

# CC-405w



Refrigerated Heating Circulator Bath with water-cooled cooling machine. Powerful, variable speed, pressure and suction pump, evaporator (cooler) and housing of stainless steel, CFC and H-CFC free. 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.

# Technical data according to DIN 12876

Operating temperature range	-40200 °C	
Temperature stability at -10°C	0,02 K	
temperature set point / display	5,7" colour Touchscreen	
Internal temperature sensor	Pt100	Laboration of the laboration o
Sensor external connection	Pt100	
Interface digital	Ethernet, USB (Host u. Device), RS232	
Safety classification	III / FL	
Heating power at 240V	1,6 kW	
Heating power at 230V	1,5 kW	
Heating power at 220V	1,3 kW	(Wilfle)
Cooling power		
at 100°C	0,7 kW	
at 20°C	0,7 kW	
at 0°C	0,7 kW	
at -20°C	0,45 kW	
at -30°C	0,18 kW	
at -40°C	0,03 kW	
Refrigeration machine	water-cooled, natural refrigerant	
Refrigerant (ASHRAE, GHS)	R-1270 (A3, H220)	
Global Warming Potential (GWP)	0	0.1.1.1.0.0017.0010.01
Pressure pump	yes	Order-No.: 2017.0010.01
max. delivery	25 l/min	
max. delivery pressure	0,7 bar	
Suction pump	yes	
max. delivery (suction)	18,5 l/min	
max. delivery pressure (suction)	0,4 bar	
Pump connection	M16x1 male	
max. permissible kin. viscosity	50 mm²/s	
Cooling water connection	G1/2 male	
Consumption at water 15°C, flow 0°C	46 l/h	
min. cooling water differential pressure	3 bar	
max. cooling water pressure	6 bar	
Bath volume	51	
min. filling capacity	41	

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from Serial-No.:		1.0/24
min. ambient temperature	5 °C	
max. ambient temperature	40 °C	
Degree of Protection	IP20	
Pressure equipment category	Art. 4.3 PED	
Power supply requirement	220-240V 1~/2~ 50/60Hz	
Net weight	55 kg	
Overall dimensions WxDxH **	370x460x679 mm	
Height of bath opening	480 mm	
Width bath opening WxD / bath depth	120 x 110 / 150 mm	

#### from Serial-No.:

Technical details and dimensions are subject to change. No liability is accepted for errors or omissions. Illustrations can deviate from the original. Accessories and periphery: mini-USB cable #54949\*, Adapter nom. dia. 12 mm\*, dummy plugs\*, sleeve nuts thread M16x1\*, hose coupling 3/8" \*, connection tubes, braided hoses for cooling water, drain valve \* standard equipment

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 has been designed to operate with cooling water up to 20°C. As the cooling water temperature increases, drop in the cooling power should be expected, and also an increased cooling water flow rate possible. Materiels 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 + / - 5% with a simultaneous frequency tolerance of + / - 2%

-5% voltage and + 2% frequency -> not allowed! Example

-5% voltage and - 2% 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

This equipment is compliant to US-SNAP and all applicable EU laws. The US-SNAP end-use for this equipment is the industrial process refrigeration. Certification by a Notified Body upon request.

\*\* Please respect space requirements. See operating conditions at www.huber-online.com