

Heat Exchanger Unit with circulation pump (stainless steel). Housing, atmospheric open expansion tank and external plate heat exchanger (copper soldered), made of stainless steel. With digital level indicator. For externally closed applications. With adjustable overtemperature protection according to DIN 12876.

## Pilot ONE:

The new 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, CN, PT, JP, CZ, 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.

The range of functions can be expanded very easily via E-grade at any time by entering a unit specific upgrade code:

E-grade "Exclusive": TAC (True Adaptive Control) - self optimising internal and cascade control, selectable temperature control mode (Internal/Process), programmer with 3 programs (max. 15 steps), ramp function (linear), 5 point calibration, scalable graphic display, favourites menu, display resolution 0,01 K.

E-grade "Professional": Programmer with 10 programs (max. 100 steps), ramp function for temperature gradients (linear and non-linear), 2nd set point, user menus (Administrator level), calendar start.

4-year warranty - registration required.

Cooling power at:	22kW	/	30kW
primary side:			
inlet 10° C / flow	50 l/min	/	100 l/min
secondary side:			
outlet 20° C / recirculation	160 l/min	/	160 l/min

## Secondary (HTS to application):

Medium:	water
Temperature range:	5° ... 90° C

## Primary (cooling water customer side):

Medium:	water
Temperature range:	0° ... 90° C
max. consumption	
at pressure differential 0,2 bar	26 l/min
at pressure differential 0,5 bar	46 l/min
at pressure differential 1,0 bar	68 l/min
at pressure differential 1,5 bar	61 l/min
at pressure differential 2,0 bar	92 l/min
at pressure differential 2,5 bar	105 l/min
at pressure differential 3,0 bar	116 l/min

## Technical data according to DIN 12876

Operating temperature range ( secondary side )	(3)...(95) °C	
Temperature stability	0,1 K	
temperature set point / display	5,7" colour Touchscreen	<b>Order-No.: 3046.0016.01</b>
Internal temperature sensor	Pt100	
Sensor external connection	Pt100	
Interface digital	Ethernet, USB (Host u. Device), RS232	
Alarm message	optic, acoustic, relay	
Safety classification	I / NFL	
Cooling power with	Water	
at 20°C	30 kW	
Circulation pump	G	
max. delivery	240 l/min	
max. delivery pressure	4,7 bar	

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Delivery at 1,1 bar	223 l/min
Delivery at 1,5 bar	211 l/min
Delivery at 2,0 bar	196 l/min
Delivery at 2,5 bar	180 l/min
Delivery at 3,0 bar	160 l/min
Delivery at 3,5 bar	139 l/min
Delivery at 4,0 bar	109 l/min
Delivery at 4,5 bar	70 l/min
Pump connection	G1 1/4 male
max. permissible kin. viscosity	50 mm <sup>2</sup> /s
Cooling water connection	G1 1/4 male
max. cooling water differential pressure	4 bar
max. cooling water pressure	6 bar
min. filling capacity	26 l
Volume of expansion	44 l
Power supply requirement (3 phase)	460V 3~ 60Hz
Pressure equipment category	Art. 4.3 PED
Degree of Protection	IP20
min. ambient temperature	5 °C
max. ambient temperature	40 °C

**from Serial-No.:**

**1.0/24**

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 cable #54949, hose connection for cooling water G1 1/4 male

Optional accessories:

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

Output data valid for: Room temperature 20° C, The performance data primary to secondary circuit apply to a temperature difference of (Delta T) 10K. This temperature control unit has been designed to operate with cooling water up to 20° C. 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

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