The multi-functional heat test chamber

M series: **the precise tester**

Especially developed precision heating cabinet, which far exceeds the possibilities of a normal heating cabinet. Its application areas are many and diverse and the APT.Line temperature technology guarantees superior temperature accuracies. In conjunction with the extensive program control, almost any temperature-time programs can be generated. The adjustable high capacity turbine, around 4 times more powerful than usual, enables extremely fast heating-up and cooling-down rates in conjunction with the programmable exhaust air flap.
With the M series, practically any problem that occurs during material and ageing tests up to 300 °C can be solved successfully.

► **Operative ranges:**
Testing laboratory, quality assurance, automotive industry suppliers as well as transport/transport subcontractors, electronics/semi-conductor industry, aircraft industry, mechanical engineering, building materials industry, chemical industry

► **Performance features:**
- 5 °C above room temperature to 300 °C
- Colour screen control with 25 programs each with 100 sections
- Memory capacity of controller: max. 500 program segments
- Adjustable high-capacity air turbine
- Freely programmable ventilation flap
- Calibrations and validations possible
- RS 422 communication interface for the standard software APT-COM® DataControlSystem
- Inner chamber volume in litres: 53; 115; 240; 400; 720

► **Equipment:**
- Safety device (TWB) class 2 (DIN 12880)
- Exhaust duct ø 50 mm
- 2 shelves, chrome-plated

Technical Data

BINDER
Best conditions for your success

M series	M 53	M 115	M 240	M 400	M 720
Exterior dimensions					
Width (mm)	634	834	1034	1234	1234
Height (inclusive feet/castors) (mm)	779	864	984	1184	1682
Depth (mm)	575	645	745	765	865
plus door handle (mm)	150	150	150	150	150
Interior dimensions					
Width (mm)	400	600	800	1000	1000
Height (mm)	400	480	600	800	1200
Depth (mm)	330	400	500	500	600
Interior volume (l)	53	115	240	400	720
Shelves, chrome-plated (number standard/max)	2/5	2/6	2/8	2/10	2/16
Load per shelf (kg)	15	20	30	35	45
Permitted total load (kg)	40	50	70	90	120
Temperature range, 5 °C above ambient up to (°C)	300	300	300	300	300
Temperature variation[1]					
at 70 °C (± °C)	0.5	0.6	0.8	0.7	0.7
at 150 °C (± °C)	1.3	1.5	1.5	1.5	1.9
at 300 °C (± °C)	2.8	2.8	2.8	5	4.6
Temperature fluctuation (≤ ± °C)	0.1	0.1	0.1	0.1	0.1
Nominal voltage (± 10 %) 50/60 Hz (V)	230	230	230	400 3/N	400 3/N
Nominal power (W)	1200	1600	2700	3400	5000
Number of doors	1	1	2	2	2
Optional					
Shelves, chrome-plated resp. stainless steel	●	●	●	●	●
Safety device cl. 3.1 acc. to DIN 12880, Part 1	●	●	●	●	●
Lockable door	●	●	●	●	●
Viton gasket (temperature resistant up to 250 °C max)	●	●	●	●	●
Gas proof design	●	●	–	–	–
Inert gas connection	●	●	●	●	●
Sealable access ports	●	●	●	●	●
Additional PT100 temperature sensor, fix or flexible with external connection	●	●	●	●	●
Measuring protocol acc. to DIN 12880, Part 2	●	●	●	●	●
Calibration certificate	●	●	●	●	●
Door with window and interior lighting	●	●	●	●	●
HEPA-fresh air filter	●	●	●	●	●
Additional measuring channel in the controller as digital specimen temperature display with flexible Pt 100 temperature sensor and interface RS 422.	●	●	●	●	●

All technical data are specified for units with standard equipment at an ambient temperature of +22 °C and a voltage fluctuation of ±10 %. The temperature data are determinated 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.

[1] without glass door
[2] up to 98 % of the set value

● Optional
– not available

Your dealer: