

# Model KBF-S 240 | Humidity test chambers with large temperature / humidity range

The new Solid.Line KBF-S climate chamber is a custom-made solution for long-term testing and accelerated stability testing for pharmaceutical products in accordance with the ICH Q1A guideline. The corrosion-free and condensation-free interior also ensures exceptionally stable temperature and moisture levels, even when fully loaded.

### BENEFITS

- Safe thanks to climatic homogeneity that far exceeds the accuracy required by ICH guidelines, even with a fully loaded unit.
- Reliable thanks to failsafe operation without compromise. The interior and Longlife evaporator plate are made entirely from stainless steel.
- Smart, as a wide range of accessories makes it highly compatible for adaptation to specific customer requirements.
- Economical thanks to maximum effective volume which allows for 30% larger load compared to the competition.





Model 240

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#### **IMPORTANT FEATURES**

- Temperature range: o °C to 70 °C
- Humidity range: 20% to 80% RH
- APT.line<sup>™</sup> preheating chamber technology
- Humidity regulation with capacitive humidity sensor and steam humidification  $\, \cdot \,$
- LCD to display temperature and humidity along with additional information and alarms
- Internal data logger, measured values can be read out in open format via USB •
- Unit self-test for comprehensive status analysis

- Inner chamber made completely of stainless steel
- 2 stainless steel racks, incl. shelf supports
- Access port with silicone plug, 30 mm, left
- Robust twin casters with brakes, from 240 L
- Class 3.1 independent temperature safety device (DIN 12880) with visual and audible temperature alarm
- Computer interface: Ethernet
- Independent water supply via tank

## ORDERING INFORMATION

Interior volume		Power supply - unit fuse	Plug*	Version	Model version	ArtNo.
[L]	[L]					
Model KBF	-S 240					
247		200230 V 1~ 50/60 Hz -16,0 A	CEE 7/7	Standard	KBFS240-230V	9020-0366
	247	200240 V 1~ 50/60 Hz -16,0 A	NEMA 6-20	Standard	KBFS240UL-240V	9020-0367

## BINDER Best conditions for your success

# TECHNICAL DATA

Data

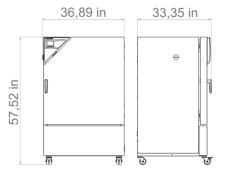
Data						
Designation	KBFS240-230V	KBFS240UL-240V				
Article Number	9020-0366	9020-0367				
Option model	Standard	Standard				
Performance Data Temperature	verformance Data Temperature					
Temperature range	o70 °C	o70 °C				
Max. heat compensation at 40°C	300 W	300 W				
Performance Data Climate						
Temperature range with humidity	1070 °C	1070 °C				
Humidity range	2080 % r.F.	2080 % r.F.				
Electrical data						
Rated Voltage	200230 V	200240 V				
Power frequency	50/60 Hz	50/60 Hz				
Nominal power	1,4 kW	1,4 kW				
Unit fuse	16,0 A	16,0 A				
Phase (Nominal voltage)	1~	1~				
Dimensions and weights						
Interior volume	247 L	247 L				
Net weight of the unit (empty)	161 kg	161 kg				
Load per rack	30 kg	30 kg				
Permitted load	100 kg	100 kg				
Wall clearance back	100 mm	100 mm				
Wall clearance sidewise	100 mm	100 mm				
Housing dimensions not incl. fittings and connections						
Width net	925 mm	925 mm				
Height net	1,460 mm	1,460 mm				
Depth net	8oo mm	8oo mm				
Internal Dimensions						
Interior width	650 mm	650 mm				
Interior height	785 mm	785 mm				



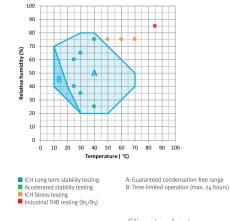
Interior depth	485 mm	485 mm			
Unit doors	1	1			
Environment-specific data					
Sound-pressure level	52 dB(A)	52 dB(A)			
Energy consumption at 40°C and 75% RH	400 Wh/h	400 Wh/h			
Fixtures	Fixtures				
Number of shelves (std./max.)	2/9	2/9			

All technical data is specified for unloaded units with standard equipment at an ambient temperature of +22 °C ±3 °C and a power supply voltage fluctuation of ±10 %. The temperature data is determined in accordance to BINDER factory standard following DIN 12880, observing the recommended wall clearances of 10 % of the height, width, and depth of the inner chamber. Technical data refers to 100 % fan speed. All indications are average values, typical for units produced in series. We reserve the right to change technical specifications at any time.

# DIMENSIONS Incl. fittings and connections [mm]



## DIAGRAMS



Climate chart

## **OPTIONS**

Designation	Description	KBF-S 240	*	ArtNo.
A	left			
Access port with silicone plug	30 mm	•	01	8012-2072

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Designation	Description	KBF-S 240	*	ArtNo.
	50 mm	•	01	8012-2079
	100 mm	•	01	8012-2077
	right			
	30 mm	•	01	8012-2071
	50 mm	•	01	8012-2078
	100 mm	•	01	8012-2076
	top			
	30 mm	•	01	8012-2073
	50 mm	•	01	8012-2074
	100 mm	•	01	8012-2075
alibration certificate, xpanded	for temperature and humidity; for extending the measurement in center of chamber to include another test value	•	-	8012-2066
	temperature measurement incl. certificate, 9 measuring points at specified temperature	•	-	8012-2067
alibration certificate, emperature	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	•	-	8012-2068
	temperature measurement incl. certificate and 27 measuring points at specified temperature	•	-	8012-2069
	Measurement in center of chamber at 25°C / 60% RH or at specified test values	•	-	8012-2065
alibration certificate, emperature and humidity	temperature (according to DIN12880) and humidity measurement incl. certificate, 27 temperature measuring points and 1 humidity measuring point, at 25 °C / 60 % RH or at specified values		-	8012-2070
oor lock	lockable door handle	•	-	8012-2086

## ACCESSORIES

Designation	Description	KBF-S 240	*	ArtNo.
	Multi Management Software APT-COM™			
	version 4, BASIC edition	•	_	9053-0039
APT-COM™ 4	version 4, GLP edition		_	9053-0042
	version 4, PROFESSIONAL edition	•	_	9053-0040
BINDER PURE AQUA SERVICE	System for preparation or complete desalination of tap water, complete set containing PURE AQUA 300 single-use cartridge, measuring device, and all necessary connecting parts	•	-	8012-0759
BINDER PURE AQUA SERVICE, accessories	Single-use, replacement cartridge for BINDER PURE AQUA System	•	-	6011-0165

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Designation	Description	KBF-S 240	*	ArtNo.
Convenient water supply	Flexible positioning of the water container with magnetic holder, hose adapter for water container with practical quick coupling, and water stop function			
,	External, with magnetic holder	•	-	8012-1847
	Basic set consisting of 2 pieces, attachment material, control unit for max. 4 light strips, 100-240 V, 50/60 Hz			
	Basic set 300, length 30 cm	•	-	8012-1107
	Basic set 500, length 50 cm	•	-	8012-1108
LED light bars	Expansion set consisting of 2 pieces, attachment material: clips. For expanding the basic set of light bars			
	Expansion set 300, length 30 cm	•	-	8012-1716
	Expansion set 500, length 50 cm	•	-	8012-1717
	IQ/OQ/PQ documents – supporting documents for validation performed by customers, according to customer requirements, PQ section added to qualification folder IQ/OQ; parameters: temperature and humidity values			
	Digital in PDF format	•	-	7057-0006
	Hard copy inside folder	•	-	7007-0006
Qualification documents	IQ/OQ documents – supporting documents for validation performed by customers, consisting of: IQ/OQ checklists incl. calibration guide and comprehensive unit documentation; parameters: temperature and humidity values			
	Digital in PDF format	•	-	7057-0002
	Hard copy inside folder	•	-	7007-0002
Rack	stainless steel	•	-	8012-2050
Rack, reinforced	stainless steel, with fasteners (1 set of 4)	•	-	8012-0638
Rack accessories	fasteners (1 set of 4) for additional security of racks	•	-	8012-2280
Shelf, perforated	Stainless steel	•	-	8012-2163
H-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	•	-	8012-2250
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	•	-	8012-225

## SERVICES

Designation	Description	*	ArtNo.
Calibration services			
Temperature and humidity calibration	Expansion –Additional Temperature and humidity calibration with 1 measuring point in center of chamber with 1 specified pair of values, including certificate. Travel to be quoted separate.	-	DL30-0302
Temperature and humidity measurement according to DIN12880	Temperature measurement in accordance with DIN 12880 with 27 temperature measuring points and 1 humidity measuring point in center of chamber with a pair of values specified by the user, including certificate	_	DL30-0427

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Designation	Description	*	ArtNo.
Temperature measurement, 9 temperature measuring points and 1 humidity measuring point	Temperature measurement with 9 temperature measuring points and 1 humidity measuring point in center of chamber with a pair of values specified by the user, including certificate. Travel to be quoted separate. A total of 3 shelves are required.	_	DL30-0309
Temperature measurement, 18 temperature measuring points and 1 humidity measuring point	Temperature measurement with 18 temperature measuring points and 1 humidity measuring point in center of chamber with a pair of values specified by the user, including certificate. Travel to be quoted separate. A total of 2 shelves are required.	_	DL30-0318
Temperature measurement, 27 temperature measuring points and 1 humidity measuring point	Temperature measurement with 27 temperature measuring points and 1 humidity measuring point in center of chamber with a pair of values specified by the user, including certificate. Travel to be quoted separate. A total of 3 shelves are required.	_	DL30-0327
Installation services			
	Connect the unit to the customer-side connections (electricity, water, wastewater, gas), basic functions check, brief operating instructions. (excl.: unpacking, setup,	_	DL10-0300
Unit installation		_	DL10-0310
	Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming. Travel to be quoted as separate — Limited to 3 hours.	_	DL10-0700
Unit instructions		_	DL10-0710
Maintenance services			
BRONZE 3-year maintenance contract	Annual Device Inspection Includes Preventive Maintenance with Calibration Certificate. 10% Discount on Spare Parts and Labor for any additional Services needed Wear + tear parts to be purchased or billed to customer. Travel to be quoted as separate.	_	DL20-0710
Validation services			
Execution of IQ/OQ	Execution of IQ/OQ in accordance with qualification folder. Travel to be quoted separate.	-	DL42-0300
Execution of IQ/OQ/PQ	Execution of IQ/OQ/PQ in accordance with qualification folder. Travel to be quoted separate.	-	DL44-0500
Warranty service			
1-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded		DL50-0030

# NOTES

01 Condensation may occur in the area around the access port. Access ports may be placed in custom locations for an additional charge.

# **BINDER GmbH**

Tuttlingen, Germany TEL +49 7462 2005 0 FAX +49 7462 2005 100 info@binder-world.com www.binder-world.com

# BINDER Asia Pacific (Hong Kong) Ltd.

Kowloon, Hong Kong, P.R. China TEL +852 39070500 FAX +852 39070507 asia@binder-world.com www.binder-world.com

## **BINDER Inc.**

Bohemia, NY, USA TEL +1 631 224 4340 FAX +1 631 224 4354 usa@binder-world.com www.binder-world.us

# **BINDER Environmental Testing**

Equipment (Shanghai) Co., Ltd.

Shanghai, P.R. China TEL +86 21 685 808 25 FAX +86 21 685 808 29 china@binder-world.com www.binder-world.com