

TP04300A

For testing components, hybrids, modules, subassemblies and printed circuit boards at precise temperature.

TEMPERATURE PERFORMANCE AND AIRFLOW CAPACITY

Temperature Range:¹

Standard head with arm or 2.4 m (8 ft) hose -80° to +225°C (60 Hz System)
-75° to +225°C (50 Hz System)³

Standard head, no arm with 1.2 m (4 ft) hose -80° to +225°C (60 Hz System)
-75° to +225°C (50 Hz System)³

Typical Temperature Transition Rate (air)^{1,2}

-55° to +125°C: approx. <5 seconds²
-125° to -55°C: approx. <13 seconds²

System air flow output

2.4 l/s to 9 l/s (5 to 18 scfm) CONTINUOUS

Temperature accuracy

1.0°C (when calibrated against NIST transfer standard)

Temperature set, display and resolution

± 0.1°C

Temperature Control:

DUT Sensor Ports

Internal diode, Type T and Type K Thermocouple and 100 ohm Platinum RTD

DUT Control

Control to within ± 0.1°C; SELF-TUNING available in DUT Control

Remote interface ports

IEEE-488, RS232C Serial, and Start Test/End of Test/Stop on First Fail (ST/ET/SFF) and Ethernet

¹Note: Ultimate low temperature and system performance may vary under operating conditions less than or greater than nominal.

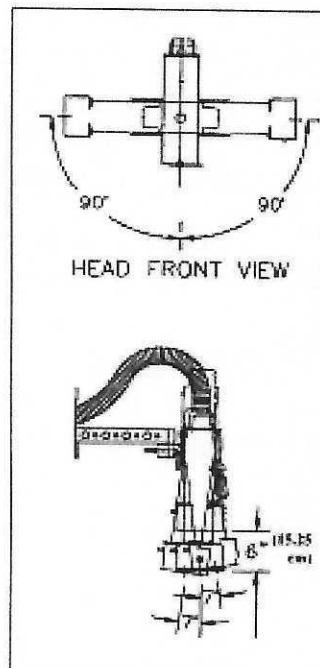
²Note: Transition performed under nominal operating conditions.

³Note: Due to our utilization of HCFC-free refrigerants, the ultimate low temperature of 50 Hz systems will be approximately 5°C less cold than a 60 Hz unit.



USER FEATURES

Modes of operation	Two: Operator Mode and Cycling Mode
Test set-up configurations	In Cycling Mode, an unlimited quantity may be created; save to hard disk/diskettes
Ramp/soak/cycle configurations	In Cycling Mode, up to 18 sequences per test set-up; table is displayed on-screen
Program and data storage	Data logging and program files may be stored on the hard drive or to a 3.5" floppy diskette
On-screen help	Included for both Cycling and Operator's Modes
DUT temperature control	Patented ⁴ Dual Loop Temperature Control
Status indicators	On-screen and remote I/O
Purge flow tester interface protection	Dry air purge protects tester electronics from condensation
Purge flow capacity	0.25 to 1.5 liters per second (0.5 to 3 scfm) airflow, manually adjustable
Calibration	Automated, simplified and accurate for all airflows and DUT types
Thermal head raising and lowering	Pneumatic control on thermal head, operated manually or via remote interface
Head positioner movement	Manual locking (4 locks), 360° head rotation; head can be manually pivoted, turned, tilted and vertically swung for ease of interface at tester site.
Manipulator (arm) movement	Motorized raising and lowering of arm; 330° positioning range around the base unit



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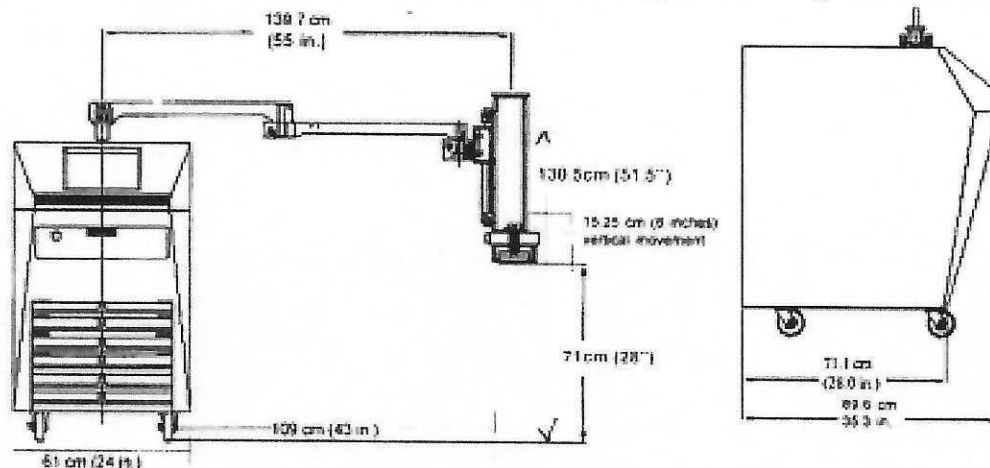
Part No. SL10270 R/D

⁴Note: US Patent no. 4,734,872



Model TP04300A ThermoStream[®] System Specifications

Model TP04300A ThermoStream® System Specifications



ENVIRONMENTAL AND SERVICE FEATURES

Over-Temperature Protection	+235°C (factory-set) (Also uses user-settable high and low air temperature limit)
Mobility	4 swivel caster wheels with locks (10.16 cm (4-inch) diameter); rear handle for ease of transport
Refrigerants	50 Hz systems: HCFC-free and CFC-free, non-toxic, non-flammable 60 Hz systems: CFC-free, non-toxic, non-flammable
Noise level	<65 dBA approximately
Serviceability	Field-replacement modules and printed circuit boards
Weights and Dimensions	Base: <u>Width:</u> 61.0 cm (24 in.) <u>Depth:</u> 71.1 cm (28 in.); <u>Height:</u> 108 cm (42.5 in.); <u>System weight:</u> 236 kg (520 lbs); <u>Packed:</u> 365 kg (805 lbs)
Maximum operating height	130.5 cm (51.5 in.) approximately
Minimum operating height	71 cm (28 in.) approximately
<i>(An additional 20.3 cm (8 in.) rear clearance is required for supply connections and cabinet ventilation.)</i>	

FACILITY REQUIREMENTS

Power Requirements ⁵	200-240 VAC (230V nominal), 50 Hz, 30 amp, 1 phase 200-240 VAC (230V nominal), 60 Hz, 30 amp, 1 phase
Compressed Air Requirements	
Clean, Dry Air	Filtered to 5 micron particulate contamination Oil content: <0.01 ppm by weight filtered to .01 micron oil contaminant Dewpoint: <10°C @ 6.2 BAR (90PSI)
Supply Pressure	6.2 to 7.6 BAR (90 to 110 PSIG)
Supply flow at minimum supply pressure	7.2 l/s to 14.3 l/s (9 to 30 scfm) (Nominal 25 scfm)
Air supply temperature	+20° to +25°C (+22°C nominal)
Operating Temperature	+20° to +28°C (+23°C nominal)
Humidity	0 to 60% (45% nominal)

⁵*Note:* System is configured for operation within voltages listed above using an internal transformer. Please specify power configuration with order.

*Under operating conditions which are less or greater than nominal, performance may be less than specification provided.



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Part No. SL10270 R/D 09/02

Before You Call

Introduction

You can help us support your machine in timely fashion by having on hand specific information when calling in:

- Software Version
- System Model Number

System Model Number

A modular system design allows the customer to select options or features as desired for a given installation or application

The System Model Number Designation, printed on the TP04300 nameplate, reflects the configuration at time of shipment:

