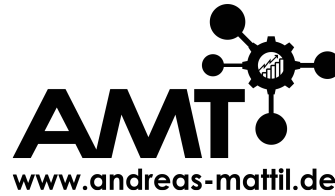# BCU14
BAKEOUT CONTROL UNIT

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PREVAC

DESCRIPTION

The BCU14 Bakeout Control Unit is a microprocessor controlled device for independent temperature control of either two heating zones of a vacuum system or a single heating zone and a sample heater inside. 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 can be remotely controlled via RS232/485 or Ethernet interfaces. The unit is equipped with autosave function (the device save your parameters, preset and apply them automatically after restart).

FEATURES

- Instruction by video movie integrated on TFT display
- Configurable user interface
- Power failure procedures
- Configurable interlocks
- Independent fans control system
- Sensor break protection
- Additional output signals to control external units
- Easy firmware upgrade via USB

APPLICATIONS

The main tasks of the BCU14 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 BCU14 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.

TECHNICAL DATA

Supply voltage	230 VAC (L+N+PE, 2L+PE) (power consumption max 11.5 kW) 3x400 V(3L+N+PE) (power consumption max 19.55 kW)
Temperature range control	room temperature up to 1200 °C
Regulation method	fully automated based on PID algorithm
Measurement resolution	±1 °C
Interlocks	fully isolated, one for each zone + master interlock
Number of control zones	2 independent
Timers	2 independent for each zone
Operation modes	timer, manual (timer counter)
Process parameters	time, temperature, ramp
Communication interface	RS232/485, Ethernet
Communication protocol	MODBUS-TCP
User interface	7" TFT display with touchscreen
Interface languages	English, German, Polish
Dimensions	448.8 × 132.5 × 435 mm (W×H×D) 19" rack mountable
Weight (approx.)	10 kg