BUSINESS UNIT ELECTRONICS

Biometric access control –
highest security in the data centre

Security today is more than locking

The modern IT infrastructure requirements demand a maximum of physical security today and have pushed the development from purely mechanical to mechatronic handle systems. In the area of electronic opening and monitoring EMKA offers powerful locking technology with comprehensive hardware and software solutions.

The EMKA GROUP is world market leader for locks and latches, hinges and gasketing used in switch and control cabinets. In the fields HVAC technology and transport EMKA is also among the leading manufacturers of locking technology. EMKA is represented in 46 countries employing more than 1,400 employees.

Complies with PCI, SOX, SSAE 16 and HIPAA, supportive for EN 50600, "Indisputable audit trail, personal identification and traceability"

# Biometric access control systems*

The perfect access control requires the unmistakable identification of the authorised persons. PIN codes can be given away, access cards can get into the wrong hands. Only biometric characteristics provide clear identification. Highest security can be achieved by biometric access control down to the cabinet level. The integration of a fingerprint sensor directly in the swing handle on the cabinet permits unmistakable recognition.

From a single server rack up to a complete data centre, different, combinable security levels guarantee the highest protection of data and material assets by single, double, or triple authentication as the dual-custody principle.

db BioLock – swing handle with fingerprint sensor and emergency opening

The new swing handle db BioLock with integrated fingerprint sensor is the innovative extension of the handle series 1150. As it fits into standard cut-outs, it is suitable both for new installations and retrofitting. After putting a finger on the sensor, its authorisation is checked by the system. In case of positive authentication, the handle is released, the integrated LED is lit and the handle can be opened. A contact is used for remote monitoring of the status of the handle. In case of power failure the handle can be opened with a key if there is an emergency. For this, the cover on the locking cylinder has to be destroyed so this process is clearly visible.
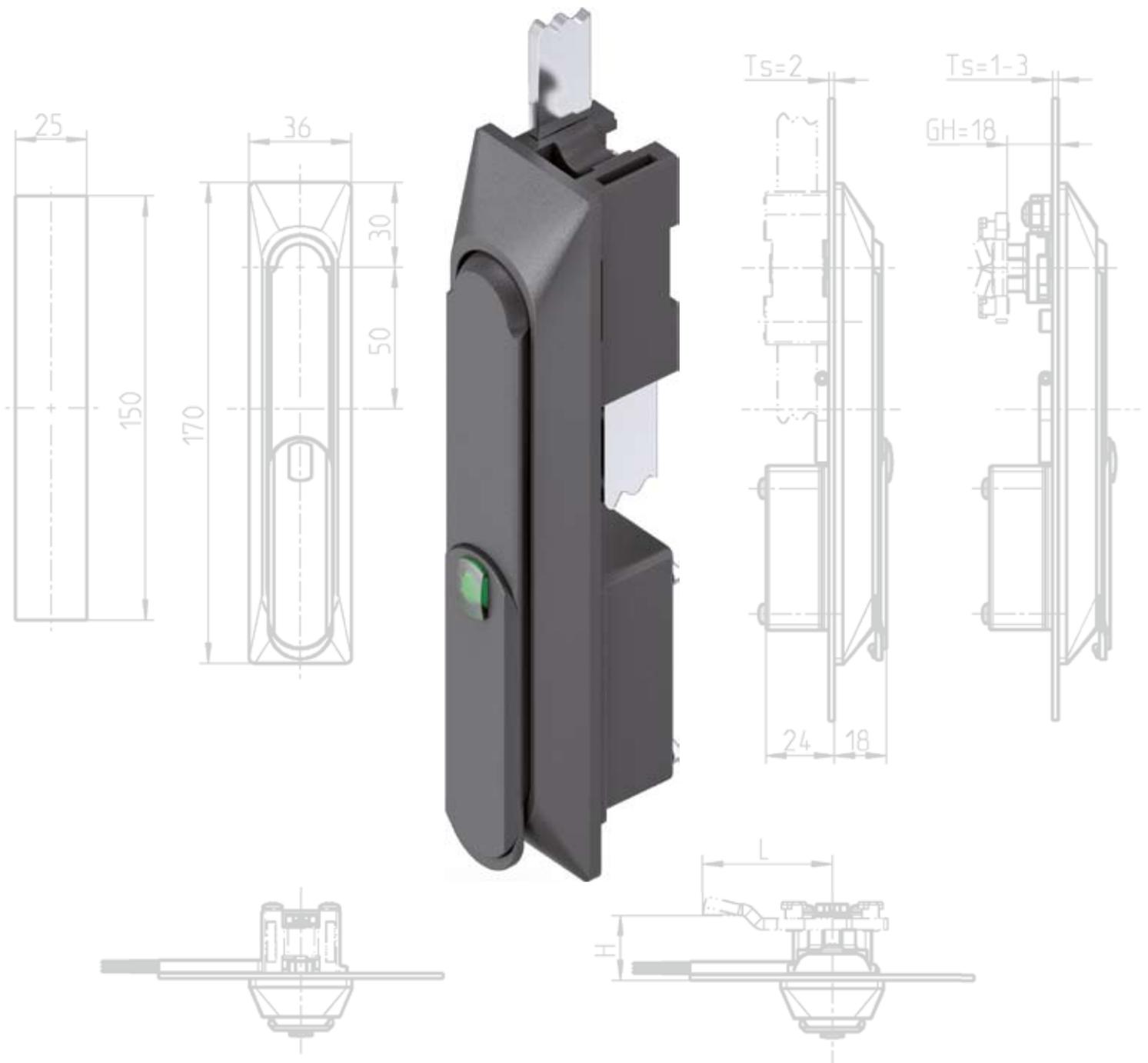
db ELock – swing handle with emergency opening

The swing handle db ELock has the same installation dimensions as the db BioLock and can thus be installed in standard cut-outs. In combination with a db BioLock handle on the front door of a server rack, the db ELock on the back is activated simultaneously. When a central authentication (db ID Box) is used at the front end of a suite of cabinets, the db ELock handle will be activated by this. All other technical features are identical with the db BioLock handles.

The db Control Cockpit has an SNMP interface and can thus be integrated in superordinate systems.

db Control Cockpit Software

The software db Control Cockpit is used for configuring, operating and administering all connected access control systems.

The characteristics of new users are first scanned by the provided desktop fingerprint scanner and linked with the relevant authorisations. Every user can register up to 10 fingers, two of which are "alarm fingers", that are displayed as an alarm due to authentication under duress in the software.

db Control Cockpit provides extensive control and monitoring functions. A status window displays the opening processes of

With the desktop fingerprint scanner fingerprints can be scanned and, using the db Control software, stored for the access control as well as authorisations assigned.

all connected doors / handles in real time. The software monitors whether the doors are open, closed, left ajar or opened by force.

db Control Cockpit displays alarms in real time. The operator can see a list of potential alarm incidents that can also be sent by e-mail.

db Control Cockpit generates detailed event logs with a clear identification of the user. The reporting function is very flexible and makes also customer-specific reports possible. The secure alarm administration and the support of the SYSLOG standard ensure that the db Control Cockpit software is a security system in itself.

db Control Cockpit can be used for administering several thousand access control units and swing handles. The database remains on a central server ensuring the convenient administration of the complete system.

Network LAN

db Communication Module

Stand-Alone Solution

db BioLock   db BioLock

or

db BioLock   db ELock
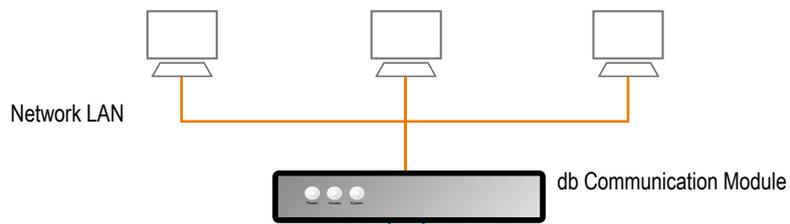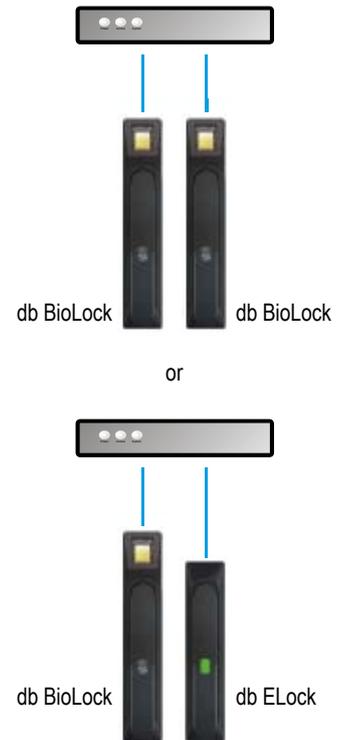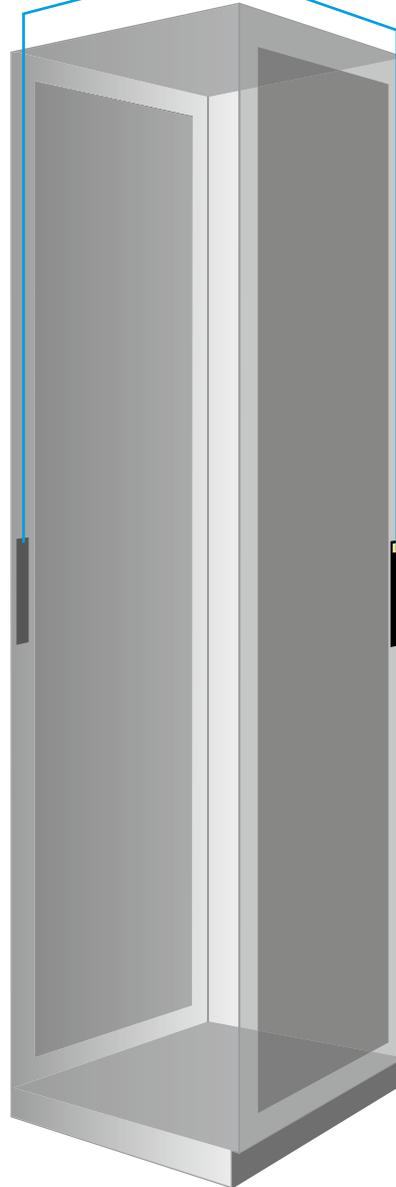
Locking systems for server racks

The stand-alone solution is designed for single server racks. In this case the db Communication Module takes over the control and power supply of the connected components. The db Communication Module features a network interface and ports for two handles and six external sensors.

Two locking solutions are possible:

1. The front door is fitted with a db BioLock handle and the back door with a db ELock handle. After positive authentication both handles are activated simultaneously.

2. Both doors are equipped with a db BioLock handle, and this makes the independent access to each door possible.

Network LAN

db BUS Communication Module

EMKA
Beschlagteile

db Handle Module
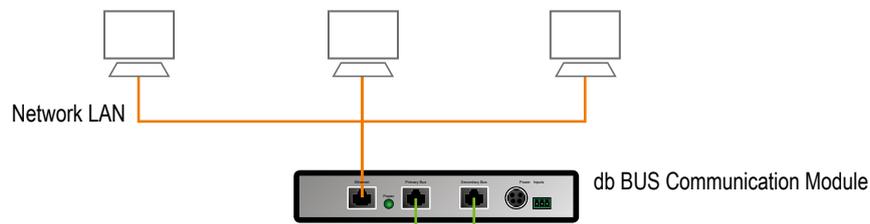
**BUS Solution up to
32 cabinets / 64 handles**

db BioLock   db BioLock

or

db BioLock   db ELock

or
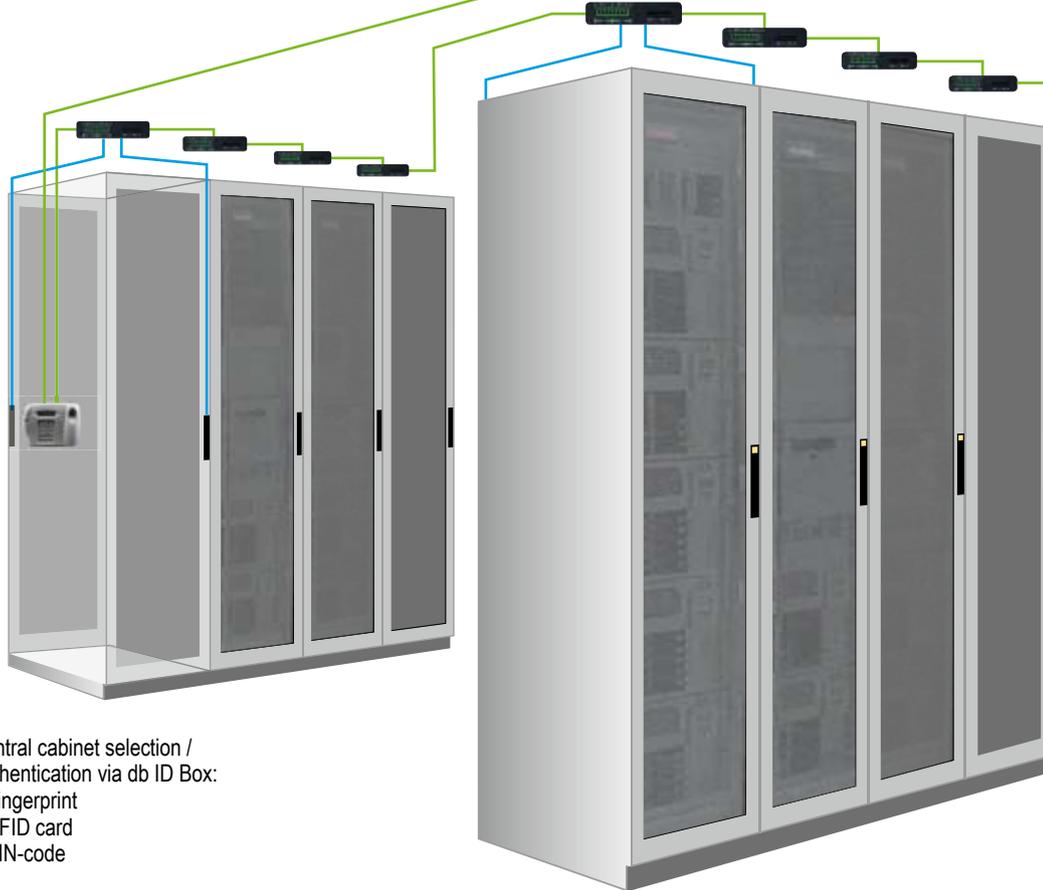
Central cabinet selection /
Authentication via db ID Box:
- Fingerprint
- RFID card
- PIN-code

db ELock   db ELock

Authentication directly on the cabinet
door via db BioLock swing handle
with fingerprint sensor
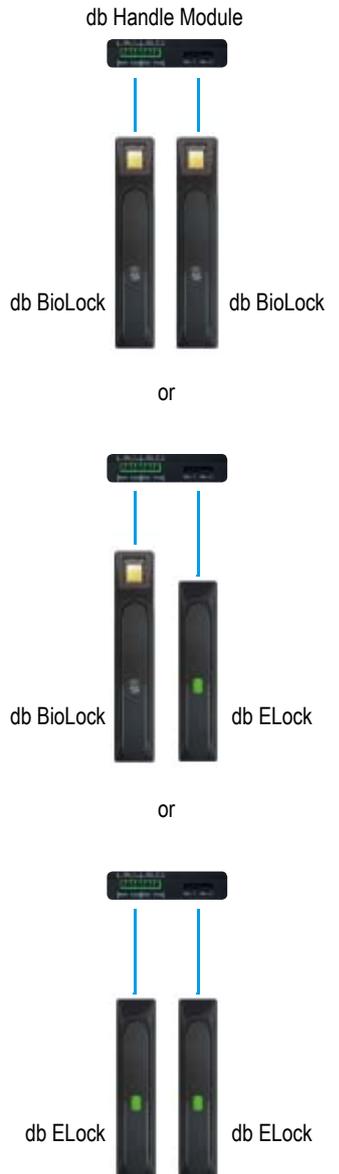
In a data centre with a lot of rows of cabinets the bus system is the right solution. The db Bus Communication Module serves the purpose of controlling and supplying up to 64 handles and optional db ID Boxes with power. Larger installations require several bus systems, which are all administered centrally by the management software db Control Cockpit.

In every server rack a handle module with the possibility to connect 2 handles and 4 contacts is installed. For the central authentication at the front end / end of a row of cabinets the db ID Box provides the possibility to select the required cabinet door using a keypad.

With any user-defined combination of fingerprint, personal PIN code or RFID card the corresponding swing handle is activated.

All components within the bus system are powered centrally via the db Bus Communication Module. By means of the special wiring as closed ring the power supply of the bus nodes is effected from 2 sides so that in case of an interruption of the bus in one place the power supply is still safeguarded.

POWER   ACCESS   SYSTEM
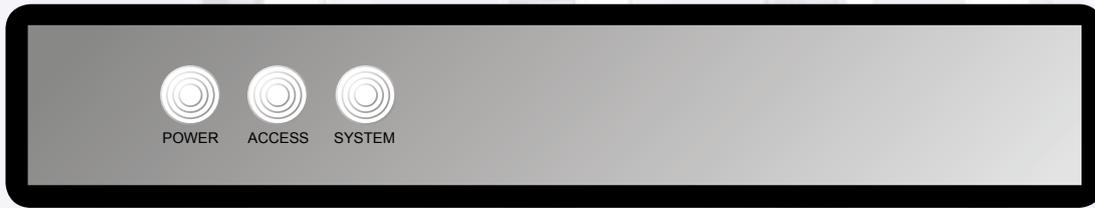
db communication module for stand-alone solution (Front view)

BACK DOOR   FRONT DOOR   NETWORK

RESET   POWER   ALARM   TAMPER SWITCHES
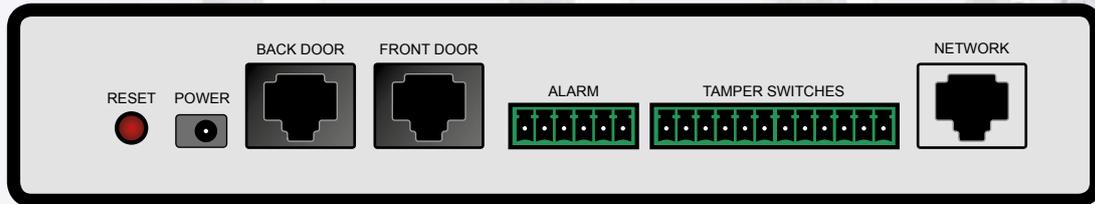
db communication module for stand-alone solution (Back view)

db BioLock   db ELock

Biometric access control, hardware

Ethernet   Primary Bus   Secondary Bus   Power Inputs

Power
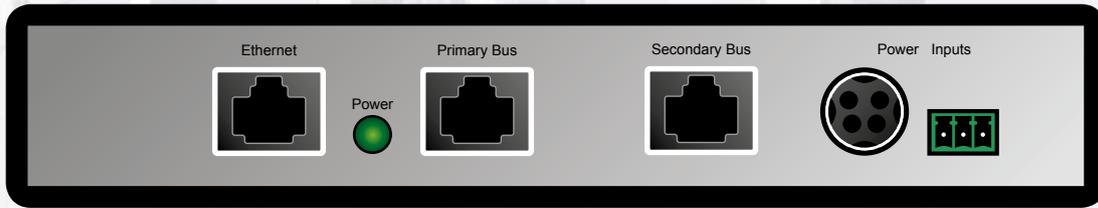
db BUS Communication Module

db Handle Module
(Front view)

db Handle Module
(Back view)

db ID Box

db BioLock   db ELock

The db Communication Module for stand-alone solutions is suitable for connecting 2 electromechanical swing handles db BioLock (with fingerprint sensor) or one handle db BioLock and db ELock each.

The db Bus Communication Module transmits the control signals and the power supply for up to 32 handle modules with connected swing handles.

Besides the RJ45 ports for the bus system, two db BioLock or db ELock swing handles per db handle module can be connected. In addition, two connections each are possible for door and side panel contacts. The power supply is effected via the bus line.

The db ID Box with central keypad, fingerprint sensor and optional RFID card reader, in combination with the db Bus Communication Module, provides the possibility for authentication at the end of a row of cabinets. With the keypad the required cabinet door is selected. Then up to three authorisations (fingerprint, PIN code, access card) can be entered for authentication.

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