

Heating Circulator with electronic level indicator for closed systems and open baths. Powerful - regulated - cooling, saves water, unpressurised. Stepper motor controlled HT cooler (High temperature cooler) and water cooled heat exchanger. Water exit temperature limited to 55°C. No steam exits on cooling with circulation temperatures over 100°C. Magnetic coupled circulation pump made of stainless steel. Automatical capacity adaption for heating. Expansion tank (not thermoregulated) for closed systems, lockable for open baths. Heat exchanger, moistened parts and housing made of stainless steel. With adjustable overtemperature protection according to DIN 12876. Powerful variable speed pump (soft start) with integrated pressure control with optional external pressure sensor.

#### 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.

The dimensions specified below are approximate and may be subject to change.

#### Technical data according to DIN 12876

Operating temperature range	65...300 °C	
Minimum temperature with water cooling	15 °C	
temperature set point / display	5,7" colour Touchscreen	<b>Order-No.: 1083.0020.01</b>
Resolution of display	0,01 K	
Internal temperature sensor	Pt100	
Sensor external connection	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	12 kW	
Cooling power		
at 300°C	10 kW	
at 200°C	10 kW	
at 100°C	10 kW	
Circulation pump:	MK pump	
max. delivery	96 l/min	
max. delivery pressure	3,5 bar	
Delivery at 0,5 bar	82 l/min	
Delivery at 1,0 bar	72 l/min	
Delivery at 1,5 bar	60 l/min	
Delivery at 2,0 bar	45 l/min	
Delivery at 2,5 bar	33 l/min	
Delivery at 3,0 bar	20 l/min	
Pump connection	M30x1,5 male	
max. permissible kin. viscosity	50 mm <sup>2</sup> /s	
Cooling water consumption at water temp. 15°C	640 l/h	
Cooling water connection	G3/4 male	
min. cooling water differential pressure	1 bar	
max. cooling water pressure	6 bar	
min. filling capacity	7 l	

## Technical data according to DIN 12876

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Filling capacity expansion tank	24 l
Overall dimensions WxDxH **	540x749x1184 mm
Power supply (3 Phase)	460V 3~ 60Hz
Pressure equipment category	Art. 4.3 PED
Degree of Protection	IP20
max. ambient temperature	40 °C
min. ambient temperature	5 °C

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from Serial-No.:

1.0/25

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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:

mini-USB Kabel #54949

Optional accessories:

Com.G@te, Software, temperature control / - connection hoses, thermofluids, further accessories, etc.: see catalog.

Note: Pump connections: Bore shape Y (60°) according to DIN 3863, pipework/flexible tempering hoses: Ball socket according to DIN 3863, sleeve nut according to DIN 3870.

Output data valid for: Room temperature 20°C, cooling water inlet 15°C and 1 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

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

Note on all Unistat T models:

These devices do not have an active refrigeration system.

Water cooled: Target temperatures (down to the minimum 65°C) can only be achieved with appropriate heat loss from the application or suitable water cooling.

Air cooled: The heat loss must be between 0.1kW and 2.8kW, depending on the unit. In order to reach 65°C the ambient temperature must be well below 60°C.

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