

BAKEOUT CONTROL UNIT BCU 13

Description

The BCU13 Bakeout Control Unit is a microprocessor controlled device for independent control of either two heating zones of a vacuum system or a single heating zone and a sample heater inside e.g. a preparation chamber. The single unit has two independently controlled and regulated 10kW heater power supplies. Heating operation for either one sample and one chamber or for two chambers is factory pre-set and cannot be modified by the user. An additional option allows the customer to independently control other non-regulated heaters such as those used for ion pumps.

The unit is also fully **software controlled** and **web-enabled** so that it can be operated over any network, including the internet.

Only one communication interface can be chosen at time of order (please refer to table) but this can be easily changed in the future via simple rear panel plugin connection modules, without ever having to access the internals of the unit.

Application

The main tasks of the BCU13 are regulation and stabilization of (i) the power supplied to the heaters in order to achieve a required bakeout temperature in any given zone, and (ii) parallel control of unregulated heaters (on valves, ion pumps, etc.) .Target temperature, bake time and ramp times are all user-defined.

Additional information

The BCU13 Bakeout Control Unit controller can be supplied in a 3HE 19" enclosure unit with steering power components (one or two units - 2 heat zones per unit) or for 19" rack mounting with external power components.

Software

Full dedicated software application or library module.

* Only one communications interface can be used at once. Please specify at time of order.

Specification	
Supply voltage	3x400VAC ; 20A max
Temperature range control	up to 400°C
Outout power	up to 10kW per ZONE; 230VAC or 3x400VAC
Regulation method	PID - no parameters input require
Accuracy (for 2kW/1m ³)	Better than $\pm 2^\circ\text{C}$
User interface	LCD alphanumeric display 2 x 20 LCD display with function keys
Interlocks/Triggers	High vacuum
Number of control zones	2 independent
Timers	2 independent for each zone
Operation modes	Continuous or timer sequence
Other output control	One continuous output for each zone with own timer
Communication Interface * (option)	RS232/485/422, USB, Profibus DPV1, Modbus, EtherNet/IP, Bluetooth
Dimensions	210 x 128 x 25 mm (W x H x D) - control panel 490 x 130 x 380 mm (W x H x D) - complete set 1-4heating zones in 19" enclosure
Weight, approx	350 g - control panel

