## Spektrale Energieverteilung
sichtbarer Bereich (400 nm - 700 nm)

**Daylight D65**

## Spektrale Energieverteilung
sichtbarer Bereich (400 nm - 700 nm)

**Office/Store Light TL84**

## Spektrale Energieverteilung
sichtbarer Bereich (400 nm - 700 nm)

**Incandescent Light A**

# Colour Matching Cabinets MATCHMASTER 425 MC II · 425 III · 425 IV
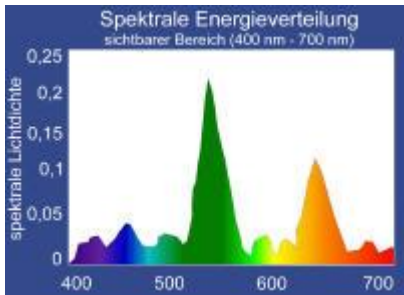
**Model 425 MC II**
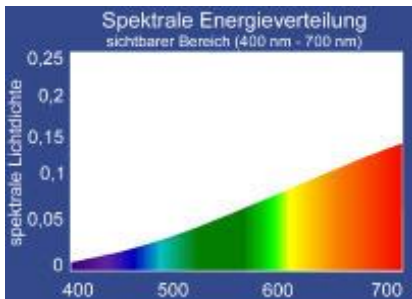
testing equipment for quality management

# ERICHSEN
since 1910

**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 Cabinet **425 MC II** meets 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 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
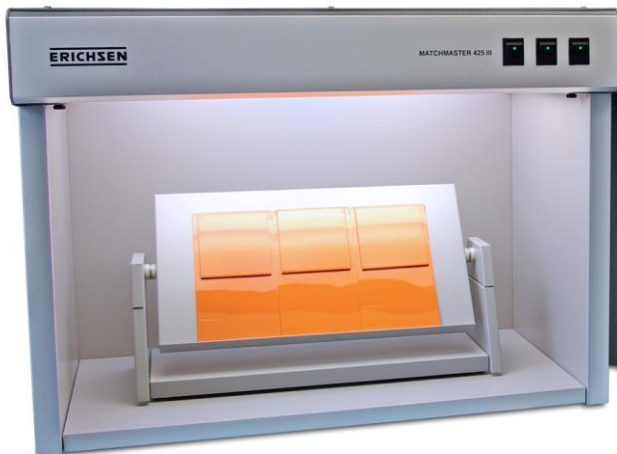


**Model 425 III**

**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 for a uniform distribution of light is available at option. It is possible to switch over between these three standard light sources manually 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
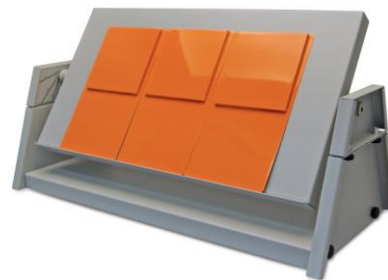


**adjustable Viewing Stand**



**45° Viewing Stand**

## Technical Data

| | 425 MC II | 425 III | 425 IV |
|---|---|---|---|
| Dimensions (W/D/H) | 1070 x 680 x 790 mm | 680 x 420 x 480 mm | 520 x 340 x 460 mm |
| Viewing area | 1010 x 630 x 630 mm | 610 x 340 x 360 mm | 460 x 250 x 330 mm |
| Net weight (approx.) | 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) |
| Consumption (approx.) | 602 W / 2.62 A | 180 W / 0.79 A | 116 W / 0.51 A |
| Illuminants | D65 (25 W) - 3 pcs.<br>A (60 W)   - 6 pcs.<br>TL83 (25 W) - 2 pcs.<br>TL84 (25 W) - 2 pcs.<br>UV (30 W)   - 1 pc. | D65 (17 W)   - 2 pcs.<br>A (60 W)     - 2 pcs.<br>TL84 (17 W) - 1 pc. | D65 (15 W)   - 2 pcs.<br>A (40 W)     - 2 pcs.<br>TL84 (15 W) - 1 pc. |

| Order Information | |
|---|---|
| **Ord.-No.** | **Product Description** |
| 02780131 | **Colour Matching Cabinet MATCHMASTER 425 MC II** 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 |
| 02780231 | **Colour Matching Cabinet MATCHMASTER 425 III** light types D65, A, TL84, including Test Certificate, operating manual |
| 02780331 | **Colour Matching Cabinet MATCHMASTER 425 IV** light types D65, A, TL84, including Test Certificate, operating manual |

| Accessories | |
|---|---|
| **Ord.-No.** | **Product Description** |
| | **For MATCHMASTER 425 MC II** |
| 08230132 | 45° Viewing Stand (31 x 91 cm) |
| 08230232 | Adjustable Viewing Stand  (31 x 61 cm) |
| 08240232 | Adjustable Viewing Stand (20 x 41 cm) |
| 08230332 | Insert Panel Set (black  aluminium panels for high gloss, specular  or very dark colour samples) |
| | **For MATCHMASTER 425 III** |
| 08240632 | Light diffuser |
| 08240132 | 45° Viewing Stand  (22 x 56 cm) |
| 08240232 | Adjustable Viewing Stand  (20 x 41 cm) |
| 08240332 | Insert Panel Set (black matt aluminium panels for high gloss, specular  or very dark colour samples) |
| | **For MATCHMASTER 425 IV** |
| 08250532 | Light diffuser |
| 08250132 | 45° Viewing Stand (22 x 41 cm) |
| 08240232 | Adjustable Viewing Stand (20 x 41 cm) |
| 08250232 | Insert Panel Set (matt black aluminium panels for high gloss, specular  or very dark colour samples) |

Subject to technical modifications
TBE 425 – IX/2018