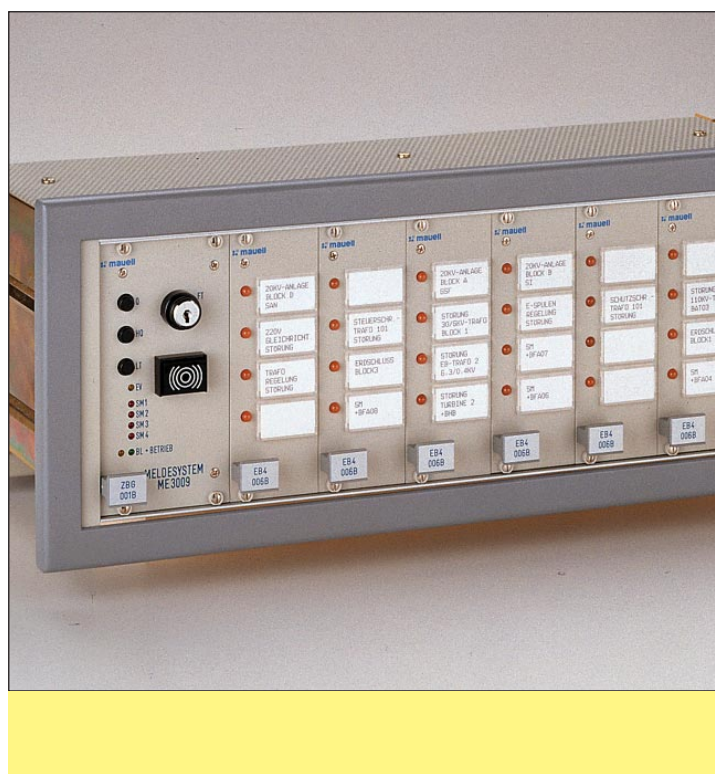


# Electronic Alarm System



# ME 3009

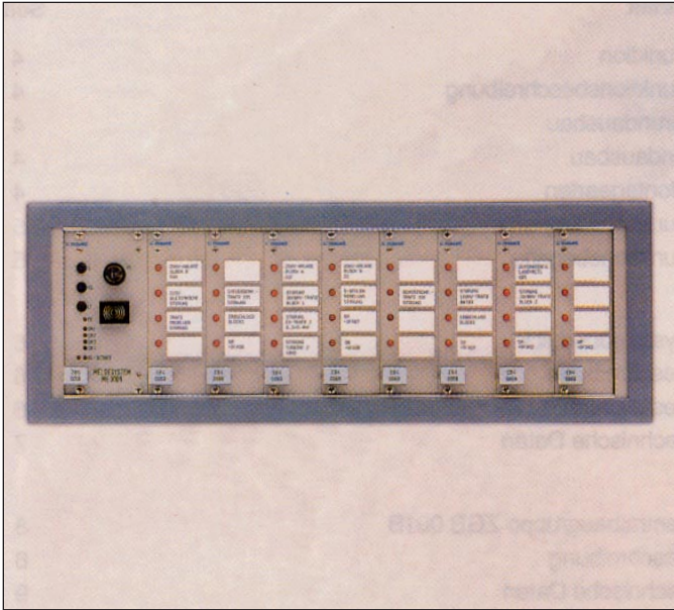
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The data in this brochure was correct and up-to-date at the time of issue and is subject to improvements and changes without prior notice. The applicable instructions for installation and commissioning must be observed. The circuits and configuring information shown are only suggestions and are not binding. No warranty can be given.

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## Function



ME 3009 compact annunciator system

### Functional description

The ME 3009 compact annunciator system is used for the display and transmission of warning alarms and operating states. All alarms are displayed clearly and are accompanied by an alarm text which is located directly next to the display for clear indication of the type and extent of the alarms at all times. The incoming alarm can be displayed flashing together with an additional audible signal. Up to a total of two acknowledgements can be initiated for warning alarms, so that clear perception of the alarm can be assumed. Any number of alarms can additionally be combined to 4 group alarms, displayed and transmitted as a relay contact. The system can be set to a first-up interlock or new-value processing mode. A group of selected alarms can be assigned to first-up indication, where the first incoming alarm is displayed flashing and the subsequent alarms of this group are statically displayed. Each single and group alarm is assigned a relay for transmitting the alarm to peripheral devices.

The rugged and fail-safe design of this system has proved highly efficient, particularly for use in the area of industry and power supply. The modular and compact design achieved by combination of alarm display and processing on the alarm modules provides a rational solution for the detection and processing of 4 to 96 alarms. The alarm system consists of a central controller module and the necessary number of alarm modules, each of which are able to process 4 alarms. The ME 3009 compact annunciator system has been designed for universal application featuring alarm modules capable of processing input signals with any voltages between 24 V and 230 V DC or AC without additional wiring.

Working current or NC current activation and assignment to one or several of 4 group alarms can be set for each signal input via jumpers on the alarm modules. A new value processing or first-up interlock mode can also be set for each alarm module.

A high degree of interference immunity is ensured by a suppressor circuit and electrical isolation (by means of optocouplers) of the signal inputs from the system-internal signal circuits and the use of high-noise-immunity CMOS circuits.

This a precondition for a system whose signal inputs can be exposed to high interference voltages as a consequence of unfavourable cable routing.

The electronics of the ME 3009 compact annunciator system can be connected to a supply voltage of 24 V, 48 V or 60 V DC, depending on the particular type.

The supply voltage for the electronics is independent of the signal voltage, so that, e.g. a system with a supply voltage of 24 V DC is also able to process input signals of 230 V AC.

The LED display of the ME 3009 compact annunciator system has the advantage that the high cold lamp current occurring with systems using filament lamps (e.g. during lamp test) does not have to be taken into account in the dimensioning of power supply units. The terminals for the signal inputs, transmitting contacts, supply voltage, etc., are located at the rear of the rack, the bus circuit board of which is covered safe from finger-touch in compliance with the requirements of VBG4. The use of a bus circuit board enables the replacement of all modules without rewiring.

### Basic configuration

The basic configuration of the ME 3009 compact annunciator system consists of a 19" rack with a central controller module and 8 slots for alarm modules. On each alarm module, 4 alarms are processed, displayed and designated, so that it is possible to process 4 to 32 alarms in the basic configuration. Unused module slots are covered with dummy plates. Subsequent expansion is extremely simple by removing the dummy plates and inserting the additionally required alarm modules. If more than 32 alarms are to be processed, an expansion rack for 8 alarm modules which can process a further 4 to 32 alarms, is used. The slot for the central controller module not required here is covered with a dummy plate.

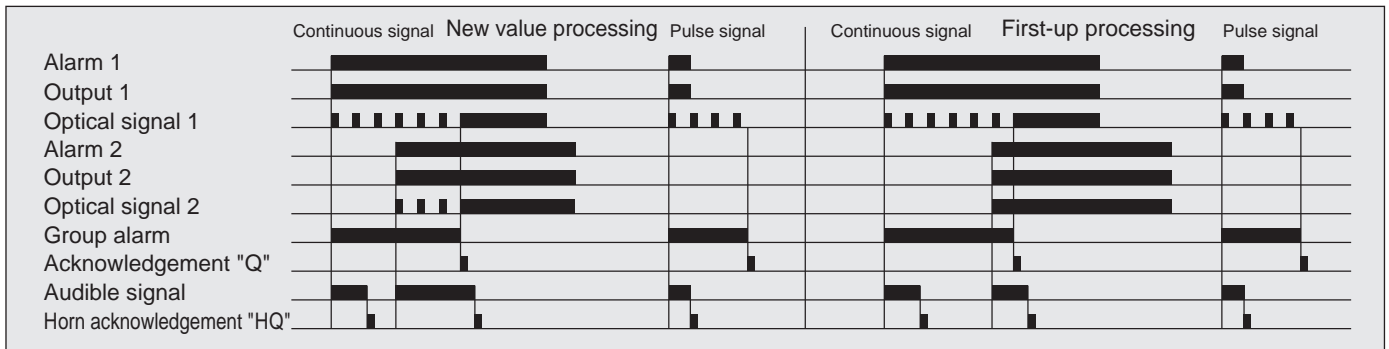
### Final configuration

Depending on the particular compact annunciator system, a maximum of two expansion racks can be connected and up to 96 alarms accordingly processed. Where a larger number of signal inputs is required, the use of a further central controller module is necessary. Interconnection of the basic rack and expansion racks is simple via plug-in bus cable. The alarm module slots in the racks can be equipped as required. It is also possible to clearly define for each alarm module a specific slot in the racks via mechanical coding. This ensures that attention is drawn to a preset first-up interlock or group alarms.

### Mounting methods

19" racks are available for mounting the compact annunciator system in racks or cabinets. For "control or mosaic board" mounting, additional mounting sets with front panel are available for 1, 2 or 3 racks.

The rack, front panel and panel cutouts are shown in the dimension drawings.



Function diagram

## Function diagram

The function diagram shows sequences for new value and first-up processing, whereby the signal is active once continuously, i.e. beyond acknowledgement and once prior to acknowledgement. The signal sequences can be set at jumpers on the central controller module and alarm modules.

## Function definitions

### Working current or NC current activation

With working current activation, the signal input responds to the rising edge, with NC current activation, to the falling edge of a voltage at the signal input. Unless otherwise stated in the order, the inputs of the alarm modules of the ME 3009 compact annunciator system are delivered for working current activation as standard. Each individual signal input can easily be changed from working current to NC current activation by means of a jumper on the alarm module.

### New value processing

With new value processing, each incoming alarm is indicated by a flashing light (see also alarm modules) and horn. After horn acknowledgement, the audible signal is cancelled and all active alarms are indicated by a steady light.

### First-up interlock

Located on the central controller module is a first-up memory via which a group of alarms with first-up interlock can be built up. This group can consist of up to 96 alarms. Assignment to this first-up group can be defined for each alarm module (4 alarms). With the first-up interlock, the first incoming alarm of the first-up alarm module is indicated by a flashing light. All further alarms of the first-up alarm module are indicated by a steady light. After acknowledgement, the flashing light for the first-out alarm changes to a steady light, provided the alarm is still active, otherwise the alarm display goes out.

### Signal transmission

Provided on the alarm modules for each signal circuit is a relay for separate, isolated signal transmission to random peripheral devices (e.g. lamps, relays, etc.). These contacts operate on an acknowledgement or alarm-dependent basis, depending on the alarm module settings and the module type.

### Group alarms

The ME 3009 compact annunciator system provides contact outputs for four independent group alarms. The associated relays are located on the central controller module. Each signal input can be assigned to one or several of the 4 group alarm signal outputs. The group alarm contacts are generally acknowledgement-dependent, i.e. they remain closed until the acknowledgement pushbutton is pressed. The group alarms are also visually displayed on the central controller module.

### Horn active / not active

In addition to visual indication, an audible signal generator and an associated transmitting contact is provided on the central controller module. The alarm module can be set so that generated alarms are indicated with an additional audible signal, depending on the alarm module.

### Automatic horn acknowledgement

In addition to manual horn acknowledgement (acknowledgement via pushbutton), an automatic acknowledgement mode can also be set. Automatic acknowledgment can be set via a jumper on the central controller module. Automatic horn acknowledgement takes place about five seconds after signal input.

### Function test "FT"

All signal inputs of the system can be activated, protected via a key-switch on the central controller module. The signal sequence then takes place as described above, depending on the system settings. It should be noted that the function test activates all transmitting contacts for single and group alarms. The alarm status active prior to the function test cannot be re-established.

### LED Test "LT"

When the "LT" pushbutton is pressed on the central controller module, all LED's on the central controller module and the alarm module show a steady light. This does not change the alarm status.

### Voltage monitoring

The central controller module features a circuit for monitoring the supply voltage and internal system voltage. The contact is closed as soon as one of the two voltages fails or falls below the permissible tolerance limit. The associated LED (operation) on the central controller module also goes out.

## System overview

### Flexible in function - adaptable at any time

- 4 to 96 alarms, 4 independent group alarms, external horn and voltage supply monitoring
- Noise-immune, isolated inputs via optocoupler
- Floating outputs via relay
- Working or NC current activation can be set for each alarm
- Assignment to 4 group alarms can be set for each alarm
- New value or first-up processing can be set for each alarm module
- Flashing LED display and audible signal for signal input
- Alarm texts located directly next to LED display
- Further signal voltage range 24 to 230 V DC or AC
- Double acknowledgement at central controller module or external pushbutton
- Automatic horn acknowledgement setting option (5s)
- Supply voltages 24 V, 48 V or 60 V DC
- Functional test and display test from central controller module or external pushbuttons

### Modular design - expandable at any time

- 1 central controller module and up to 24 alarm modules
- 4 alarms per alarm module
- In 19" rack with system bus wiring
- 8 alarm modules per rack
- Plug-in bus connection cable between racks
- Terminals at rear of rack; module replacement without rewiring
- Rear cover for safety from finger-touch according to VBG 4
- Front panel for mosaic and control board mounting

### Ordering data

Designation	Order number
Basic system 19" rack for maximum 32 alarms	01-08-801
Expansion 19" rack for an additional maximum 32 alarms with bus cable	01-08-802
Mounting set for panel-mounting, with front panel for	
1 rack	01-10-003
2 racks	01-10-004
3 racks	01-10-005
Dummy plate for unused alarm module slot	01-10-002
	Supply voltage
Central controller module ZBG 001B for up to 24 alarm modules	24 VDC 01-42-153
4 group alarms, first-up	48 VDC 01-42-154
or new value processing	60 VDC 01-42-155
Alarm module EB4 006B for single flashing light, 4 alarms	24 VDC 01-42-150
2 transmitting contacts per alarm	48 VDC 01-42-151
(NO contact) single common connection	60 VDC 01-42-152
Alarm module EB4 007B for single flashing light, 4 alarms	24 VDC 01-42-159
1 floating transmitting contact	48 VDC 01-42-160
per alarm (NO contact)	60 VDC 01-42-161
Alarm module MD4 001B for steady light, 4 status signals,	24 VDC 01-42-156
2 transmitting contacts	48 VDC 01-42-157
(NO contact), single common connection	60 VDC 01-42-158

## Technical data

All data is based on rated voltage and an ambient temperature of +25°C.

### Supply

Supply voltage  
24 V DC, 48 V DC, 60 V DC

Tolerance  
±20%

Reference potential  
L- or M

### Power input

Per basic configuration or expansion unit (for 32 alarms)

Supply voltage	24 V DC	48 V DC	60 V DC
Wattage	45 W	65 W	70 W

When dimensioning power supply units, the additional power demand of peripheral devices must be taken into account, e.g. horn, single or group alarm lamps, relays, etc.

### Signal voltages

Random input signals from 24 V to 230 V DC or AC  
(see rack connection overview, page 15)

Reference potential  
for DC: L- or M  
for AC: N

### Signal definition

0 signal < 0.4 x signal voltage  
1 signal > 0.6 x signal voltage

### Input current

0.5 mA per input

### Input delay

5 ms

### Internal fuse protection

Supply voltage 6.3 A

Signal voltage 315 mA

For alarm systems with several varying signal voltages, only one voltage is provided with system-internal fuse protection. For the other signal voltages, one external 315 mA fuse must be provided in each case.

### Electric strength

Power-frequency voltage strength 1 min:	2 kV / 50 Hz
Impulse strength 1.2 / 50 µs :	5 kV

With exception:

Internal processing against frame:	2 kV / 4.0 kV
Transmitting contacts A-F against G-N:	1 kV / 1.5 kV
Contacts HU, U<, SM against each other:	1 kV / 1.5 kV

### Transmitting contact ratings

#### Contact for external horn

250 V AC / 1 A / 50 W

#### Contact for signal transmission

250 V AC / 2 A / 100 W

#### Contact for group alarms

250 V AC / 1 A / 100 W

#### Contact for voltage monitoring

250 V AC / 1 A / 50 W

### Conductor size

Solid 4.0 mm<sup>2</sup>  
Flexible 2.5 mm<sup>2</sup>  
AWG 12

### Time for automatic horn acknowledgement

5 seconds

### Flashing frequency

1.2 Hz

### Ambient temperature range

0 °C to +45 °C

### Jumper settings

#### Alarm modules

Working current/NC current activation	per alarm	also with MD4
Horn On/Off	per alarm group	not with MD4
First-up / New value processing	per alarm group	without function with MD4
First-up processing only in conjunction with horn ON!		
Transmission alarm / acknowledgement-dependent	per alarm group	not with MD4
Group alarm	per alarm	also with MD4

#### Central controller module

Automatic horn acknowledgement HQ	ON / OFF
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### Standard delivery condition

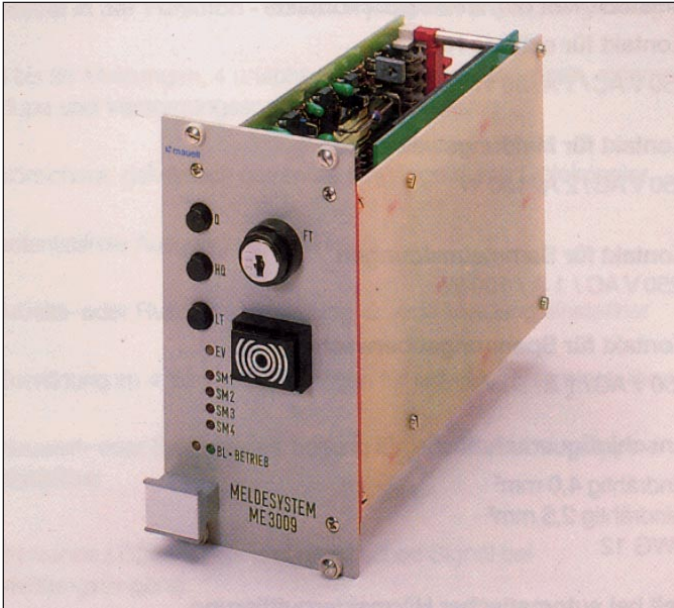
#### Alarm groups

- Working current activation
- New value processing
- No group alarm
- Transmitting contacts, alarm dependent
- Horn ON

#### Central controller module

- Automatic horn acknowledgement

## ZBG 001B Central controller module



ZBG 001B Central controller module

### Description

Together with up to 24 alarm modules, the central controller module forms the ME 3009 compact annunciator system. The system can be expanded up to 96 alarms. Alarm display takes place appropriate to new value or first-up processing. The alarms can be combined to 4 group alarms as required. Each alarm and group alarm is signalled audibly and visually. All signals are also transmitted to the peripheral devices via floating relay contacts. The central controller module is inserted into the left slot of the basic rack. The alarm modules can be inserted into the basic rack and in up to 2 expansion racks. The racks can be interconnected via plug-in bus cable, the alarm modules via the system bus. Unused rack slots can be covered with dummy plates. Expansion of the system up to final configuration is easily possible at any time. The central controller module accommodates the power supply voltage and power fail circuit, 4 transmitting relays for the group alarms, horn impulse memory with relay for external horn activation, first-up memory for first-up processing and flashing-frequency generator. The following display and control elements are located on the front panel of the central controller module:

- 3 horn acknowledgement pushbuttons (HQ), acknowledgement LED (Q) and test LED (LT)
- 1 key-switch for initiating functional test (FT)
- 1 electronic buzzer for audible signalling
- 1 LED for first-up processing display
- 4 LED's for group alarm display
- 1 LED for flashing frequency display
- 1 LED for voltage monitoring

The internal supply voltage for the system, i.e. also for the alarm groups, is generated and monitored in the central controller module. An "Operation" LED display and an NC circuit contact "U<" indicate a correct voltage supply. Available are central controller modules for supply voltages of 24 V, 48 V or 60 V DC. The process input alarms can be assigned to one or several of 4 group alarms. In the central controller module, these group alarms are indicated by the LED displays "SM 1 to SM 4" on the front panel. The group alarms are also output at 4 relay contacts (NO contacts connected to common potential).

The horn impulse which is generated in the alarm modules on signal input is stored in a memory. Up until horn acknowledgement, the signal generator on the front panel of the central controller module and a relay with floating make contact for an external horn activation are activated. The audible alarm signal can be acknowledged in the following ways:

1. Pressing the horn acknowledgement pushbutton "HQ" on the front panel of the central controller module.
2. Pressing an external horn acknowledgement pushbutton (terminal C).
3. Automatic horn acknowledgement. With the jumper setting "autom. HQ" on the central controller module, the acknowledgement signal is generated about 5 seconds after setting the horn impulse memory.

With the horn impulse, the first-up memory is also set and the "EV" LED display on the front panel of the controller module is activated. With the setting of the first-up memory, the subsequent alarms of the first-up alarm module are displayed up to acknowledgement with a steady light (on the front panel of the respective alarm module). The first alarm of the first-up alarm group is displayed with a flashing light on the alarm module. When the acknowledgement pushbutton "Q" on the front panel of the central controller module is pressed, the flashing light for a new value or first-up alarms changes to a steady light, provided the alarm is still active. An external acknowledgement pushbutton can also be connected (terminal B).

Via a key-switch on the front panel of the central controller module, a functional test can be carried out. During a functional test, all signal inputs of the alarm modules are activated and the system responds according to the presets.

It should be noted that the functional test (like incoming alarms) activates all transmitting contacts for single and group alarms. A stepped switch can also be connected for the functional test (terminal G).

When the "LT" pushbutton on the front panel of the central controller module is pressed, all LED displays of the system are activated. An external button can additionally be connected to terminal F.

### Technical data

Space requirement 14 module

Bus strip 1 x 48-pole male connector strip

System voltage 24, 48 or 60 V DC  
Tolerance  $\pm 20\%$

Relay for external horn (make contact)

Contact data

Maximum voltage 250 V AC  
Maximum current 1 A  
Maximum capacity 50 W

4 single-pole contacts for group alarms (make contacts)

Combined contact potentials

Contact data

Maximum voltage 250 V AC  
Maximum current 1 A  
Maximum capacity 100 W

Contact for voltage monitoring (NO contact)

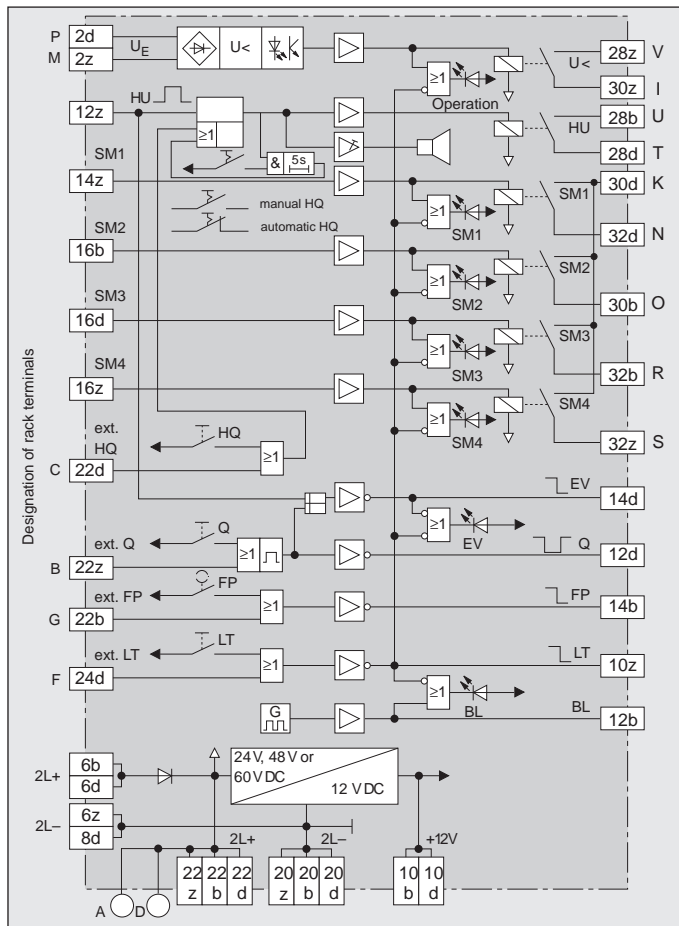
Contact data

Maximum voltage 250 V AC  
Maximum current 1 A  
Maximum capacity 50 W

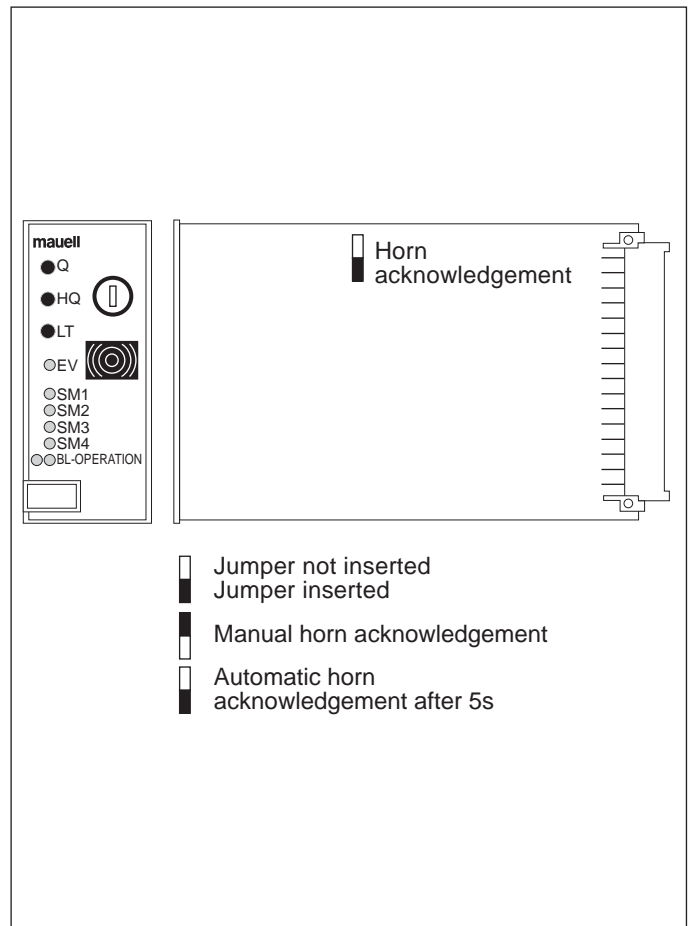
### Ordering data

Designation	Supply voltage	Order number
ZGB 001B	24 V DC	01-42-153
ZGB 001B	48 V DC	01-42-154
ZGB 001B	60 V DC	01-42-155

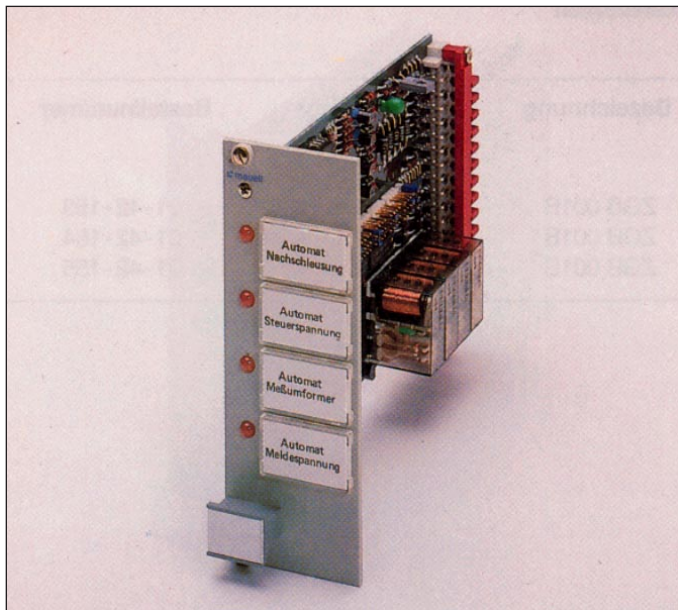
### Block diagram central controller module ZGB 001B



### Jumper diagram central controller module ZGB 001B



## Alarm modules



Alarm module

### Description

The alarm modules serve for alarm detection, processing, transmission, display and designation. Together with a central controller module, up to 24 alarm modules form the ME 3009 compact annunciator system. Each alarm module has 4 signal inputs, so that 4 to 96 alarms can be processed per system. The system can transmit these signals electrically isolated and potential-free to the peripheral devices and also combine any number of alarms to a maximum of 4 group alarms. The alarms are signalled visually and audibly. The alarm modules are mounted in 19" racks with bus wiring. Unused module slots are covered with dummy plates. Expansion of the system up to final configuration is simple and can be carried out at any time. Interconnection of the basic rack and up to 2 expansion racks is simple via plug-in bus cable. The alarm modules are supplied with power from the central controller module via the rack bus. The supply and internal system voltage are monitored on the central controller module. Available are alarm modules for supply voltages of 24 V, 48 V or 60 V DC.

The alarm modules can be adapted to the particular task via jumper settings on the module. Each signal input can be set to working or NC current activation and also assigned to one or several of 4 group alarms. The group alarms are displayed on the front panel of the central controller module and output via transmitting relays. It is also possible to set each alarm module to a first-up interlock or new value processing mode.

The alarm module inputs are able to process signal voltages of 24 V to 230 V DC or AC, independent of the alarm system supply voltage. The input circuits are interference suppressed and electrically isolated from the internal circuits via optocouplers to ensure a high degree of functional reliability, even with high interference voltages present at the signal inputs, e.g. due to unfavourable cable routing. A relay is available for each signal input for transmitting the process signals, e.g. to the peripheral devices. Incoming alarms are additionally indicated on the front panel of each alarm module with a flashing or steady light, depending on the alarm module type and jumper settings. In addition to the LED displays, easily interchangeable paper labels with alarm texts are located below removable transparent covers. Each incoming alarm generates a horn impulse which is passed to the central controller module, depending on the jumper setting, and activates an audible signal and a transmitting relay.

Available are three different types of alarm module which differ in their mode of signal transmission and display.

### Alarm module EB4 006B

This alarm module provides two make contacts per signal input for signal transmission. The contacts of all transmitting relays are connected to a common potential, i.e. their supply points are connected in parallel and like the outputs are routed to terminals. Signal transmission takes place with signal input and ends, depending on the jumper setting for each input optional, with signal transmission or after acknowledgement and signal transmission (jumpers: B1 to B4 transmitting contact). Depending on the jumper setting, alarm display on the front panel of the module takes place for new value processing (jumper: new value/first-up; open) up to acknowledgement with a flashing light and up to signal transmission with a steady light. For the first-up interlock (jumper: new value / first-up signal; closed and horn jumper HU: ON), display of the first incoming alarm of the first-up group takes place with a flashing light up to acknowledgement and subsequently with a steady light, as long as the alarm is active. The alarms following the first alarm of the first-up group are displayed with a steady light.

### Technical data

Space requirement	10 module
Bus strip	48-pole male connector strip
System voltage	24, 48 or 60 V DC
Tolerance	±20%
Contacts for signal transmission	
Contact data	
Maximum voltage	250 V AC
Maximum current	2 A
Maximum capacity	100 W
Number of signal inputs	4
Signal voltages at signal input	
Voltage	24 to 230 V DC or AC
0 signal	< 0.4 x signal voltage
1 signal	> 0.6 x signal voltage
Input current	0.5 mA per input
Input signal delay	5 ms
Conductor size (bus terminals)	
Solid	4.0 mm <sup>2</sup>
Flexible	2.5 mm <sup>2</sup>
AWG	12

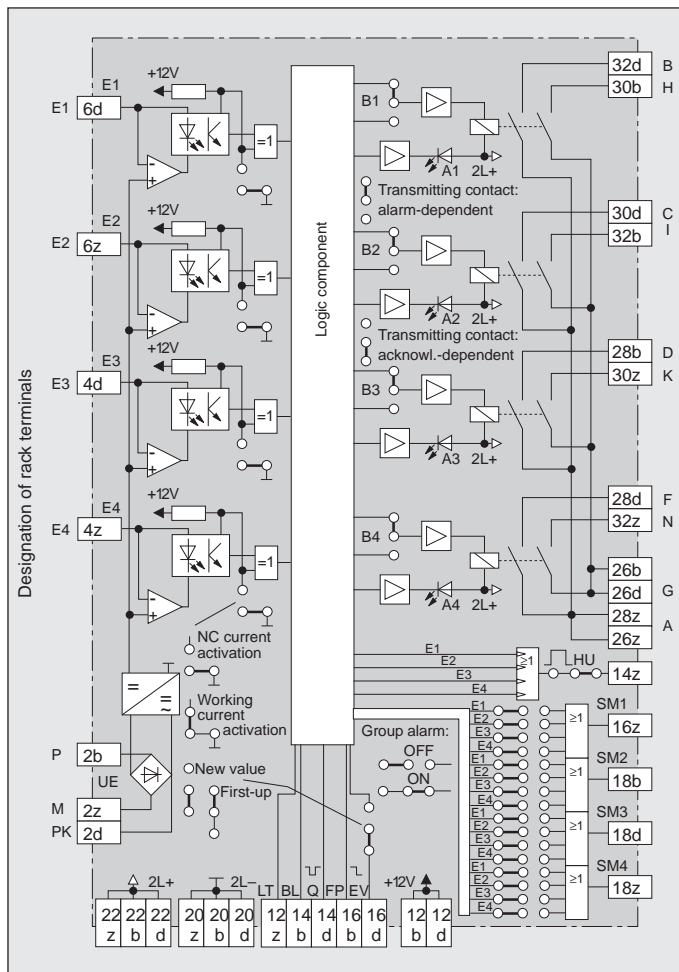
### Jumper settings

See jumper diagram

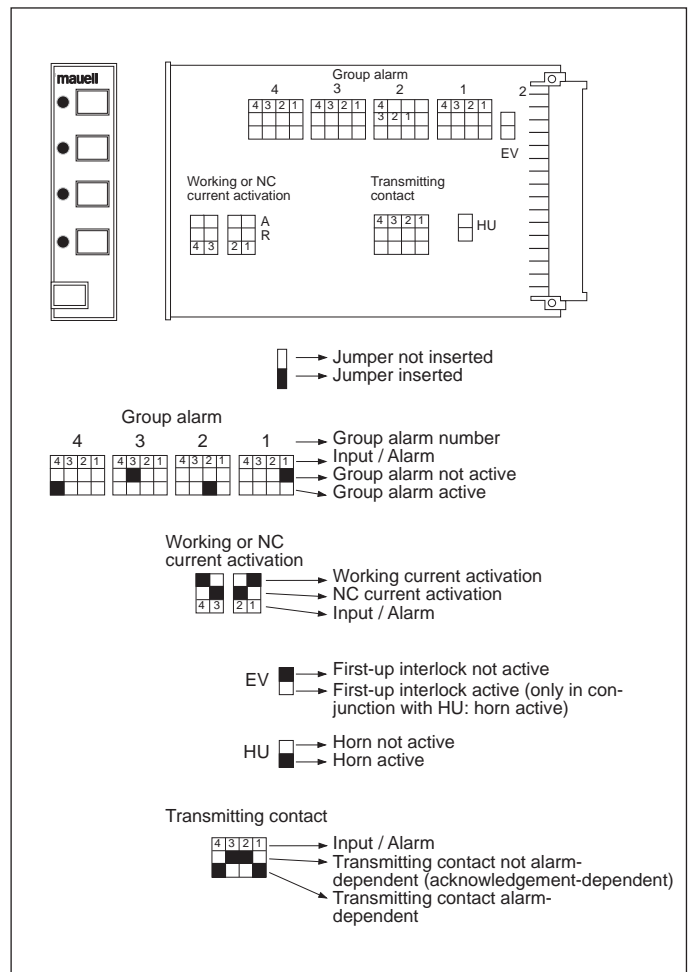
### Ordering data

Designation	Supply voltage	Order number
Alarm module EB4 006B	24 VDC	01-42-150
for single flashing light, 4 alarms,	48 VDC	01-42-151
2 transmitting contacts per alarm	60 VDC	01-42-152
(NO contact) single common connection		

### Block diagram alarm module EB4 006B



### Jumper diagram alarm module EB4 006B



## Alarm modules

### Alarm module EB4 007B

In contrast to alarm module EB4 006B, this alarm module provides for signal transmission for each signal input a floating make contact which is routed to terminals. Signal transmission takes place with signal input and ends, depending on the jumper setting for each input optional, with signal transmission or after acknowledgement and signal transmission. Depending on the jumper setting, display on the front panel of the module takes place for new value processing up to acknowledgement with a flashing light and up to signal transmission with a steady light. For the first-up interlock, display of the first incoming alarm of the first-up group takes place with a flashing light up to acknowledgement and subsequently with a steady light, as long as the alarm is active. The alarms following the first alarm of the first-up group are displayed with a steady light.

#### Technical data

Space requirement	10 module
Bus strip	48-pole male connector strip
System voltage	24, 48 or 60 V DC
Tolerance	±20 %
Contacts for signal transmission	
Contact data	
Maximum voltage	250 V AC
Maximum current	2 A
Maximum capacity	100 W
Number of signal inputs	4

#### Signal voltages at signal input

Voltage	24 to 230 V DC or AC
0 signal	< 0.4 x signal voltage
1 signal	> 0.6 x signal voltage
Input current	0.5 mA per input
Input signal delay	5 ms
Conductor size (bus terminals)	
Solid	4.0 mm <sup>2</sup>
Flexible	2.5 mm <sup>2</sup>
AWG	12

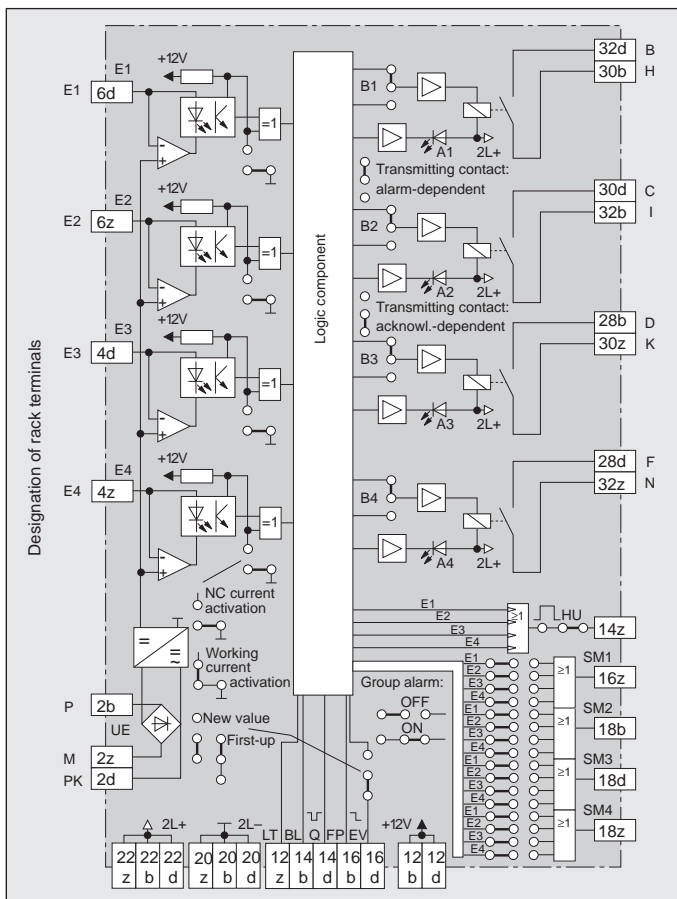
#### Jumper settings

See jumper diagram

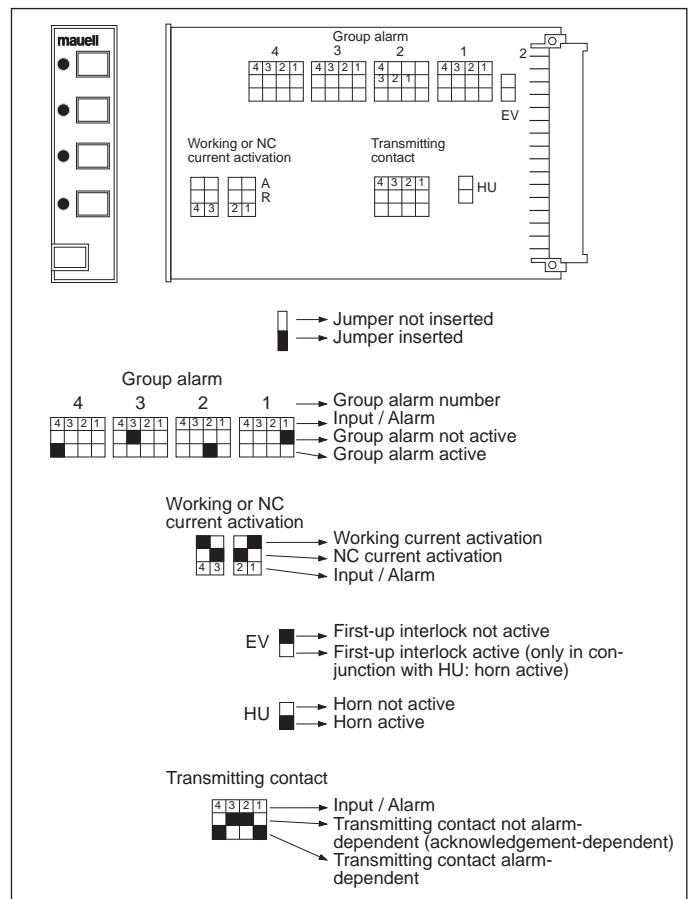
#### Ordering data

Designation	Supply voltage	Order number
Alarm module EB4 007B	24 VDC	01-42-159
for single flashing light, 4 alarms,	48 VDC	01-42-160
1 floating transmitting contact per alarm (NO contact)	60 VDC	01-42-161

### Block diagram alarm module EB4 007B



### Jumper diagram alarm module EB4 007B



### Alarm module MD4 001B

The alarm module MD4 001B serves for status display and provides 2 make contacts per signal input for signal transmission. The contacts of all transmitting relays are connected to a common potential, i.e. their supply points are connected in parallel and like the outputs are routed to terminals. Signal transmission takes place with signal input and ends with signal transmission (independent of an acknowledgement). Display of the alarms on the front panel of the alarm module always takes place with a steady light.

### Technical data

Space requirement	10 module
Bus strip	48-pole male connector strip
System voltage	24, 48 or 60 V DC
Tolerance	±20 %
Number of signal inputs	4
Signal voltages at signal input	
Voltage	24 to 230 V DC or AC
0 signal	< 0.4 x signal voltage
1 signal	> 0.6 x signal voltage
Input current	0.5 mA per input
Input signal delay	5 ms

### Contacts for signal transmission

Contact data	
Maximum voltage	250 V AC
Maximum current	2 A
Maximum capacity	100 W
Conductor size (bus terminals)	
Solid	4.0 mm <sup>2</sup>
Flexible	2.5 mm <sup>2</sup>
AWG	12

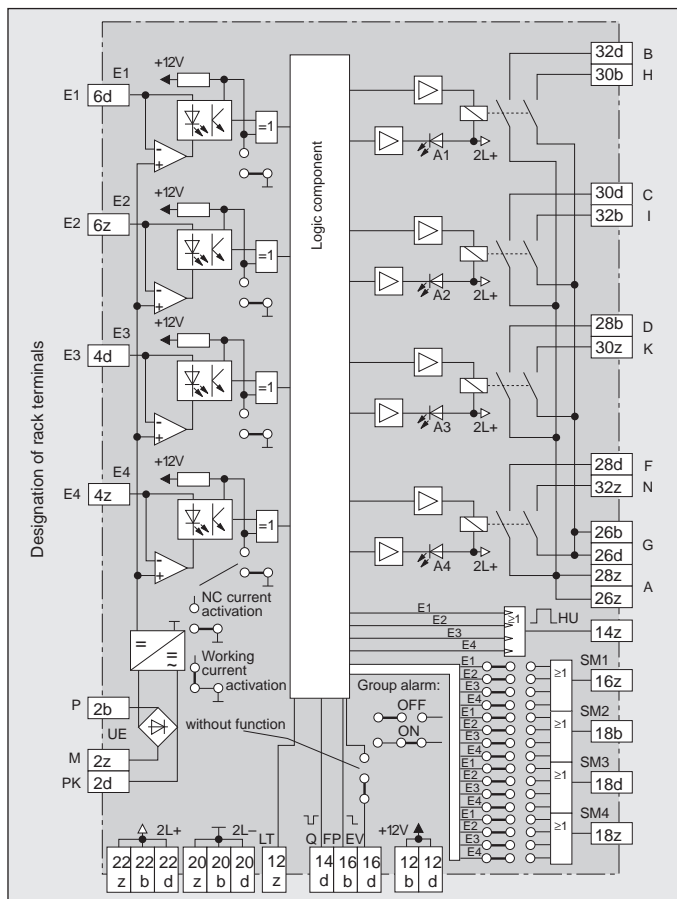
### Jumper settings

See jumper diagram

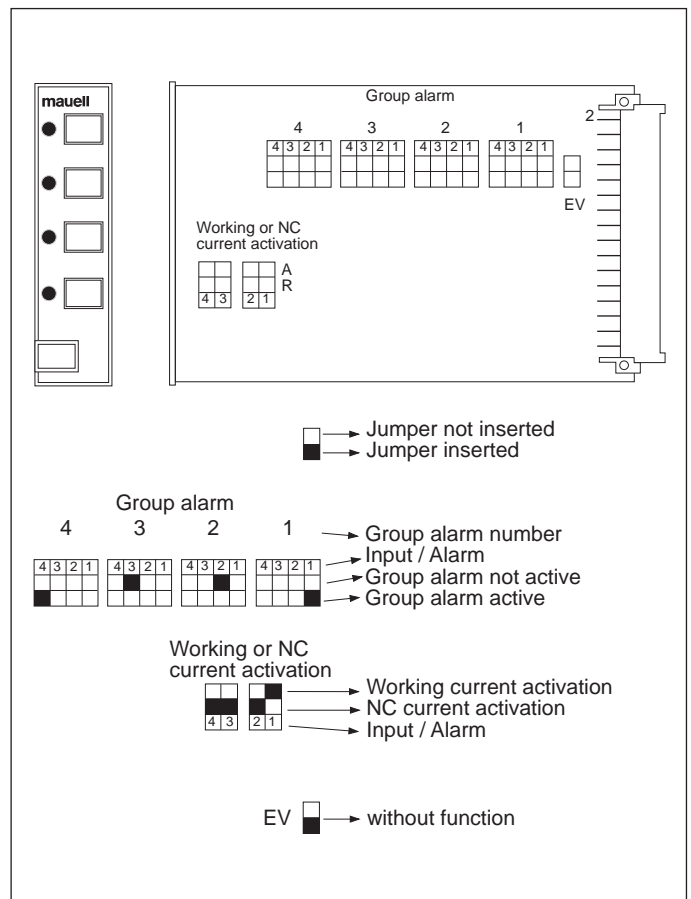
### Ordering data

Designation	Supply voltage	Order number
Alarm module MD4 001B	24 V DC	01-42-156
for steady light, 4 alarms,	48 V DC	01-42-157
2 transmitting contacts per alarm (NO contact), single common connection	60 V DC	01-42-158

### Block diagram alarm module MD4 001B

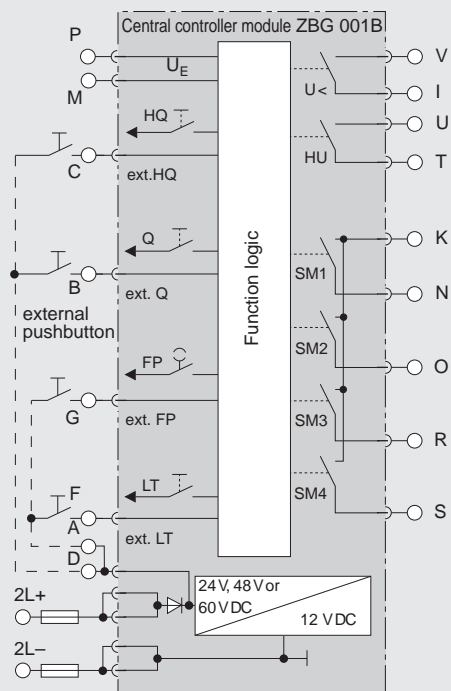
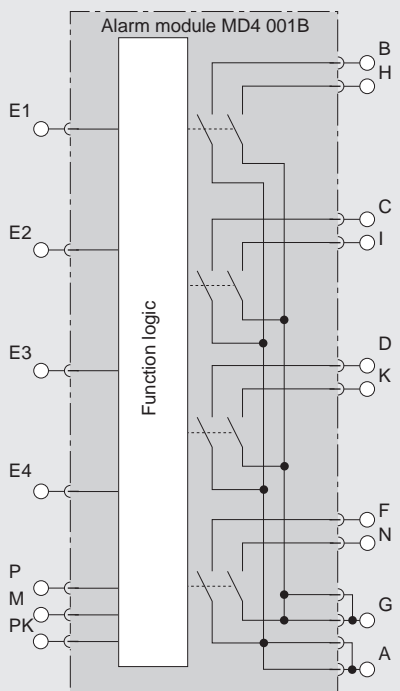
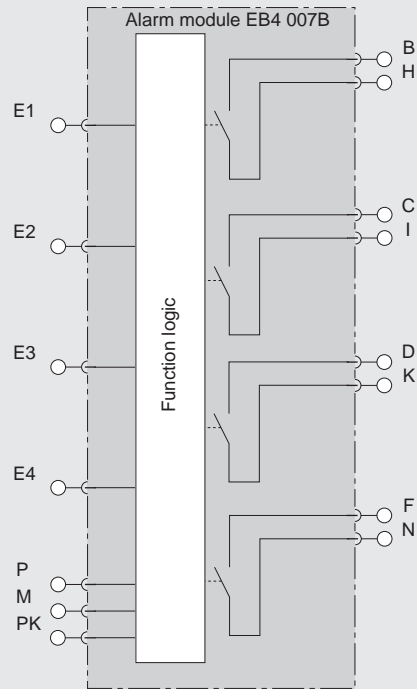
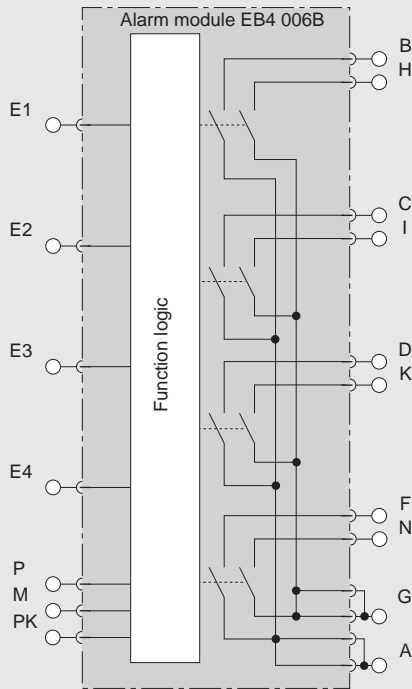


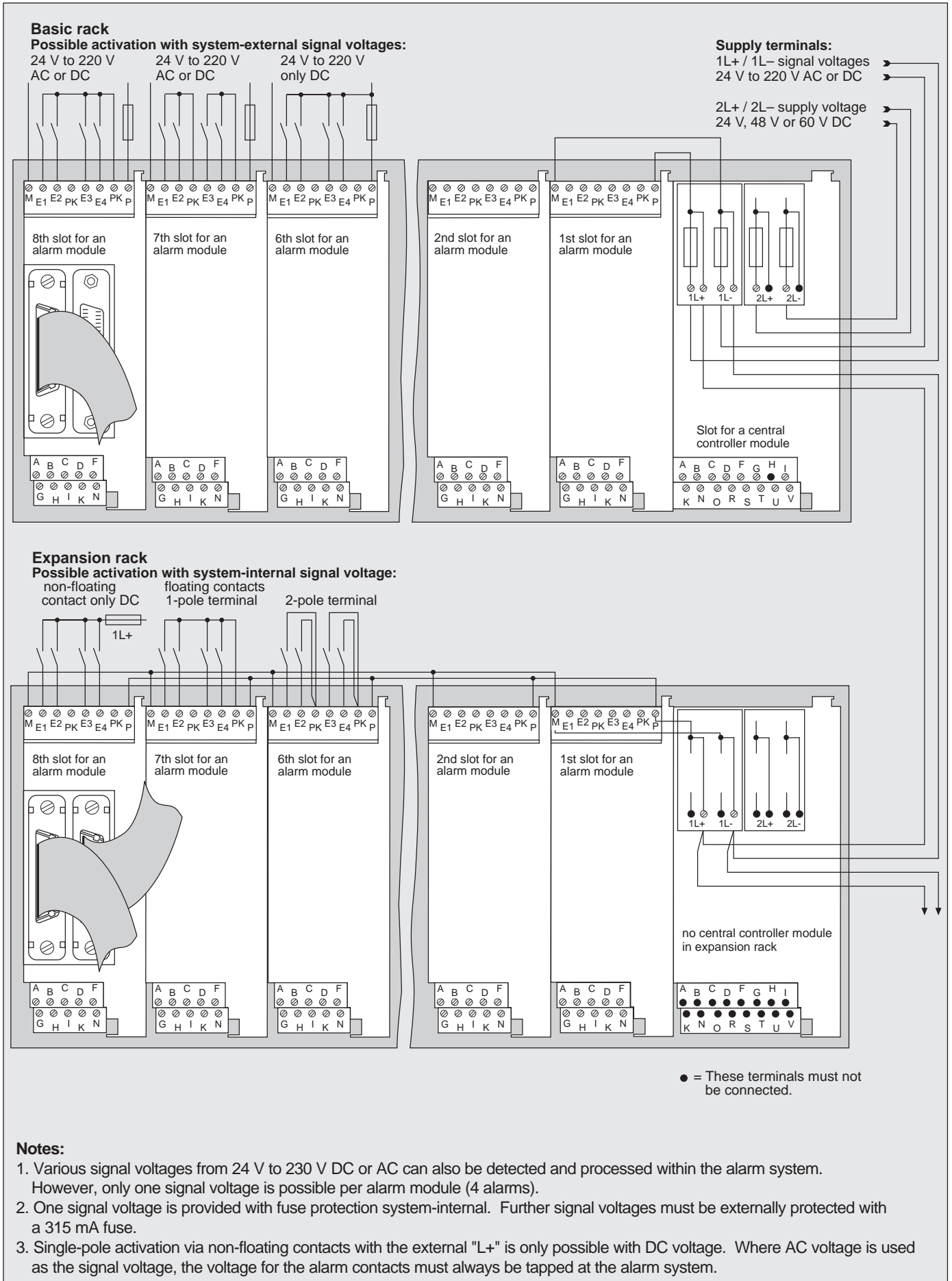
### Jumper diagram alarm module MD4 001B



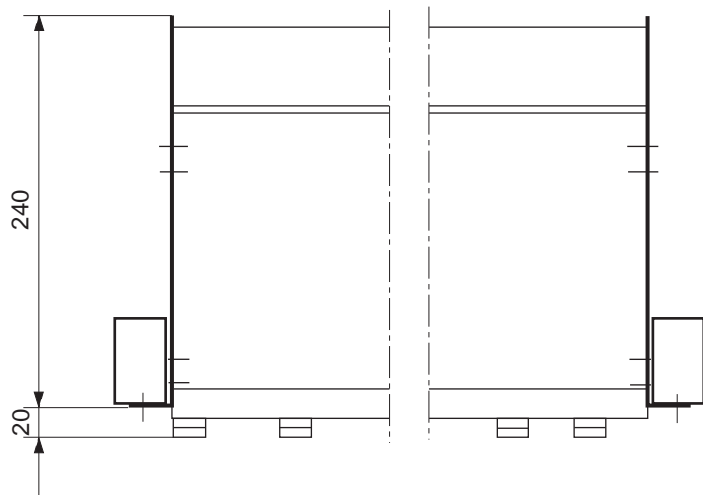
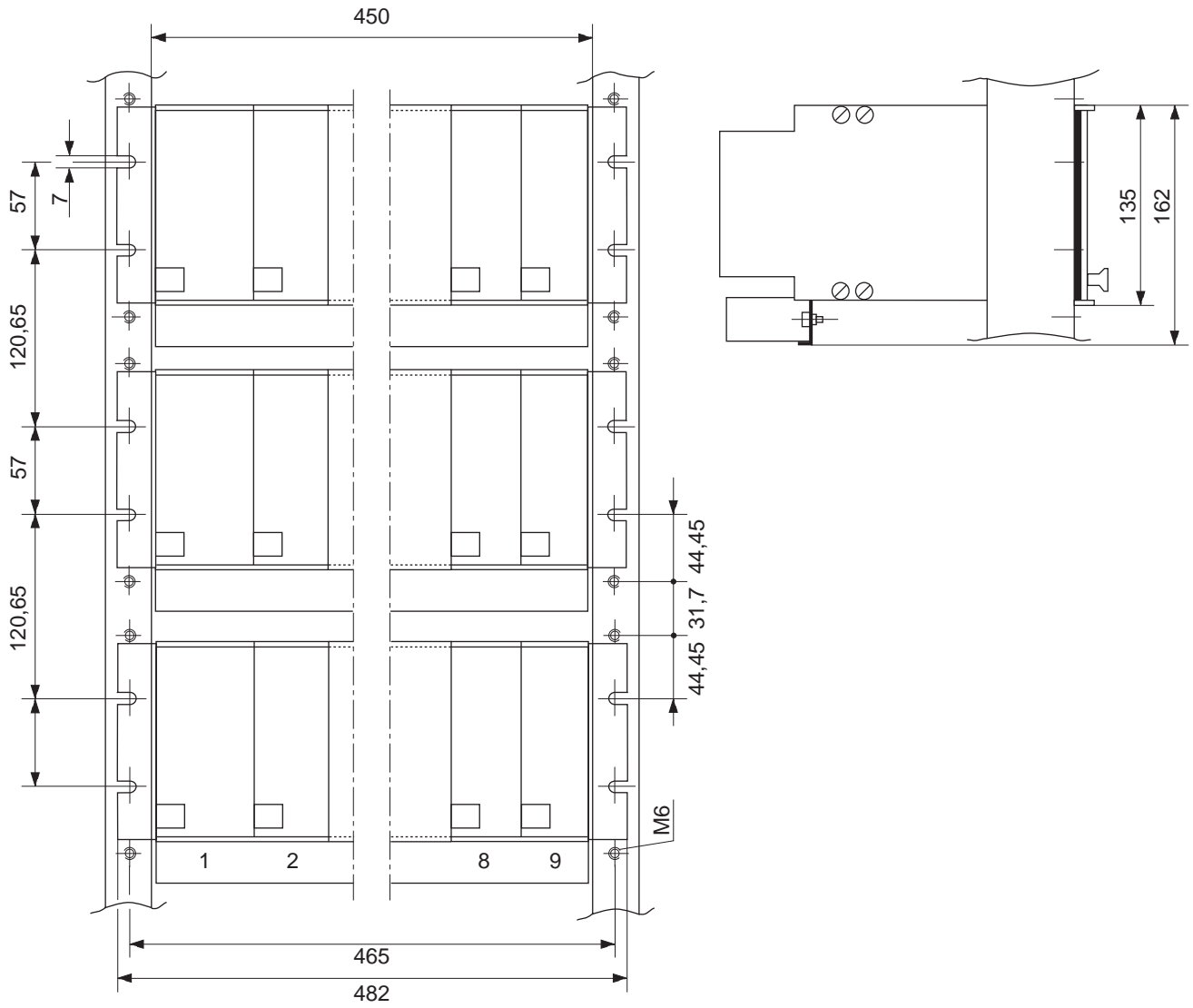
# Module overview

## Modules with designation of rack terminals



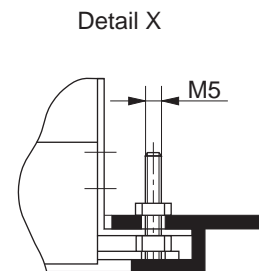
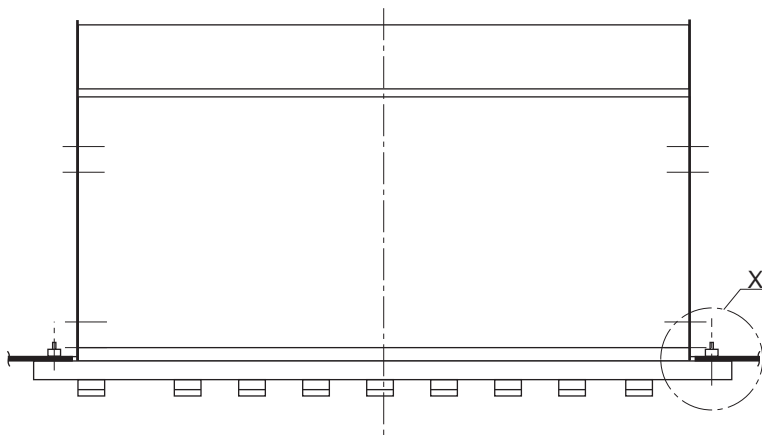
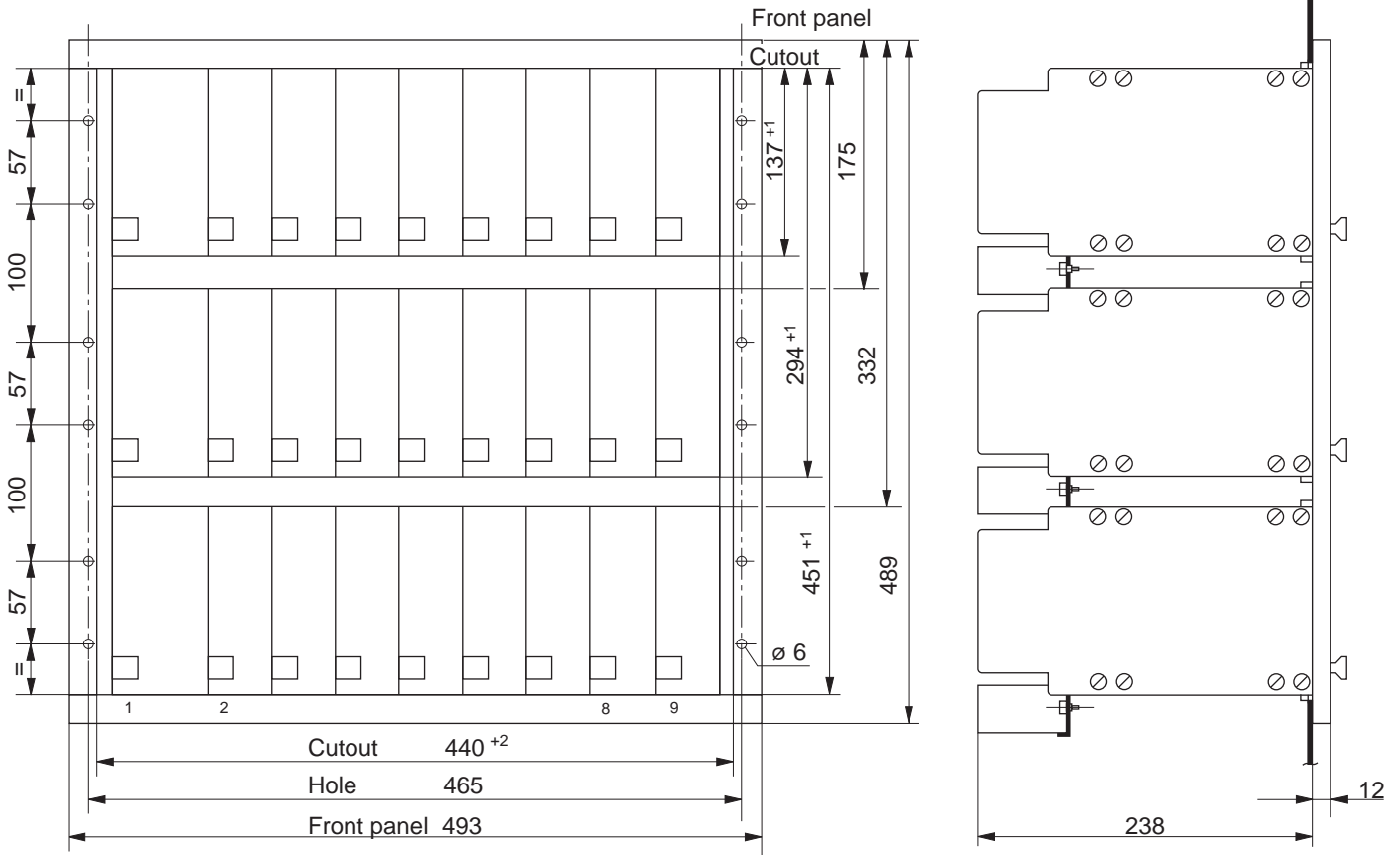


**Dimension drawings**  
**19" rack DIN 41494**



**Ordering data**

Designation	Order number
19" rack (basic configuration)	01-08-801
19" expansion rack including bus cable	01-08-802



19" racks can be used with a mounting set for panel-mounting as a 1, 2, or 3-part rack.

**Ordering data**

Designation	Order number
Mounting set for 1 rack	01-10-003
Mounting set for 2 racks	01-10-004
Mounting set for 3 racks	01-10-005

## Configuring information

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### Problem

- An alarm system for a supply voltage of 60 V DC is to be configured for 16 alarm and 8 status indications.
- The signal voltage for the alarms is 60 V DC, the signal voltage for the status indications is 230 V AC.
- The signals are to be transmitted to the control system by means of floating contacts.
- Two group alarms derived from selected alarms and status indications are also to be made available to a remote control unit.
- Working or NC alarm activation setting of the signal inputs is to take place on activation of the system.
- A group of four alarms with first-up interlock is to be configured.
- The system is to be panel-mounted.
- The system is to be expandable.

### Our solution

The **ME 3009 compact annunciator system** equipped for visual and audible processing, transmission and display of:

- 16 alarms with single flashing light and
- 8 alarms with steady light.
- Further input voltage range 24 V to 230 V DC or AC.
- Prewired for 32 alarms in initial configuration.
- Working or NC current activation can be set for each signal input via jumpers.
- Group alarm generation can be set for each signal input via jumpers.
- First-up or new value processing can be set for each alarm module.
- Expandable up to 96 alarms per central controller module.
- Designed for control, mosaic board or rack mounting.

### Scope of supply:

- |   |  |
|---|--|
| 1 | 19" basic rack for ME 3009 for accommodation of a central controller module and also up to 8 alarm modules corresponding to 32 signal inputs.<br>Order number 01-08-801                      |
| 1 | Central controller module type ZGB 001B, 4 group alarms, 1 transmitting contact (NO contact) per alarm, single common connection, supply voltage 60 V DC.<br>Order number 01-42-155          |
| 4 | Alarm modules type EB4 006B for single flashing light, 4 alarms, 2 transmitting contacts (NO contact) per alarm, single common connection, supply voltage 60 V DC.<br>Order number 01-42-152 |
| 2 | Alarm modules type MD4 001B for display of status indications, 2 transmitting contacts (NO contact) per alarm, single common connection, supply voltage 60 V DC.<br>Order number 01-42-158   |
| 2 | Dummy plates for unused rack slots.<br>Order number 01-10-002  |
| 1 | Mounting set for panel and rack mounting.<br>Order number 01-10-003  |

- Supply voltage  24 V DC please mark with a cross ☒  
 48 V DC  
 60 V DC
- Cabinet mounting   
 Panel-mounting

<input type="checkbox"/> <b>Basic rack</b>								
Central controller module <input type="checkbox"/> ZBG 001B    <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>
<input type="checkbox"/> <b>1. Expansion rack</b>								
<input checked="" type="checkbox"/> Dummy plate    <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>
<input type="checkbox"/> <b>2. Expansion rack</b>								
<input checked="" type="checkbox"/> Dummy plate    <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>	Alarm module <input type="checkbox"/> MD4 001B <input type="checkbox"/> EB4 006B <input type="checkbox"/> EB4 007B <input type="checkbox"/> Dummy plate <input type="checkbox"/>

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