

DRAGON 4.0

Temperature forcing system



Ultra-performant, for 24h/7d use.

The new DRAGON has been designed for maximum performances and rugged tests thanks to a robust and powerful cooling unit design.

PERFORMANCE (Ambient temp : +23°C to +25°C)

Temperature range	-75°C to +225°C
Pull down time (+125°C to -55°C)	~ 18 seconds
Stability at -55°C	+/- 0.7°C

WARRANTY

Parts	2 years
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-75°C

Coldest temperature



6s

from -55°C to 125°C

Technical Specifications

DRAGON 4.0

GENERAL SPECIFICATIONS

Overall Dimensions (H x W x D) w/o head	1300 x 700 x 900mm / 600mm of vertical motion / 500mm of horizontal motion
Net Weight (kg / lbs.)	280 / 618
Temperature range	-75°C to +225°C, display and setting (on air) at +/- 0.1°C
Air flow	2.0 L/s to 8.4 L/s
Controlled ramp	0.01°C/s to 16°C/s
Head stability (AIR regulation)	≤ 0.7°C
DUT stability	≤ 1.0°C (for DUT probe placed on a board under the nozzle)
Transition time without control	-55°C to +125°C /s in 6 seconds / +125°C to -55°C/s : 18 seconds (w/o ramps controls)
Standard Equipment	4 swivel castors RS232
Environment	Indoor use only. Room Temperature: +18°C to +32°C (64°F to 89°F) Not designed for use in explosive atmospheres (ATEX)

REFRIGERATION AND THERMAL PRODUCTION

Cooling Engine	2 cascade compressors in the lower part of the frame
Expansion Device	Capillary tube
Natural Gas Refrigerant load 	1st stage : R1270 / 2nd stage : R170 (CFC, HCFC & HFC free)
Energy rejection at -75°C (kW)	4
Thermal production	Electrical heating resistance
Thermal protection	The head temperature is protected by an independent probe against T°C > 260 ° C

ELECTRONIC DATA / CONNECTIONS / ELECTRIC

Controller type & interface	Temperature regulator w/ 10" tactile display
Temperature probe	2 x Thermocouple K for regulation (AIR/DUT) + security
List of alarms	Over-temperature, high temperature, no air supply, CP1 & CP2 overpressure, DUT & AIR failure, air pressure monitoring, communication failure
Compressed air source	Flow : 12 l/s Supply pressure : from 6 to 8 bars Air temperature : from +15°C to +25°C Air class : 1
Types of power supply (Voltage ~ +/-10%)	230V +/-10% AC, 50Hz, circuit breaker 32A, D curve with differential 30mA

OPTIONS AND CONFORMITIES

Options	Nozzle & foam mat Board IEEE / 488.1 / GPIB Anti-static equipments (head, nozzle & mat) Specific nozzles and boxes on request Support service for adjusting the regulation parameters on request
Supplied with	Final test sheet (temperature drop curve made with fictitious load) User manual on USB drive Quality control sheet (on request)
Certification / Conformities	IEC 61010-1 IEC 61010-2-012 CEM Class A Industrial