

BINDER

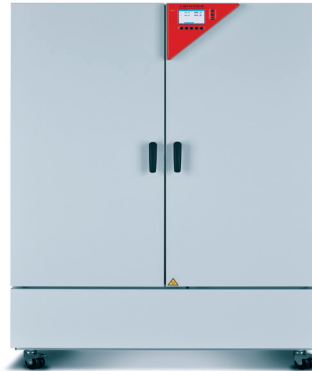
Environmental/ Humidity Test Chambers

BINDER
Best conditions for your success

KMF 240
8.5 cu.ft.



KBF 1020
36 cu.ft.



For Optimal Test Conditions

► **Large Temperature and Humidity Range**

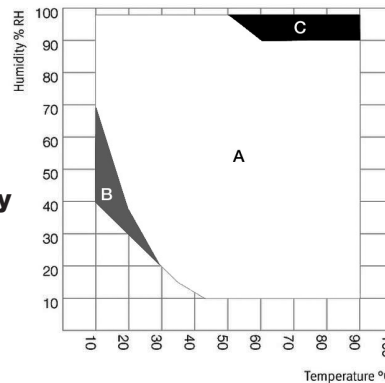
- Temperature accuracy and reproducible results
- Maximum parameter uniformity

► **Best in Class Temperature and Humidity Uniformity**

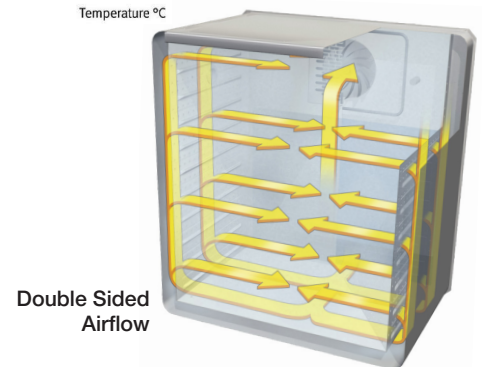
- Best in Class under full load conditions
- Lowest air velocity

► **Water Management**

- **Water Source Choices**
 - ▲ Water with conductivity of 1-20 $\mu\text{S}/\text{cm}$
 - ▲ Tap water + Pure Aqua filter (**BINDER Pure Aqua**)
 - ▲ External water tanks
- Pump to drain water up to 3 feet
- Steam humidity generator for fast recovery time and neutral temperature effect

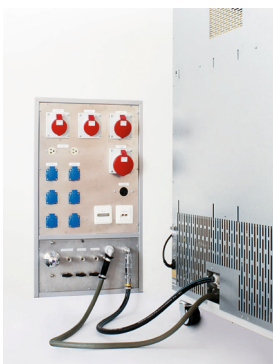


Climate Diagram
KMF Shown



Double Sided
Airflow

Water Source Choices



House Water



BINDER Pure Aqua



Water Tanks

Technical Data

Exterior Dimensions	KBF115	KBF240	KBF720	KBF1020	KMF115	KMF240	KMF720
Width (inches)	35"	36"	49"	49"	35"	37"	49"
Height including feet/castors (inches)	41"	58"	76"	76"	41"	58"	76"
Depth plus connections & fittings (inches)	26"	32"	35"	45"	26"	32"	35"
Wall clearance, rear (inches)	4"	4"	4"	4"	4"	4"	4"
Wall clearance, side (inches)	4"	4"	12"	4"	4"	4"	4"
Interior Dimensions							
Width (inches)	24"	26"	38"	38.5"	24"	26"	38"
Height (inches)	19"	31"	49"	49"	19"	31"	49"
Depth (inches)	14"	19"	23"	33"	14"	19"	23"
Interior volume (cu.ft.)	3.6	8.7	24.7	36	3.6	8.7	24.7
Expansion racks (aluminum) (std, number/max.)	2/5	2/9	2/15	2/15	1/5	1/9	1/15
Load per shelf (lbs.)	66	66	99	99	66	66	99
Permitted total load (lbs.)	220	220	331	331	220	220	331
Weight (empty) (lbs.)	284	406	681	805	280	395	650
Temperature Data w/o humidity							
Temperature range	0 to 70°C	0 to 70°C	0 to 70°C	0 to 70°C	-10 to 100°C	-10 to 100°C	-10 to 100°C
Temperature uniformity at 40°C	±0.2 K	±0.3K	±0.2 K	±0.2 K	—	—	—
Temperature fluctuation	±0.1 K	±0.1 K	±0.1 K	±0.5 K	—	—	—
Max heat compensation (W)	at 40°C 200	at 40°C 300	at 40°C 600	at 40°C 600	at 25°C 150	at 25°C 200	at 25°C 450
Climate Data with humidity							
Temperature range	10-70°C	10-70°C	10-70°C	10-70°C	10-90°C	10-90°C	10-90°C
Temperature uniformity depending on setpoint	—	—	—	—	±0.2 to 1.0 K	±0.1 to 1.0 K	±0.1 to 1.0 K
at 25°C (± K) 60% RH at 40°C (± K) 75% RH	±0.2 K	±0.3 K	±0.2 K	±0.2 K	—	—	—
Temperature fluctuation	—	—	—	—	±0.1 to 0.3 K	±0.1 to 0.3 K	±0.1 to 0.5 K
at 25°C (± K) 60% RH at 40°C (± K) 75% RH	±0.1 K	±0.1 K	±0.1 K	±0.1 K	—	—	—
Humidity range	10 to 80%	10 to 80%	10 to 80%	10 to 80%	10 to 98%	10 to 98%	10 to 98%
Humidity fluctuation depending on setpoint	—	—	—	—	≤2.5 ±%RH	≤2.0 ±%RH	≤2.0 ±%RH
Humidity fluctuation at 25°C 60% RH at 40°C 75% RH	≤2.0 ±%RH	1.5 ±%RH	1.5 ±%RH	1.5 ±%RH	—	—	—
Recovery time after 30 sec door open 25°C 60% RH (min)	15	4	2	11	—	—	—
Recovery time after 30 sec door open 40°C 75% RH (min)	8	5	6	12	—	—	—
Dew point temperature range	—	—	—	—	5 to 90°C	5 to 90°C	5 to 90°C
Electrical Data							
Voltage (± 10%) 50/60 Hz, 1~	200-240	200-240	200-240	200-240	200-240	200-240	200-240
Nominal power (kW)	2.0	2.1	3.1	3.1	2.0	2.1	3.1
Energy Consumption (Wh/h)	40°C/75% RH 470	40°C/75% RH 650	40°C/75% RH 620	40°C/75% RH 650	85°C/85% RH 570	85°C/85% RH 570	85°C/85% RH 900
Noise level approx. (dB (A))	52	52	53	56	52	52	56

1 These values can be used for dimensioning air condition systems.

All technical data are specified for units with standard equipment at an ambient temperature of 25 °C (77 °F) and a line voltage fluctuation of ±10%. The temperature data is determined in accordance to factory standard following DIN 12880, respecting the recommended wall clearances of 10% of the height, width and depth of the inner chamber. All figures are typical average values for series devices. We reserve the right to alter technical specifications at any time.

Options



light cassettes



LQC



data logger with
optional ambient sensor