

**The Universys  
by KBA-Metronic AG**

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# UNIVERSYS

Modular all-in-one system for personalizing plastic and paper cards



Application flexibility to meet individual requirements: landscape or portrait printing on single cards; hot stamping for applying up to 400 mm<sup>2</sup> of scratch-off foil and/or labeling.

**B**acked by many years of experience in printing and marking solutions, KBA-Metronic AG has developed the universal Universys system for personalization of single cards.

Modular design is the main advantage of the Universys, which contains standardized separation, rotation, ink jet printing, hot stamping and stacker modules. A labeling module or a magnetic stripe coder can be added to handle special applications. The modular design enables users to quickly reconfigure the system and upgrade it at a later date, and it also gives them the flexibility to react without delay to changing market conditions.

The KBA-Metronic alphaJET C inkjet printer is suitable for single ABS, PVC, paper and PET cards in landscape or portrait format. The hot stamping module covers relevant data with a

scratch-off film foil up to a maximum of 400 mm<sup>2</sup>. It has a capacity of 7,200 cards per hour.

The security covering system hides secret personal information from view. An integrated code camera verifies all of the relevant print data in compliance with the latest safety and marking requirements. The multi-functional Universys is ideal for addresses, personal data, PIN numbers, barcodes, serial numbers, expiry dates and scratch-off fields.

These great features combined with the printing and marking know-how of KBA-Metronic's specialists are your guarantee of flexibility, individuality and dynamic performance



Standard magazine for up to 500 cards with a thickness of 0.8 mm, friction separation and double card detection sensor.

# Cost-effective solutions:

**Dependable inline production of landscape and portrait formats, hot stamping, labeling and magnetic stripe coding.**

## A brief summary of the key advantages:

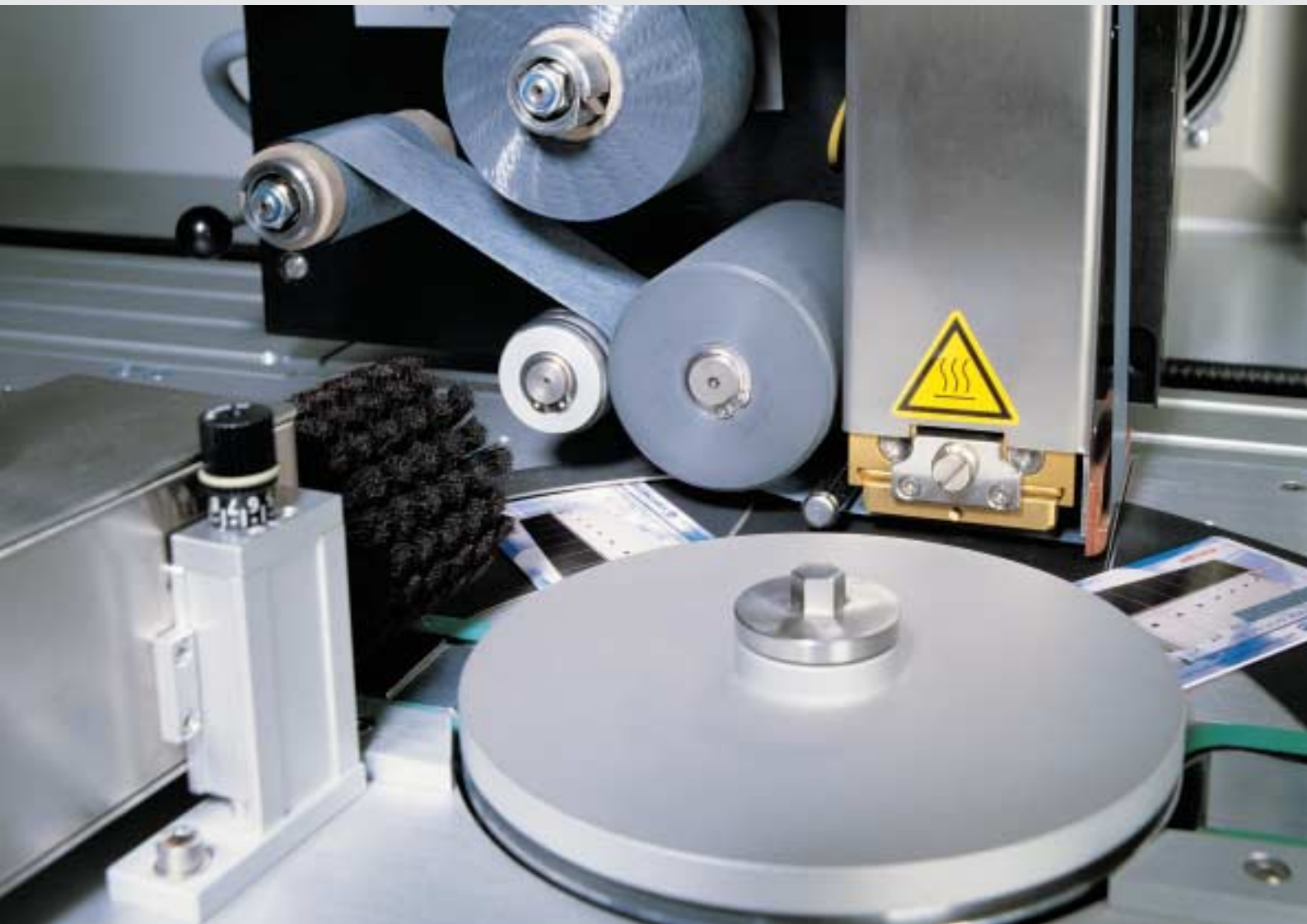
- inline printing in landscape or portrait orientation
- hot stamping and/or labeling depending on safety and marking requirements
- hot stamping capacity: up to 7,200 cards per hour
- labeling capacity: up to 14,000 cards per hour
- alphaJET C ink jet printer and control cameras ensure reliable data and information transfer
- retrofit options including two magnetic stripe encoder versions depending on the application and security standard
- can print on a variety of plastics
- card thickness: 0.25 mm - 0.8 mm
- fully-automatic personalization system
- modular design meets engineering and market requirements for flexible inline production
- functional, user-friendly display simplifies operation
- automatic card separation
- data and quality checks guarantee production efficiency
- efficient, powerful software developed by KBA-Metronic AG guarantee security and reliability
- low investment costs
- outstanding price/performance ratio

## One-stop shopping:

KBA-Metronic AG develops and manufactures nearly all of the components in the Universys system, and the company offers comprehensive service.



Operators control all Universys machine functions from a simple, user-friendly display.



The KBA-Metronic hot stamping module can cover up to 400 mm<sup>2</sup> of important data.



Maximum width of scratch-off labels: 54 mm.  
The optional labeling module has a throughput of 14,000 cards per hour.

The standard model of the Universys personalization system contains the following modules:

- separation module using friction to separate ISO cards. A magazine can hold about 500 0.8 mm cards.
- rotation module turns the cards in landscape and portrait orientation for coding in both directions
- alphaJET C with 2 print heads is included as standard equipment. A second alphaJET C can be installed. The integrated inspection camera verifies that relevant print data are processed correctly.
- hot stamping module which has been specially developed by KBA-Metronic AG covers sensitive data with scratch-off foil. A second camera can be installed for verification, and a labeler for standard labels can also be added.

- The delivery module has a delivery conveyor and a reject chute for defective cards. Rejected cards are segregated in a secure area to protect them from unauthorized access. Depending on the mode setting, reject cards can be reprinted later, or they can be reprinted immediately to maintain the correct sequence.

Modular design gives the Universys the flexibility to grow along with the customer's business. Upgrade options include a magnetic stripe coder which can write individualized data onto magnetic stripes. The module writes and verifies the data in one efficient, secure operation.

# One step ahead: flexible, modular technology



The rotation module rotates the cards to place them in landscape and portrait orientation, so that marking can be applied in both directions.

Users can have a choice of two magnetic stripe coders depending on the applications requirements: LOCO and HICO. The LOCO can write data to 14,000 cards per hour. The HICO model has a capacity of 6,000 cards per hour regardless of the data density on the cards. A read station verifies that the data has been transferred correctly to the card. These units address the growing need for magnetic stripe cards including customer cards, gift cards and membership cards.

Always keeping one step ahead increases your competitiveness in the face of tough opposition. Universys offers the technological flexibility to handle a wide range of personalization tasks.



Universys with seven modules ready for operation

Despite its complexity, the Universys is very easy to operate. Operators use well-designed screen forms on the display to recall all of the job-specific parameters. The user is guided through

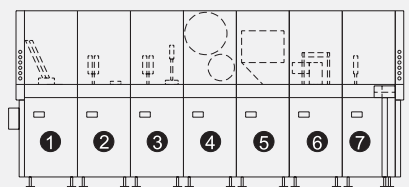


Delivery module with reject shunt

the menus and is able to quickly use the full range of functions available on the system. Personnel with a knack for machinery can quickly be brought up to speed, making the decision to choose a Universys system easier for novice users.

The Universys is an efficient, cost-effective solution for print runs ranging from 500 cards to several million. Its adaptability makes it a technological allrounder. The compact, modular design reduces space requirements and the associated costs. Overall, the system offers an impressive price/performance ratio.

The components supplied by KBA-Metronic AG work smoothly together, and this enhances production reliability. Numerous systems installed worldwide demonstrate the successful engineering capabilities of this innovative company.



Sample Universys configuration:

- 1 infeed module
- 2 rotation module
- 3 printing module incl. code camera
- 4,5 labeling modules 1 and 2
- 6 hot stamping module
- 7 outfeed module (optional inspection camera for scratch-off field)

# Simple, dependable operation: compact, flexible design

## Universys technical data

### Printing process

Printing system:	KBA-Metronic alphaJET C ink jet printer, up to three print heads can be controlled and synchronized per print module
Printing resolution:	max. 48 dots in vertical direction per print head (depending on card throughput)
Print height:	0.8 mm - 15 mm (0.03 to 0.6") (up to 6 lines)
Printing speed: (material dependent):	KBA-Metronic hot stamping module: up to 7,200 cards/hr KBA-Metronic labeling modules: up to 14,000 cards/hr
Magazine:	500 cards (card thickness: 0.8 mm, 32 mil, 0.03")

### Printing materials / formats

Printing materials:	ISO standard cards
Material:	ABS, PVC, PET, laminated PVC, paper, etc.
Card format:	ISO standard size 85.5 x 54 mm, (3.4 x 2.1") special formats on request
Card thickness	0.25 mm - 0.8 mm (10 - 32 mil, 0.001 - 0.03")

### Dimensions and weight (standard version with 5 modules)

Length x width x height:	
- covers closed:	2,660 x 1,700 x 1,670 mm (104.7 x 66.9 x 65.7")
- covers open:	2,660 x 1,700 x 2,070 mm (104.7 x 66.9 x 81.5")
Total weight:	approx. 0.9 tons (1.985 lbs)

### Electrical supply (standard version with 5 modules)

Supply voltage:	230 V (115 V),
Frequency:	50 / 60 Hz
Current strength:	4 A at 230 V / 8 A at 115 V
Fusing:	16 A (provided by customer)

### Pneumatic supply

Air connection	6 bar (87.0 psi), 1/4"
Air consumption:	min. 4 l/min

### Emissions

Noise:	max. 72 dB(A)
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Technical alterations reserved