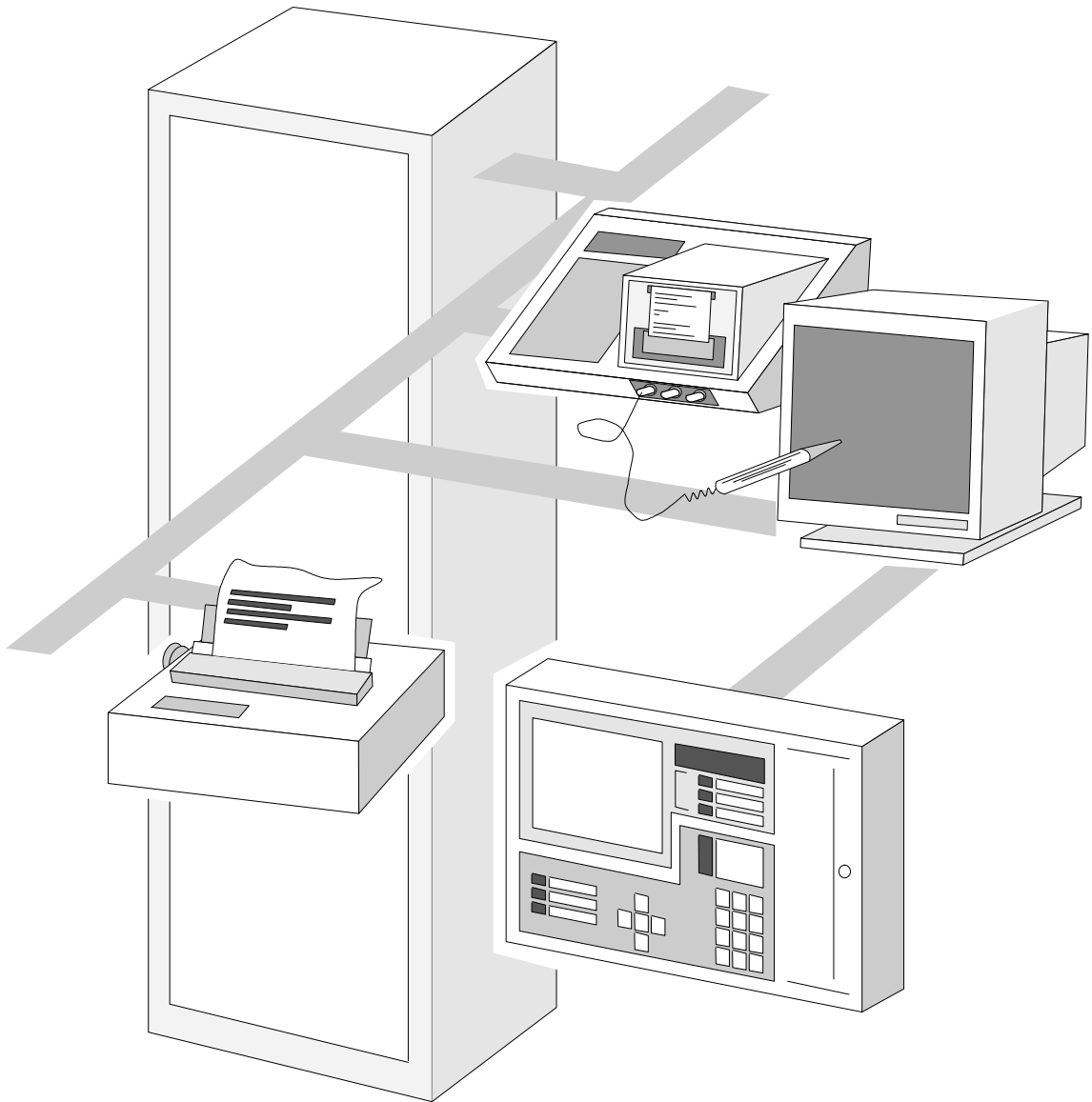


# *DMS 7000*

## *DANGER MANAGEMENT SYSTEM*

*Terminal systems (Up-grade CS100)*



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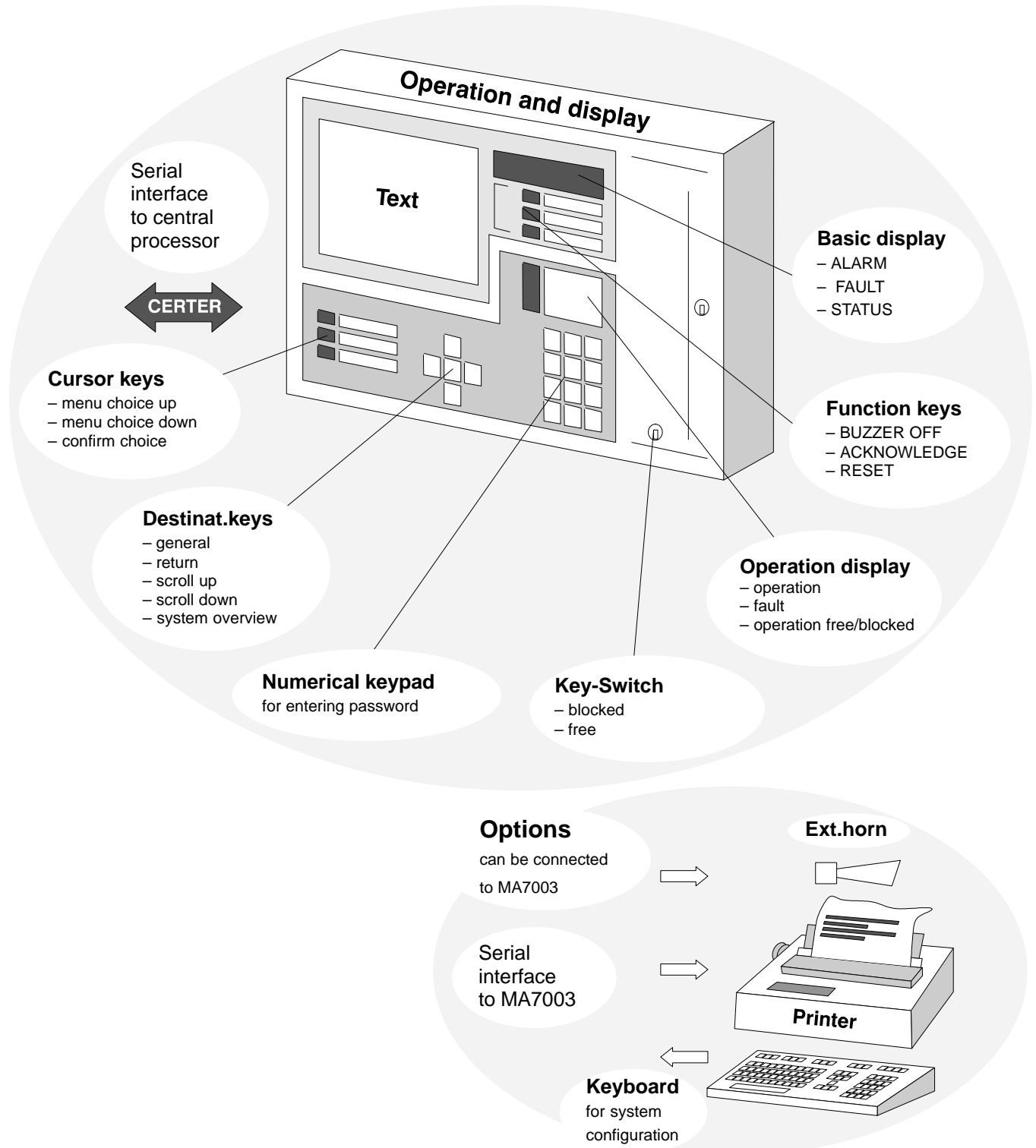
## System console MA7003

Danger management system DMS7000 display and operating unit for the display of information in plain language.

Guided operation and standardized display

Accurate information on alarm location and operating status

Events are displayed geographically in the sequence: room, floor, building, and general location.



## Functions



### Monitoring

- Detection-/control elements
- Detection-/control zones
- Peripheral equipment:
  - remote transmission, logging printer etc.
- Power supply
- Battery
- Presence of equipment
- Communication network
  - data base: process-/building/equipment image
  - max. 52,000 data points/names (number of network nodes)

### Control

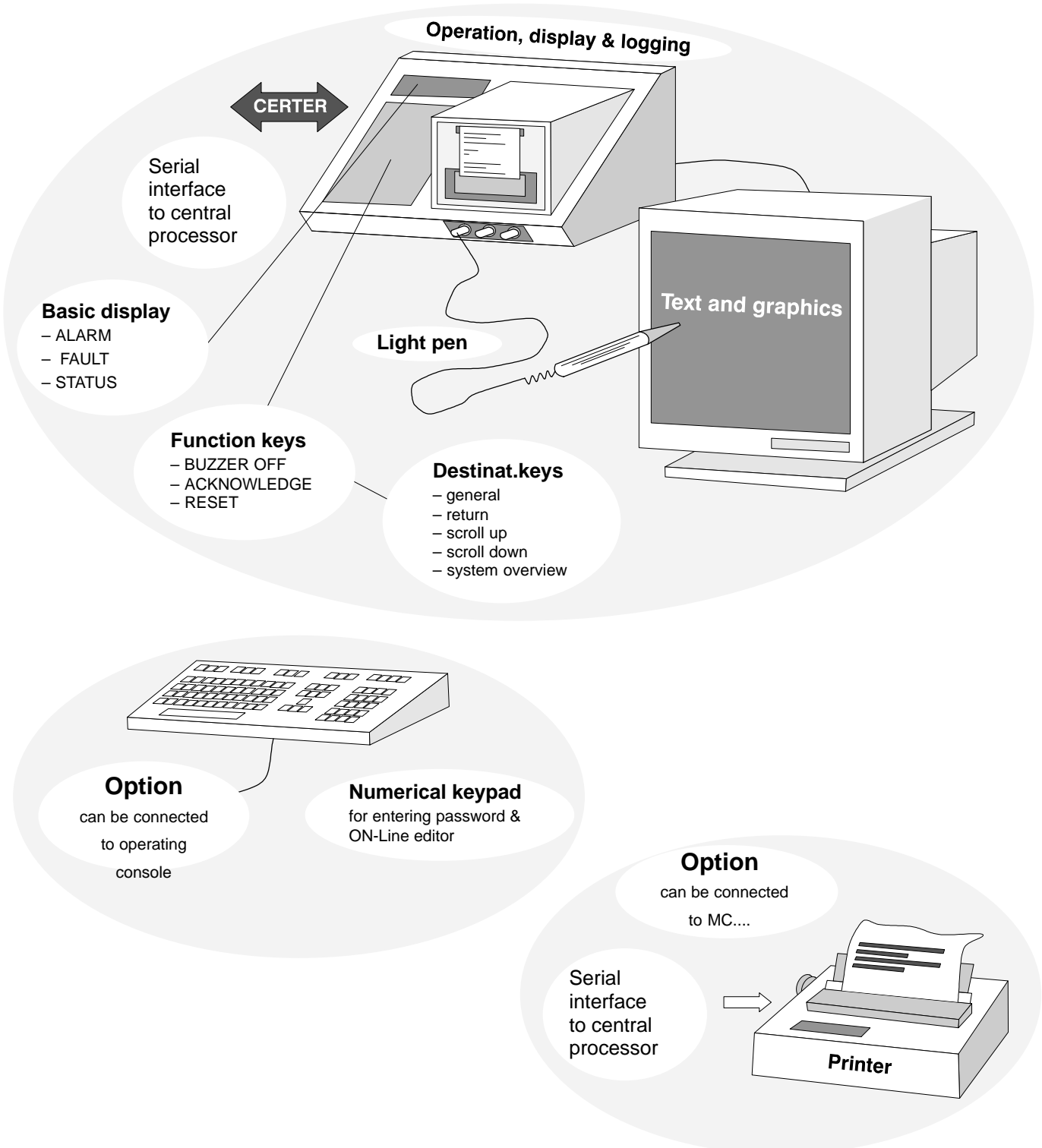
- Detection-/control elements "Dependent on sector/data point"
- Detection-/control zones "Dependent on sector/data point"
  - data base: command decoding: node/procedure
  - event/time-controlled assignments with integrated SPS-functions
  - max. 1000 input/logic/output elements

### Observation

- **System overview:**  
Number of **UNUSUAL** statuses
- **Spontaneous events:**  
Message table, overview images
- **Current system status:**  
Detailed information on the system overview
- **History data file:**  
Information on past events
- **Separate indication field:**  
ALARM FAULT STATUS

## System console MA7013

Danger management system DMS7000 display and operating unit for text and graphics  
 Guided operation and standardized display  
 Accurate information on alarm location and operating status  
 Events are displayed geographically in the sequence: room, floor, building, general location



## Operation

(Continuation functions)

- **Basic operation:**  
Buzzer off, Acknowledgement, reset via function keys with guided operation
- **Extended operation:**  
From acknowledge ..... to detection/control elements "**on/off; active/inactive**"  
Roll, turn pages, cursor movement, selection of elements and functions etc. via light pen or mouse in sophisticated conversational mode
- **Operating access:**  
with or without password

## Logging

- **Event log:**  
Chronological logging of events
- **Counter-measures log:**  
Activated by events, dependent on sector/function/building  
Varying contents of measures log for "**Day/present** and with **Night/absent**"
- Log of current system status
- Log of the history of the data file
- Operating access only with password
- Cause of alarm for event log
- Log directive for check on watchmen

## Filing

- History data file for chronological event storage and operating access.
- Various search terms and menu plans for selection and assessment dependent on sector/building/function and how far back in the past.

## Remote transmission

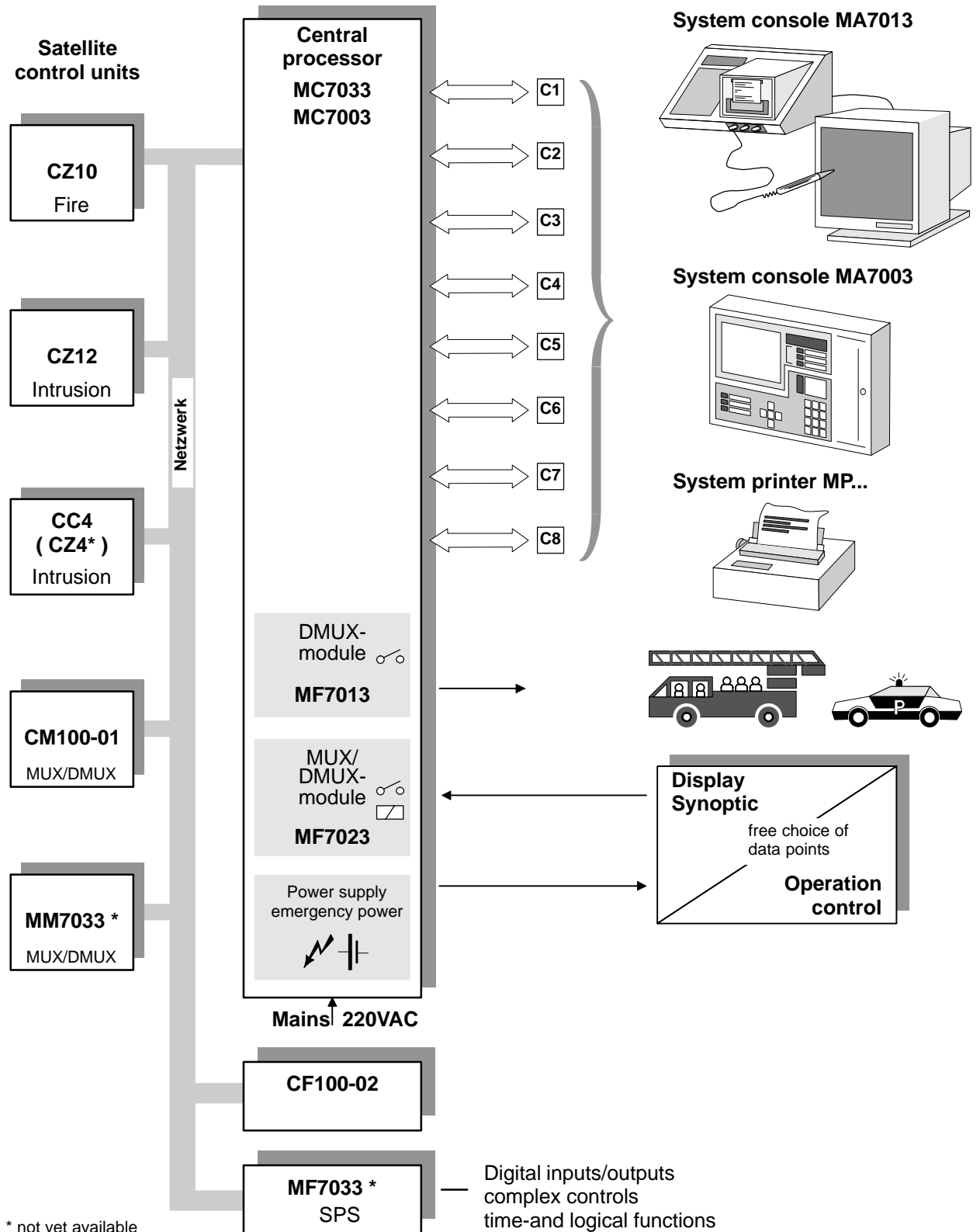
- 12 potential-free relay outputs
- Configuration as required with SPS functions
- Can be parameterized according to risk sector, location, ALARM, FAULT & STATUS

## Configuration

- **Configuration menus with interactive guided operation:**
  - for the daily work on the system console with **ON-LINE** editors
  - for extensive system data with **OFF-LINE** editors
  - for the central or assignment-orientated alarm organization: system console, system printer dependent on "sector/building/function"
  - for event/time controlled assignments with SPS functions
  - for the digital inputs/outputs which can be parameterized at telegram level, linked to SPS functions

# Danger Management System DMS 7000

## System overview



## Devices on the "Central Evaluation Level"

### General technical data

- Processor
  - data bus,pulse 16/32bit, 8Mh pulse frequency
  - main memory max. 13M bytes
  - operating system CERTOS real time, multi-tasking
  - file system MS-DOS
- 19" module concept

### MC70.. Central processor

central processor for central monitoring and control of the danger management system.  
Two different sizes are available :

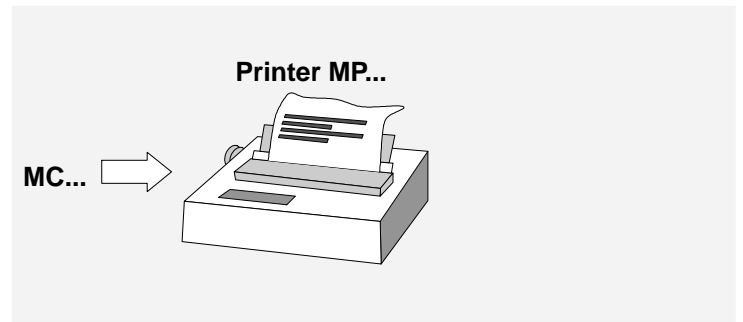
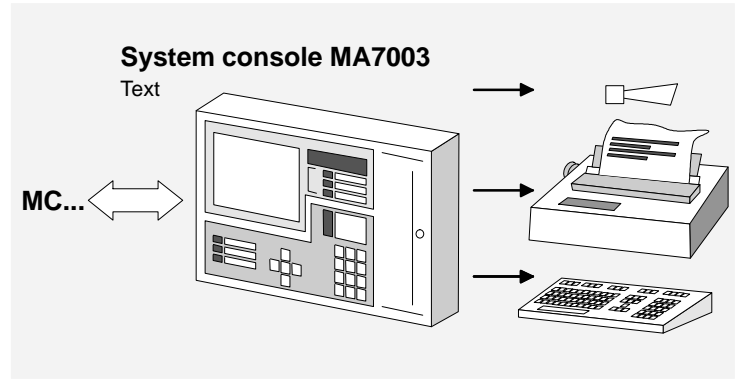
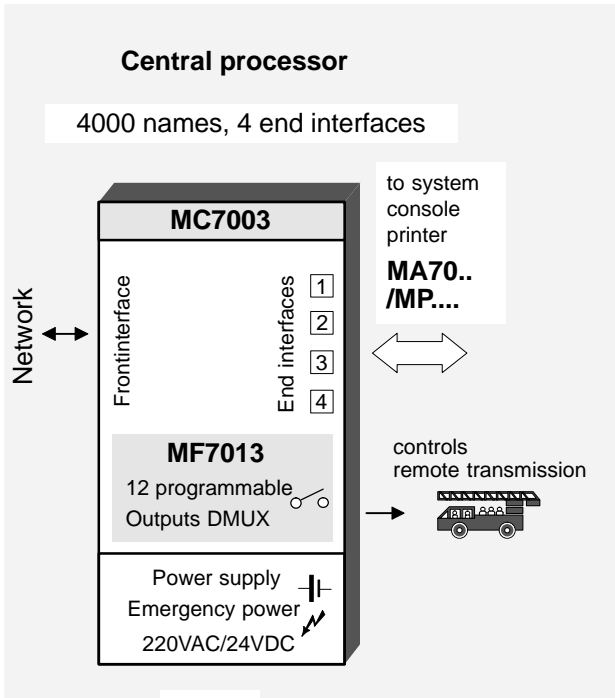
- a) The **MC7003** with 4 end interfaces and 4000 node names
  - b) The **MC7033** with 8 end interfaces and 52,000 node names
- treatment of all risk sectors
  - processing and monitoring of all signals to and from the satellite control unit as well as to the man-machine interfaces
  - preselectable ports (end interface) for different devices and types of information (matrix programming)
  - assignment of system consoles, printers, graphic display panels etc. to one or more risk sectors
  - event logging and recording
  - event-controlled functions
  - programmable input / output functions (MUX/DMUX)
  - front interface
  - expandable up to 8 end interfaces for system consoles and printers
  - up to 4000 respectively 52,000 information nodes (geographical names)

### MC7003

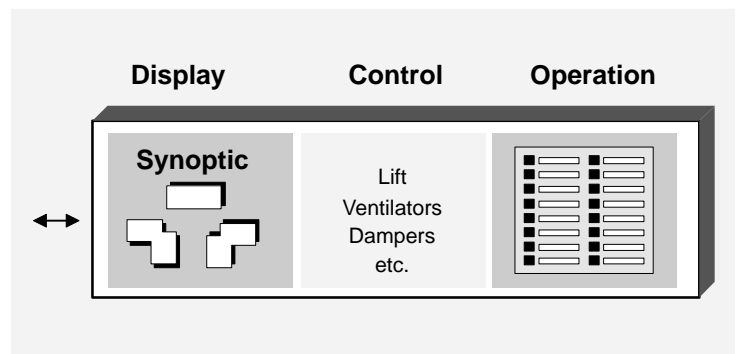
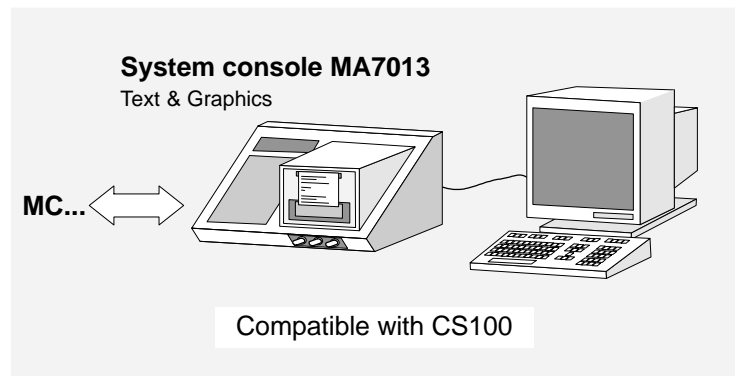
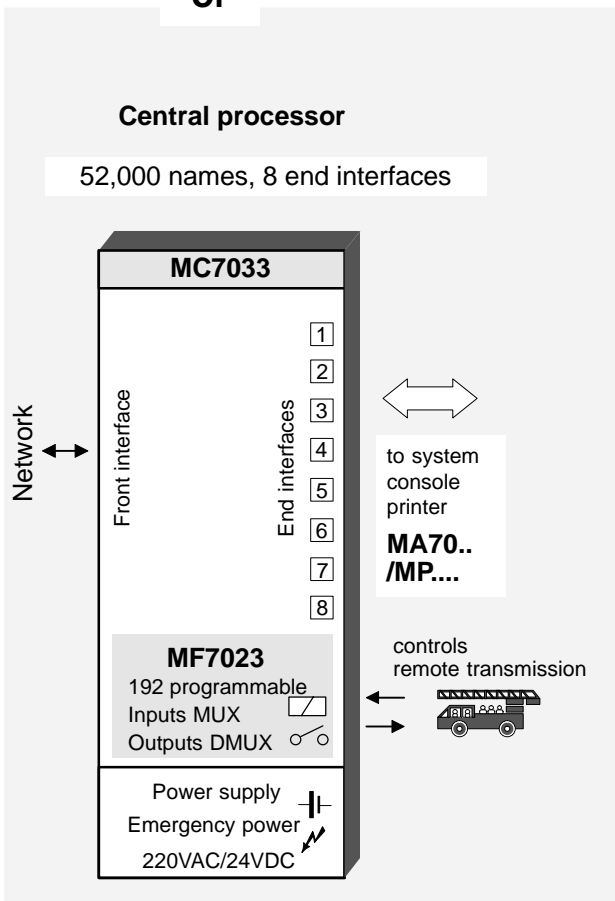
- Network CERBAN or CERLOOP
- max. 4 serial interfaces CERTER for the periphery
  - system console **MA7003** text
  - printer
- Disk drive for data security ON/OFF interface controlled
  - max. 4 floppy disks each with 720k
- Storage capacity approx. 4000 nodes (names)
- integrated DMUX module **MF7013**



# Terminalsystems Combinations



or



### **MC7033**

- Network CERBAN or CERLOOP
- max. 8 serial interfaces CERTER for the periphery
  - system console **MA7003** text
  - system console **MA7013** text and graphics (provisional solution)
  - printer
- Disk drive for data security ON/OFF interface controlled in modular concept
  - max. 4 floppy disks                      each with 720kB
  - max. 2 hard disks                        40MB
- Storage capacity approx. 52,000 nodes (names)
- integrated DMUX module **MF7013**
- integrated MUX/DMUX module **MF7023**

### **MF70.. MUX/DMUX (SPS)**

Programmable logic controller unit with digital inputs/outputs offering a wide application range such as for:

- indicating panels, synoptical viewboards
- actuation of functions in the control units at the "Local Evaluation Level"
- complex fire control installations
- logical and sequential functions, timer
- event-controlled functions

#### **MF7013** DMUX module

- max. 12 potential-free relay outputs
  - contact load 30V DC I<sub>max</sub> 100mA
- full SPS functions
- application max.1000 elements (output, input, logic)

#### **MF7023** MUX/DMUX module

- max. 192 potential-free outputs and/or inputs (opto coupler)
  - output characteristic –U<sub>a</sub> = 5 ... 29V DC; I<sub>a</sub> = 40 mA
  - input characteristic –U<sub>e</sub> = 17 ... 29V DC; I<sub>e</sub> = 1 mA
- option: relays
- full SPS functions
- application max.1000 elements (output, input, logic)

## MA70.. System-/Operation-console

system console for information display and guided operation of the danger management system. Two system consoles are available:

- a) The **MA7003** with alpha numeric Liquid Cristal Display (LCD) for text
  - accurate display of alarm location and operating states in plain language
  - presentation of geographical information in the common way as room, floor, building and immediate location
  - standardized operating sequence and display modes
  - dialog operating by flashing masks and instructions
  - cursor control, dedicated function keys for basic operation and numeric key pad
  - password access to 16 authorization stages
- b) The **MA7013** with the additional features of **colour graphics**.
  - dialogue operating by colour-coded masks and instructions
  - colour presentation of topological information such as location, building and floor plans

### MA7003

- serial interface CERTER to the system processor **MC70..**
- serial interface CERTER to the log printer
- Operation and display (text)
- Options
  - connection for the keyboard for extended operation
  - connection for printer
  - connection for horn

### MA7013

- serial interface CERTER to the system processor
- serial interface CERTER to the log printer
- Control console text & graphics
  - Table console and colour monitor
  - Optionale key pad and digitizing tablet
  - Rack -installation for processor
- Disk drive for data security ON/OFF interface controlled
  - max 1 floppy disk                      720kB

# Danger Management System DMS7000

## Replacement of the CS100

The **MC7033** central processor and the **MA7013** system console are the result of specific new development projects in control centre technology. The equipment forms part of the new DMS 7000 danger management system. New systems of the same complexity as the well-known CS100 equipment family, as well as the modernization of existing CS100 systems form the field of application.

### Utilization of the new equipment family

Both pieces of equipment in the DMS 7000 system allow:

- Competitively priced realization of new systems
- Competitively priced replacement of the CS100 by the DMS 7000
- Retrofitting of existing CS100 systems

### Advantages to customer

- Additional functions
- Simpler system operation
- Lower costs for system extension
- Time saved in making modifications, servicing and maintenance

## Modernization

### New list of messages (operation orientated)

- Allows specific procedures to be carried out smoothly via monitor in that several zones can be switched off after each other without having to change to the system overview. The reference to new messages draws the attention of the operator to the fact that the zones are also switched off. The method of display (spontaneous display or new list of messages) can be freely defined via an editor.

### Change of image can be defined (display orientated)

- The change of image (reference to trouble and status) can be freely defined by means of an editor. The layout on the monitor can be adjusted according to the customer's priorities.

### Organization

- The organization of the control unit (**day/night**, present/absent) can be seen in the system overview on the monitor and can be operated direct.

### Macro instruction

- Data points which are important for the customer can be so defined that they are shown in the system overview and can be operated direct. Circuits for several zones can thus be combined and switched on and off much easier via a macro instruction. Up to 6 spare macro instructions can also be defined.

### Measures log

- A different measures log for **ALARM**, **TROUBLE** and **STATUS** events can be allocated to each node. The allocation can be varied according to the day/night organization.

### Flexible printer configuration

- Logging (with printer) according to sector and **ALARM**, **TROUBLE** and **STATUS** can be freely defined independent from the display on the monitor.

### Extension of the on line editors

- Flexible and fast input of system and tree data on site by the service engineer. Additional possibility for log printout.
  - printout selectable according to chronological retrospect
  - according to given route in the tree structure
  - according to macro instruction

### History

- The recording of all events on a separate disk

### Counter for drift display

- With MS9 Plus detectors installed, the current status can be polled at any time from the control centre.

### Graphics

- Simple image entry with the new graphics editor (GraphEDT). The GraphEDT is an application program below the GEM surface and operates on an MS-DOS/80386 personal computer:
  - For the creation of images for the DMS7000 and with the CG100-11 by means of FLEX shell and conversion
  - For the import and processing of AUTOCAD drawings with conversion possibility

**Central processor**

- Data bus, pulse 16/32 bit, 8MHz frequency
- Address capacity 16 M bytes
- Operating system CERTOS real time, multitasking

**MS-DOS file format**

- The file format guarantees flexible working with corresponding OFF line editors. This greatly reduces work time. Although the MS-DOS file format is used, the DMS7000 equipment PC/MS-DOS is virus-proof (operating system CERTOS).

**DMUX module MF7013 and DMUX/MUX module MF7023**

- Provides links (AND, OR etc.) and controls for specific customers. Complies with the requirements of a digital SPS system.  
Simple entry and modification on site possible. The corresponding tool is at present being modified.
  - **MF7013** max. 2 cards each with 6 relay outputs
  - **MF7023** max. 4 MUX and/or DMUX modules (192 inputs/outputs)