



- Calibration of instruments for radiation measurements
- Measurement of radiation from UV to IR
- Software for special requirements

The Austrian
Calibration Measurement Software Company

J1020 - Dry Air Pump3 User Manual



Precision is
our **business**

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Warranty

For warranty terms and conditions, contact CMS or your distributor for further details.

CMS guarantees that the product delivered to customer has been verified, checked and tested to ensure that the product meets the appropriate specifications. The product warranty is valid only if the product has been installed and used according to the directives provided in this instruction manual.

CMS shall in no event be liable for incidental or consequential damages arising from the faulty and incorrect use of the product.

CMS reserve the right to make changes to specifications without prior notice.

In case of any manufacturing defect, the product will be repaired or replaced under warranty. However, the warranty does not apply if:

- Any modification or repair was done by any person or organization other than CMS service personnel.
- The damage or defect is caused by not respecting the instructions of use as given on the product brochure or the instruction manual.

Safety Information

This product is designed and manufactured under the consideration of the safety precautions. Please make sure to read and understand this instruction manual thoroughly in order to be able to operate the instrument safely and in the correct manner.

Warning /Caution

- The installation base should have enough load capacity for the instrument to be mounted. Fix the equipment securely. Otherwise, the instrument may drop due to gale or earthquake which may lead to unexpected accidents.
- Make sure the instrument and the cables are installed in a location where they will not get soaked.

Voltage Warning

- Make sure to check the power supply voltage and type (AC/DC) before connecting the device to the power supply. Connecting the device to other power supplies than specified will lead to damage and accidents.

Contact Information

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CMS Ing. Dr. Schreder GmbH J1020-DRYAIRPUMP3

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INSTRUMENT SET-UP

This manual briefly describes the characteristics of the J1020-DRY-AIR PUMP3. Make sure to read this instruction manual thoroughly and to understand the contents before starting to operate the instrument. Keep this manual at safe and handy place for whenever it is needed.

For any questions, please contact us at the CMS office given above or your distributor.

The operator should carefully read the following instructions to ensure proper and safe use of this equipment.

After unpacking the device, check for any mechanical damage or loose parts inside. Should there be any transportation damage, inform the supplier immediately and do not operate the device.



The dry air pump re-circulates air through the connected elements. This air is also passed through a drying tube. The desiccant changes colour when saturated and should be replaced. Connect the hose with about 6mm inner diameter to the marked connectors on the right side.

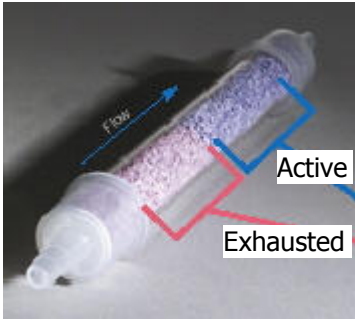
Technical Data

Operation Voltage:	220-240 V/50Hz (115-120 V/60Hz)
Power consumption:	~ 5 W
Cable:	1 m
Flow rate:	max. 2.5 l/minute
Pressure:	max. 180 mbar
Weight:	0.5 kg
Size:	200 mm x 120 mm x 60 mm

Part numbers / spare parts

Description	Par. No
Dry air pump System, 240V/50Hz	102016
Dry air pump System, 115-120V/60Hz	102017
Drying Tube with 30 g of indicating drying agent	102012
Hose duo black-blue. Di=4mm; Da=6mm; 7m standard	102020

DRYING TUBE FOR AIR AND GASES



Indicating DRIERITE in this plastic unit dries air and gases for small scale laboratory applications. A rubber hose connection provides an immediate flow of dry gas.

Note:

Do not use this plastic unit in the presence of vapors or liquids containing phosphate esters, synthetic lubricants, hydrocarbon solvents, methanol, acetone, lacquer solvents, or other organics.

PROPERTIES:

The drying agent is impregnated with cobalt chloride. It is blue when dry and changes to pink upon absorption of moisture. The colour change is pronounced and clearly visible. This makes it valuable when it is necessary to know with certainty that dryness is being maintained and to signal when the drying agent should be replaced. It can be regenerated repeatedly for reuse.

REGENERATION OF DRIERITE DESICCANTS:

After normal use, any of the forms may be regenerated for reuse. The operation is simple and involves only standard equipment. The used and exhausted desiccant should be ventilated to remove vapors, if any, and stored in a convenient container until a sufficient amount is accumulated to justify the work of regeneration.

For the regeneration, the granules may be spread in layers one granule deep and heated for 1 hour at 210° C (425° F). The regenerated material should be placed in the original glass or metal container and sealed while hot. The may become less distinct on successive regenerations due to the migration of the indicator into the interior of the granule and sublimation of the indicator.

The Importance of Temperature:

The temperature at which DRIERITE desiccants are regenerated is crucial in restoring to its original condition. Absorbed moisture is water of hydration and is chemically bound to the calcium sulfate. Temperatures in the range of 400° - 450° F are required to break these bonds and release absorbed moisture. Lower temperatures, regardless of heating time, will not regenerate it unless applied under vacuum (26" Hg, 325° F or 28" Hg, 275° F). Care should be taken not to overheat the desiccants. High temperatures can alter the crystal structure and render the desiccants permanently inactive.

Specification

Dimensions:	3/4" o.d. x 8" overall length
Connections:	Hose barbs for 1/4" to 3/8" i.d. flexible tubing
Desiccant:	30 grams Indicating DRIERITE
Water capacity:	3 grams
Maximum flow rate:	300 cubic centimeters per minute
Construction:	Tube is polycarbonate. End caps are molded polypropylene. 20 Micron polypropylene filter in each end