# Technology you will love







### Safe & Simple:

## The new KISS® lab circulators

KISS Cooling and heating circulators for laboratory applications from -30 to +200 °C

Under the brand name KISS Huber Kältemaschinenbau presents a new model series with economical cooling and heating circulators. KISS stands for "Keeping Innovation "Safe & Simple" and describes what the customer may expect from the devices: innovative technology with safe and simple operation!

The new KISS circulators are ideally suited for routine laboratory applications such as sample temperature control, analyses and material testing as well as the external temperature control of measuring devices and test setups. You can choose from over 50 models for heating and cooling. This applies to all models: KISS circulators are lowcost, however they do have all equipbrighter environments. Another advantage is the simultaneous display of actual temperature and setpoint value, as well as high/low temperature limit

The controls are reduced to the essential, therefore the operation remains always easy and clear. As a factory fitted option, a connection socket for a Pt100 probe can be fitted. This permits the display (not control) e.g. of an external process temperature. The socket



#### Easy operation, stylish design

The housing is made from high-grade stainless steel. Therefore the devices are very robust and have a very elegant appearance. However, far more important is the practicality and also here are KISS circulators a good choice for most temperature applications. Starting with the simple commissioning, the space-saving design to the low-noise operation, KISS circulators are ideal for laboratory applications. Switch on, set setpoint value and press start - temperature control could not be easier.

#### Safe and reliable

In line with the motto "Safe & Simple", KISS devices do not only offer easy operation, but also meet the highest standards in terms of safety. All models are equipped with an over temperature and low level protection to class III/FL (DIN 12876) and are thus also suited for flammable liquids. Moreover, KISS circulators are a safe option from the technical application perspective. This is can be seen with the circulating

pump, which generates a capacity of 14 l/min; 0.25 bar (pressure side) / 10.5 l/min; 0.17 bar (suction side) and thus ensures optimal mixing and homogeneous temperatures. The temperature stability is ±0.05 Kelvin, which is sufficient for most standard applications. A pump adapter is available as accessory, which permits external temperature control via hose connections.

#### Temperatures from -30 to +200 °C

The KISS range comprises an immersion circulator with screw clamp as well as different baths. The baths are available either in transparent polycarbonate (up to +100 °C) or high-grade stainless steel (up to +200 °C). The filling volume of the baths is from 6 to 25 litres, depending on the model. For cooling applications we offer cooling circulators for working temperatures down to -30 °C. As standard, these models already work with natural refrigerants and are therefore friendly to the environment and climate. Additionally, the cooling machines have an



The new OLED display shows all important data clearly: setpoint value, actual value, temperaturelimits as well as status of the pump, heating and cooling systems.







KISS circulators are equipped with a USB and RS232 interface as standard. Optionally (factory fitted), an additional connection socket for a Pt100 measuring probe is available (Order-No. 10519).



Fig. 4: KISS-baths are available in transparent polycarbonate or stainless steel. The range of volumes is from 6 to 25 litres.

automatic cooling capacity adjustment that reduces the energy consumption and the waste heat to a minimum. The finishing touch to the range is a range of useful accessories like test tube inserts, platforms, bath covers, probes hoses and temperature control.

Furthermore, there is a free software for remote control, recording of measuring data and visualisation called "SpyLight".

The new KISS range of circulators reprobes, hoses and temperature control places the MPC range and is planned to be available as from February 2017. liquids. KISS Fig. 5: KISS circulators are available in three colour options: grey (standard), red and blue.



#### **Heating Immersion Circulator**

Model	Temperature	Temperature	Heating		Pump Data			Safety	Dimensions	Cat.No.	G	
	Range	Stability <sup>1</sup>	Power	max. Pr	max. Pressure		uction	Class <sup>2</sup>	WxDxH/ID³			
	(°C)	(K)	(kW)	(l/min)	(bar)	(l/min)	(bar)		(mm)			
KISSE	(-30)* 25 200	0.05	2.0	14	0.25	10.5	0.17	FI III	132 x 153 x 312/150	2035 0012 98	1	

#### Heating Baths with Polycarbonat bath, to +100°C

Model	Temperature	Heating	Bath			Pump Data				Dimensions	Cat.No.	G
	Range	Power	Opening	Depth	Volume	max. Pressure		e max. Suction		WxDxH		
	(°C)	(kW)	(mm)	(mm)	(ltr)	(l/min)	(bar)	(l/min)	(bar)	(mm)		
KISS 106A	(15)* 25100	2,0	130 x 110	150	6	14	0,25	10,5	0,17	147 x 307 x 330	2037.0043.98	1
KISS 108A	(15)* 25100	2,0	130 x 210	150	8	14	0,25	10,5	0,17	147 x 407 x 330	2037.0045.98	1
KISS 110A	(15)* 25100	2,0	130 x 310	150	10	14	0,25	10,5	0,17	147 x 507 x 330	2037.0047.98	1
KISS 112A	(15)* 25100	2,0	303 x 161	150	12	14	0,25	10,5	0,17	333 x 360 x 335	2037.0049.98	1
KISS 118A	(15)* 25100	2,0	303 x 321	150	18	14	0,25	10,5	0,17	333 x 520 x 335	2037.0051.98	1

<sup>\*</sup> Auxiliary cooling device required Safety class III/FL

#### Heating Baths with stainless steel bath, to +200°C

Model	Temperature	Heating	Bath				Pump	Data		Dimensions	Cat.No.	G
	Range	Power	Opening	Depth	Volume	max. Pr	essure max. Suction		Suction WxDxH			
	(°C)	(kW)	(mm)	(mm)	(ltr)	(l/min)	(bar)	(l/min)	(bar)	(mm)		
KISS 208B	(-30)* 25200	2,0	230 x 127	150	8,5	14	0,25	10,5	0,17	290x350x375	2038.0053.98	1
KISS 212B	(-30)* 25200	2,0	290 x 152	150	12	14	0,25	10,5	0,17	350x375x375	2038.0052.98	1
KISS 215B	(-30)* 25200	2,0	290 x 152	200	15	14	0,25	10,5	0,17	350x375x425	2038.0051.98	1
KISS 220B	(-30)* 25200	2,0	290 x 329	150	20	14	0,25	10,5	0,17	350x555x375	2038.0050.98	1
KISS 225B	(-30)* 25200	2,0	290 x 329	200	25	14	0,25	10,5	0,17	350 x 555 x 425	2038.0049.98	1

<sup>\*</sup> Auxiliary cooling device required

#### Cooling Baths, to -30°C

Model	Working	Heating	Bath				Pump Data				g Powe	r (kW)	Dimensions	Cat.No.	G
	Temp. Range	Power	Opening	Depth	Volume	max. Pi	essure	max. S	uction		at (°C)		WxDxH		
	(°C)	(kW)	(mm)	(mm)	(ltr)	(l/min)	(bar)	(l/min)	(bar)	0	-10	-20	(mm)		
KISS K12	-20200	2,0	290 x 152	150	12	14	0,25	10,5	0,17	0,2	0,12	0,05	350 x 560 x 430	2009.0020.98	2
KISS K15	-20200	2,0	290 x 152	200	15	14	0,25	10,5	0,17	0,2	0,12	0,05	350 x 560 x 430	2010.0017.98	2
KISS K20	-30200	2,0	290 x 329	150	20	14	0,25	10,5	0,17	0,35	0,27	0,16	350 x 555 x 615	2011.0013.98	2
KISS K25	-30200	2,0	290 x 329	200	25	14	0,25	10,5	0,17	0,35	0,27	0,16	350 x 555 x 615	2012.0015.98	2
KISS K6	-25200	2,0	140 x 120	150	4,5	14	0,25	10,5	0,17	0,20	0,15	0,05	210 x 400 x 546	2008.0043.98	2
KISS K6s	-25200	2,0	140 x 120	150	4,5	14	0,25	10,5	0,17	0,26	0,21	0,05	210 x 400 x 546	2008.0044.98	2

Safety class III/FL All units use natural refrigerant as standard



<sup>\*</sup> Auxiliary cooling device required

<sup>1</sup> to DIN 12876, measured in a stainless steel tank 12 litres 2 FL for flammable liquids, III = adjustable overtemperature protection and addition low-liquid level protection

<sup>&</sup>lt;sup>3</sup> Immersion Depth

### Reliable, environmentally friendly and best value for money:

## Thermoregulation from Huber



Quality
Made in Germany



Excellent value for money



Unique Plug & Play



Case studies for performance comparison



Proven technology



Worldwide Sales & Services



Accurate information according to DIN 12876



Safe investment due to E-grade function



Maximum safety for operator and application



Environmentally friendly with natural refrigerant



Connections for USB and network



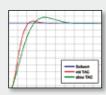
Models for all applications



Time saving heat-up and cool-down times



Easy-to-use operation



State of the art technology guarantees highest precision



Free-of-charge warranty extension

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