



Product Data Sheet

F25-HE Refrigerated/Heating Circulator

[Print Data Sheet](#)

Product Image



Description

Refrigerated/Heating Circulator for internal and external temperature applications

JULABO Refrigerated & Heating Circulators for heating and cooling are suitable for external temperature tasks and for temperature applications directly in the bath. A model from three different series' with different capacities can be selected. Powerful circulating pump systems and high heating and cooling capacities guarantee short heat-up and cool-down times. The inevitable dust accumulation that occurs in refrigeration systems is solved by means of an easily removed venting grill, which allows for easy cleaning. Depending on the model, the units are equipped with handles or castors for an easy transportation. All models have a drain tap on the front allowing the fluid to be drained easily. The compact assembly of each unit enables a space to be saved in the laboratory.

Advantages

- o VFD COMFORT DISPLAY, resolution 0.01 °C
- o Keypad for setpoints, warning/safety values and menu functions
- o ICC (Intelligent Cascade Control), self-optimizing temperature control
- o ATC3 3-Point-Calibration
- o Pt100 External sensor connection for measurement and control
- o SMART PUMP, electronically adjustable pump stages
- o Early warning system for low liquid level (DBGM 203 06 059.8)
- o Adjustable high temperature cut-out, visible via display
- o RS232 interface for online communication
- o Integrated programmer for 10 program steps
- o Active Cooling Control

Order Information

Model: F25-HE
Order no.: 9210625

Available mains power:
230V / 50Hz
115V / 60Hz
100V / 50-60Hz
230V / 60Hz

Similar Models

These models could also be interesting for you:

F25-HL
F32-HE
F25-ME

Sales & Support:

+49 7823 51-190

Monday to Friday
7:30 am - 17:00 pm

JULABO Labortechnik GmbH
Eisenbahnstrasse 45
77960 Seelbach/Germany
Phone +49 7823 51-0
Fax +49 7823 2491
info@julabo.de
www.julabo.de

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Pictures may differ from original.

Technical Specifications

Working temperature range	-28 ... 200 °C			
Temperature control	ICC			
Temperature stability	±0.01 °C			
Display	VFD			
Display resolution	0.01 °C			
Integrated programmer	available			
Heater capacity	2000 W			
Cooling capacity	20	0	-20	°C
	260	200	60	W
Refrigerant	R134a			
Pump capacity	Pressure: 700 mbar Suction: 400 mbar Flow rate: 22-26 l/min			
Digital interfaces	RS232, optional Profibus			
External Pt100 sensor connection	available			
Bath opening / bath depth (W x L / D)	12 x 14 / 14 cm			
Filling volume	4.5 Liters			
Dimensions (W x L x H)	23 x 42 x 64 cm			
Weight	32 kg			
Ambient temperature	5...40 °C			
Classification according to DIN 12876-1	3 (FL)			

Miscellaneous

Optional: Electronic module with analog connections for external programming, temperature recorder, standby, alarm (Order no. 8 900 100)



Product Data Sheet

F25-HL Refrigerated/Heating Circulator

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Product Image



Description

Refrigerated/Heating Circulator for internal and external temperature applications

JULABO Refrigerated & Heating Circulators for heating and cooling are suitable for external temperature tasks and for temperature applications directly in the bath. A model from three different series' with different capacities can be selected. Powerful circulating pump systems and high heating and cooling capacities guarantee short heat-up and cool-down times. The inevitable dust accumulation that occurs in refrigeration systems is solved by means of an easily removed venting grill, which allows for easy cleaning. Depending on the model, the units are equipped with handles or castors for an easy transportation. All models have a drain tap on the front allowing the fluid to be drained easily. The compact assembly of each unit enables a space to be saved in the laboratory.

Advantages

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- o LCD DIALOG DISPLAY backlit for convenient interactive operation
- o Keypad for setpoints, warning/safety values and menu functions
- o ICC (Intelligent Cascade Control), self-optimizing temperature control
- o TCF Temperature Control Features to optimize the control behaviour
- o ATC3 3-Point-Calibration
- o Pt100 External sensor connection for measurement and control
- o SMART PUMP, electronically adjustable pump stages
- o Early warning system for low liquid level (DBGM 203 06 059.8)
- o Adjustable high temperature cut-out, visible via display
- o RS232/RS485 interface for online communication
- o Integrated programmer for 6 x 60 program steps
- o Connections for solenoid valve and HSP booster pump
- o Active Cooling Control

Order Information

Model: F25-HL
Order no.: 9310625

Available mains power:
230V / 50Hz
115V / 60Hz
100V / 50-60Hz
230V / 60Hz

Similar Models

These models could also be interesting for you:

F32-HL
F25-HE
F25-ME

Sales & Support:

+49 7823 51-190

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Technical Specifications

Working temperature range	-28 ... 200 °C			
Temperature control	ICC			
Temperature stability	±0.01 °C			
Display	VFD + LCD			
Display resolution	0.01 °C			
Integrated programmer	available			
Heater capacity	2000 W			
Cooling capacity	20	0	-20	°C
	260	200	60	W
Refrigerant	R134a			
Pump capacity	Pressure: 700 mbar			
	Suction: 400 mbar			
	Flow rate: 22-26 l/min			
Digital interfaces	RS232, RS485, optional Profibus			
External Pt100 sensor connection	available			
Bath opening / bath depth (W x L / D)	12 x 14 / 14 cm			
Filling volume	4.5 Liters			
Dimensions (W x L x H)	23 x 42 x 64 cm			
Weight	32 kg			
Ambient temperature	5...40 °C			
Classification according to DIN 12876-1	3 (FL)			

Miscellaneous

Optional: Electronic module with analog connections for external programming, temperature recorder, standby, alarm (Order no. 8 900 100)



Product Data Sheet

F32-HE Refrigerated/Heating Circulator

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Product Image



Order Information

Model: F32-HE
Order no.: 9210632

Available mains power:
230V / 50Hz
115V / 60Hz
100V / 50-60Hz
230V / 60Hz

Downloads

- ↓ [EasyTemp Software](#)
- ↓ [Interactive product demo](#)
- ↓ [Easy BlackBox software](#)

Similar Models

These models could also be interesting for you:

[F32-HL](#)
[F32-ME](#)
[F32-MC](#)

Sales & Support:

+49 7823 51-190

Monday to Friday
7:30 am - 17:00 pm

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Description

Refrigerated/Heating Circulator for internal and external temperature applications

JULABO Refrigerated & Heating Circulators for heating and cooling are suitable for external temperature tasks and for temperature applications directly in the bath. A model from three different series' with different capacities can be selected. Powerful circulating pump systems and high heating and cooling capacities guarantee short heat-up and cool-down times. The inevitable dust accumulation that occurs in refrigeration systems is solved by means of an easily removed venting grill, which allows for easy cleaning. Depending on the model, the units are equipped with handles or castors for an easy transportation. All models have a drain tap on the front allowing the fluid to be drained easily. The compact assembly of each unit enables a space to be saved in the laboratory.

Advantages

- o VFD COMFORT DISPLAY, resolution 0.01 °C
- o Keypad for setpoints, warning/safety values and menu functions
- o ICC (Intelligent Cascade Control), self-optimizing temperature control
- o ATC3 3-Point-Calibration
- o Pt100 External sensor connection for measurement and control
- o SMART PUMP, electronically adjustable pump stages
- o Early warning system for low liquid level (DBGM 203 06 059.8)
- o Adjustable high temperature cut-out, visible via display
- o RS232 interface for online communication
- o Integrated programmer for 10 program steps
- o Active Cooling Control

Technical Specifications

Working temperature range	-35 ... 200 °C
Temperature control	ICC
Temperature stability	±0.01 °C
Display	VFD
Display resolution	0.01 °C
Integrated programmer	available
Heater capacity	2000 W
Cooling capacity	20 0 -20 -30 °C 450 390 150 50 W
Refrigerant	R134a
Pump capacity	Pressure: 700 mbar Suction: 400 mbar Flow rate: 22-26 l/min
Digital interfaces	RS232, optional Profibus
External Pt100 sensor connection	available
Bath opening / bath depth (W x L / D)	18 x 12 / 15 cm
Filling volume	8 Liters
Dimensions (W x L x H)	31 x 42 x 66 cm
Weight	38 kg
Ambient temperature	5...40 °C
Classification according to DIN 12876-1	3 (FL)

Miscellaneous

Optional: Electronic module with analog connections for external programming, temperature recorder, standby, alarm (Order no. 8 900 100)



Product Data Sheet

F32-HL Refrigerated/Heating Circulator

[Print Data Sheet](#)

Product Image



Order Information

Model: F32-HL
Order no.: 9310632

Available mains power:
230V / 50Hz
115V / 60Hz
100V / 50-60Hz
230V / 60Hz

Downloads

- ↓ [EasyTemp Software](#)
- ↓ [Interactive product demo](#)
- ↓ [Easy BlackBox software](#)

Similar Models

These models could also be interesting for you:

F32-HE
F32-ME
F32-MC

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+49 7823 51-190

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Description

Refrigerated/Heating Circulator for internal and external temperature applications

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- o Early warning system for low liquid level (DBGM 203 06 059.8)
- o Adjustable high temperature cut-out, visible via display
- o RS232/RS485 interface for online communication
- o Integrated programmer for 6 x 60 program steps
- o Connections for solenoid valve and HSP booster pump
- o Active Cooling Control

Technical Specifications

Working temperature range	-35 ... 200 °C
Temperature control	ICC
Temperature stability	±0.01 °C
Display	VFD + LCD
Display resolution	0.01 °C
Integrated programmer	available
Heater capacity	2000 W
Cooling capacity	20 0 -20 -30 °C 450 390 150 50 W
Refrigerant	R134a
Pump capacity	Pressure: 700 mbar Suction: 400 mbar Flow rate: 22-26 l/min
Digital interfaces	RS232, RS485, optional Profibus
External Pt100 sensor connection	available
Bath opening / bath depth (W x L / D)	18 x 12 / 15 cm
Filling volume	8 Liters
Dimensions (W x L x H)	31 x 42 x 66 cm
Weight	38 kg
Ambient temperature	5...40 °C
Classification according to DIN 12876-1	3 (FL)

Miscellaneous

Optional: Electronic module with analog connections for external programming, temperature recorder, standby, alarm (Order no. 8 900 100)



Product Data Sheet

F33-HL Refrigerated/Heating Circulator

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Product Image



Description

Refrigerated/Heating Circulator for internal and external temperature applications

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- o TCF Temperature Control Features to optimize the control behaviour
- o ATC3 3-Point-Calibration
- o Pt100 External sensor connection for measurement and control
- o SMART PUMP, electronically adjustable pump stages
- o Early warning system for low liquid level (DBGM 203 06 059.8)
- o Adjustable high temperature cut-out, visible via display
- o RS232/RS485 interface for online communication
- o Integrated programmer for 6 x 60 program steps
- o Connections for solenoid valve and HSP booster pump
- o Active Cooling Control

Order Information

Model: F33-HL
Order no.: 9310633

Available mains power:
 230V / 50Hz
 115V / 60Hz
 230V / 60Hz

Similar Models

These models could also be interesting for you:

F33-HE
F33-ME
F33-MC

Sales & Support:

+49 7823 51-190

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Technical Specifications

Working temperature range	-30 ... 200 °C				
Temperature control	ICC				
Temperature stability	±0.01 °C				
Display	VFD + LCD				
Display resolution	0.01 °C				
Integrated programmer	available				
Heater capacity	2000 W				
Cooling capacity	20	0	-20	-30	°C
	500	320	120	30	W
Refrigerant	R134a				
Pump capacity	Pressure: 700 mbar Suction: 400 mbar Flow rate: 22-26 l/min				
Digital interfaces	RS232, RS485, optional Profibus				
External Pt100 sensor connection	available				
Bath opening / bath depth (W x L / D)	23 x 14 / 20 cm				
Filling volume	16 Liters				
Dimensions (W x L x H)	36 x 46 x 71 cm				
Weight	45 kg				
Ambient temperature	5...40 °C				
Classification according to DIN 12876-1	3 (FL)				

Miscellaneous

Optional: Electronic module with analog connections for external programming, temperature recorder, standby, alarm (Order no. 8 900 100)



Product Data Sheet

F34-HE Refrigerated/Heating Circulator

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Product Image



Order Information

Model: F34-HE
Order no.: 9210634

Available mains power:
230V / 50Hz
115V / 60Hz
230V / 60Hz

Downloads

- ↓ [EasyTemp Software](#)
- ↓ [Interactive product demo](#)
- ↓ [Easy BlackBox software](#)

Similar Models

These models could also be interesting for you:

F34-HL
F34-ME
F34-MC

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- o ATC3 3-Point-Calibration
- o Pt100 External sensor connection for measurement and control
- o SMART PUMP, electronically adjustable pump stages
- o Early warning system for low liquid level (DBGM 203 06 059.8)
- o Adjustable high temperature cut-out, visible via display
- o RS232 interface for online communication
- o Integrated programmer for 10 program steps
- o Active Cooling Control

Technical Specifications

Working temperature range	-30 ... 150 °C
Temperature control	ICC
Temperature stability	±0.01 °C
Display	VFD
Display resolution	0.01 °C
Integrated programmer	available
Heater capacity	2000 W
Cooling capacity	20 0 -20 -30 °C 450 320 140 30 W
Refrigerant	R134a
Pump capacity	Pressure: 700 mbar Suction: 400 mbar Flow rate: 22-26 l/min
Digital interfaces	RS232, optional Profibus
External Pt100 sensor connection	available
Bath opening / bath depth (W x L / D)	24 x 30 / 15 cm
Filling volume	20 Liters
Dimensions (W x L x H)	38 x 58 x 64 cm
Weight	44 kg
Ambient temperature	5...40 °C
Classification according to DIN 12876-1	3 (FL)

Miscellaneous

Optional: Electronic module with analog connections for external programming, temperature recorder, standby, alarm (Order no. 8 900 100)



Product Data Sheet

F34-HL Refrigerated/Heating Circulator

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Product Image



Order Information

Model: F34-HL
Order no.: 9310634

Available mains power:
230V / 50Hz
115V / 60Hz
230V / 60Hz

Downloads

- ↓ [EasyTemp Software](#)
- ↓ [Interactive product demo](#)
- ↓ [Easy BlackBox software](#)

Similar Models

These models could also be interesting for you:

F34-HE
F34-ME
F34-MC

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- o Keypad for setpoints, warning/safety values and menu functions
- o ICC (Intelligent Cascade Control), self-optimizing temperature control
- o TCF Temperature Control Features to optimize the control behaviour
- o ATC3 3-Point-Calibration
- o Pt100 External sensor connection for measurement and control
- o SMART PUMP, electronically adjustable pump stages
- o Early warning system for low liquid level (DBGM 203 06 059.8)
- o Adjustable high temperature cut-out, visible via display
- o RS232/RS485 interface for online communication
- o Integrated programmer for 6 x 60 program steps
- o Connections for solenoid valve and HSP booster pump
- o Active Cooling Control

Technical Specifications

Working temperature range	-30 ... 150 °C
Temperature control	ICC
Temperature stability	±0.01 °C
Display	VFD + LCD
Display resolution	0.01 °C
Integrated programmer	available
Heater capacity	2000 W
Cooling capacity	20 0 -20 -30 °C 450 320 140 30 W
Refrigerant	R134a
Pump capacity	Pressure: 700 mbar Suction: 400 mbar Flow rate: 22-26 l/min
Digital interfaces	RS232, RS485, optional Profibus
External Pt100 sensor connection	available
Bath opening / bath depth (W x L / D)	24 x 30 / 15 cm
Filling volume	20 Liters
Dimensions (W x L x H)	38 x 58 x 64 cm
Weight	44 kg
Ambient temperature	5...40 °C
Classification according to DIN 12876-1	3 (FL)

Miscellaneous

Optional: Electronic module with analog connections for external programming, temperature recorder, standby, alarm (Order no. 8 900 100)



Product Data Sheet

FP35-HL Refrigerated/Heating Circulator

[Print Data Sheet](#)

Product Image



Description

Refrigerated/Heating Circulator for external temperature applications

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Advantages

- o VFD COMFORT DISPLAY, resolution 0.01 °C
- o LCD DIALOG DISPLAY backlit for convenient interactive operation
- o Keypad for setpoints, warning/safety values and menu functions
- o ICC (Intelligent Cascade Control), self-optimizing temperature control
- o TCF Temperature Control Features to optimize the control behaviour
- o ATC3 3-Point-Calibration
- o Pt100 External sensor connection for measurement and control
- o SMART PUMP, electronically adjustable pump stages
- o Early warning system for low liquid level (DBGM 203 06 059.8)
- o Adjustable high temperature cut-out, visible via display
- o RS232/RS485 interface for online communication
- o Integrated programmer for 6 x 60 program steps
- o Connections for solenoid valve and HSP booster pump
- o Active Cooling Control

Order Information

Model: FP35-HL

Order no.: 9310618

Available mains power:
230V / 50Hz
115V / 60Hz
100V / 50-60Hz

Similar Models

These models could also be interesting for you:

FP35-MC
CF40
CF41

Sales & Support:

+49 7823 51-190

Monday to Friday
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Technical Specifications

Working temperature range	-35 ... 150 °C				
Temperature control	ICC				
Temperature stability	±0.01 °C				
Display	VFD + LCD				
Display resolution	0.01 °C				
Integrated programmer	available				
Heater capacity	2000 W				
Cooling capacity	20	0	-20	-30	°C
	460	340	150	50	W
Refrigerant	R134a				
Pump capacity	Pressure: 700 mbar Suction: 400 mbar Flow rate: 22-26 l/min				
Digital interfaces	RS232, RS485, optional Profibus				
External Pt100 sensor connection	available				
Filling volume	2.5 Liters				
Dimensions (W x L x H)	31 x 42 x 66 cm				
Weight	38 kg				
Ambient temperature	5...40 °C				
Classification according to DIN 12876-1	3 (FL)				

Miscellaneous

Optional: Electronic module with analog connections for external programming, temperature recorder, standby, alarm (Order no. 8 900 100)



Product Data Sheet

FP40-HE Refrigerated/Heating Circulator

[Print Data Sheet](#)

Product Image



Description

Refrigerated/Heating Circulator for internal and external temperature applications with proportional cooling control

JULABO Refrigerated & Heating Circulators for heating and cooling are suitable for external temperature tasks and for temperature applications directly in the bath. A model from three different series' with different capacities can be selected. Powerful circulating pump systems and high heating and cooling capacities guarantee short heat-up and cool-down times. The inevitable dust accumulation that occurs in refrigeration systems is solved by means of an easily removed venting grill, which allows for easy cleaning. Depending on the model, the units are equipped with handles or castors for an easy transportation. All models have a drain tap on the front allowing the fluid to be drained easily. The compact assembly of each unit enables a space to be saved in the laboratory.

Advantages

- o VFD COMFORT DISPLAY, resolution 0.01 °C
- o Keypad for setpoints, warning/safety values and menu functions
- o ICC (Intelligent Cascade Control), self-optimizing temperature control
- o ATC3 3-Point-Calibration
- o Pt100 External sensor connection for measurement and control
- o SMART PUMP, electronically adjustable pump stages
- o Early warning system for low liquid level (DBGM 203 06 059.8)
- o Adjustable high temperature cut-out, visible via display
- o RS232 interface for online communication
- o Integrated programmer for 10 program steps
- o Proportional cooling control
- o Active Cooling Control

Order Information

Model: FP40-HE

Order no.: 9210640

Available mains power:
230V / 50Hz
230V / 60Hz

Similar Models

These models could also be interesting for you:

FP40-HL

FP50-HE

F32-HE

Sales & Support:

+49 7823 51-190

Monday to Friday
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www.julabo.de

Technical changes reserved.
Pictures may differ from original.

Technical Specifications

Working temperature range	-40 ... 200 °C
Temperature control	ICC
Temperature stability	±0.01 °C
Display	VFD
Display resolution	0.01 °C
Integrated programmer	available
Heater capacity	2000 W
Cooling capacity	20 0 -20 -40 °C 680 500 320 40 W
Refrigerant	R404a
Pump capacity	Pressure: 700 mbar Suction: 400 mbar Flow rate: 22-26 l/min
Digital interfaces	RS232, optional Profibus
External Pt100 sensor connection	available
Bath opening / bath depth (W x L / D)	23 x 14 / 20 cm
Filling volume	16 Liters
Dimensions (W x L x H)	37 x 46 x 71 cm
Weight	49 kg
Ambient temperature	5...40 °C
Classification according to DIN 12876-1	3 (FL)

Miscellaneous

Optional: Electronic module with analog connections for external programming, temperature recorder, standby, alarm (Order no. 8 900 100)



Product Data Sheet

FP40-HL Refrigerated/Heating Circulator

[Print Data Sheet](#)

Product Image



Order Information

Model: FP40-HL

Order no.: 9310640

Available mains power:
230V / 50Hz
230V / 60Hz

Similar Models

These models could also be interesting for you:

FP50-HL
FP40-HE
F32-HL

Sales & Support:

+49 7823 51-190

Monday to Friday
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Description

Refrigerated/Heating Circulator for internal and external temperature applications with proportional cooling control

JULABO Refrigerated & Heating Circulators for heating and cooling are suitable for external temperature tasks and for temperature applications directly in the bath. A model from three different series' with different capacities can be selected. Powerful circulating pump systems and high heating and cooling capacities guarantee short heat-up and cool-down times. The inevitable dust accumulation that occurs in refrigeration systems is solved by means of an easily removed venting grill, which allows for easy cleaning. Depending on the model, the units are equipped with handles or castors for an easy transportation. All models have a drain tap on the front allowing the fluid to be drained easily. The compact assembly of each unit enables a space to be saved in the laboratory.

Advantages

- o VFD COMFORT DISPLAY, resolution 0.01 °C
- o LCD DIALOG DISPLAY backlit for convenient interactive operation
- o Keypad for setpoints, warning/safety values and menu functions
- o ICC (Intelligent Cascade Control), self-optimizing temperature control
- o TCF Temperature Control Features to optimize the control behaviour
- o ATC3 3-Point-Calibration
- o Pt100 External sensor connection for measurement and control
- o SMART PUMP, electronically adjustable pump stages
- o Early warning system for low liquid level (DBGM 203 06 059.8)
- o Adjustable high temperature cut-out, visible via display
- o RS232/RS485 interface for online communication
- o Integrated programmer for 6 x 60 program steps
- o Connections for solenoid valve and HSP booster pump
- o Proportional cooling control
- o Active Cooling Control

Technical Specifications

Working temperature range	-40 ... 200 °C												
Temperature control	ICC												
Temperature stability	±0.01 °C												
Display	VFD + LCD												
Display resolution	0.01 °C												
Integrated programmer	available												
Heater capacity	2000 W												
Cooling capacity	<table border="1"> <thead> <tr> <th></th> <th>20</th> <th>0</th> <th>-20</th> <th>-40</th> <th>°C</th> </tr> </thead> <tbody> <tr> <td></td> <td>680</td> <td>500</td> <td>320</td> <td>40</td> <td>W</td> </tr> </tbody> </table>		20	0	-20	-40	°C		680	500	320	40	W
	20	0	-20	-40	°C								
	680	500	320	40	W								
Refrigerant	R404a												
Pump capacity	Pressure: 700 mbar Suction: 400 mbar Flow rate: 22-26 l/min												
Digital interfaces	RS232, RS485, optional Profibus												
External Pt100 sensor connection	available												
Bath opening / bath depth (W x L / D)	23 x 14 / 20 cm												
Filling volume	16 Liters												
Dimensions (W x L x H)	37 x 46 x 71 cm												
Weight	49 kg												
Ambient temperature	5...40 °C												
Classification according to DIN 12876-1	3 (FL)												

Miscellaneous

Optional: Electronic module with analog connections for external programming, temperature recorder, standby, alarm (Order no. 8 900 100)



Product Data Sheet

FP45-HE Refrigerated/Heating Circulator

[Print Data Sheet](#)

Product Image



Description

Refrigerated/Heating Circulator for internal and external temperature applications with proportional cooling control

JULABO Refrigerated & Heating Circulators for heating and cooling are suitable for external temperature tasks and for temperature applications directly in the bath. A model from three different series' with different capacities can be selected. Powerful circulating pump systems and high heating and cooling capacities guarantee short heat-up and cool-down times. The inevitable dust accumulation that occurs in refrigeration systems is solved by means of an easily removed venting grill, which allows for easy cleaning. Depending on the model, the units are equipped with handles or castors for an easy transportation. All models have a drain tap on the front allowing the fluid to be drained easily. The compact assembly of each unit enables a space to be saved in the laboratory.

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- o ICC (Intelligent Cascade Control), self-optimizing temperature control
- o ATC3 3-Point-Calibration
- o Pt100 External sensor connection for measurement and control
- o SMART PUMP, electronically adjustable pump stages
- o Early warning system for low liquid level (DBGM 203 06 059.8)
- o Adjustable high temperature cut-out, visible via display
- o RS232 interface for online communication
- o Integrated programmer for 10 program steps
- o Proportional cooling control
- o Active Cooling Control

Order Information

Model: FP45-HE

Order no.: 9210645

Available mains power:
230V / 50-60Hz

Similar Models

These models could also be interesting for you:

FP45-HE

Sales & Support:

+49 7823 51-190

Monday to Friday
7:30 am - 17:00 pm

JULABO Labortechnik GmbH
Eisenbahnstrasse 45
77960 Seelbach/Germany
Phone +49 7823 51-0
Fax +49 7823 2491
info@julabo.de
www.julabo.de

Technical changes reserved.
Pictures may differ from original.

Technical Specifications

Working temperature range	-42 ... 200 °C
Temperature control	ICC
Temperature stability	±0.01 °C
Display	VFD
Display resolution	0.01 °C
Integrated programmer	available
Heater capacity	2000 W
Cooling capacity	20 0 -20 -40 °C 850 700 420 80 W
Refrigerant	R404a
Pump capacity	Pressure: 700 mbar Suction: 400 mbar Flow rate: 22-26 l/min
Digital interfaces	RS232, optional Profibus
External Pt100 sensor connection	available
Bath opening / bath depth (W x L / D)	23 x 26 / 20 cm
Filling volume	26 Liters
Dimensions (W x L x H)	38 x 58 x 69 cm
Weight	53 kg
Ambient temperature	5...40 °C
Classification according to DIN 12876-1	3 (FL)

Miscellaneous

Optional: Electronic module with analog connections for external programming, temperature recorder, standby, alarm (Order no. 8 900 100)



Product Data Sheet

FP45-HL Refrigerated/Heating Circulator

[Print Data Sheet](#)

Product Image



Order Information

Model: FP45-HL

Order no.: 9310645

Available mains power:
230V / 50-60Hz

Similar Models

These models could also be interesting for you:

FP45-HL

Sales & Support:

+49 7823 51-190

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Advantages

- o VFD COMFORT DISPLAY, resolution 0.01 °C
- o LCD DIALOG DISPLAY backlit for convenient interactive operation
- o Keypad for setpoints, warning/safety values and menu functions
- o ICC (Intelligent Cascade Control), self-optimizing temperature control
- o TCF Temperature Control Features to optimize the control behaviour
- o ATC3 3-Point-Calibration
- o Pt100 External sensor connection for measurement and control
- o SMART PUMP, electronically adjustable pump stages
- o Early warning system for low liquid level (DBGM 203 06 059.8)
- o Adjustable high temperature cut-out, visible via display
- o RS232/RS485 interface for online communication
- o Integrated programmer for 6 x 60 program steps
- o Connections for solenoid valve and HSP booster pump
- o Proportional cooling control
- o Active Cooling Control

Technical Specifications

Working temperature range	-42 ... 200 °C				
Temperature control	ICC				
Temperature stability	±0.01 °C				
Display	VFD + LCD				
Display resolution	0.01 °C				
Integrated programmer	available				
Heater capacity	2000 W				
Cooling capacity	20	0	-20	-40	°C
	850	700	420	80	W
Refrigerant	R404a				
Pump capacity	Pressure: 700 mbar Suction: 400 mbar Flow rate: 22-26 l/min				
Digital interfaces	RS232, RS485, optional Profibus				
External Pt100 sensor connection	available				
Bath opening / bath depth (W x L / D)	23 x 26 / 20 cm				
Filling volume	26 Liters				
Dimensions (W x L x H)	38 x 58 x 69 cm				
Weight	53 kg				
Ambient temperature	5...40 °C				
Classification according to DIN 12876-1	3 (FL)				

Miscellaneous

Optional: Electronic module with analog connections for external programming, temperature recorder, standby, alarm (Order no. 8 900 100)



Product Data Sheet

FP50-HE Refrigerated/Heating Circulator

[Print Data Sheet](#)

Product Image



Description

Refrigerated/Heating Circulator for internal and external temperature applications with proportional cooling control

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Advantages

- o VFD COMFORT DISPLAY, resolution 0.01 °C
- o Keypad for setpoints, warning/safety values and menu functions
- o ICC (Intelligent Cascade Control), self-optimizing temperature control
- o ATC3 3-Point-Calibration
- o Pt100 External sensor connection for measurement and control
- o SMART PUMP, electronically adjustable pump stages
- o Early warning system for low liquid level (DBGM 203 06 059.8)
- o Adjustable high temperature cut-out, visible via display
- o RS232 interface for online communication
- o Integrated programmer for 10 program steps
- o Proportional cooling control
- o Active Cooling Control

Order Information

Model: FP50-HE
Order no.: 9210650

Available mains power:
 230V / 50Hz
 230V / 60Hz

Similar Models

These models could also be interesting for you:

FP50-HL
LH45
FP50-ME

Sales & Support:

+49 7823 51-190

Monday to Friday
 7:30 am - 17:00 pm

JULABO Labortechnik GmbH
 Eisenbahnstrasse 45
 77960 Seelbach/Germany
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 Fax +49 7823 2491
info@julabo.de
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Technical Specifications

Working temperature range	-50 ... 200 °C
Temperature control	ICC
Temperature stability	±0.01 °C
Display	VFD
Display resolution	0.01 °C
Integrated programmer	available
Heater capacity	2000 W
Cooling capacity	20 0 -20 -40 °C 900 800 500 160 W
Refrigerant	R404a
Pump capacity	Pressure: 700 mbar Suction: 400 mbar Flow rate: 22-26 l/min
Digital interfaces	RS232, optional Profibus
External Pt100 sensor connection	available
Bath opening / bath depth (W x L / D)	18 x 12 / 15 cm
Filling volume	8 Liters
Dimensions (W x L x H)	42 x 49 x 72 cm
Weight	57 kg
Ambient temperature	5...40 °C
Classification according to DIN 12876-1	3 (FL)

Miscellaneous

Optional: Electronic module with analog connections for external programming, temperature recorder, standby, alarm (Order no. 8 900 100)



Product Data Sheet

FP50-HL Refrigerated/Heating Circulator

[Print Data Sheet](#)

Product Image



Order Information

Model: FP50-HL
Order no.: 9310650

Available mains power:
230V / 50Hz
230V / 60Hz

Similar Models

These models could also be interesting for you:

FP50-HE
LH45
FP50-ME

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Technical Specifications

Working temperature range	-50 ... 200 °C
Temperature control	ICC
Temperature stability	±0.01 °C
Display	VFD + LCD
Display resolution	0.01 °C
Integrated programmer	available
Heater capacity	2000 W
Cooling capacity	20 0 -20 -40 °C 900 800 500 160 W
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