

# Unistat P520

Refrigerated Heating Circulator with air-cooled cooling machine and optical level indicator. Magnetic coupled circulation pump made of stainless steel. Automatical switch-over and capacity adaption for heating and cooling machine. Copper soldered evaporator, moistened parts and housing made of stainless steel. As well as for externally closed and also externally open applications. With adjustable overtemperature protection according to DIN 12876. Powerful variable speed pump (soft start) with integrated pressure control with optional external pressure sensor.

Unistat "P" Models: Circulating pumps with a high discharge pressure for applications with high pressure drops, e.g. in the Flow-Through chemistry or in the Semicon industry.

## 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.

#### 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 required voltage is provided using a stand alone transformer (supplied as standard)
- Dimensions of the stand alone transformer: WxDxH 252x510x600 mm
- Weight of transformer: 115 kg (is included in the total weight given below)

## Technical data according to DIN 12876

Operating temperature range		-55250 °C	
Temperature stability at -10°C		0,01 K	
temperature set point / display		5,7" colour Touchscreen	. 0
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	e undas Sto
digital output		POKO ONE	Inter
Alarm message		optic, acoustic, relay	- 2
Safety classification		III / FL	
Heating power		6 kW	
Cooling power with		Thermooil	
at 250°C		6 kW	
at 200°C		6 kW	
at 100°C		6 kW	
Cooling power with		Ethanol	
at 0°C		6 kW	
at -20°C		4,2 kW	UT I
at -40°C		1,5 kW	-
at -50°C		0,65 kW	
Refrigeration machine		air-cooled, CFC- and HCFC-free	Order-No.: 1072.0006.01
Refrigerant (ASHRAE, GHS)		R452A (A1, H280)	
Refrigerant quantity		1,44 kg	
Circulation pump:		MK pump	
max. delivery		82 l/min	
max. delivery pressure		3 bar	
Delivery at 0,5 bar		75 l/min	
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## Technical data according to DIN 12876

Delivery at 1,0 bar	66 l/min
Delivery at 1,5 bar	57 l/min
Delivery at 2,0 bar	46 l/min
Delivery at 2,5 bar	32 l/min
Pump connection	M30x1,5 male
max. permissible kin. viscosity	50 mm²/s
Filling capacity expansion tank	17
Overall dimensions WxDxH **	1290x795x1377 mm
Power supply factory configured (3 Phase)	208V 3~ 60Hz
Pressure equipment category	4.3 PED
Degree of Protection	IP20
min. ambient temperature	5 °C
max. ambient temperature	40 °C

#### from Serial-No.:

1.0/23

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, E-grade "Professional" #9496,

Optional accessories:

E-grade "Explore" #10495, SpyLight-Software, Com.G@te Namur, PC-Com.G@te-cable, Holder for Com.G@te #10018, Com.G@te-extension cable: upon request, RS232 adapter cable #55018, Thermofluid, external pressure sensor, metal hoses, external sensor, connecting cable, isolation sleeve for external open applications, float switch in sight glass for extended security, 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. If the ambient temperature rises, the cooling capacity may drop.

in accordance with EN60034-1 the following voltage and frequency tolerances are valid: Voltage + / - 5% with a simultaneous frequency tolerance of + / - 2% Example -5% voltage and + 2% frequency -> not allowed! -5% voltage and - 2% frequency -> allowed

Information to Electromagnetic compatibility: Classification (disturbance) to EN55011: Class A, Group 1 Attention: leakage current > 3,5mA

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