

# **MA35**

Rugged, Fully Automatic Infrared Moisture Analyzer for Use in Routine Operation

## Advantages

- Time-saving alternative to a drying oven –
   measurement results in only 10 20 minutes
- Simple operation
- Rugged design
- Ideal for simple routine checks
- Best price-performance ratio with Sartorius quality –
   Made in Germany



## **Product Description**

The MA35 is the ideal basic model for quick and reliable analysis of the material moisture of liquid, pasty and solid substances using the thermogravimetric method. Sartorius's decades of experience in the area of moisture analysis guarantees quick and reliable measurement results and high user-friendliness.

### **Applications**

Ruggedness for All Areas of Application

The compact and rugged design, combined with great precision and measurement accuracy, make the MA 35 the ideal device for uniform measuring tasks. The selection of long-lasting and rugged components, impervious to vibration and dirt, guarantees reliable measurement results, even in a harsh environment. An ideal partner for use in production, incoming goods or in the laboratory.

### Simple Use

Sartorius's unique, fully automatic endpoint determination makes programing a switch-off criterion unnecessary. This saves time because, on the one hand, time-consuming optimizations are no longer required, and on the other, operation of the device is simplified so that it can be used competently by anyone. This is made possible by continuous monitoring of the drying cycle by the MA35.

This monitoring then completes the measurement fully automatically using a switch-off criterion that is calculated based on the drying curve as soon as the sample weight is constant, and where despite heating, no additional loss of weight is detectable. The measurement accuracy required for this is provided by a Sartorius weighing system with readability to 1 mg, which has been specially optimized for use in high temperature ranges.

### **Quick Measurement Results**

For sample heating, the MA35 features two powerful metal tubular-shaped heating elements generating 360 watts of power. These elements facilitate quick and uniform heating of samples and thus shorten measurement times, which means a significant amount of time is saved compared to the drying oven because the finished end result can already simply be read within a few minutes.

# **Technical Specifications**

Weighing range	35 g
Typical reproducibility of the weighing system	From around 1 g of weight of sample taken: $\pm$ 0.2% From around 5 g of weight of sample taken: $\pm$ 0.05%
Readability	1 mg; 0.01%
Measurement display	% moisture, % dry mass, % ATRO, g residue
Typical sample quantity	5 – 15 g
Access to the sample compartment	<ul><li>by lifting top with wide opening angle</li><li>with viewing window</li></ul>
Windscreen	Integrated windscreen
Switch-off criterion	Optional:  - Fully automatic  - Manual switch-off  - Allotted time 0.1 – 99 min.
Heating program	Standard drying
Measurement program	The device is power failure-proof, so 1 program can be saved (parameter freely selectable)
Temperature setting	40 – 160 degrees Celsius in increments of 1 degree Celsius
Sample heating	Uniform with an Infrared dark radiator (metal tubular-shaped heating elements)
Measured value storage	Results are safely stored until the start of the next measurement
Log printout	<ul> <li>Non-adjustable GLP log for measurement results   Calibration   Adjustment</li> <li>Paper-saving brief log for measurement results</li> <li>An optionally available external printer is used for the printout (YDP20   YDP30)</li> </ul>
Inspection equipment monitoring	External calibration by means of optionally available calibration weights; temperature adjustment using an optional adjustment set
User guidance	Through symbols that correspond to the selected functions
Language selection	English, German, French, Spanish, Italian, Russian
Data interface	RS232 C-S/V24-V28, 7 Data-bit (ASCII) 1 Parity-bit
Network frequency	50   60 Hz
Power consumption	max. 400 VA
Case dimensions (W $\times$ D $\times$ H)	224 × 366 × 191 mm
Weight	Approximately 5.8 kg

### **Models Available**

MA35M-230N	Standard version 230 V +15%, -20%
MA35M-115N	Standard version 115 V +15%, -20%
MA35M-115US	Standard version 115 V +15%, -20% with country-specific enhancements for the USA
MA35M-1CN230V1	Standard version 230 V +15%, -20% with country-specific enhancements for China

### Accessories

6965542	Disposable sample pans 80 units, Aluminum, round, 90 mm
6906940	Fiberglass filter for use with liquid, pasty and oily samples, 80 units
6906941	Fiberglass filter, for use with liquid and oily samples, soft Quality, 200 count, Ø 90 mm
YDS05MA	Glass panel replacement set Aluminum pane instead of glass to comply with FDA/HACCP guidelines (Conversion kit)
YDP20-0CE	Data printer
6906918	Color ribbon for measured value printer
6906937	Paper rolls for data printer, 5 items at 50 m
YSS43-02	External calibration weight, 30 g $\pm$ 0.3 mg DKD [Deutsche Kalibrierdienst; German Calibration Service] certificate
YTM15MA	Temperature adjustment set
YMD01B	Individual method development for the MA35 (including brief report)

## Scope of Supply

- Moisture measuring device with data interface
- Network cable
- 80 Aluminum sample pans

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