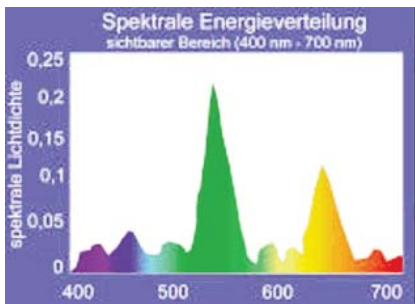
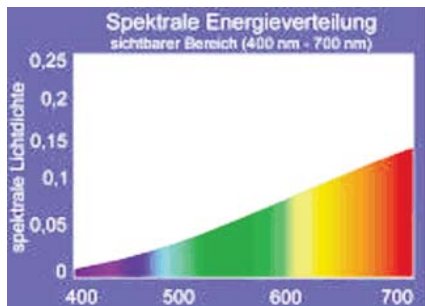


Daylight D65

**Colour Matching  
Cabinets  
MATCHMASTER  
425 MC · 425 MC II ·  
425 III · 425 IV**



Office/Store Light TL84



Incandescent Light A



testing equipment for quality management

**ERICHSEN**

**Technical Description**

**DIN 53 218  
DIN 6173  
ISO 3668  
ASTM D 1729  
BS 3900:D1**

**Colour Viewing and  
Inspection Systems for  
Colour Matching and  
Inspection**

## General Information

Particularly designed for manufacturers and users of coating materials, and for those frequently assessing colours and surfaces visually. Because an objective visual colour comparison can only be made under constant and defined conditions, four compact colour matching systems with several light sources are available for inspection and evaluation of colour samples like e. g. inks, colours, plastics, textiles, paper, colorants and other coloured materials; ideal for cosmetics, coatings, printing and packaging, advertising and graphic design, interior and fashion design.

The Colour Matching Cabinets **425 MC** and **425 MC II** meet the requirements of an inspection of measuring equipment, as the working hours of the illuminants can be indicated. All systems offered comply with the requirements of the **ASTM D 1729 Standard** (including **CIE Publication 51**) for light quality and intensity, symmetry of illumination and viewing, ambient conditions, and uniformity.

The **MATCHMASTER 425 MC II** is supplied as standard with a **Calibration Certificate** (light quality). Furthermore an especially certified set of illuminants can be supplied for this system.

For the **MATCHMASTER 425 III** and **425 IV** a **Test Certificate** (light quality) is issued on delivery.

**Three types of light** can be simulated as standard versions:

In the field of colour assessment a central position is occupied by the **Standard Light D65** (artificial daylight, full spectrum equalized in terms of colour) with a colour temperature of 6,500 kelvin, which simulates the daylight at noon.

Besides also the current **Standard Light TL84** (Office/Store Light, chartreuse, high luminosity, energy-efficient) with approx. 4,100 kelvin, can be generated.

The **Standard Light A** (Home Light/Incandescent light) with high red contribution (reddish-orange, tungsten lamp) and about 2,850 kelvin, represents a normal living ambiance.

These **three** main light types are certainly the ones for judging the appearance of the colour of a product in everyday life of the enduser.

Furthermore, the optional light type **TL83** (3,000 kelvin, greenish, phosphor(III), low bandwidth, energy-efficient) as well as the **UV Light** (for the determination of optical brightening and fluorescent whitening agents as well as the colouration of fluorescent substances of pigments) are available as standard light types.

## MATCHMASTER 425 MC Microprocessor-controlled



### Design and Function

The housing of the **MATCHMASTER 425 MC** comprises of solid thermoplastic sheets dyed conforming to standards, and is open at the front side.

Beside the three light types **D65**, **A** and **TL84**, **UV light** can be switched-on additionally to illustrate the fluorescent properties of some samples. It is possible to change between the three standard light sources at arbitrary time intervals, either automatically or manually, in any desired order.

A control panel with foil keyboard and LCD provides a comfortable control – **either manual or automatic** - of the instrument. The active operating mode is indicated by light emitting diodes.



Control panel

The manual operation is very easy: By a keystroke the required light type is set. In the automatic mode the preprogrammed combination of light sources in connection with the transit times (2 - 15 s) is switched automatically. The programming of the automatic test sequence can be seen from the indications on the LCD.

In the test mode the switching cycles as well as the time a light of each individual light source are displayed to monitor the life time of the lamps.

### Accessories

- Light Diffuser to avoid gloss spots on high gloss samples
- Inspection Tilting Table to assess several samples of gloss, colour and metamerism simultaneously under a specific angle of view

## MATCHMASTER 425 MC II

### Microprocessor-controlled



### Design and Function

The **MATCHMASTER 425 MC II** comprises of metal sheets lacquered conforming to standards and can be put together with the help of a crosstip screwdriver within some minutes. The solid and carefree metal housing is open at the front side; if larger samples have to be assessed, the cabinet can be used without side parts.

The **Standard Light Cabinet MATCHMASTER 425 MC II** is a colour comparison instrument with **five different light sources (D65, TL84, A, TL83, UV)** for perfect assessment and comparison of colour under various light types. A light diffuser provides a uniform distribution of light. Upon request light types can be exchanged, e.g. CWF (cool white fluorescent). A **Calibration Certificate** (light quality) is included in the scope of supply.

An **electronic light automatism** enables a programmable automatic change of light sources in connection with adjustable times of illumination. The user can programme a sequence of the individual light types (up to 10 changes) in any desired order.



Control panel

The **MATCHMASTER 425 MC II** is equipped with a **light monitoring facility "LiteGuard II"** which observes all five light sources, records the hours alight of the individual tubular lamps, and indicates the exchange of a tubular lamp, if required.

### Accessories

- 45° Viewing Stand (31 x 91 cm), neutral grey
- Adjustable Viewing Stand (31 x 61 cm)
- Matt black Insert Panel Set made of aluminium, including side walls, rear wall and floor panels

## MATCHMASTER 425 III and 425 IV



Model 425 III

Model 425 IV

### Design and Function

The standard light cabinets **MATCHMASTER 425 III** and **425 IV** are colour comparison instruments with **three light types**. There are three standard light types available: **D65, A** and **TL84**. A light diffuser provides a uniform distribution of light. It is possible to switch over automatically or manually between these three standard light sources at arbitrary time intervals in any desired order. Each cabinet comes with a **Test Certificate** (light quality).

Both bench models consist of metal sheets lacquered conforming to standards and can be assembled without any tool within some minutes. The colour comparison cabinets are open at the front side.

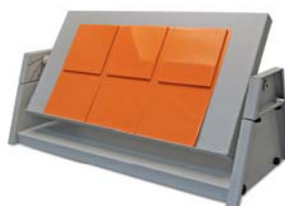
A control panel with illuminated toggle switches - the symbols of the three light sources are shown above - provides an easy operation of the instrument.



Control panel

### Accessories

- 45° Viewing Stand, for Model 425 III (22 x 56 cm), for Model 425 IV (22 x 41 cm), neutral grey surround
- Adjustable Viewing Stand (20 x 41 cm)
- Matt black Insert Panel Set made of aluminium, including side walls, rear wall and floor panels



adjustable Viewing Stand



45° Viewing Stand

## Technical Data

	425 MC	425 MC II	425 III	425 IV
Dimensions (W/D/H)	650 x 500 x 610 mm	1070 x 680 x 790 mm	680 x 420 x 480 mm	520 x 340 x 460 mm
Viewing area	620 x 490 x 430 mm	1010 x 630 x 630 mm	610 x 340 x 360 mm	460 x 250 x 330 mm
Net weight (approx.)	22 kg	44 kg	14 kg	10 kg
Power supply	230 V, 50 Hz (110 V, 60 Hz on request)	230 V, 50 Hz (110 V, 60 Hz on request)	230 V, 50 Hz (110 V, 60 Hz on request)	230 V, 50 Hz (110 V, 60 Hz on request)
Consumption (approx.)	400 W / 1.74 A	602 W / 2.62 A	180 W / 0.79 A	116 W / 0.51 A
Illuminants	D65 (18 W) - 3 pcs. A (60 W) - 4 pcs. TL84 (18 W) - 2 pcs. UV (18 W) - 2 pcs.	D65 (25 W) - 3 pcs. A (60 W) - 6 pcs. TL83 (25 W) - 2 pcs. TL84 (25 W) - 2 pcs. UV (30 W) - 1 pc.	D65 (17 W) - 2 pcs. A (60 W) - 2 pcs. TL84 (17 W) - 1 pc.	D65 (15 W) - 2 pcs. A (40 W) - 2 pcs. TL84 (15 W) - 1 pc.

Order Information	
Ord.-No.	Product Description
0172.02.31	<b>Colour Matching Cabinet MATCHMASTER 425 MC</b> microprocessor-controlled, light types D65, A, TL84, UV (can be switched-on), operating manual
0278.01.31	<b>Colour Matching Cabinet MATCHMASTER 425 MC II</b> microprocessor-controlled, light types D65, A, TL84, UV, including Calibration Certificate as well as light diffuser, electronic light automatism, and light monitoring system, operating manual
0278.02.31	<b>Colour Matching Cabinet MATCHMASTER 425 III</b> light types D65, A, TL84, including Test Certificate and light diffuser, operating manual
0278.03.31	<b>Colour Matching Cabinet MATCHMASTER 425 IV</b> light types D65, A, TL84, including Test Certificate and light diffuser, operating manual

Ord.-No.	Product Description
<b>For MATCHMASTER 425 MC</b>	
0442.01.32	Inspection Tilting Table with angular spacing
0448.01.32	Light Diffuser for uniform light distribution
<b>For MATCHMASTER 425 MC II</b>	
0823.01.32	45° Viewing Stand (31 x 91 cm)
0823.02.32	Adjustable Viewing Stand (31 x 61 cm)
0824.02.32	Adjustable Viewing Stand (20 x 41 cm)
0823.03.32	Insert Panel Set (black aluminium panels for high gloss, specular or very dark colour samples)
<b>For MATCHMASTER 425 III</b>	
0824.01.32	45° Viewing Stand (22 x 56 cm)
0824.02.32	Adjustable Viewing Stand (20 x 41 cm)
0824.03.32	Insert Panel Set (black matt aluminium panels for high gloss, specular or very dark colour samples)
<b>For MATCHMASTER 425 IV</b>	
0825.01.32	45° Viewing Stand (22 x 41 cm)
0824.02.32	Adjustable Viewing Stand (20 x 41 cm)
0825.02.32	Insert Panel Set (matt black aluminium panels for high gloss, specular or very dark colour samples)

Subject to technical modifications  
TBE 425 - XI/2008