

UCT

Mini control unit with grafic display



The **UCT** is a small controller for on-site mounting in low voltage equipment, e.g. for the control of heating and climate systems. For operating and visualisation, an OLED-display with a touch panel is integrated. With CAN as field bus, the UCT connects to a network and optionally controls additional I/O-modules.

Connections for process signals:

- 16 analog inputs, 10 Bit, PT1000 / 0..10 V / 0..20 mA
- 2 analog outputs, 0..10 V or 0..20 mA
- 8 digital inputs 24 V, optoisolated, for reading switches

Power outputs for low voltage devices:

- 4x 230 V_{AC}, 2 A, with Solid State Relays
- 4x 230 V_{AC}, 2 A, with relays
- 2x relay, 2 A, floating change-over contacts
- 2x relay, 2 A, floating normally open contacts

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Signals

Power

Analog in- and outputs

In the standard configuration, the analog inputs of the **UCT** are configured for temperature sensing by PT1000-sensors. Each input can also be configured as current or voltage input (0..20 mA or 0..10 V). The analog outputs are capable of delivering currents 0..20 mA, with an appropriate shunt, they can also be used as 0..10 V voltage outputs.

Digital inputs

The digital inputs of the **UCT** are optically isolated and share a common ground. They are designed to read ground switching sensors, e.g. switches.

CAN-Bus

The CAN-Bus is galvanically isolated. The **UCT** can be used a control unit (master) as well as intelligent I/O-Module. Baudrates 50 kB upto 1 MB are supported, CANopen ist optionally available.

Power outputs

The **UCT** provides 8 switched line outputs 230 V_{AC}, 2 A, with fast fuses. 4 of them are switched by SSRs, 4 are optionally fitted with plug-in relays or SSRs.

4 floating outputs by plug-in relays (2x normally open, 2x change over) are supporting loads upto 230 V_{AC}, 2 A.

Operation

An OLED grafic display 2,8" with a resolution of 320x240 pixels is supported by a software library and allows process visualisation. The display comes with a touch panel for user input, e.g. by a stylus or a pen.

Size and supply

The **UCT** comes as ready-to-use module for screw mounting in an ABS case with an IP30 protection class. It measures 260x230x120 mm (LxWxH) and is supplied by 230 V_{AC}.

For wire connections, cage clamps are used and are supporting solid as well as stranded cables.

Programming

The **UCT** is based on the Motorola MC68332 microcontroller. The Realtime Operating System RTOS-UH is in the standard scope of supply. For programming, a Crest-C- and a PEARL-compiler as well as an IEC 61131-3 wokbench are available.

Options

An internal extension port is available for the mounting of different communication modules, e.g. for:

- Ethernet
- WLAN
- Modem (V92, ISDN, GSM)

All in- and outputs are configurable according to customer specifications, even in small lots. Modules in special configurations are available at low cost, please contact factory.