Self-Regulating Vacuum System
PC3001 VARIO® SELECT

NEW!

Touch-screen control!

The integrated VACUU-SELECT® controller comes with automatic operating modes for most common lab vacuum applications. Drag and drop menus let you set up your own custom operations in minutes. The easiest to operate vacuum system ever!

vacuubrand

The VACUUBRAND PC3001 VARIO® select is the best choice vacuum system for bench-top sized rotary evaporators and other evaporative applications. The PC3001 VARIO® select controls the vacuum in your rotary evaporator with minimal supervision, continuously optimizing to changing vapor conditions without programming. Just press "start" and the PC3001 VARIO® select provides faster evaporation and tighter control, while freeing you up to do more important work. It features a VARIO® version of our MD1C vacuum pump, with integrated solvent recovery in a compact, attractive package.

Faster–Continuously optimized vacuum speeds complete evaporative processes up to 30% faster than with two-point electronic control.
Safer for samples–System adapts to changing vapor conditions, virtually eliminating bumping and foaming.
Productive–Self-regulation frees you to spend your time on discovery, not equipment operation.
Reliable, Oil-free–With 1/3 the recommended maintenance of competitive dry pumps!
Energy-saving–Speed-controlled motor reduces energy consumption and is virtually inaudible in typical operation.
Efficient–Intuitive user interface with predefined procedures for common applications.

Technical Data:	
Pump	MD1C VARIO-SP chemistry-design diaphragm pump, w/ fluoropolymer flowpath
Integrated Vacuum Controller	VACUU-SELECT® touch screen with capacitive absolute pressure transducer and integrated vent valve
Pumping Speed	1.2cfm / 34lpm
Ultimate Vacuum	1.5Torr / 2mbar
Ultimate Vacuum w/ Gas Ballast	3Torr / 4mbar
Dimensions (L x W x H)	30.3 x 30.6 x 40 cm (11.9 x 12 x 15.7 in.)

Ordering Information:

Part No.	Description
CG-4802-101	PC3001 VARIO® Select, 100-120V, 2 m^3/h

Chemglass Life Sciences

Product appearance, catalog numbers, prices, specifications, and technical information are subject to change without notice.

3800 N. Mill Road, Vineland, NJ 08360
800-843-1794 • www.cglifesciences.com

Improve Lab Productivity with Self-Regulating Vacuum

Vacuum applications–from filtration to aspiration, concentration to evaporation, freeze drying to gel drying–are so common in chemistry and life science laboratories, that they are a reasonable place to look for productivity opportunities. In fact, few investments can make a greater contribution to lab productivity than can dollars invested in vacuum controls.

The most precious resource…your time

The typical vacuum application relies on uncontrolled vacuum from a central vacuum system or a dedicated vacuum pump with little or no control. Unlike temperature, for which electronic control is assumed, vacuum is often controlled by a scientist monitoring and manually adjusting vacuum to approximate the desired conditions. Such an approach is a waste of the most precious resources in the lab, the time and intellect of the scientist, as well as being less effective than automated control.

Consider a rotary evaporator application. In simple applications, unpredictable central-vacuum supply may be adequate. But in applications with complex mixtures, continuous oversight and adjustment is needed to prevent bumping and possible loss of sample. The alternative is for conditions to be worked out over trial runs on an electronically controlled system to find a preset vacuum level. Even with typical electronic control, however, oversight and adjustment are needed to fine-tune each process.

Simple operation and no "babysitting"

A modern, efficient alternative is provided by VARIO® controlled vacuum systems from VACUUBRAND. In VARIO® vacuum systems, an oil-free pump is integrated with a variable speed motor and a digital controller. The system automatically finds and follows boiling curves, continuously optimizing the vacuum level without having to program presets. The scientist just presses "Start" and the VARIO® pump begins searching for the first boiling point. The VARIO® controller gently approaches the boiling point so "over pumping" is substantially reduced and bumping is virtually eliminated, even as the scientist is freed for more creative and satisfying work.

Up to 30% faster

The system continually optimizes vacuum levels, even for azeotropic mixtures, with the result that evaporation times are up to 30% faster than other electronically-controlled pumps or manually controlled systems with continuous oversight. The pump can even shut itself off when evaporation is complete.

For All Applications

The VACUU-SELECT®vacuum controllers feature an intuitive smartphone-like interface. Choose from optimized routines for common applications, modify and save your own customizations, or assemble your own process as simply as dragging and dropping steps together. USB connectivity allows for easy uploading/downloading of protocols via flash drive, or software updates.

Reliable and convenient

Of course, productivity also depends on the reliability of the vacuum system. At the heart of every VARIO® pumping system is a VACUUBRAND® oil-free pump with a corrosion-resistant fluoropolymer flow path. Service intervals on these pumps are typically well in excess of 15,000 operating hours—over 10 years between scheduled service stops on a pump operated 20 hours a week! VARIO® systems can even capture exhaust vapors without reliance on cold traps or chillers, or the cost and inconvenience of transporting dry ice. On-board vapor capture not only saves time and electricity or coolant expense, but also captures virtually all of the vapors passing through the pumps, reducing lab exposure to hazardous vapors.

VARIO® vacuum pumps are made in Germany by VACUUBRAND GMBH + CO KG. The VACUUBRAND label has meant reliability and innovation in laboratory vacuum technology and control for nearly a half-century.