Constant climate chambers

Always the right climate
KBF-S ECO | KBF-S
KBF | KBF P | KBF LQC | KMF series

Series KBF LQC | with ICH-compliant light source and light dose control

The main advantage of the BINDER KBF LQC series is the patented light photometry for photostability tests. Two 3D spherical sensors control the light dosage of UV-A and visible light. Once the desired light dosage is achieved, the chamber switches off automatically.

KBF LQC 240 model

BENEFITS

- Safe thanks to climatic homogeneity that far exceeds the accuracy required by ICH guidelines, even with a fully loaded unit. The light spectrum is 100% compliant with ICH requirements.
- 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.

MAIN FEATURES

- Temperature range: 0 °C to +70 °C
- Temperature range with light: +10 °C to +60 °C
- Humidity range: 10 % to 80 % RH
- positionable illumination cassettes with ICH-compliant UV/Vis light source
- Independent light-dose control of UV-A and visible light with spherical sensors
- APT.line™ preheating chamber technology
- Humidity regulation with capacitive humidity sensor and vapor humidification
- Inner chamber made of stainless steel
- BINDER Multi Management Software APT-COM™ Basic Edition
- Intuitive touchscreen controller with time-segment and real-time programming

AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
KBF LQC 240	247	› go2binder.com/en-KBFLQC240
KBF LQC 720	700	› go2binder.com/en-KBFLQC720

Find all details online: go2binder.com/en-KBFLQC

OPTIONAL EQUIPMENT

Access port with silicone plug	For introducing external measuring instruments. Large selection of different diameters and positions (left, right, or top)	
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.	
LED light bar sets	LED light bars in three different lengths (30, 50, 90 cm) can be easily and variably positioned in the BINDER unit, including various attachment options and control unit. Additional light bars can be added as desired.	
Services	You can access our installation, maintenance, calibration, validation, or warranty services by taking out a Maintenance Service Agreement or by simply getting in touch when you need us. More information is available in the accessories and services chapter.	
BINDER INDIVIDUAL	Using a BINDER series production product as a basis, we develop individual solutions as a single unit or in small batches. All products are tested, certified, and supplied with a full functional guarantee and warranty. More information is available in the accessories and services chapter.	

▸ All extras online go2binder.com/en-options

TECHNICAL DATA

Description	KBF LQC 240	KBF LQC 720
Measures		
Interior volume [L]	247	700
Net weight of the unit (empty) [kg]	217	374
Permitted load [kg]	100	150
Load per rack [kg]	30	45
Wall clearance back [mm]	100	100
Wall clearance sidewise [mm]	100	200
Internal Dimensions		
Width [mm]	650	973
Height [mm]	785	1250
Depth [mm]	485	576
Housing dimensions not incl. fittings and connections		
Width net [mm]	925	1250
Height net [mm]	1460	1925
Depth net [mm]	800	890
Performance Data Temperature		
Temperature range with 100% illumination [°C]	10...60	10...60
Temperature range without illumination cassettes [°C]	0...70	0...70
Performance Data Climate		
Temperature range with 100% illumination [°C]	10...60	20...60
Temperature range without illumination cassettes [°C]	10...70	10...70
Temperature variation with illumination at 40 °C and 75 % RH [± K]	0.6	1.2
Temperature fluctuation with illumination at 40 °C and 75 % RH [± K]	0.2	0.2
Humidity range with illumination cassettes, with illumination [% RH]	10...75	10...75
Humidity range without illumination [% RH]	10...80	10...80
Humidity fluctuation with illumination at 40 °C and 75 % RH [± % RH]	2	2
Lightdata per Illumination Cassettes		
ICH compliant illumination for photo stability testing [lx]	7500	9000
ICH compliant illumination for photo stability testing [W/m²]	1.1	1.5
Electrical data		
Nominal power (version 230 V) [kW]	2.4	3.5
Nominal power (version 240 V) [kW]	2.4	3.5
Fixtures		
Number of shelves (std./max.)	2/7	3/12
Number of illumination cassettes (std./max.)	2/2	3/3

ORDERING INFORMATION [Art. No.]

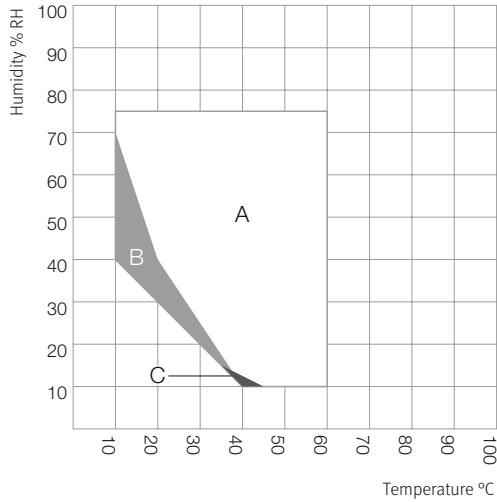**Further details:** Go to www.binder-world.com › Search › Enter Article Number

Voltage	Option model		KBF LQC 240	KBF LQC 720
200...230 V 1~ 50/60 Hz	Standard		9020-0332	9020-0334
200...240 V 1~ 50/60 Hz	Standard		9020-0333	9020-0335

EXTRACT OF FULLFILLED STANDARDS
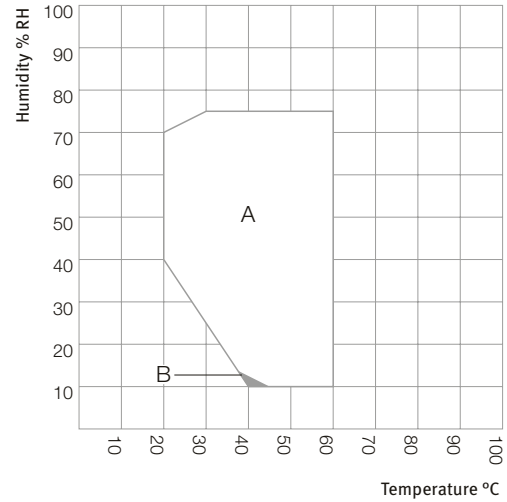
• ICH Q1A(R2)
• ICH Q1B

TEMPERATURE-HUMIDITY CHART

KBF LQC 240

A: Guaranteed condensation-free range
B: Time-limited operation (max. 24 hours)
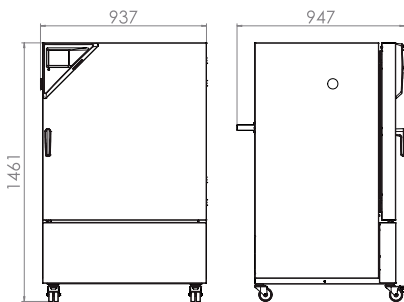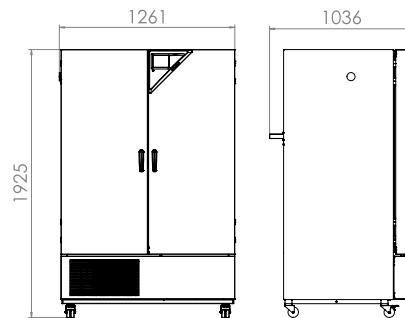C: Deviations of technical data may be possible

KBF LQC 720

A: Guaranteed condensation-free range
B: Deviations of technical data may be possible

DIMENSIONS incl. fittings and connections [mm]

KBF LQC 240

KBF LQC 720

ORDERING INFORMATION OPTIONS

Designation	Description	KBF LQC 240	KBF LQC 720	Art. No.
Access port with silicone plug	left			
	30 mm	•	•	8012-1443
	50 mm	•	•	8012-1473
	100 mm	•	•	8012-1340
	right			
	30 mm	•	•	8012-1437
	50 mm	•	•	8012-1467
	100 mm	•	•	8012-1337
	top			
	30 mm	•	•	8012-1449
	50 mm	•	•	8012-1455
	100 mm	•	•	8012-1461
Alarm output, zero-voltage	for temperature (±2 °C) and humidity (±5 % RH), accessible via 6-pin DIN socket (max. 24 V - 2.5 A), with audible signal that can be switched off	•	–	8012-1759
		–	•	8012-1763
Analog output 4-20 mA	for temperature and humidity values (output not adjustable)	•	–	8012-1734
		–	•	8012-1739
Calibration certificate, expanded	for temperature and humidity; for extending the measurement in center of chamber to include another test value	•	•	8012-1189
Calibration certificate, temperature	temperature measurement incl. certificate and 27 measuring points at specified temperature	•	•	8012-1604
	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature	•	•	8012-1584
	temperature measurement incl. certificate, 9 measuring points at specified temperature	•	•	8012-1563
Calibration certificate, temperature and humidity	Measurement in center of chamber at 25 °C / 60% RH or at specified test values	•	•	8012-1183
	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	•	•	8012-1610
Class 3.3 independent temperature safety device	with visual alarm (DIN 12880)	•	–	8012-1752
		–	•	8012-1755
Door lock	lockable door handle	•	–	8012-1658
		–	•	8012-1661
Light photometry	including certificate, illumination and irradiance for visible light, 25 measuring points on 3 measurement levels, as well as spectral distribution (385 – 785 nm)	•	•	8012-0909
RS 485 interface, 2-wire	Additional serial interface can be used parallel to Ethernet, for Multi Management Software APT-COM™	•	•	8012-1744
Shelf, reinforced	positioned at bottom level, max. load 45 kg, with additional attachment for operation of shaking device, stirring device or roller bottle system	–	•	8012-1490

ORDERING INFORMATION ACCESSORIES

Designation	Description	KBF LQC 240	KBF LQC 720	Art. No.
APT-COM™ 4 BASIC-Edition	for simple logging and documentation requirements with up to 5 networked units.			
	version 4, BASIC edition	•	•	9053-0039
APT-COM™ 4 GLP-Edition	for working under GLP-compliant conditions. Measured values are documented in a tamper-proof way in line with the requirements of FDA Regulation 21 CFR 11.			
	version 4, GLP edition	•	•	9053-0042

Designation	Description	KBF LQC 240	KBF LQC 720	Art. No.
APT-COM™ 4 PROFESSIONAL-Edition	convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units.			
	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
Converter, voltage	to operate the device at a nominal voltage of 120 V 1 ph 60 Hz			
	240 V option model	•	–	8009-0821
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	•	•	8012-2250
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, humidity, and light values			
	Digital in PDF format	•	•	7057-0003
	Hard copy inside folder	•	•	7007-0003
	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, humidity, and light values			
	Digital in PDF format	•	•	7057-0007
	Hard copy inside folder	•	•	7007-0007
Rack	stainless steel	•	–	8012-2050
		–	•	8012-2051
Rack accessories	fasteners (1 set of 4) for additional security of racks	•	•	8012-2280
Rack, reinforced	stainless steel, with fasteners (1 set of 4)	•	–	8012-0638
		–	•	8012-0674
RS 485 / RS 422 interface converter	RS 422 cable set and RS 485 / RS 422 interface converter for connection to 10-way plug distributor			
	115 V option model	•	•	8012-0599
	230 V option model	•	•	8012-0589
Shelf, perforated	Stainless steel	•	–	8012-2163
		–	•	8012-2252
Water supply set	consisting of fresh- and waste-water containers (20 liters each), cabling and pump			
	external, for hanging from the back of the device	•	•	8012-0643
	external, free-standing	•	•	8012-1846
WLAN kit	The kit contains a client bridge that establishes a wireless connection between BINDER units and APT-COM4, LIMS, or customer-specific software via an Ethernet interface. It provides an alternative solution in situations where units need to be positioned in locations without an on-site Ethernet connection. In secured networks, installation and configuration must be performed by the customer's IT service.	•	•	8012-2262