ThermalAir TC-100 Air Chiller

An Evolution in Localized Temperature Test Systems

The MPI ThermalAir TC-100 high capacity thermal air process chiller system is used for temperature testing and localized temperature inducing of continuous -80°C Clean Dry Air.

- **Built-in Air Drying System**
- **Energy-efficient Ultra-stable DC Chiller**
- **One-Touch On/Off Flow Button**
- **RS-232 Remote Communication Port**
- **No LN_2 or CO_2 Required**
- **Plug-in Anywhere Worldwide**
- **No Configuration Needed**

Performance Plus!

- Eco-Friendly with up to 50% power energy saving
- Ultra-stable smart DC energy-efficient chiller
- Front panel display for convenient user-operation to adjust output airflow up to 27 SCFM
- No voltage or frequency configuration needed
  - One System Worldwide
- Quiet low audible noise for engineering laboratory
- No LN_2 or CO_2 required [Built-in Air Dryer]

Features and Advantages

- Ultra Cold Temperatures are maintained at 50Hz or 60Hz.
- The system lets the operator control airflow settings.
- Plug-in Anywhere from 185 to 250VAC. No need for user voltage re-configuration when the system is moved to different locations.
- Versatile ways of manual flow adjustment
  - On/Off Flow Button
  - On/Off Flow by Remote RS-232
- Proprietary single-compressor, auto-cascade system

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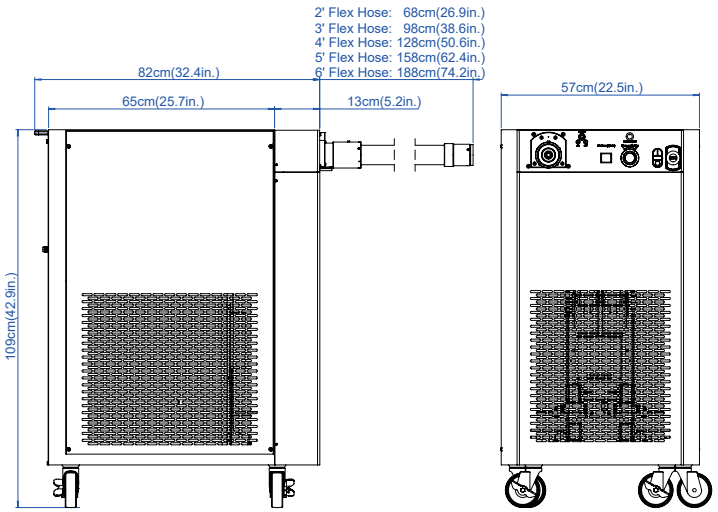

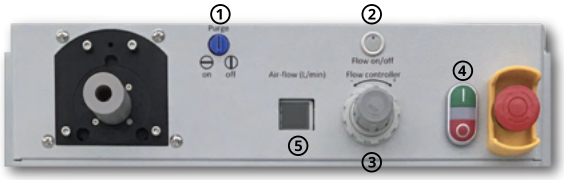

The front panel user interface includes:

① Purge Air On/Off Switch
② Main Air Flow On/Off Button
③ Air Output Flow Regulator (4-27 SCFM)
④ Power On/Off Switch
⑤ LED Air Flow Rate Display.

Users can remotely adjust air flow On/Off by RS-232 communication port.

Specifications

Temperature Performance & Airflow Capacity

Temperature Performance	-80°C at air outlet 20 SCFM Continuous ***50/60Hz same system, same temperature performance***
Temperature Air Output System	4 to 27 SCFM (1.9 l/s to 12.7 l/s)
Air Connection	Input (rear) 5/8" barbed fitting Output (front) 1/2" OD copper tube

Note: Systems DO NOT degrade @50Hz or @High Air Flow Output Rates

Facility Requirements / Dimensions & Weights / Compressed Air

Base Unit (WxDxH) & System Weight	Un-packed: 57.2 cm (22.5 in.) x 84.0 cm (33.1 in.) x 107.7 cm (42.4 in.) / 200 kg (441 lbs) Packed: 100.0 cm (39.4 in.) x 143.0 cm (56.3 in.) x 155.0 cm (61.1 in.) / 280kg (617 lbs)
Air Flow Rate	4-27 CFM (1.9 l/s to 12.7 l/s) with air supply of 15-35 CFM (7.1-16.5 l/s)
Portability	Static dissipative, four easy roll swivel caster wheels
Noise Level	<49 dBA average / Full performance at 50Hz operation
Power	Voltage: 185 to 250 VAC, single phase Frequency: 50/60 Hz Current: up to 20A
Clean, Dry Air (CDA)	Filtered to 5µ particulate contamination Oil Content: <0.1 ppm by weight and filtered to 0.01µ oil contaminants
Input Air Dewpoint	<10°C @ 7.2 BAR (105 PSI)
Input Air Pressure	90 to 120 PSIG, 110 PSI nominal (6.2 to 8.3 BAR)
Input Air Flow	15-35 CFM (7.1-16.5 l/s)
Input Air Temperature	+20°C to +25°C, +22°C nominal
Operating Temperature Environment	+20°C to +28°C, +23°C nominal
Operating Humidity	0 to 60% RH, 45% nominal
Compliance	Designed to meet CE, EN 61010, NEC
* Documentation	User's Manual

MPI Thermal ThermalAir TC-100 INFO Sheet
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