

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.: 1028.0018.01</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	3 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 requirement	200-240V 1~/2~ 50/60Hz
max. current	14,5 A
Fuse	16 A
min. ambient temperature	5 °C
max. ambient temperature	40 °C

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**from Serial-No.:**

**S413492**

**1.1/20**

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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

External branch circuit protection according to UL 489 required.

For the specification, please refer to the electrical schematics.

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)