

## MKF series: For dynamic climate testing in accordance with current standards

**MKF series test chambers are ideally suited for all tests in accordance with current temperature climatic test standards based on DIN and IEC standards:** The required temperature and humidity values can be attained rapidly and maintained accurately, even under extreme conditions. The MKF series offers a user-friendly, program-controlled application, color display and documentation software, as well as comprehensive standard features to ensure safe and efficient operation.



### ► Performance features and equipment:

- Electronically controlled APT.line<sup>®</sup> preheating chamber technology
- Temperature range without humidity -40 °C to +180 °C (-40 °F to +356 °F), with humidity +10 °C to +95 °C (+50 °F to +203 °F)
- Humidity range 10 % r.H. to 98 % r.H.
- MCS controller with 25 storable programs of 100 sections each for a maximum of 500 program segments
  - User-friendly LCD screen
  - Easy-to-read menu guide
  - Integrated electronic chart recorder
  - Variety of options for the graphic display of process parameters
  - Real-time clock
- Electronically controlled humidification and dehumidification system with capacitive humidity sensor
- Integrated water reservoir for demineralized water
- Heated viewing window with interior lighting
- Variable adjustable high-performance fan
- Programmable condensation protection for test material
- Adjustable ramp functions via program editor
- Environmentally friendly refrigerant R 404a
- 230 V power socket on the right-side operating panel
- Independent adjustable temperature safety device, Class 2 (DIN 12880)
- 4 potential-free relay outputs that can be activated via MCS controller
- RS 422 interface for communication software APT-COM<sup>®</sup> DataControlSystem
- Access port, Ø 80 mm (3.1 inch), right side (MKF 240), and right and left sides (MKF 720)
- 2 stainless steel shelves





	MKF 240	MKF 720
<b>▶ Exterior dimensions</b>		
Width (mm/inch)	1160 / 45.7	1381 / 54.4
Height (incl. feet/castors) (mm/inch)	1613 / 63.5	1997 / 78.6
Depth, excl. 55 mm (2.2 inch) for door handle (mm/inch)	962 / 37.9	1038 / 40.9
Wall clearance (mm/inch)	160 / 6.3	160 / 6.3
Viewing window width (mm/inch)	500 / 19.7	360 / 14.2
Viewing window height (mm/inch)	360 / 14.2	760 / 29.9
Number of doors	1	1
<b>▶ Interior dimensions</b>		
Width (mm/inch)	800 / 31.5	1000 / 39.4
Height (mm/inch)	600 / 23.6	1168 / 46.0
Depth (mm/inch)	500 / 19.7	600 / 23.6
Interior volume (l/cu.ft.)	240 / 8.6	700 / 25.1
Shelves (number standard/max.)	2/6	2/14
Load per shelf (kg/lbs.)	30 / 66	30 / 66
Permitted total load (kg/lbs.)	70 / 155	120 / 265
Weight (empty) (kg/lbs.)	310 / 684	540 / 1192
<b>▶ Temperature data</b>		
Temperature range (°C / °F)	-40* to +180/ -40* to 356	-40* to +180/ -40* to 356
Temperature fluctuation without humidity (± °C)	0.1 to 0.4	0.1 to 0.4
Temperature variation without humidity (± °C)	0.5 to 2.0	0.5 to 2.5
Average heating rate acc. IEC 60068-3-5 (K/min.)	4.5	3.0
Average cooling rate acc. IEC 60068-3-5 (K/min.)	3.5	3.0
Heating up time from -40 °C up to 180 °C (Min.)	48	85
Cooling down time from 180 °C up to -40 °C (Min.)	122	180
Heat compensation, max. (W)	2500	2500
<b>▶ Climatical data</b>		
Temperature range (°C / °F)	+10 to +95 / 50 to 203	+10 to +95 / 50 to 203
Humidity range (% r.H.)	10 to 98	10 to 98
Humidity fluctuation (± % r.H.)	0.5 to 2.5	0.5 to 2.5
Dew point temperature range (°C)	+5 to +94	+5 to +94
Heat compensation <sup>1)</sup> , max. (W)	300	300
<b>▶ Electrical data</b>		
Housing protection acc. to EN 60529	IP 20	IP 20
Nominal voltage (± 10 %) 50/60 Hz (V)	400 (3N)	400 (3N)
Nominal power (W)	6000	8000
Noise level (ca. dB(A))	62	65
Individually tested in compliance with VDE 0113	✓	✓

<sup>1)</sup> Temperature range + 25 °C to + 95 °C (+ 77 °F to + 203 °F) and < 90 % r.H.

\* Valid at an ambient temperature up to 25 °C (+ 77 °F)

All technical data are specified for units with standard equipment at an ambient temperature of + 25 °C (+ 77 °F) and a voltage fluctuation of ± 10 %. The temperature data are determined in accordance to DIN 12880, part 2 respecting the recommended wall clearances of 10 % of the height, width and depth of the inner chamber. All indications are average values, typical for units produced in series. We reserve the right to alter technical specifications at all times.