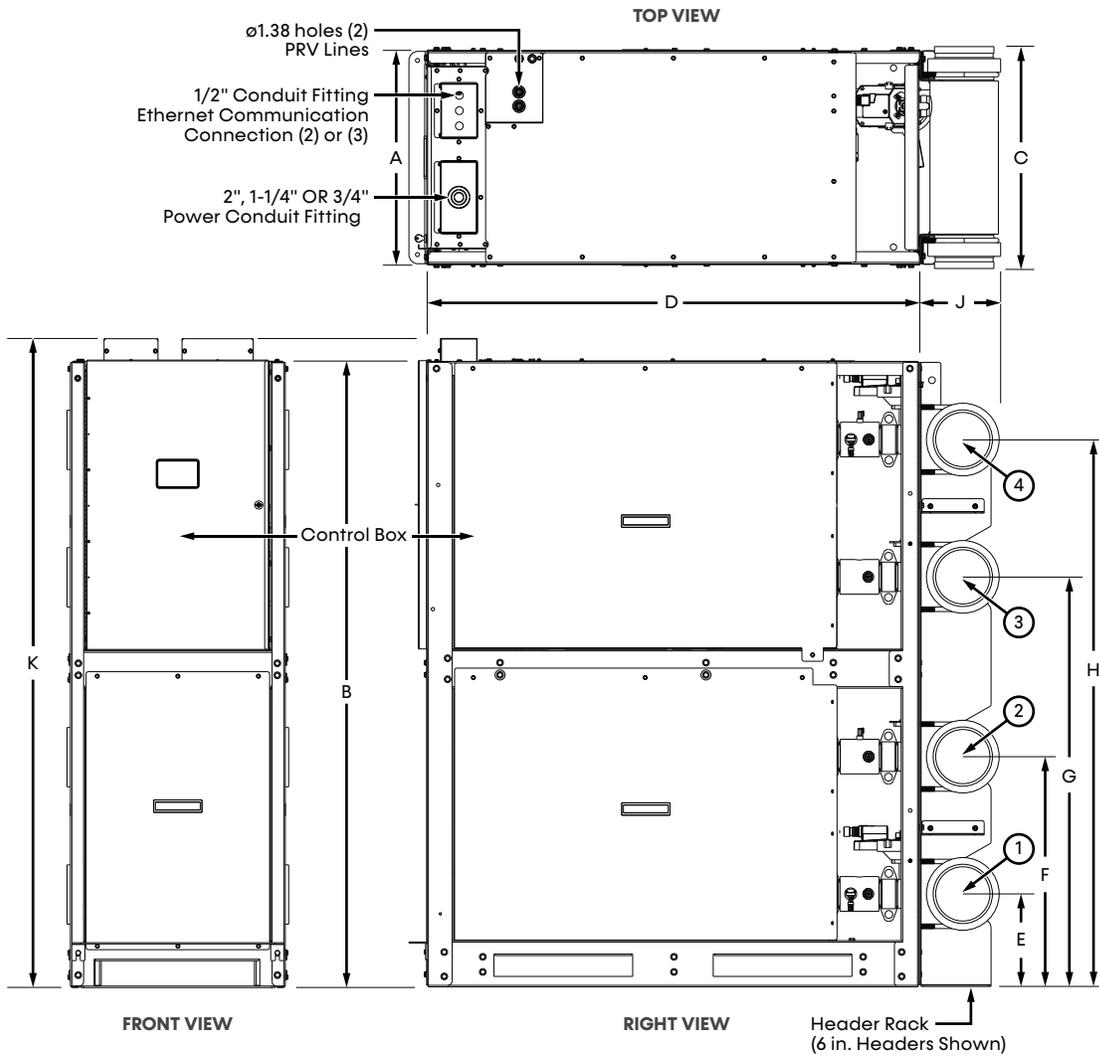
 \* Optional grooved-to-MPT adapter available for transitioning to a hose kit or other piping arrangements.

Model Size	A Chassis Width	B Chassis Height	D Chassis Depth	E Header Location	F Header Location	G Header Location	H Header Location	K Height with Electrical Connections	Connection Size (Grooved VIC)
020 030	24.00 (60.96)	70.00 (177.8)	55.00 (139.7)	10.35 (26.29)	25.71 (65.30)	45.80 (116.33)	61.16 (155.35)	72.51 (184.18)	2 in.

Model	1	2	3	4
PWC	Chilled Water Outlet	Chilled Water Inlet	Source Water Inlet	Source Water Outlet
PWH	Chilled Water Outlet	Chilled Water Inlet	Hot Water Inlet	Hot Water Outlet
PWT	Load Water Outlet	Load Water Inlet	Source Water Outlet	Source Water Inlet

**NOTES:**  
1. Dimensions shown in inches (centimeters).

### Chillers PWC, Heat Pumps PWT, and Heat Recovery PWH, 20-30 Ton, with Header Rack

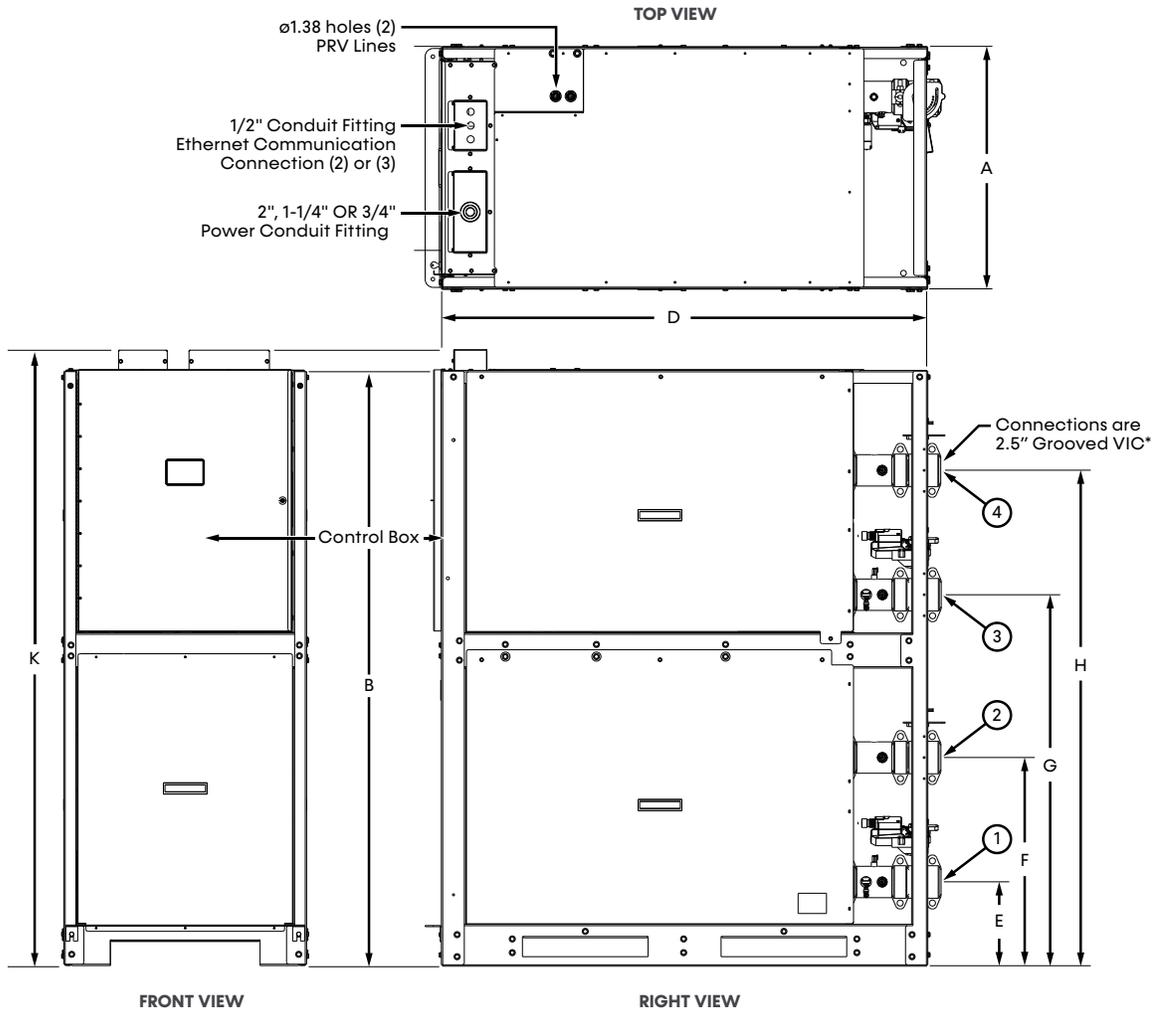


Model Size	Header Connection Size	A Chassis Width	B Chassis Height	C Width with Headers	D Chassis Depth	E Header Location	F Header Location	G Header Location	H Header Location	J Header Rack Depth	K Height with Electrical Connections
020	6.00 (15.27)	24.00	70.00	24.75	55.00	10.35	25.71	45.80	61.16	8.76 (22.25)	72.51
030	8.00 (20.32)	60.96	177.8	62.87	139.7	26.29	65.30	116.33	155.35	10.80 (27.43)	184.18

Model	1	2	3	4
PWC	Chilled Water Outlet	Chilled Water Inlet	Source Water Inlet	Source Water Outlet
PWH	Chilled Water Outlet	Chilled Water Inlet	Hot Water Inlet	Hot Water Outlet
PWT	Load Water Outlet	Load Water Inlet	Source Water Outlet	Source Water Inlet

**NOTES:**  
1. Dimensions shown in inches [centimeters].

### Chillers PWC, Heat Pumps PWT, and Heat Recovery PWH, 50-80 Ton, with no Header Rack



**NOTES**



\* Optional grooved-to-MPT adapter available for transitioning to a hose kit or other piping arrangements.

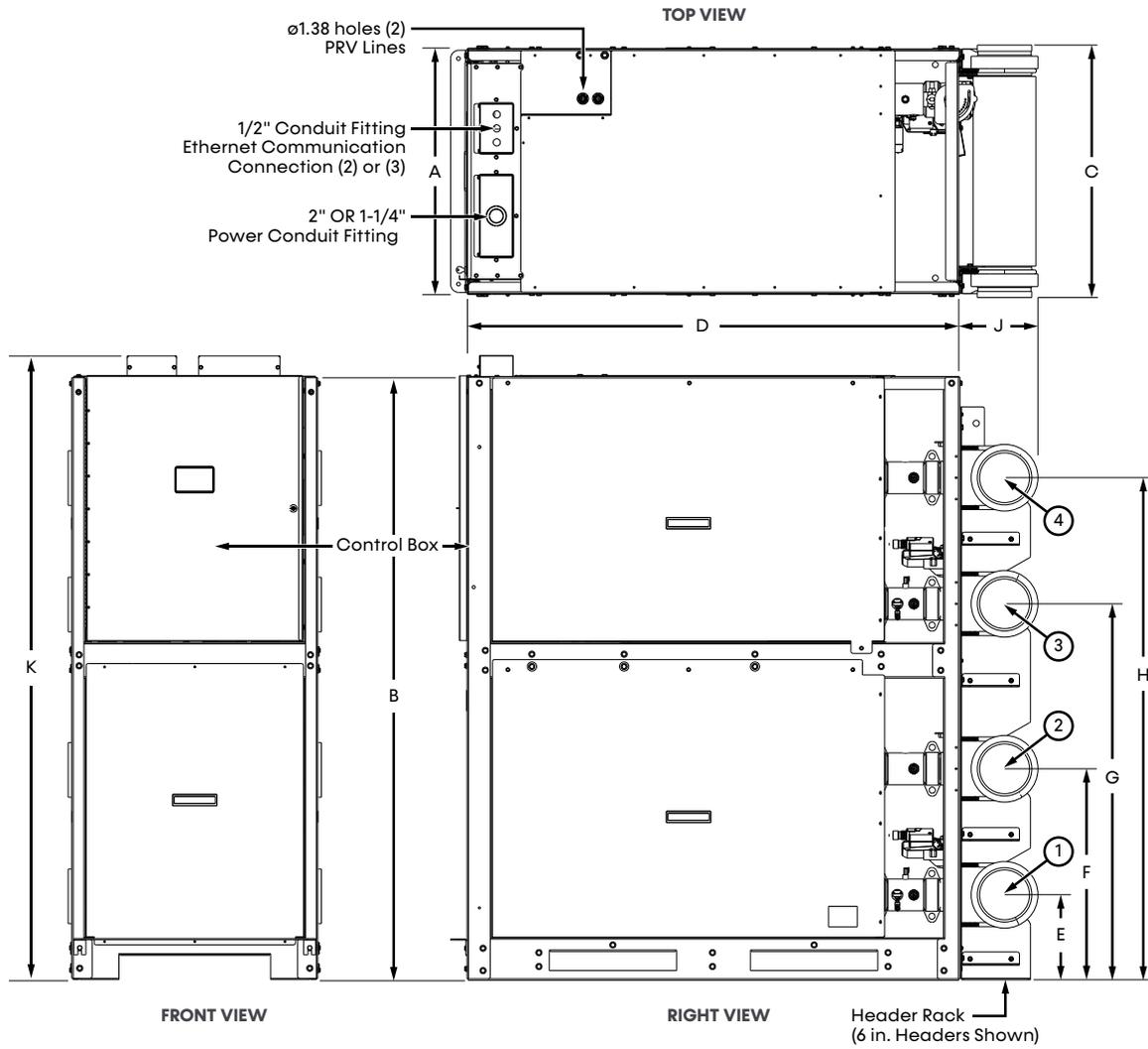
Model Size	A Chassis Width	B Chassis Height	D Chassis Depth	E Header Location	F Header Location	G Header Location	H Header Location	K Height with Electrical Connections	Connection Size (Grooved VIC)
050 065 080	30.00 (76.20)	73.54 (186.79)	60.00 (152.40)	10.39 (26.39)	25.75 (65.41)	45.85 (116.46)	61.20 (155.45)	76.10 (193.30)	2.5 in.

Model	1	2	3	4
PWC	Chilled Water Outlet	Chilled Water Inlet	Source Water Inlet	Source Water Outlet
PWH	Chilled Water Outlet	Chilled Water Inlet	Hot Water Inlet	Hot Water Outlet
PWT	Load Water Outlet	Load Water Inlet	Source Water Outlet	Source Water Inlet

**NOTES:**

1. Dimensions shown in inches (centimeters).

### Chillers PWC, Heat Pumps PWT, and Heat Recovery PWH, 50-80 Ton, with Header Rack

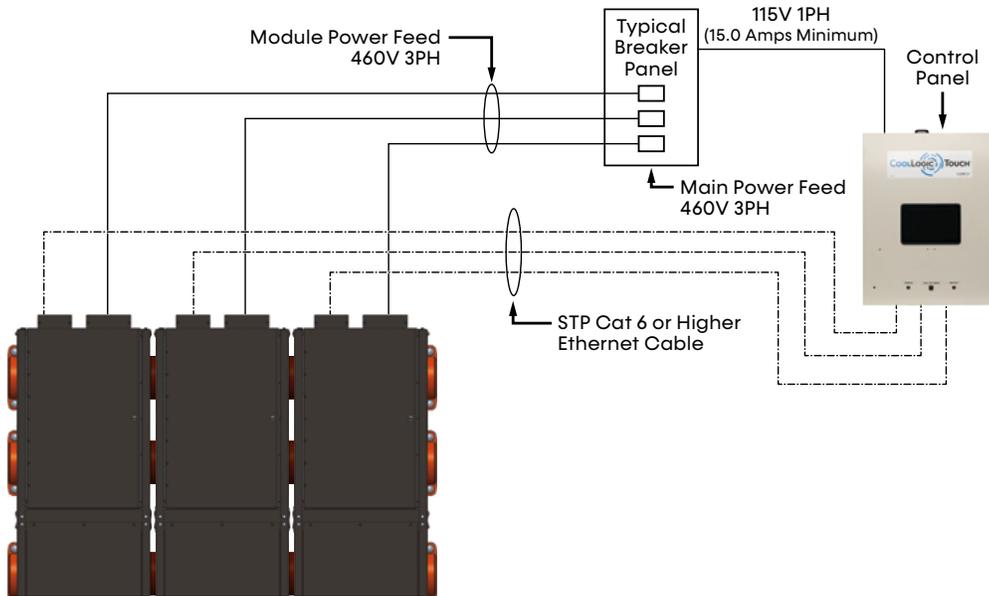


Model Size	Header Connection Size	A Chassis Width	B Chassis Height	C Width with Headers	D Chassis Depth	E Header Location	F Header Location	G Header Location	H Header Location	J Header Rack Depth	K Height with Electrical Connections
050	6.00 (15.27)	30.00	73.54	30.75	60.00	10.35	25.71	45.80	61.16	9.50 (24.13)	76.10
065	8.00 (20.32)	30.00 (76.20)	73.54 (186.79)	30.75 (78.11)	60.00 (152.40)	10.35 (26.29)	25.71 (65.30)	45.80 (116.33)	61.16 (155.35)	11.46 (29.11)	(193.29)
080	8.00 (20.32)	30.00	73.54	30.75	60.00	10.35	25.71	45.80	61.16	9.50 (24.13)	76.10

Model	1	2	3	4
PWC	Chilled Water Outlet	Chilled Water Inlet	Source Water Inlet	Source Water Outlet
PWH	Chilled Water Outlet	Chilled Water Inlet	Hot Water Inlet	Hot Water Outlet
PWT	Load Water Outlet	Load Water Inlet	Source Water Outlet	Source Water Inlet

**NOTES:**  
1. Dimensions shown in inches [centimeters].

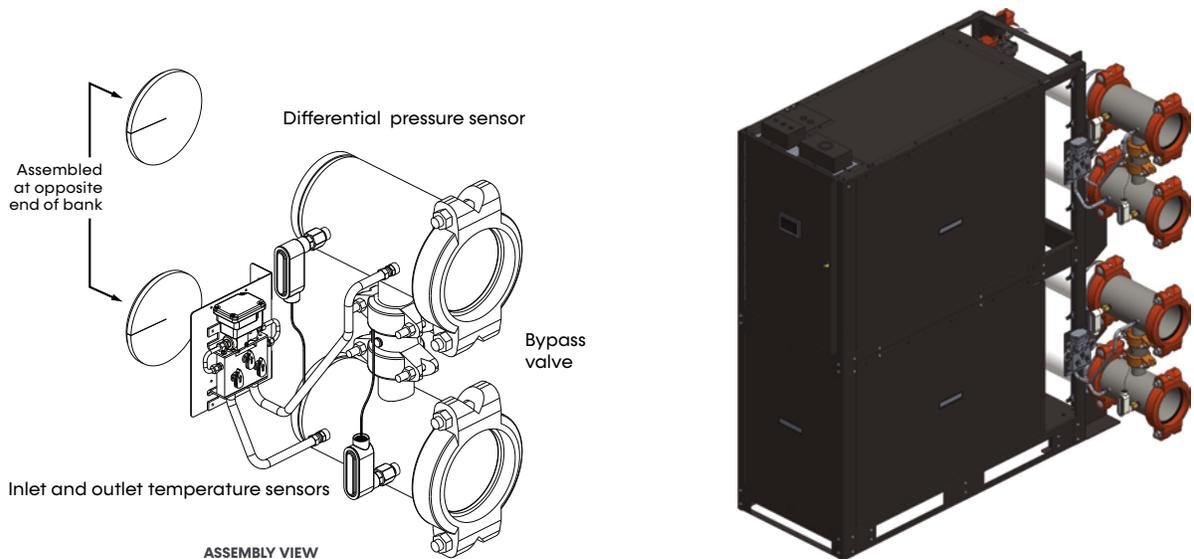
## TYPICAL POWER DISTRIBUTION WIRING



### NOTES

- Communication wiring is home run set up with STP Cat 6 or higher Ethernet cable.
- Climacool Standard Bank Package includes ship-loose items: 1-CoolLogic Touch Control System per bank and 2-temperature sensors and wells, 1-DP proof of flow sensor and 1-bypass header kit for each water loop. These items are to be installed, powered, and control-wired in the field by others.
- The shown breaker panel may be purchased through Climacool Corp, but is typically provided by the project electrical contractor.
- Breaker panel represents field power supply and is to be installed by others. Not provided as part of the Climacool modular chiller system.
- Control wiring by others.
- Disconnects are NOT Included.
- All voltages available, 460V used as example only.

## WATER HEADER BYPASS ARRANGEMENT



## MARKET APPLICATIONS



K-12  
Education



Industrial  
Labs



Multi-family  
Residential



Hospitality



Data  
Centers



Manufacturing



Retail



Public



Healthcare

Contact your local ClimaCool representative or visit our website at [www.climacoolcorp.com](http://www.climacoolcorp.com) to find out more about the heating and cooling solutions that may fit your application needs.



A NIBE GROUP MEMBER

7300 SW 44<sup>th</sup> St | Oklahoma City, OK 73179  
Phone: 405.815.3000 | Fax: 405.415.9231  
[www.climacoolcorp.com](http://www.climacoolcorp.com)

Climacool works continually to improve its products. As a result, the design and specifications of each product at the time of order may be changed without notice and may not be as described herein. Please contact Climacool's Customer Service Department at 405-815-3000 for specific information on the current design and specifications. Statements and other information contained herein are not express warranties and do not form the basis of any bargain between the parties, but are merely Climacool's opinion or commendation of its products. The latest version of this document is available at [www.climacoolcorp.com](http://www.climacoolcorp.com).