Total Building Solutions

**VISONIK with all fire/intrusion/gas panels on CERBAN**
Interoperability solution

Building automation and control system with separate fire/intrusion/gas panels

**Highlights**

- Modular, user-friendly building automation and control system (building automation and life safety & security)
- Integrated monitoring of all building installations (building automation, HVAC, fire, security, safety etc.)
- Single-user operation
- Modular software to meet all customer needs
- Ease of operation in familiar Windows environment
- Standard network technology for secure and fast communication
- Full compatibility with Siemens products for fire, security, safety and automation
- Assurance of total reliability
- Wide-ranging application competence
- Safe investment thanks to modular software and open architecture
- Flexibility in adapting to organizational changes and system expansion
- Modern information and reporting system
- Web-enabled
- Combined logging
- High quality graphics-based management station for handling fire & safety systems
• Facility to link intervention text messages, and place these in the graphics in areas where fire detection is installed (especially important in hazardous areas)
• Scope for alarm routing via fax, e-mail and SMS – important and often requested

System architecture

This configuration allows for integration of all fire panels (CS11 AlgoRex and CZ10), intrusion panels (CS4, CS440, CZ12) and gas panels (CC60) in a CERBAN configuration into the VISONIK DCS via the NISE-03 interface and an SGU-NISE driver (System Gate Unit). The SGU NISE driver can be installed on the DCS server or on a dedicated SGU machine (connected directly to the Ethernet).

Communication

Management level
• Monitoring of all major life safety information on DESIGO INSIGHT
• Alarm handling of the whole system from DESIGO INSIGHT
• Supported commands: acknowledgement, day/night organization, exclude/include group, control element on/off, test/include group.
• Consistency of data assured between locally and centrally operated devices

Automation level
• Process interactions between life safety and HVAC subsystems

General
• Supervision of all physical communication connections
• Supervision of database consistency

Communication / connection

• AlgoRex (CS11) C-Bus clusters via CK11, CERBAN protocol and NISE-03 to DCS via SGU driver.
• All other panels directly via CERBAN protocol and NISE-03 to DCS via SGU driver.

Combined system components

<table>
<thead>
<tr>
<th>Level</th>
<th>System</th>
<th>Name</th>
<th>Software version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management level</td>
<td>Building automation &amp; control system</td>
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<td>V 20.xx</td>
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<td>Management station</td>
<td>DESIGO INSIGHT</td>
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<td>V 20.xx.xx</td>
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<tr>
<td>Fire panel</td>
<td>AlgoRex CS11</td>
<td>V5.xx and earlier</td>
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</tr>
<tr>
<td></td>
<td>CZ10</td>
<td>V4.x and earlier</td>
<td></td>
</tr>
<tr>
<td>Gas panel</td>
<td>CC60</td>
<td>V5.x and earlier</td>
<td></td>
</tr>
<tr>
<td>Intrusion panel</td>
<td>CS440</td>
<td>V9.xx</td>
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<tr>
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<td>CS4</td>
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<tr>
<td></td>
<td>CZ12</td>
<td>V04 and earlier</td>
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<th>Connectivity components</th>
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<td>NISE-03</td>
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<td>CK1142 (for CS11 only)</td>
<td>V 5.xx</td>
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</table>
Recommendations

- Max. 2044 life safety points per NISE
- Max. 250 commands from NISE to FSP controllers
- Max. 3 physically connected NISE per SGU driver
- Max. 3 CERBAN connections per NISE of which one can be used for connection of 1 CK11 (4 AlgoRex panels) – max. 6 subsystems
- Max. 4 AlgoRex per CK11
- Max. 6132 life safety data points per DCS
- Max. 5 s for alarm transmission from life safety panel to DESIGO INSIGHT

Engineering process / Tools

<table>
<thead>
<tr>
<th>Tools</th>
<th>NISE Configurator</th>
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Engineering process

- Define life safety data points to be transferred to DCS:
  - for AlgoRex by importing from AlgoRex engineering data file to NISE Configurator
  - for all other panels by a fast manual definition process within NISE Configurator
- Data points are then treated as standard VISONIK data points
- Graphic symbols library available, for representing life safety data points in DESIGO INSIGHT