

High Temperature Thermostat using the unistat principal with Plug & Play technology. Minimized volume, shortest possible heating times, hydraulically closed: No oil vapour. The cooling water discharge temperature is limited to 55 °C to prevent steam from being generated during cooling at flow temperatures in excess of 100 °C. Housing and heat exchanger made of stainless steel. With adjustable overtemperature protection according to DIN 12876. Length of cable between machine and controller approx. 5m. Speed controlled pump (soft start), pump pressure control.

#### Pilot ONE:

The Pilot ONE controller with pioneering technology and advanced control functions brings numerous advantages to routine work. The extensive features list includes a brilliant 5,7" TFT touchscreen display, USB and network connections, an integrated technical glossary and language support in 13 languages (EN, DE, FR, IT, ES, RU, ZH, PT, JA, CS, PL, KO, TR). The Pilot ONE has a convenient navigation system with easily remembered icons and menu categories which are colour sorted to make routine work simpler. Thanks to a favourites menu and One-Click operator guidance all important information is always just a few keystrokes away. Software wizards also help you to set up, ensuring correct settings. The USB port allows connection of the system to a PC or notebook. Together with the Spy software, requirements such as remote control or data transmission are easily achieved in a cost-effective manner. Network integration is easy with the internet port.

#### Further functions:

E-grade Professional installed as standard, TAC (True Adaptive Control) - self optimising internal and cascade control, selectable temperature control mode (Internal/Process), programmer with 10 programs (max. 100 steps), ramp function (linear and non-linear), 5 point calibration, scalable graphic display, favourites menu, display resolution 0,01 K, integrated technical glossary, 2nd set point, user menus (Administrator level), calendar start, wallpaper selection.

4-year warranty - registration required.

#### Technical data according to DIN 12876

|   |                                       |                                |
|---|---------------------------------------|--------------------------------|
| Operating temperature range                       | 50...400 °C                           |                                |
| min. operating temperature range w. water cooling | 15 °C                                 |                                |
| Resolution of display                             | 0,01 K                                | <b>Order-No.: 1028.0024.01</b> |
| Temperature stability at 70°C                     | 0,05 K                                |                                |
| temperature set point / display                   | 5,7" colour Touchscreen               |                                |
| Absolute accuracy                                 | 2-point-calibration                   |                                |
| Internal temperature sensor                       | Pt100                                 |                                |
| External sensor                                   | Pt100                                 |                                |
| Interface digital                                 | Ethernet, USB (Host u. Device), RS232 |                                |
| digital input                                     | ECS ONE                               |                                |
| digital output                                    | POKO ONE                              |                                |
| Alarm message                                     | optic, acoustic, relay                |                                |
| Safety classification                             | III / FL                              |                                |
| Heating power                                     | 9 kW                                  |                                |
| Cooling power at 100°C                            | 10 kW                                 |                                |
| Cooling power at 200°C                            | 10 kW                                 |                                |
| Cooling power at 300°C                            | 10 kW                                 |                                |
| Cooling power at 400°C                            | 10 kW                                 |                                |
| Circulation pump:                                 |                                       |                                |
| max. delivery                                     | 26 l/min                              |                                |
| max. delivery pressure                            | 0,8 bar                               |                                |
| Delivery at 0,2 bar                               | 23 l/min                              |                                |
| Delivery at 0,4 bar                               | 18 l/min                              |                                |
| Delivery at 0,6 bar                               | 12 l/min                              |                                |
| Pump connection flow                              | M24x1,5                               |                                |
| Pump connection return                            | M24x1,5                               |                                |
| Cooling water connection                          | G1/2 male                             |                                |
| Consumption at water 15°C, flow 20°C              | 240 l/h                               |                                |
| min. filling capacity                             | 2,3 l                                 |                                |
| Volume of expansion                               | 5 l                                   |                                |
| min. cooling water differential pressure          | 3 bar                                 |                                |
| max. cooling water pressure                       | 6 bar                                 |                                |
| Overall dimensions WxDxH                          | 288x379x890 mm                        |                                |
| Pressure equipment category                       | Art. 4.3 PED                          |                                |
| Degree of Protection                              | IP20                                  |                                |
| Net weight  | 54 kg                                 |                                |

## Technical data according to DIN 12876

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|                          |                  |
|--------------------------|------------------|
| Power supply (3 Phase)   | 400V 3~N 50/60Hz |
| max. current (3 Phase)   | 14,5 A           |
| Fuse (3 phase)           | 3x16A            |
| min. ambient temperature | 5 °C             |
| max. ambient temperature | 40 °C            |

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**from Serial-No.:**

**S388582**

**1.0/20**

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Technical details and dimensions are subject to change. No liability is accepted for errors or omissions. Illustrations can deviate from the original.

Included Accessories:

E-grade "Professional" #9496, mini-USB cable #54949, Cover level indicator, connection cable (order no.: 13482), hose coupling cooling water for G1/2 male

Optional accessories:

software & interfaces, temperature control / - connection hoses, thermofluids, further accessories, etc.: see catalog.

Output data valid for: Room temperature 20° C, cooling water inlet 15° C and 3 bar differential pressure between cooling water inlet and - outlet. This temperature control unit is designed to operate with cooling water intake temperature between 5° C and 20° C. When cooling water temperatures fall below the condensation point, it is essential to insulate the cooling water pipes in the unit.

As the cooling water temperature increases, drop in the cooling power should be expected, and also an increased cooling water flow rate possible. Materials used in the cooling water circuit include; copper, Stainless steel 1.4401, MS, PA, PPE, PTFE and EPDM. Please use suitable cooling water.

In accordance with EN60034-1 the following voltage and frequency tolerances are valid:

Voltage + / - 10%, as long as the frequency tolerance does not run in the opposite direction.

Example: -10% voltage and + 3% frequency -> not allowed !

-10% voltage and -3% frequency -> allowed.

Information to Electromagnetic compatibility:

Classification (disturbance) to EN55011: Class A, Group 1

Attention: leakage current externe Temperierung

Standard delivery conditions - Power cable configuration:

1. Single / two-phase devices (100V to 240V) --> with power cable and country-specific plug (please specify when ordering)
2. Three-phase devices with current consumption less than 63A --> with cable, without plug
3. Three-phase devices with current consumption greater than 63A --> without cable, without plug

\*\* Please respect space requirements. See operating conditions at [www.huber-online.com](http://www.huber-online.com)