

# VARIO® chemistry pumping unit PC 3001 VARIO select

[Link to the website](#)

## Product description

The PC 3001 VARIO select pumping unit precisely controls the vacuum level in order to achieve unparalleled process control. This pump is suitable for even high boiling point solvents. 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 detects solvent boiling and automatically adjusts the pump's motor speed to maintain process control. The VARIO motor speed control also makes the pump whisper quiet and provides for exceptionally long maintenance intervals. The inlet separator, made of glass with a robust protective coating, prevents particles and liquid droplets from entering the pump, preventing damage and extending pump life. And the exhaust vapor condenser allows for nearly complete recovery of solvents when used with a chilled water line or recirculating chiller for economical recycling and environmental protection.

## Performance features

- simplify lab work with the VACUU·SELECT vacuum controller with graphic user interface and predefined applications
- automatic boiling point detection and continuous optimization of vacuum levels for quick process times
- compact and powerful; superior performance even with continuous condensate purge
- whisper quiet and ultra low vibration
- eco-friendly: extremely low power consumption and efficient solvent recovery. Oil-free!

## Ordering data

| Product name         | Nominal mains voltage   mains frequency      | Plug type | Articleno. |
|----------------------|----------------------------------------------|-----------|------------|
| PC 3001 VARIO select | 200-230 V   50-60 Hz<br>100-120 V   50-60 Hz | UK        | 20700202   |

## Items supplied

Pumping unit completely mounted, ready for use, with manual.

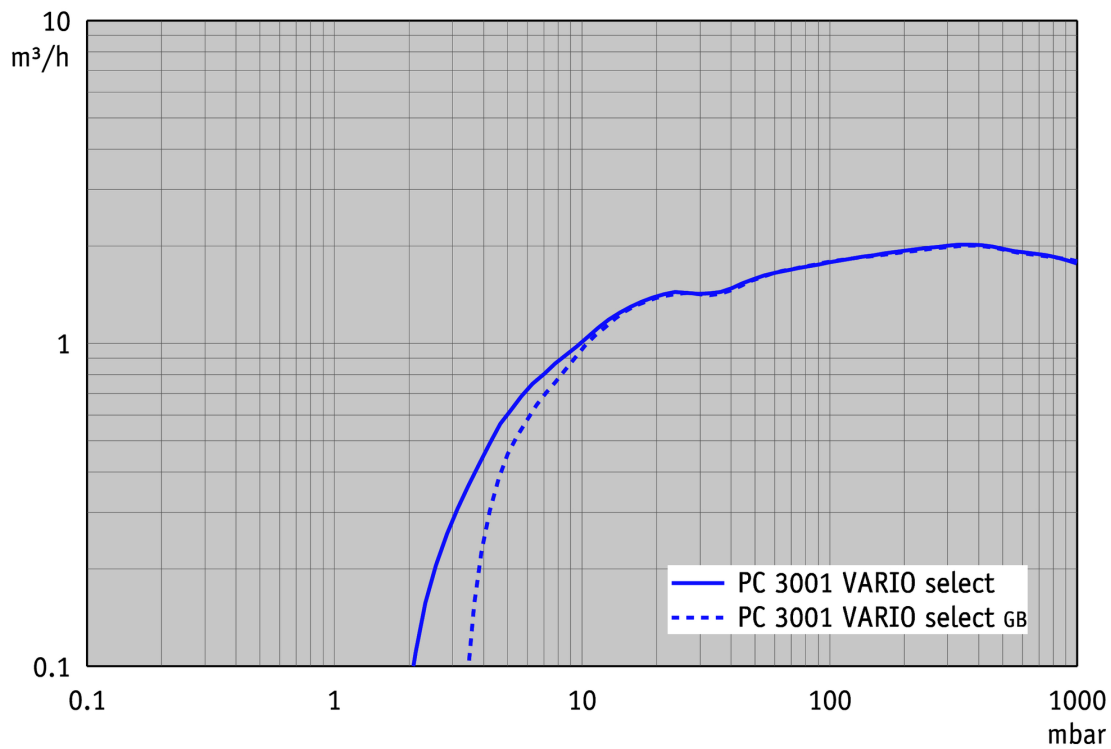
## Accessories

- Function extension for VACUU-SELECT controller VACUU-SELECT User Management (20700900)
- Vacuum tubing transparent DN 8 mm (20686061)
- Adjustable elbow DN 10/8 mm (20637873)
- Fluid level sensor for round bottom flask 500 ml 500 ml (20699908)
- Cooling water valve VKW-B (20674220)
- Set of diaphragms and valves for MD 1C, MD 1C VARIO-SP, PC 2001/ 3001 VARIO, MV 0.5C MD 1C, MD 1C +AK+EK, MD 1C VARIO-SP, PC 2001 VARIO, PC 3001 VARIO, MV 0.5C (20696828)
- Set of diaphragms and valves for MD 1C, MD 1C VARIO-SP, PC 2001/ 3001 VARIO, MV 0.5C MD 1C, MD 1C +AK+EK, MD 1C VARIO-SP, PC 2001 VARIO, PC 3001 VARIO, MV 0.5C (20696828)

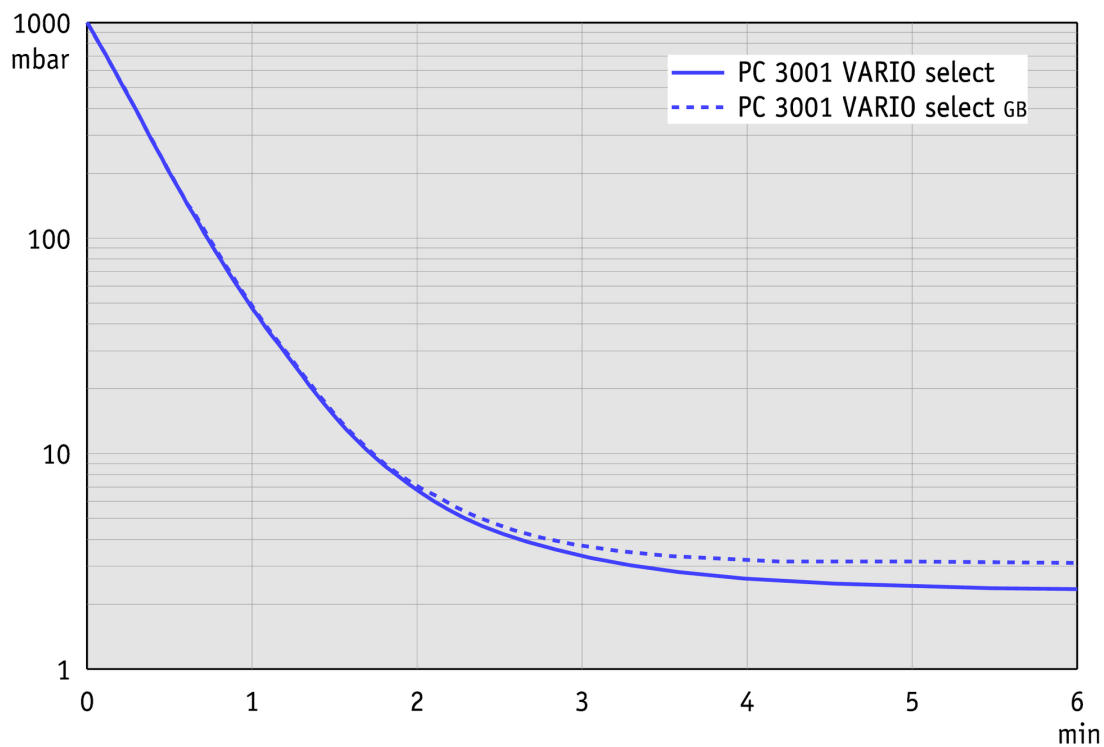
## Technical data

| Max. pumping speed 50 Hz (mbar)                                                                                  | 2 m <sup>3</sup> /h                                                                                              |
|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Max. pumping speed 60 Hz (cfm)                                                                                   | 1.18 cfm                                                                                                         |
| Ultimate vacuum                                                                                                  | 2.0 mbar / 1.5 torr                                                                                              |
| Ultimate vacuum with gas ballast                                                                                 | 4 mbar / 3 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 6-10 mm                                                                                           |
| Outlet connection                                                                                                | Hose nozzle DN 8-10 mm                                                                                           |
| Coolant connection                                                                                               | 2 x hose nozzle DN 6-8 mm                                                                                        |
| Rated motor power                                                                                                | 0.16 kW                                                                                                          |
| Motor speed range                                                                                                | 200 - 3000 min <sup>-1</sup>                                                                                     |
| Protection class IEC 60529                                                                                       | IP 20                                                                                                            |
| Dimensions (L x W x H)                                                                                           | 303 mm x 306 mm x 400 mm                                                                                         |
| Weight                                                                                                           | 8.2 kg                                                                                                           |
| Noise (sound pressure level) in dBA at 50 Hz or 1500 rpm/62% (VARIO)/1500 rpm (VARIO-SP)/12500 Upm (VACUU-PURE®) | 42 dBA                                                                                                           |
| ATEX conformity                                                                                                  | II 3/- G Ex h IIC T3 Gc X Internal Atm. only                                                                     |
| NRTL certification                                                                                               | Yes                                                                                                              |
| Interface                                                                                                        | Ethernet (RJ45): Modbus TCP / USB (Type A): Data transfer, software update, RS-232 (additional adapter required) |

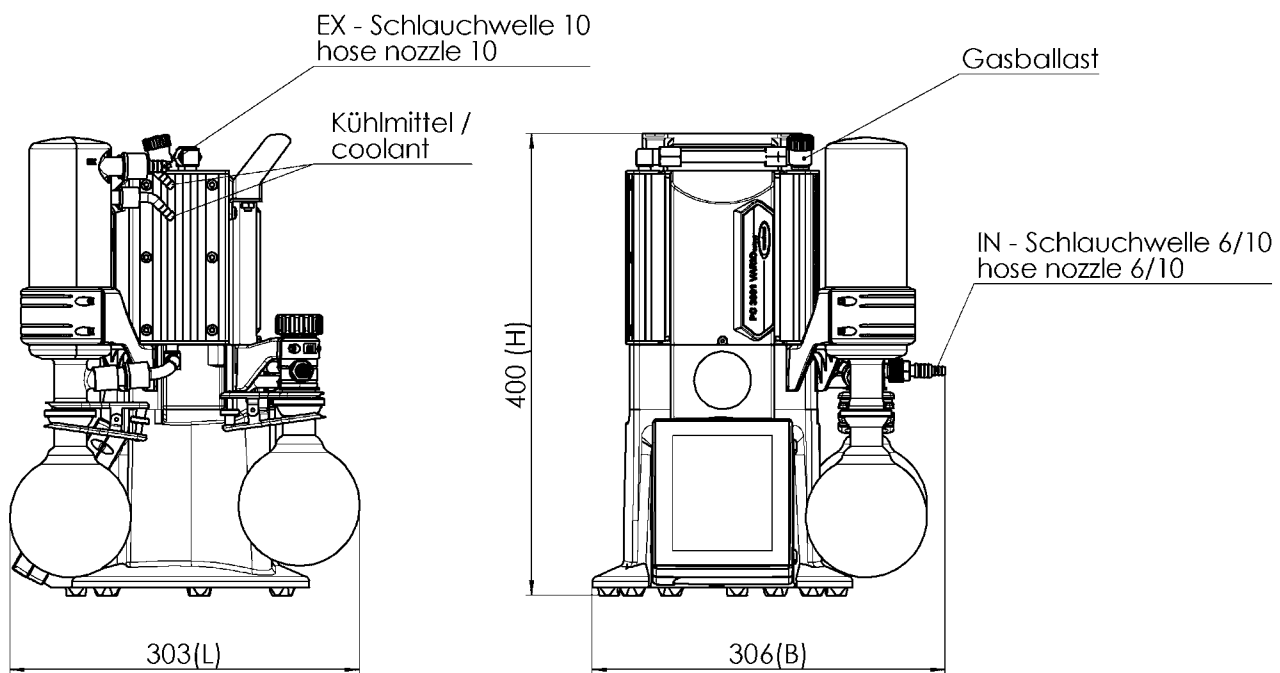
## Pumping speed graph at 50 Hz



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



## Dimension sheet



Alle Maße / all dimensions (mm)

VACUUBRAND PC 3001 VARIO select  
Version 2017/06/29

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