

## Data Sheet

Heating/Tempering / Temperature Control



### HRC 2 basic

The compact refrigerated and heating circulator HRC 2 basic is renowned for its high energy efficiency, a working temperature powerful infinitely range from -20°C to 100°C and a variable pressure and suction pump. The on-demand and speed-controlled compressor reduces noise and operating costs. The high-quality Isolation of the 4 l bath allows fast heating and reduces heat input when cooling.

Using the external temperature control circuit is possible for up to 2.5 l thermofluid without a refill.

The integrated hopper and drain valve ensure a safe and clean handling of the thermofluid. The easy-to-open front flap allows an easy cleaning of the cooling unit's air filter. There is a drain valve on the front side of the bath. A hose can be connected to empty the bath, so the user does not get in direct contact with the thermofluid.

- Speed-controlled refrigeration system with 400 W cooling capacity
- Speed-controlled pump made of PEEK: (0.5 bar; 22 l/min)
- 1500 W heating capacity (1200 W @115V)
- Digital level indicator
- Safety classification III (FL) according to DIN 12876
- Adjustable temperature safety circuit

#### Interfaces:

- RS 232
- USB

Accessories: HF.Si.20.250.50A, HF.Si.20.200.50, UF.Si.N30.150.10LV, H.PVC.8 Tube, H.PVC.12 Tube, H.SI.8 Tube, H.SI.12 Tube, H.PUR.8.R Tube, H.PUR.12 Tube, H.FKM.8 Tube, H.FKM.12 Tube, LT 5.20 Hose kit (2 pcs), LT 5.21 Hose kit insulated (2 pcs), ISO.8, ISO.12, Ball valve M16x1, mechanic fluid level controller, IB 8 eco, IB 18 eco, IB HF 24 eco, IB 9 pro, IB 12 pro, IB 20 pro, IB R RO 15 eco, IB R 9 eco, IB R 20 eco, IB R 52 eco, elbow tube 90°, Olive for DN 6 hoses (2 pcs.), Olive for DN 8 hoses (2 pcs.), Olive for DN 10 hoses (2 pcs.), Olive for DN 12 hoses (2 pcs.), Adapter NPT 1/4 (2 pcs.), Adapter NPT 1/2 (2 pcs.), Adapter NPT 3/4 (2 pcs.), lock nut (2 pcs.), stopper (2 pcs.)

#### Technical Data

Appliance type	Circulation thermostat
Class designation acc. DIN 12876	III
Identification according to DIN 12876	FL
Cooling agent	R134a
Cooling agent quantity [g]	230
Cooling agent pressure max. [bar]	20
Heat output [W]	1500
Cooling capacity (@20°C) [W]	400
Cooling capacity (@10°C) [W]	370
Cooling capacity (@0°C) [W]	320
Cooling capacity (@-10°C) [W]	240
Cooling capacity (@-20°C) [W]	130
Working temperature [°C]	-20 - 100
Operating temperature min. [°C]	-20
Operating temperature max. (with external heating) [°C]	100
Temperature display	yes
Temperature stability DIN 12876 (@+70°C) [±K]	0.1
Temperature stability DIN 12876 (@-10°C) [±K]	0.1
Temperature control	PT 100
Working temperature sensor	PT 100
Safety temperature sensor	PT1000
Working temperature display	LED
Safety temperature display	LED
Temperature stability DIN 12876 [±K]	0.1
Display resolution [K]	0.1
Set temperature resolution [±K]	0.1
Warning function optical	yes
Warning function acoustic	yes
Warning function excess temperature	yes
Adjustable safety circuit [°C]	0 - 110
Sub-level protection	yes
Over-level protection	yes
Filling volume [l]	1.4 - 4.0
Pump type	Pressure- / suction pump
Pump capacity adjustable	yes
Pump pressure max. (0 liters discharge flow) [bar]	0.5
Pressure pump (suction side) (0 liter flow) [bar]	0.25
Flow rate max. (0 bar back pressure) [l/min]	21
Pump connection	M16x1
Calibration option	yes
Technical data complies with the standard	DIN 12876
Permissible ON time [%]	100
Dimensions (W x H x D) [mm]	220 x 475 x 525
Weight [kg]	28.5
Permissible ambient temperature [°C]	5 - 32
Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 21
USB interface	yes
RS 232 interface	yes
Voltage [V]	230 / 115
Frequency [Hz]	50/60
Power input [W]	1800
<b>Ident. No.</b>	<b>0025003742</b>