Total Building Solutions

**VISONIK with all fire/intrusion/gas panels on CERLOOP**

Interoperability solution

Building automation and control system with a network of 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 PC 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
- Solutions based on openness and standards (OPC)
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 the integration of all fire panels (CS11 AlgoRex and CZ10), intrusion panels (CS4, CS440, CZ12) and gas panels (CC60) in a CERLOOP 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 (running on WIN NT) connected directly to the Ethernet.

1) Proprietary Class A loop

**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 interaction 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>
<td>VISONIK</td>
<td>V 20.xx</td>
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<tr>
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<td>Management station</td>
<td>DESIVO INSIGHT</td>
<td>V 1.1</td>
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<tr>
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<td>V 20.xx.xx</td>
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<td>V5.xx and earlier</td>
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<td></td>
<td></td>
<td>CZ10</td>
<td>V4.x and earlier</td>
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<tr>
<td></td>
<td></td>
<td>CC60</td>
<td>V5.x and earlier</td>
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<tr>
<td></td>
<td>Intrusion panel</td>
<td>CS440</td>
<td>V9.xx</td>
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<td></td>
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<td>CS4</td>
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<td></td>
<td></td>
<td>CZ12</td>
<td>V04 and earlier</td>
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<td>Automation level</td>
<td>Connectivity components</td>
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<td>SGU – V4</td>
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<td>NISE</td>
<td>NISE-03</td>
<td>V 6.0</td>
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<td></td>
<td>MK7022 gateway</td>
<td>MK7022</td>
<td>V 10.xx</td>
</tr>
<tr>
<td></td>
<td>CK1142 (for CS11 only)</td>
<td>CK1142</td>
<td>V 5.xx</td>
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Siemens Building Technologies | VISONIK with all fire/intrusion/gas panels on CERLOOP | CM120501en | 30.07.2003
Recommendations

- Max. 2044 life safety data points per NISE
- Max. 250 commands from NISE to FSP controllers
- Max. 3 physically connected NISE per SGU
- Max. 1 CERLOOP connection per NISE + 2 CERBAN connections – max 18 subsystems, max. 16 subsystems per MK7022 ( = per CERLOOP)
- Max. 4 AlgoRex per CK11
- Max. 6132 life safety data points per DCS

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