T-2500E (SE) Facilities Requirements

This document describes the environmental, power, and compressed air requirements for the T-2500E series of Precision Temperature Forcing Systems (PTFS).

Environment: Ambient temperature must be below 26C. The grills for airflow to the T-2500E refrigeration condenser must not be obstructed. At least 12" of clearance is required. Suggested floor space is 40 X 36 inches.

Power: *200 to 240 VAC 50/60 Hz, single phase*. Power transformer in system must be wired for the actual input power voltage/Hz. The power transformer is a multi-tap transformer. For USA operation, the transformer is wired for *208 VAC*, *60 Hz* power at the factory.

Power Cord: A 15 foot, 12 ga., 3-conductor power cord is supplied with the equipment. Power connector is a NEMA L6-20 twist-lock. If a longer power cord is required, wire gage must increase accordingly.

Compressed Air: *18 CFM at 85 to 110 psi*. Must be clean, dry air that is free of oil (< .01 ppm) and particles. Dew point must be below +10C at 85 psi. A male quick disconnect nipple (MIL-C-4109) with a 1/4 NPT male pipe thread is provided for the air connection. Thermonics' part number *P2-181*. The female quick disconnect that mates with this nipple is Thermonics' part number *P2-234*. If desired, the P2-181 can be removed and the user can replace this with a quick disconnect nipple of their choice.

Compressed Air Supply Hose: Supply hose must be capable of providing 18 CFM at 85 to 110 PSI. Minimal inside diameter of 1/4 inch is recommended for lengths up to 10 feet. Longer hoses require a minimum 3/8 inside diameter.

Air Compressor: The following is an example specification for an air compressor system to operate one Thermonics' PTFS:

Atlas Copco Compressor Model GA5FF

- 7 1/2 hp
- 25 CFM at 125 PSI
- Integrated Refrigerated Dryer, 10C dew point
- Water/Particulate Filter

Altas Copco Receiver Tank Model V80-200

- 80 Gal.

Altas Copco Coalescing Filter Model PD17

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