# KISS K12

Refrigerated Heating Bath with air-cooled refrigerating unit and KISS-Controller. Consisting of isolated cooling bath made of stainless steel with immersion thermostat. Powerful pressure and suction pump made of industrial plastic material. Wetted parts made from stainless steel or plastics. With adjustable overtemperature protection according to DIN 12876.

NEW: KISS controller:
KISS combines state-of-the-art technology with simple operation and stylish design. Models with KISS controller are suitable for routine tasks in research and industry and are convincing as practice oriented basic equipment:

* Large, bright OLED display
* Simple operation with menu navigation
* Simultaneous display of set point, internal temperature, Tmin and Tmax
* Status displays for pump, cooling and heating
* USB (Device) and RS232 interfaces
* Overtemperature protection, Safety class 3 (FL)
* Autostart function for power failure
* 3 colour versions available: grey (standard), blue, red

Option: Pt100 sensor connection #10688 to display (not control) e.g. of the process temperature (only available factory fitted, additional charge).

3-2-2 warranty - registration required.

**Technical data according to DIN 12876**

| | |
|---|---|
| Operating temperature range | -20...200 °C |
| Temperature stability at 70°C | 0,05 K |
| temperature set point / display | digital |
| Absolute accuracy | setup for calibration |
| Internal temperature sensor | Pt100 |
| Alarm message | optic, acoustic |
| Safety classification | Class III / FL |
| Heating power | 2 kW |
| Cooling power | |
| at 20°C | 0,25 kW |
| at 0°C | 0,2 kW |
| at -10°C | 0,12 kW |
| at -20°C | 0,05 kW |
| Refrigeration machine | air-cooled, natural refrigerant |
| Refrigerant | R290 |
| Refrigerant quantity | 0,041 kg |
| Gas warning sensor | without |
| Pressure / Suction pump | |
| max. delivery | 14 l/min |
| max. delivery pressure | 0,25 bar |
| max. delivery (suction) | 10,5 l/min |
| max. delivery pressure (suction) | 0,17 bar |
| Bath volume | 12 l |
| Width bath opening WxD | 290x152 mm |
| Bath depth | 150 mm |
| Height of bath opening | 265 mm |
| Overall dimensions WxDxH ** | 350x560x430 mm |
| Net weight | 28 kg |
| Power supply requirement | 230V 1~ 50/60Hz |
| max. current immersion thermostat | 10 A |
| max. current refrigerated bath | 1,5 A |
| min. Fuse | 10A |
| max. Fuse | 16A |
| Degree of Protection | IP20 |
| min. ambient temperature | 5 °C |
| max. ambient temperature | 40 °C |



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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.

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**Technical data according to DIN 12876**

Included Accessories:
data cable #9472, bath bridge #19596.

Optional accessories:
drain valve #6839, temperature control / - connection hoses, thermofluids, various bath cover and further accessories, etc.: see catalog.

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

Special Case: Acetone and Polyglycol: The plastic pump is not resistant against acetone and polyglycols (depending on the manufacturer). It is recommended that water is mixed with either glysantine or ethylene glycol for freeze protection. A more resistant plastic is available on request at an additional cost.

Standard delivery conditions - Power cable configuration:
1. Single-phase devices (230V/115V) -> with cable and plug
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