

## **FK30-SL Calibration Bath**

The calibration baths in this category feature an integrated refrigeration unit and are suitable for calibration applications to -30 °C. The bath cover with openings and Viton® sleeves is already included in delivery for all models.

## Your advantages

- VFD COMFORT DISPLAY
- LCD DIALOG DISPLAY backlit for convenient interactive operation
- · Keypad for setpoints, warning/safety values and menu functions
- ICC (Intelligent Cascade Control), self-optimizing temperature control
- TCF Temperature Control Features to optimize the control behavior
- ATC3 3-Point-Calibration
- Pt100 External sensor connection for measurement and control
- · SMART PUMP, electronically adjustable pump stages
- Adjustable high temperature cut-out, visible via display
- Integrated programmer for 6 x 60 program steps
- Highest temperature stability to ±0.005 °C (±0.02 °C at +200 °C)
- Temperature uniformity better than ±0.01 °C
- Optional Pt100 sensor for reference temperature measurements
- Temperature chamber with overflow at maximum liquid level
- · Active Cooling Control



# Technical data

Available voltage versions			Bath		
Order No.	9 352 627		Bath tank	Stainless steel	
Available voltage ve	ersions:		Bath cover	integrated	
9 352 627.02			Usable bath opening cm (W x L / D)	12 x 17 /	
9 352 627.03					
9 352 627.04					
Cooling			Other		
Cooling coil		not available	Classification	Classification III (FL)	
Cooling of compres	sor	1-stage Air	IP Code	IP 21	
			Pump type	Immersion Pump	
Electronics			Dimensions and volumes		
Digital interface		Profibus optional	Usable immersion depth cm	17	
External pt100 sens	or connection	integrated	Weight kg	48	
Integrated program	mer	6x60 steps	Dimensions cm (W $\times$ L $\times$ H)	32 x 45 x 79	
Temperature contro	bl	ICC	Filling volume I	14	
Absolute temperatu	re calibration	3 Point Calibration			
Temperature displa	у	VFD			
Temperature setting	9	Keypad			
Temperature va	lues				
Working temperatur	re range °C	-30 +200			
Temperature stabili	ty °C	±0.005			



5 ... 40

Ambient temperature °C



Temperature display resolution °C	0.01
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## Performance values

## 115V/60Hz (Nema N5-15 Plug)

115V/60Hz						
Heating capacity kW			N	1		
Cooling capacity (Ethanol)						
°C	20	0	-20			
kW	0.46	0.34	0.15			
Viscosity max. cST				70		
Refrigerant				R134a		
Filling volume g				163		
Global Warming Potential for R134a			tential for R134a	1430		
Carbon dioxide equivalent t			0.233			
Pump capacity flow rate I/min			v rate I/min	22 26		
Pump capacity flow pressure bar			v pressure bar	0.4 0.7		
Maximum suction bar			oar	0.2 0.4		

## 230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F)

230V/50Hz					
Heating capacity kW			2		
Cooling capacity (Ethanol)					
°C	20	0	-20		
kW	0.46	0.34	0.15		
Viscosity max. cST			70		
Refrigerant			R134a		
Filling volume g			163		
Global Warming Potential for R134a			1430		
Carbon dioxide equivalent t				0.233	
Pump capacity flow rate I/min			22 26		
Pump capacity flow pressure bar			0.4 0.7		
Maximum suction bar			0.2 0.4		

## 230V/50Hz (UK Plug Type BS1363A)

230V/50Hz				
Heating capacity kW			N	2
Cooling capacity (Ethanol)				
°C	20	0	-20	
kW	0.46	0.34	0.15	
Viscosity max. cST				70
Refrigerant			R134a	
Filling volume g				163
Global Warming Potential for R134a			obal Warming Potential for R134a 1430	





Carbon dioxide equivalent t	0.233
Pump capacity flow rate I/min	22 26
Pump capacity flow pressure bar	0.4 0.7
Maximum suction bar	0.2 0.4

## **All Benefits**



#### JULABO. Quality.

Highest standards of quality for a long product life.



#### Green technology.

Development consistently applied environmentally friendly materials and technologies.



#### Satisfied customers.

11 subsidiaries and more than 100 partners worldwide guarantee fast and qualified JULABO support.



#### 100% Checked.

100% testing. 100% quality. Each JULABO Circulator undergoes thorough quality testing before leaving the factory.



#### Quick start.

Individual JULABO consultation and comprehensive manuals at your disposal.



#### Services 24/7.

Around the clock availability. You can find suitable accessories, data sheets, manuals.



## Connection of additional equipment

Stakei connections for solenoid valve, HSP booster pump and HST booster heater



## Early warning system for high/low temperature limits

Maximum safety for applications, optical and audible alarm, convertible to automated cut-off function



## Clever pump system

Reliable and consistent pump capacity, electronically adjustable pump stages



## Control from the external application

External Pt100 sensor connection for precise measurement and control directly in the external application



#### For flammable bath fluid

Classification III (FL) according to DIN 12876-1



#### ATC3. Calibration.

'Absolute Temperature Calibration' for compensating a physically caused temperature difference, 3-point calibration.



## Process. Under control.

Full regulation of the dynamics control, access to all important control parameters for individual process optimization.



## 100 % Cooling capacity

'Active Cooling Control' for cooling available throughout the entire working temperature range, fast cool-down even at higher temperatures



## **Energy saving cooling**

Proportional cooling control for automatic adjustment of cooling power or temporary switch-off of compressor as needed to save up to 90 % energy in comparison to unregulated cooling machines



## Condensation and ice protection

A heated cover plate prevents condensation or ice build-up in the bath

