

## VACUUM CONTROLLER

### CVC 3000

#### ■ Vacuum controller CVC 3000

The CVC 3000 adjusts the vacuum level fully automatically to the process demands by controlling vacuum pumps and solenoid valves. The CVC 3000 even manages condenser cooling water. The integrated venting valve and a highly resistant alumina ceramic vacuum sensor ensure excellent measuring reliability independent of gas type. The CVC 3000 controls vacuum automatically via pump motor speed control when used to operate the VACUUBRAND NT VARIO pumps. Ten fully configurable programs can also be easily edited and stored. Each program can include up to ten time and pressure steps, with control functions such as venting, pumping and vacuum ramp. External valves and gauge heads connect simply and are recognized automatically via the VACUU·BUS™ control system.

CVC 3000



#### PERFORMANCE FEATURES

- automatic adjustment of the vacuum level throughout the process for high process reliability and unattended operation (with NT VARIO pumps)
- controls process vacuum, cooling water, and venting to demand
- intuitive operation with turn-and-tap jog wheel and clear text menus, with integrated venting valve
- interactive communication (PC) through RS232C serial interface
- self-configuring by recognizing any VACUU·BUS™ appliance: NT VARIO pumps, valves, external gauge heads

#### APPLICATIONS

Many vacuum processes, such as evaporation or concentration, benefit from automated electronic vacuum control to achieve the most efficient, but also gentle, conditions. The CVC 3000 provides two-point vacuum control by operating a solenoid valve, as well as providing continuous vacuum control and even fully automatic process control with NT VARIO pumps. In case of valve control, a hysteresis value is suggested automatically. Any parameter can be adjusted, even during vacuum control. Pressure and time settings, as well as run-on time for pump and valves after application is complete, can be adjusted.

## VACUUM CONTROLLER

## CVC 3000E

### ■ CVC 3000E Workstation vacuum controller for integration into laboratory furniture

VACUUBRAND offers easily adaptable built-in versions of the CVC 3000 controller for vacuum networks integrated into laboratory furniture. The built-in version features an in-line solenoid vacuum valve mounted directly to the rear of the controller, with an integrated check valve included to avoid interference and contamination among neighboring work stations. The layout and installation of the built-in controllers can be easily accomplished by lab furniture manufacturers. An external vacuum gauge head with ceramic sensor (VSK 3000) is available as an accessory for vacuum measurement directly at the process workstation. VACUU·BUST™ connections including sensor cables may be extended up to 30 m.

CVC 3000E



TECHNICAL DATA		CVC 3000
Upper measuring limit	mbar/hPa / torr	1080 / 810
Lower measuring limit	mbar/hPa / torr	0.1 / 0.1
Measurement principle		Capacitive, gas-type independent, abs. pressure (alumina ceramics)
Measurement uncertainty		< +/- 1 mbar/hPa/torr / +/- 1 digit (after adjustment, constant temp.)
Temperature coefficient		< 0.07 mbar/hPa/torr / °C
Vacuum connection		PTFE-tubing conn. 10/8 mm with hose nozzle DN 6/10 mm (KF DN 16 optional)
Venting valve, connection		Integr., hose nozzle DN 4-5 mm
Ambient temperature range (storage)	°C	-10 - 60
Ambient temperature range (operation)	°C	10 - 40
Max. media temp. continuous operation	°C	40
Max. media temperature for short times	°C	80
Material of outer housing		Robust plastic housing (PP) with good chemical resistance
Degree of protection		IP 20
Degree of protection, front side of display unit		IP 42
Cable length of external power supply	m	2
Dimensions (L x W x H)	mm	138 x 124 x 115
Weight	kg	0.44

ACCESSORIES	ORDERING INFORMATION	CVC 3000
Rubber vacuum tubing DN 6 mm (686000)	100-230 V ~ 50-60 Hz	CEE/CH/UK/US/AUS 683160
Rubber vacuum tubing DN 10 mm (686002)	Built-in version upon request	
PTFE tubing DN 10/8 mm (638644)		
DKD calibration with first delivery (900216)		
DKD recalibration (900217)		
Accessories VACUU·BUST™ In-line solenoid vacuum valve VV-B 6C (674291)		