Hydraulically sealed Refrigerated Heating Circulator with air-cooled refrigerating unit. Evaporator and housing made of stainless steel. With atmospheric open expansion tank and optical level indicator.As well as for externally closed and also externally open applications.

High system performance ( w att/litre) due to minimized internal volume. No HTF vapour and no moisture absorption because the expansion tank is thermally passive. For external open baths the expansion tank will be blocked off. This means that the thermostat is atmospherically sealed and can be located below or above the level of the application. Pow erful variable speed pump (soft start) with integrated pressure control with optional external pressure sensor.

## 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 netw ork connections, an integrated technical glossary and language support in 13 languages ( $\mathrm{EN}, \mathrm{DE}, \mathrm{FR}, \mathrm{IT}, \mathrm{ES}, \mathrm{RU}, \mathrm{CN}, \mathrm{PT}, \mathrm{JP}, \mathrm{CZ}, \mathrm{PL}, \mathrm{KO}$, 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. Softw are wizards also help you to set up, ensuring correct settings. The USB port allow s 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 $0,01 \mathrm{~K}$, integrated technical glossary, 2 nd set point, user menus (Administrator level), calendar start, wallpaper selection.

4-year warranty - registration required.
Technical data according to DIN 12876

Operating temperature range
Temperature stability at $-10^{\circ} \mathrm{C}$
temperature set point / display
Resolution of display
Internal temperature sensor
Sensor external connection
Interface digital
digital input
digital output
Alarm message
Safety classification
Heating power
Cooling power with
at $250^{\circ} \mathrm{C}$
at $200^{\circ} \mathrm{C}$
at $100^{\circ} \mathrm{C}$
Cooling power with
at $0^{\circ} \mathrm{C}$
at $-20^{\circ} \mathrm{C}$
at $-40^{\circ} \mathrm{C}$
Refrigeration machine
Refrigerant (ASHRAE, GHS)
Global Warming Potential (GWP)
Refrigerant quantity
Gas warning sensor
Circulation pump:
max. delivery
max. delivery pressure
Pump connection
max. permissible kin. viscosity
min. filling capacity
$-45 \ldots 250^{\circ} \mathrm{C}$
0,01 K
5,7" colour Touchscreen
0,01K
Pt100
Pt100
Ethernet, USB (Host u.
Device), RS232
ECS ONE
POKO ONE
optic, acoustic, relay
III / FL
3 kW
Thermooil
1 kW
1 kW
1 kW
Ethanol
1 kW
0,6 kW
$0,15 \mathrm{~kW}$
air-cooled, natural
refrigerant
R-1270 (A3, H220)
0
$0,15 \mathrm{~kg}$
without
55 I/min
0,9 bar
M24x1,5 male
$50 \mathrm{~mm}^{2} / \mathrm{s}$
1,5।

Technical data according to DIN 12876

| Filling capacity expansion tank | $2,8 \mathrm{I}$ |  |
| :--- | :--- | :--- |
| Overall dimensions $\mathrm{W} \times \mathrm{DxH}{ }^{* *}$ | $426 \times 327 \times 631 \mathrm{~mm}$ |  |
| Net weight | 65 kg |  |
| sound pressure level $+/-4 \mathrm{~dB}(\mathrm{~A})$ | $56 \mathrm{~dB}(\mathrm{~A})$ |  |
| Power supply requirement | $220-240 \mathrm{~V} \quad 1 \sim / 2 \sim 50 / 60 \mathrm{~Hz}$ |  |
| max. current | $15,5 \mathrm{~A}$ |  |
| Fuse | 16 A |  |
| Pressure equipment category | Art. 4.3 PED |  |
| Degree of Protection | IP 20 |  |
| min. ambient temperature | $5^{\circ} \mathrm{C}$ |  |
| max. ambient temperature | $40^{\circ} \mathrm{C}$ |  |
| from Serial-No.: | $\mathbf{4 0 8 6 5 2}$ | $\mathbf{1 . 1 / 2 0}$ |

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, Adaptor M $16 \times 1$ male to M24x1,5 female,
Optional accessories:
E-grade "Explore" \#10495, RS232 adapter cable \#55018, SpyLight-Software, Com.G@te Namur, PC-Com.G@te-cable, Holder for Com.G@te \#10019; Com.G@te-extension cable: upon request, Thermofluid, external pressure sensor, metal hoses M16x1 or $M 24 \times 1,5$, 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 $Y\left(60^{\circ}\right)$ according to DIN 3863, pipew ork/flexible tempering hoses: Ball socket according to DIN 3863, sleeve nut according to DIN 3870.

Output data valid for: Room temperature $20^{\circ} \mathrm{C}$. 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 allow ed!
$-5 \%$ 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 ( 100 V to 240 V ) --> 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

