

# VARIO<sup>®</sup> chemistry diaphragm pump MD 4C VARIO select



Link to the website

#### **Product description**

The MD 4C VARIO select pump is an excellent solution for labs working with most high boiling point solvents. The pump's three stage configuration gives it an ultimate vacuum rating of 1.5 mbar. The integrated VACUU·SELECT controller provides an easy-to-use, application based interface that covers all common lab applications. The VACUU·SELECT controller has you covered. Use manual set-point-control for simple processes, run fully automated distillations, or create your own application with simple drag-and-drop editing. For solvent evaporation, the VACUU·SELECT controller continuously detects the boiling point and automatically adjusts the vacuum process as necessary. VARIO's on-demand motor speed control results in whisper-quiet operation and unparalleled length of service intervals for wear parts.

### **Performance features**

- VACUU-SELECT vacuum controller with graphical user interface and predefined applications simplifies work in the laboratory
- automatic boiling point detection and adjustment of the vacuum for short process times
- extraordinary diaphragm life for minimum operational and servicing costs
- meets high vacuum requirements for most high boiling solvents



### **Ordering data**

Product name	Nominal mains voltage   mains frequency	Plug type	Articleno.
MD 4C VARIO select	100-120 V   50-60 Hz	US	20736553

### **Items supplied**

Pump completely mounted, ready for use, with manual.

### Accessories

- Function extension for VACUU·SELECT controller VACUU·SELECT User Management (20700900)
- Silencer with hose 5cm DN 8-10mm (20636588)
- Rubber vacuum tubing DN 8 mm (20686001)

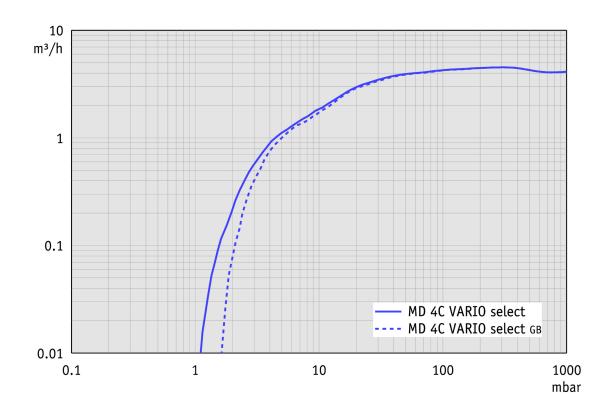


### **Technical data**

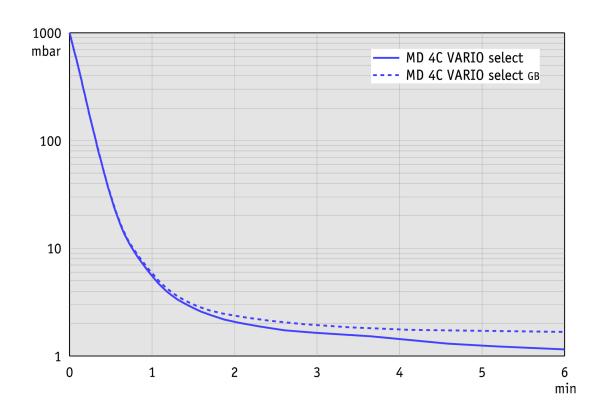
Max. pumping speed 50 Hz (mbar)	4.6 m <sup>3</sup> /h		
Max. pumping speed 60 Hz (cfm)	2.7 cfm		
Ultimate vacuum	1.5 mbar / 1.1 torr		
Ultimate vacumm with gas ballast	3 mbar / 2.2 torr		
Number of heads	4		
Number of stages	3		
Vacuum controller	VACUU·SELECT		
Permissible ambient temperature range (operation)	10 - 40 °C		
Permissible ambient temperature range (storage)	-10 - 60 °C		
Max. outlet pressure (abs.)	1.1 bar		
Inlet connection	Hose nozzle DN 8-10 mm		
Outlet connection	Hose nozzle DN 8-10 mm		
Rated motor power	0.53 kW		
Motor speed range	30 - 2400 min <sup>-1</sup>		
Protection class IEC 60529	IP 20		
Dimensions (L x W x H)	325 mm x 243 mm x 245 mm		
Weight	16.8 kg		
Noise (sound pressure level) in dBA at 50 Hz or 1500 rpm/62% (VARIO)/1500 rpm (VARIO-SP)/12500 Upm (VACUU-PURE®)	43 dBA		
NRTL certification	No		
Interface	Ethernet (RJ45): Modbus TCP / USB (Type A): Data transfer, software update, RS-232 (additional adapter required)		

## **VACUUBRAND®**

### Pumping speed graph at 50 Hz



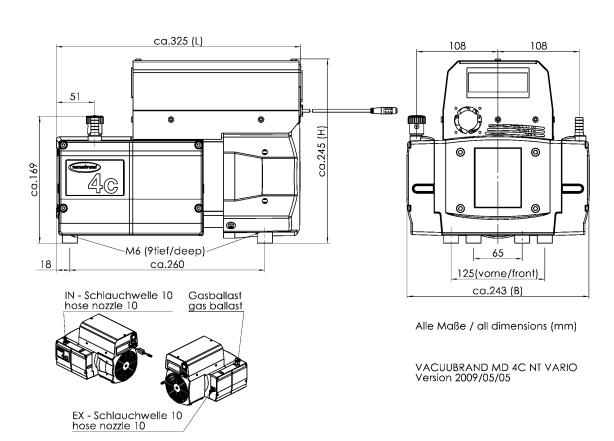
### Pump down graph at 50 Hz (10 l volume)



### **VACUU**BRAND®

### **Dimension sheet**





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**VACUU**BRAND®

VACUUBRAND is part of the Brand group, a manufacturer of high-quality and innovative laboratory equipment and vacuum technology with a global team of approx. 1,000 employees.

With highly motivated and qualified employees, we manufacture the world's most comprehensive product family for vacuum generation, measurement and control for the rough and fine vacuum range in the laboratory.

#### All with one goal:

Enabling our customers to run reliable, safe and efficient processes. This is why we commit ourselves to continuous innovation, first-class performance, and outstanding quality.

Engineering excellence is central to our ability to deliver products and solutions renowned for their quality, durability, and reliability. Innovative technology, high quality materials and extensive testing deliver unmatched performance - engineered and manufactured in Germany.

Together with you, our experts will find the best solution for your application and provide you with first-class service along the way.

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