

Data Sheet

Heating/Tempering / Temperature Control



CBC 5 control

The CBC 5 control is a powerful refrigerated and heating circulator with strong heating and cooling power for an operating temperature range of - 25 °C to + 200 °C. It is best suited for external applications thanks to its proven pressure and suction pump. High-quality insulation of the device allows for fast heat-up times and reduces heat input at low temperatures. All parameters are manageable (read out, monitored and completely documented) by software (e. g., labworldsoft(r) or NAMUR commands).

- High performance pressure/suction pump (speed-controlled)
- Industry standard TFT display for maximum visibility (pump speed, temperature)
- Adjustable safety circuit
- Visible and audible alarm
- Safety drain valve
- USB / RS 232 interfaces (labworldsoft(r) and enabling online updates of device software)
- Connection for external temperature probe (PT 100) and optional external solenoid valves (multi-IO port)
- Safety classification III (FL, DIN 12876)
- Removable WiCo (wireless controller) enables safe remote operation, e.g. outside of a closed fume hood

Accessories: HF.Si.20.250.50A, HF.Si.20.200.50, UF.Si.N30.150.10LV, LT 5.20
Hose kit (2 pcs), LT 5.21 Hose kit insulated (2 pcs), H.FKM.8 Tube, H.FKM.12 Tube, H.PUR.8.R Tube, H.PUR.12 Tube, ISO.8, ISO.12, MV 1 Magnetic valve, CO V 1
Closed pressure valve, Ball valve M16x1, 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.), WH10 WiCo Holder, PT 100.30
Temperature sensor

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
Pressure max. [bar]	20
Heat output [W]	2500
Cooling capacity (@20°C) [W]	350
Cooling capacity (@10°C) [W]	320
Cooling capacity (@0°C) [W]	270
Cooling capacity (@-10°C) [W]	190
Cooling capacity (@-20°C) [W]	80
Cooling capacity (@-20°C; 3200 rpm) [W]	130
Cooling capacity (@ 20°C; 3200 rpm) [W]	400
Working temperature min. [°C]	-25
Working temperature max. [°C]	200
Operating temperature min. [°C]	-25
Temperature display	yes
Temperature stability DIN 12876 (@+70°C) [±K]	0.01
Temperature control	PT 100
Working temperature sensor	PT 100
Safety temperature sensor	PT1000
Working temperature display	TFT
Safety temperature display	TFT
Connection for ext. temperature sensor	PT 100
Display resolution [K]	0.01
Display for operation with ext. sensor	yes
Warning function optical	yes
Warning function acoustic	yes
Warning function excess temperature	yes
Warning function insufficient temperature	yes
Adjustable safety circuit min. [°C]	0
Adjustable safety circuit max. [°C]	260
Sub-level protection	yes
Filling volume min. [l]	5
Filling volume max. [l]	7
Pump type	Pressure- / suction pump
Pump capacity adjustable	yes
Pump pressure max. (0 liters discharge flow) [bar]	0.61
Pressure pump (suction side) (0 liter flow) [bar]	0.45
Flow rate max. (0 bar back pressure) [l/min]	31
Pump connection	M16x1
Bath depth min. [mm]	150
Calibration option	yes
Technical data complies with the standard	DIN 12876
Dimensions (W x H x D) [mm]	275 x 690 x 490
Weight [kg]	40.0
Permissible ambient temperature [°C]	5 - 32
Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 21
RS 232 interface	yes
USB interface	yes
Voltage [V]	230 / 100 - 115
Frequency [Hz]	50/60
Power input [W]	3000
Ident. No.	0004167000