

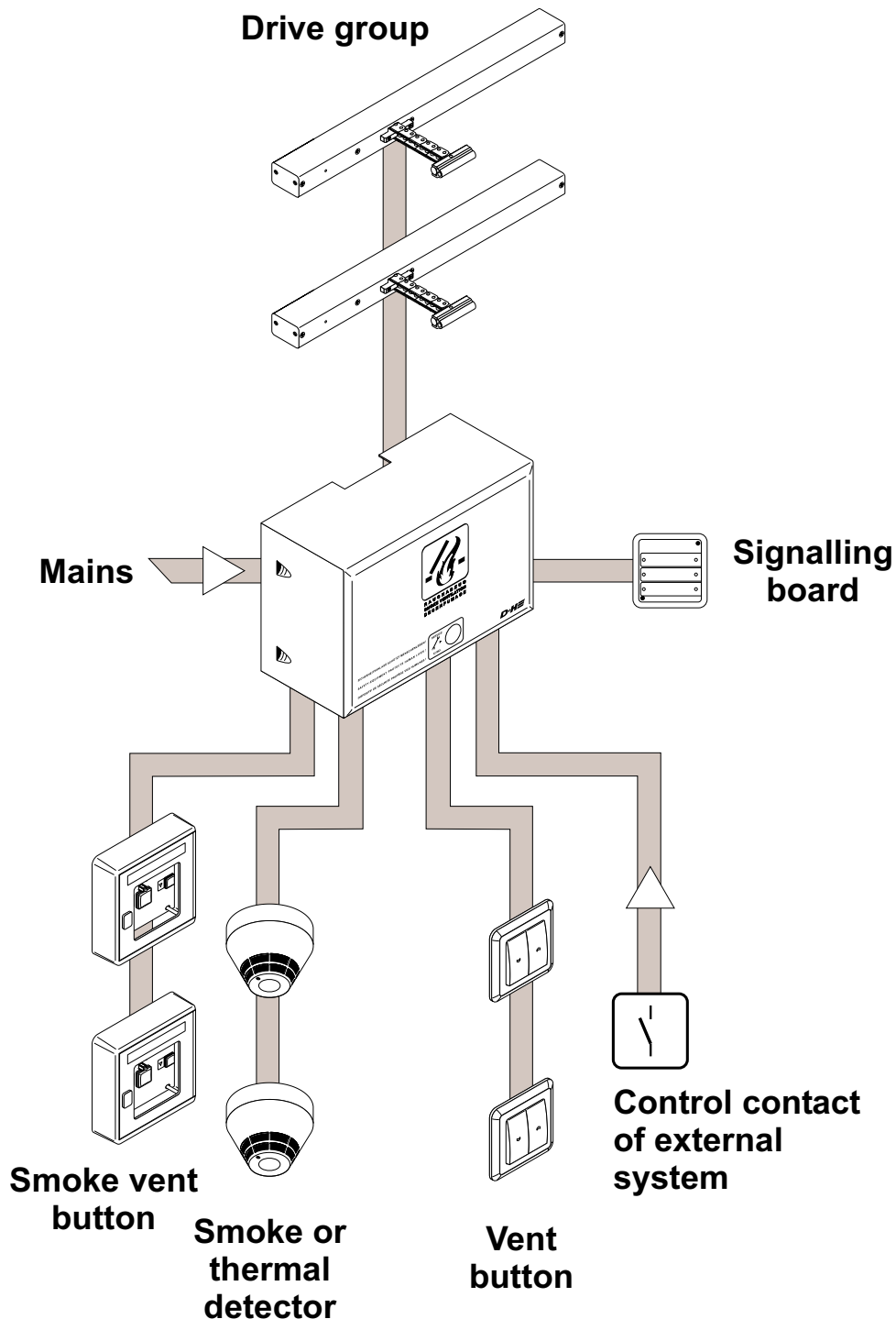


Smoke Vent Control Panel RZN 4202 V1

**Safety system protects human life and material assets!
Once a year functional testing by a specialist company,
authorized by the manufacturer.**


Connection, mounting and functional testing by an electrical specialist company.
Green control diodes in buttons must continuously lighten,
otherwise see "fault finding".

Repair immediately power failure. Emergency power supply 72 hours.





Operation

Triggering in case of fire:



- Break glass in break glass button
- Press red button 
- Smoke vent runs open
- Red display diode lightens.

Closing after alarm:

With manual triggering:

- Press masked key  in smoke vent button
- Smoke vent closes
- Red display diode  is extinguished.

Day-to-day ventilation:

- Press vent button 
- Window runs open only as long as button is pressed down (deadman).
- Window closes automatically, when button  is actuated.

The window can be stopped at any intermediate position by pressing simultaneously both buttons.

This function is not working in case of power failure or when alarm is indicated by a smoke vent system.

Automatic opening in case of fire:



(when fire detector available)

In case of alarm:


- Control diode lightens on fire detector
- Fire detector stores alarm
- Smoke vent runs open

Closing after alarm:

With automatic triggering by fire detector:

- Wait until there is no more smoke in detector
- Press masked key  in smoke vent button
- Smoke vent closes
- Red display diode  is extinguished in button

Emergency closing in case of power failure:

- Press masked key  in smoke vent button.

Afterwards detach fuse "**MOT F1.6A**" in control panel and put in again (relays fall off, emergency power is maintained).



Call immediately in-house electrician!

External control:

With external control the smoke vent opens as soon as the contact of the external system closes.

Closing after alarm:

With automatic triggering by external control:

- Open contact in external system, e.g. by reset of the fire alarm system
- Press masked key  in smoke vent button
- Smoke vent closes
- Red display diode  is extinguished in button.

Maintenance

Once a year by a specialist company, who is authorized by the appliance manufacturer.

Renew test badge, keep control book.

Respective current D+H maintenance instruction is decisive.

D+H authorized expert companies are specially trained by D+H for carrying out this maintenance competently, and therefore they are automatically provided with relevant maintenance instructions.

Following tests must be carried out with maintenance:

- Outside examination / inspection of system components
- Measuring of insulation resistances
- Checking of all relevant power supply units
- Functional testing of connected system components
- Record of competent carrying-out of maintenance, and designation according to directions

Examination

Every six months and after repair by a specialist or staff, who has been introduced to the task.

Eliminate failings at once.

Keep control book.

Inspection:

Check all appliances and cable connections for outer damage and dirt accumulation. Fire detectors, smoke vent buttons, smoke vents etc. must not be impaired in their function by goods in storage or structural changings.

Performance:

Actuate continuously another smoke vent button (fire detector) per line each time with every new examination.

Open smoke vent button.

Open/ close system.

Trigger smoke detector with D+H smoke detector testing device, or as an alternative with cigarette smoke. Response time lag circa 20 sec. Display diode must lighten.

Smoke vent must open.

See further: **Closing after alarm by fire detector.**

Trigger external control, if possible.


Smoke vent must open.

See further: **Closing after alarm by external control.**

Check alarm indication and even running of all drives up to final position.

Emergency supply:

Disconnect mains fuse on distribution board. Repeat functional testing.

Green control diode  must not lighten in smoke vent button.

Ventilation out of operation.

Fault Finding

Green control diode  does not lighten in smoke vent button. System faulty.

Open control panel. Use voltage tester for 24 VDC range, or uni-measuring device 30 VDC.

Test cable (-) on left fastening screw of inscription lable (**-Test**).

Carry out diagnosis with probe tip (+) in following order:

1. Mains control on binder NK

When no indication, 230 V mains failure.

System is supplied with 72 hours emergency power, ventilation is out of operation.

Restore mains supply as soon as possible.

Mains fuse is to be checked by in-house electrician.

2. Drive group on binder G

When no indication, - fuse "**MOT F1.6A**", check line or closing resistors in last drive connection.

Battery

When diagnosis 1 and 2 in order, then battery failure. Control fuse "**BATT F0.1A**" and check, whether battery is existing and perfectly connected (see note on inscription lable).

False alarm

System runs open, but cannot be closed again.

Check button cable and fire detector cable, if available, for interruption and short circuit.

Check connections of binders.

Check closing resistor in last button.

Check external control, if necessary.

Mounting information

230 V Power supply:

Plan separate, disconnectable electric circuit. Mark fuses. Connection cable NYM-I 3x1.5.

24 V Emergency supply:

Use only VdS approved accumulators.

RZN 4202: 2 x 12 V / min. 1.1 Ah

In case of connection of alarm devices:

RZN 4202: 2 x 12 V / min. 1.9 Ah

Weak current lines:

Install and insert separately from supply mains.

Mark cable and binder sockets red.

Control panel:

Mount control panel guarded and easily accessible for maintenance near drives.

Smoke vent button:

Mounting 1.5 m above upper edge of flooring.

Fire detector:

Monitoring area for smoke vent system maximum 400 m², however at least 2 detectors per roof section. Distance to walls, bearers, etc. minimum 0.5 m.

Do not install within fresh air current of ventilations or domelights. Fire fighting devices must not impair detectors. With sprinkler systems ask for constraint control!

Moving direction of drive:

Change poles of drive, when moving direction wrong.

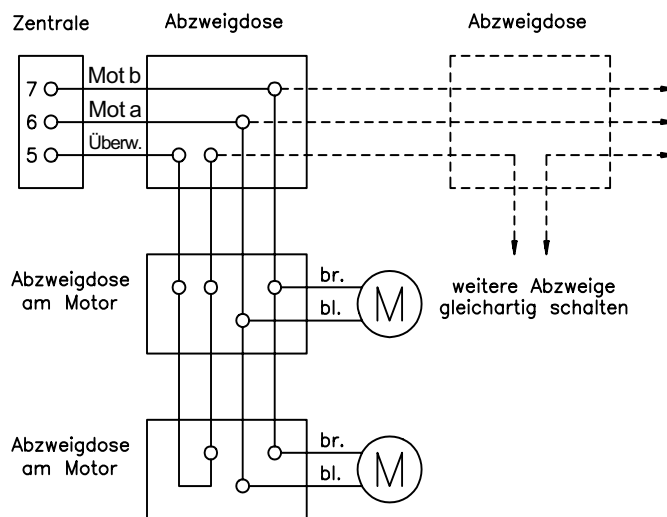
Regulations:

Following regulations must be observed: VDE 0833 for alarm systems, VDE 0100 for electrical installations, DIN 18232 for smoke

vent systems, regulations of the local fire-brigade, and the ones of EVU for mains

Connection with line derivation:

Supply wires **Mot a / Mot b** derive parallel, **Monitoring** is looped through all cables up to end of group.



Cable lay-out table

Cable lengths and cross sections:

Voltage drop is going to be critical in 24V system with many drives and long cable lengths.

Observe absolutely maximum cable lengths and cross sections!

Notice: No type designation is given for these cables, because of a large variety on the market. Please consult your D+H distributor about these.

Earthed conductor must not be wired!

Drieves*		1	2	
Cable	4 x 1,5mm ²	100	50	m
Cable	4 x 2,5mm ²	200	100	m
Cable**	7 x 2,5mm ²	400	200	m

* Table of drives with 1A.
Double cable length for using drives with 0,5A

** Connect in parallel 2 wires for each drive - MOT-!

*** Only valid for drives with 1A drive current. Use drive current „160“ for drives with 0.5A.

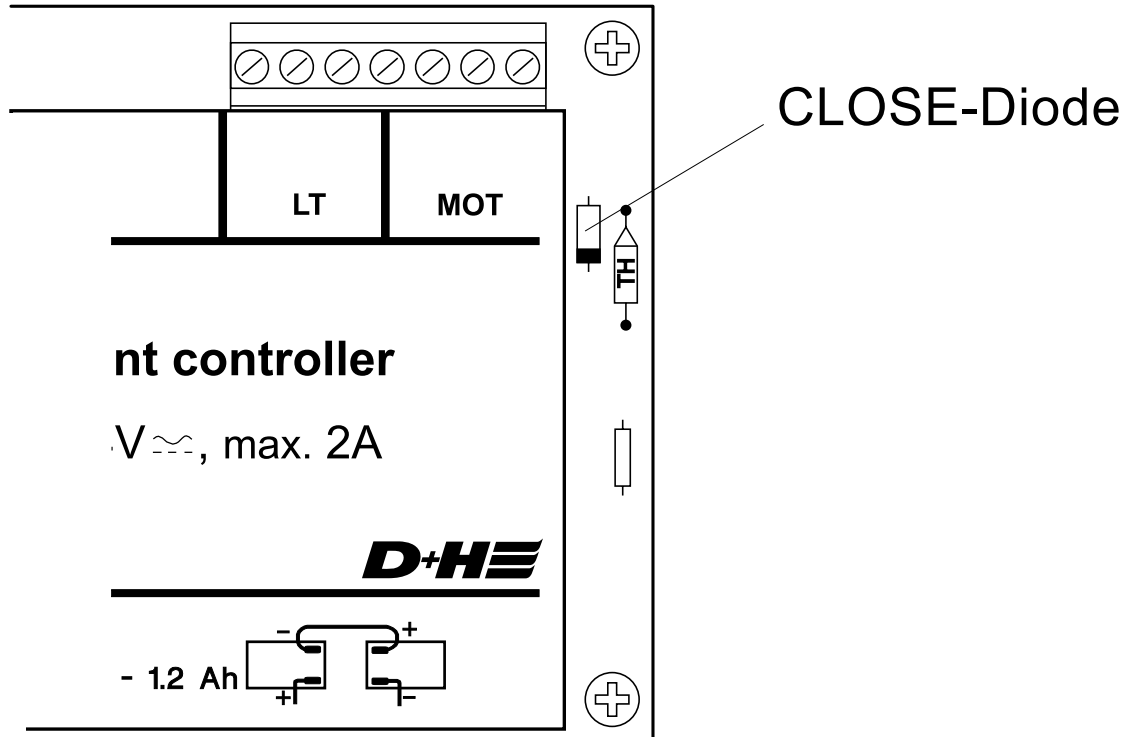
Setting of Safety Function

The diode, marked below, must be cut out with side cutting pliers to achieve a “deadman’s function“, in case the window, which is to be opened, is in an hand-accessible area (mounting heights less than 2,5m).

I.e. the drives run only as long as the vent button is actuated.

In this case, automatic control is not permissible, .e.g. by room temperature control or wind/ rain detector.

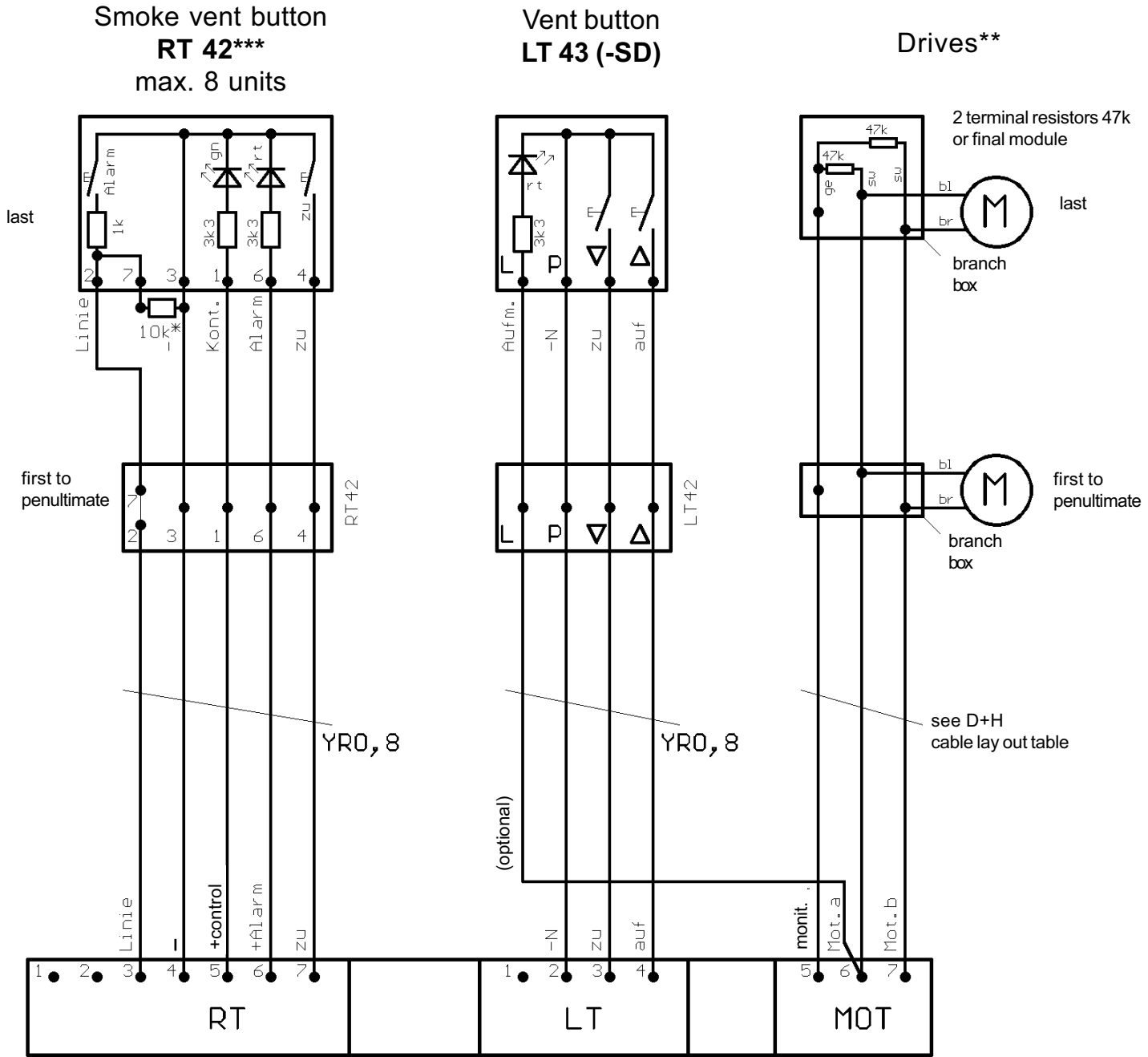
See guideline ZH 1/494 and safety notes, which are included to the drive!



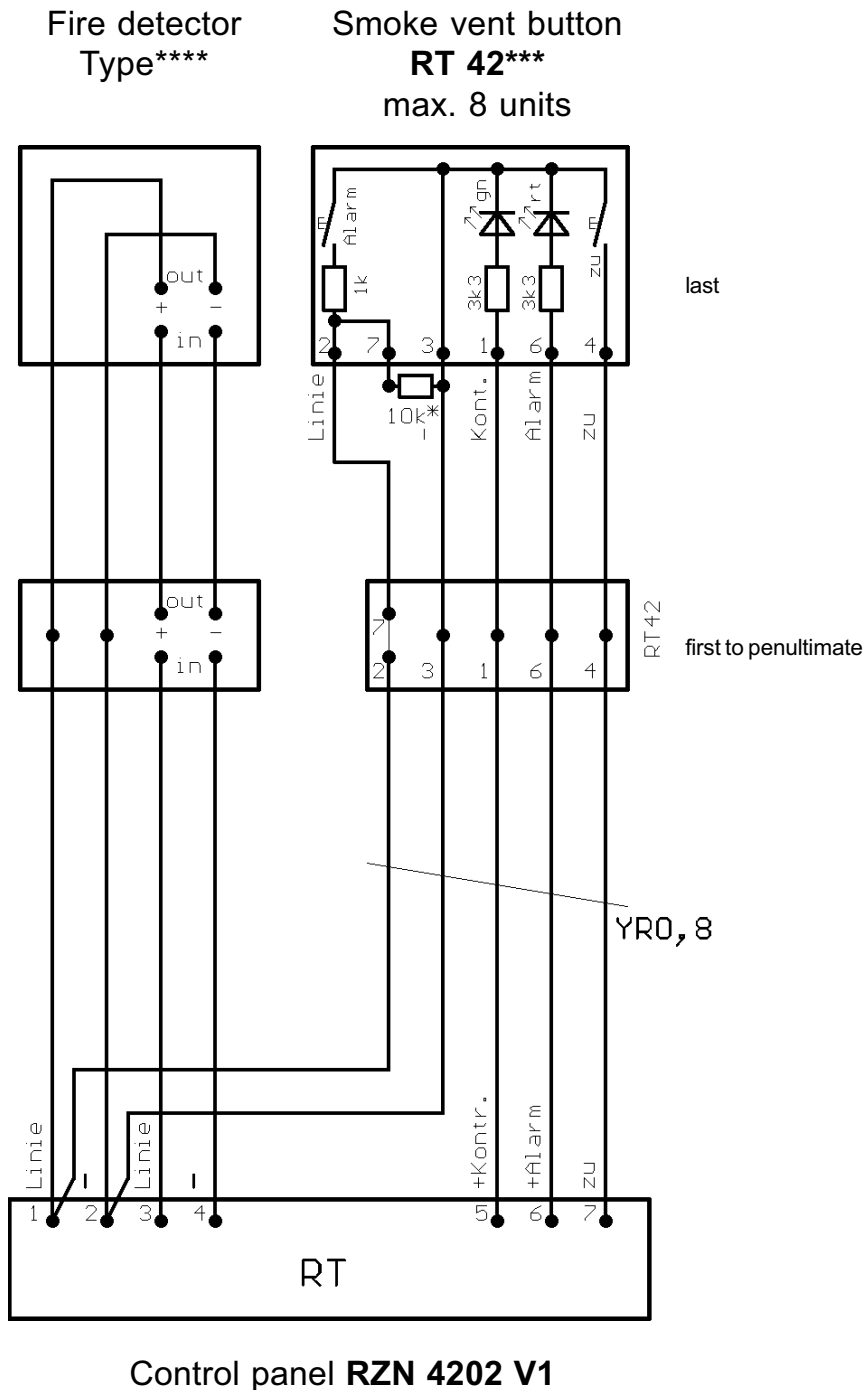
Guarantee

You will get **2 years** guarantee for all D+H products from date of verified handing over of the system up to maximal 3 years after date of delivery, when mounting and starting has been carried out by a D+H authorized distributor.

D+H guarantee is expired, with connection of D+H components with external systems or with mixing of D+H products with parts of other manufacturers.



Connection of Fire Detectors



*** Terminal resistors for line monitoring:**
 They are pinched in control panel for transport. Take it off there, and connect according to plan.

**** Maximum number of drives:**
 RZN 4202 = 2 drives with 1 A.
 Double number when drives with 0.5A are used.

***** Smoke vent button RT 42**
 With smoke vent buttons with lower board number than DH4642 (see reverse of board), exit of line to next smoke vent button from **binder 2**. Binder 7 is without function.

****** Fire detector**
 Only D+H system approved detectors are permitted to use. Number of detectors see respective product information of detector.

Connection of External Control

