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- Contact your local Honeywell partner
- View product details and the complete technical documentation at:

  http://europe.hbc.honeywell.com

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LONMARK

EXCEL 5000 OPEN™
SYSTEM

think
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Investors appreciate our approach, keeping their investment attractive and flexible through the whole building life cycle and saving money right from the initial installation.

System Integrators benefit from the LONWORKS® concept and Honeywell products, offering more functionality with fewer devices. Furthermore, they appreciate over highly effective tools for engineering, commissioning and network analysis.

Consultants like our truly open and integrative approach across applications, allowing them to offer higher functionality at less cost and keeping all options open for the future.

Building Operators experience higher facility value, as we integrate different applications while at the same time reducing operating costs in terms of energy consumption, maintenance and training.
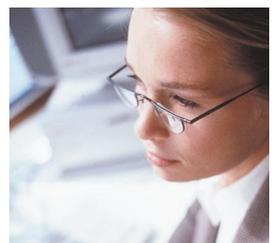
Office Users love setting up their individual working conditions, e.g via the Web Office Console or via Excel ZAPP, the wireless handheld, giving them convenient control of heating, lighting and sunblinds.

Web Office Console

DESCRIPTION

The Web Office Console (W.O.C.) allows integrated room operation of LONWORKS® based control systems for room temperature, room lighting and room sunblinds via the Internet Browser of the room users' office PCs.
The W.O.C is based on the client/server principle.

Benefits are:

- **Increased energy savings** due to co-ordinated control of room temperature, room lighting and sunblinds according to the actual occupancy situation of every individual room.
- **Reduced total installation cost,** because wall modules, switches and their wiring can become obsolete.
- **Drastically reduced cost of change,** because rearrangements of office space can be followed by simple software configuration instead of re-positioning and re-wiring of all modules.
- **High flexibility** for rearrangements of office space, because adapting the room operation will be quick and clean.

FEATURES

- **Independence from a LNS database**
- **Independence from a building management central**
  The W.O.C can be operated without a central and it can be operated in parallel to an existing central in the same system.
- **Independence from LONWORKS® controller brand**
  The W.O.C is independent of the model or manufacturer of LONWORKS® controllers that are controlling the room temperature, room lights or room sunblinds.
- **Strictly client/server principle**
  The clients are the PCs of the office users. The server (W.O.C PC) is a standard PC which runs the complete W.O.C software package. No software and no hardware installations need to be done on the PCs of the office users.

Excel Zapp

DESCRIPTION

Excel ZAPP is a wireless solution that provides remote control for integrated HVAC and non-HVAC room control solutions. This is done via radio frequency signals sent by the ZAPP handheld or the ZAPP wall module to the ZAPP receiver. The handheld can be pointed in any direction. It even works through walls, as Excel ZAPP uses RF technology instead of infrared.

Excel ZAPP Handheld
RT7070A

- Submit occupancy status
- Change set-point offset (temperature)
- Adjust fanspeed
- Raise or lower sunblinds
- Switch on, switch off, or adjust switchgears (second light)
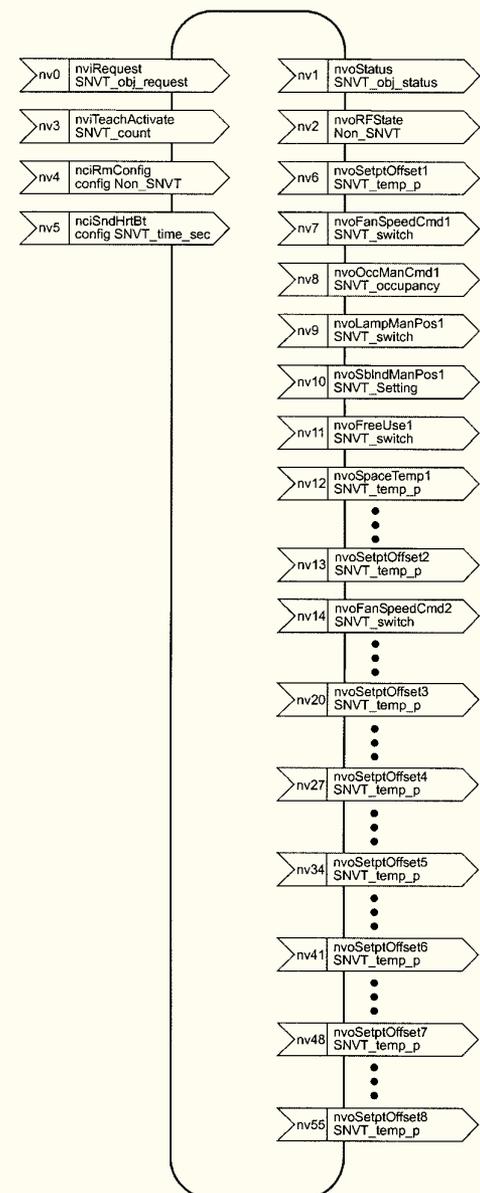- Enable and change office styles

Excel ZAPP Wall Modules
T7270

- Submit space temperature and setpoint offset
- No wires to be drawn
- Mapping to receiver by pressing a button
- Available with or without setpoint offset and with or without LCD display.

Excel ZAPP Receiver
W7070A

The Excel ZAPP Receiver forwards commands from the ZAPP Handheld to devices on the LONWORKS® network. The ZAPP Receiver is able to receive data from up to eight ZAPP handhelds, so dramatically reducing costs and installation works.

LNS Plug-In Enabled

LONMARK® Functional Profile

nv0 — nviRequest SNVT_obj_request	nv1 — nvoStatus SNVT_obj_status
nv3 — nviTeachActivate SNVT_count	nv2 — nvoRFState Non_SNVT
nv4 — nciRmConfig config Non_SNVT	nv6 — nvoSetptOffset1 SNVT_temp_p
nv5 — nciSndHrtBt config SNVT_time_sec	nv7 — nvoFanSpeedCmd1 SNVT_switch
	nv8 — nvoOccManCmd1 SNVT_occupancy
	nv9 — nvoLampManPos1 SNVT_switch
	nv10 — nvoSblndManPos1 SNVT_Setting
	nv11 — nvoFreeUse1 SNVT_switch
	nv12 — nvoSpaceTemp1 SNVT_temp_p
	nv13 — nvoSetptOffset2 SNVT_temp_p
	nv14 — nvoFanSpeedCmd2 SNVT_switch
	nv20 — nvoSetptOffset3 SNVT_temp_p
	nv27 — nvoSetptOffset4 SNVT_temp_p
	nv34 — nvoSetptOffset5 SNVT_temp_p
	nv41 — nvoSetptOffset6 SNVT_temp_p
	nv48 — nvoSetptOffset7 SNVT_temp_p
	nv55 — nvoSetptOffset8 SNVT_temp_p

Excel 12

## W7704 Integrated Room Solutions Controller

DESCRIPTION

Excel 12 is an integrated room controller covering applications such as heating, lighting and sunblind control. Its flash memory allows future upgrades by simply downloading new applications.The LNS plug-in allows configuration adjustment to specific customer needs.

FEATURES

- LONMARK® profiles # 8501, 3040, 1060
- 5 versions available with different Input/Output mix
- 230 Vac and 24 Vac
- Optional terminal protection covers for wall mounting
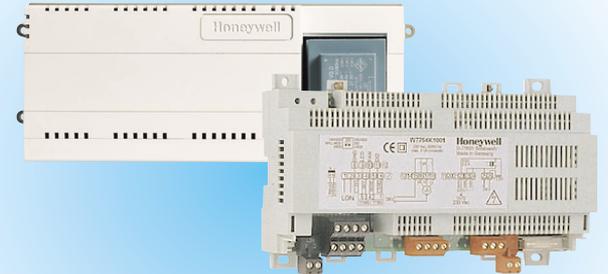- Din-rail (ring cabinet/fuse box) and wall mounting

LNS Plug-In Enabled

LONMARK® Functional Profile
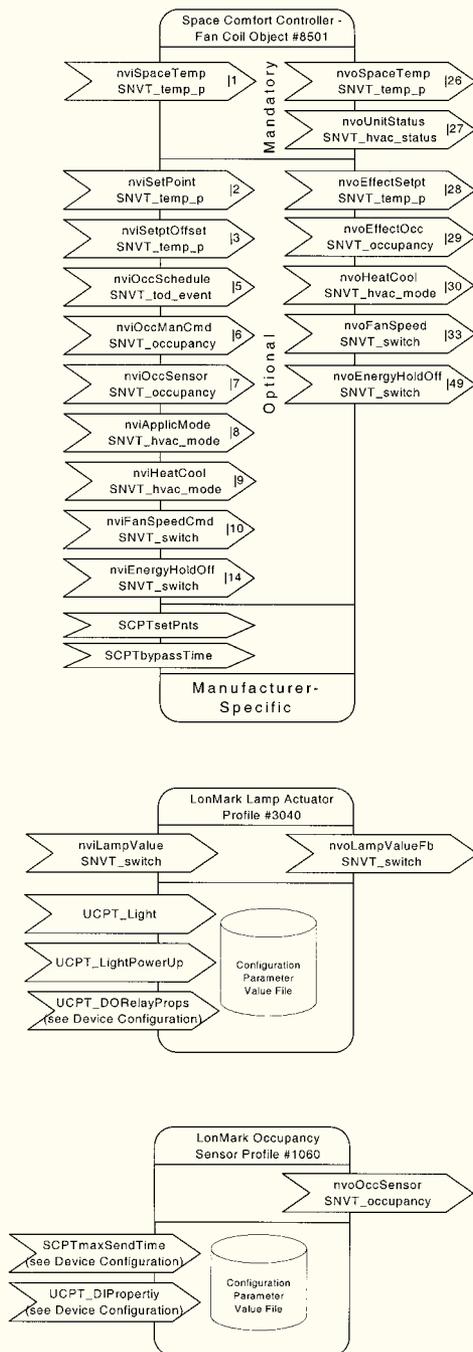
Excel 10

W7752D, E, F, G, I Fan Coil Unit Controller

DESCRIPTION

The W7752D,E,F,G,J, are LONMARK® compliant Fan Coil Unit Controllers in the Excel 10 family product line. These controllers provide room temperature control for two and four pipe fan coil units with optional electric heating coils (W7752D,F) and can control single, two or three speed fans. The controller is provided with default configuration settings and is fully operable on installation. The controller can be configured with job-specific settings. A variety of optional wall modules interface with the FCU controllers and provide any or all of the following: setpoint adjustment, fan speed adjustment, and an occupancy bypass button. All wall modules include a space temperature sensor, however a remote return air sensor can also be used.

In addition to the W7752 models we offer the W7754 K, L, M versions:
- smaller and lighter
- 230V controller + actuator
- 24V controller + actuator
- second digital input
- wall module simulation
- removable terminals
- fuse directly accessible
- digital outputs for solid state relay
- max. 8 thermoactuators per triac

LNS Plug-In Enabled

LONMARK® Functional Profile

W7752 Fan Coil Unit Controllers support the LONMARK® Functional Profile #8020.

FEATURES

- LONMARK® HVAC profile #8020.
- Stand-alone operation or on high speed 78 kbaud LONWORKS® FTT network.
- Uses Echelon LonTalk® protocol.
- Factory-configured default parameters.
- Wide range of supported valves and actuators.
- Interlocks and time delays to protect equipment.
- Power supplied by power mains.
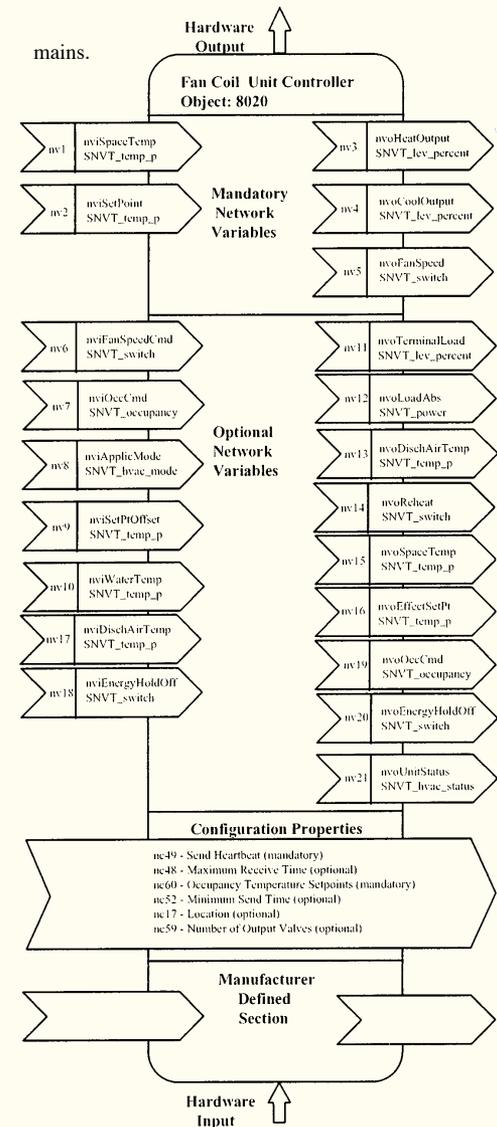
W7763C, D, E Chilled Ceiling Controller

W7762A, B Hydronic Controller

Honeywell

Honeywell

DESCRIPTION

The W7763C, D and E are LONMARK® compliant Chilled Ceiling Controllers in the Excel 10 family product line. These controllers provide room temperature control using different heating and cooling sequences. The controller is provided with default configuration settings and is fully operable on installation. The controller can be configured with job-specific settings. A variety of wall modules interface with the Chilled Ceiling Controllers and provide the following options: setpoint adjustment, an occupancy bypass button and LED, and an LONWORKS® Bus jack. All wall modules include a space temperature sensor, however a remote return air sensor can also be used.
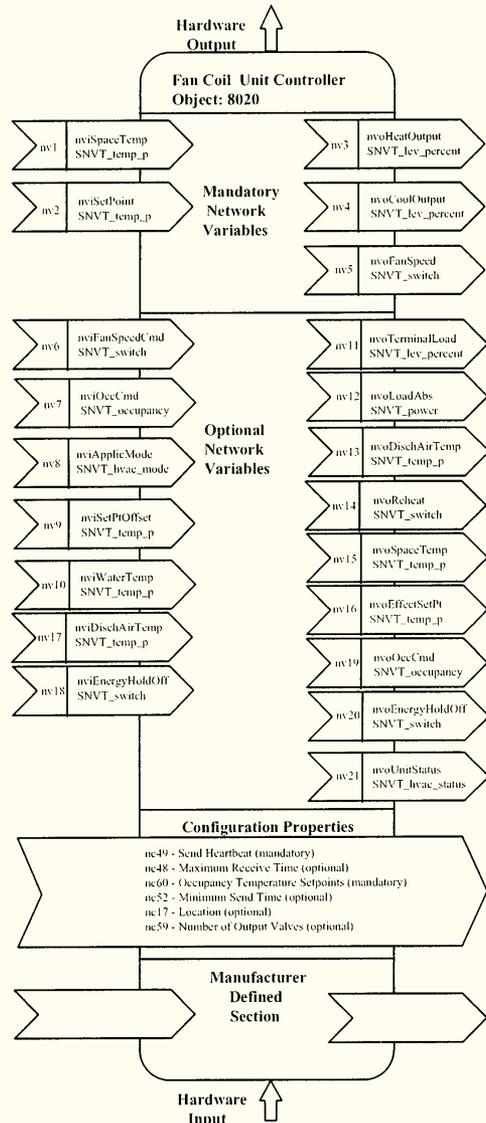
FEATURES

- LONMARK® HVAC profile #8020.
- Stand-alone operation or on high speed 78 kbaud LONWORKS® FTT network.
- Uses Echelon LonTalk® protocol.
- Factory-configured default parameters.
- Wide range of supported valves and actuators.
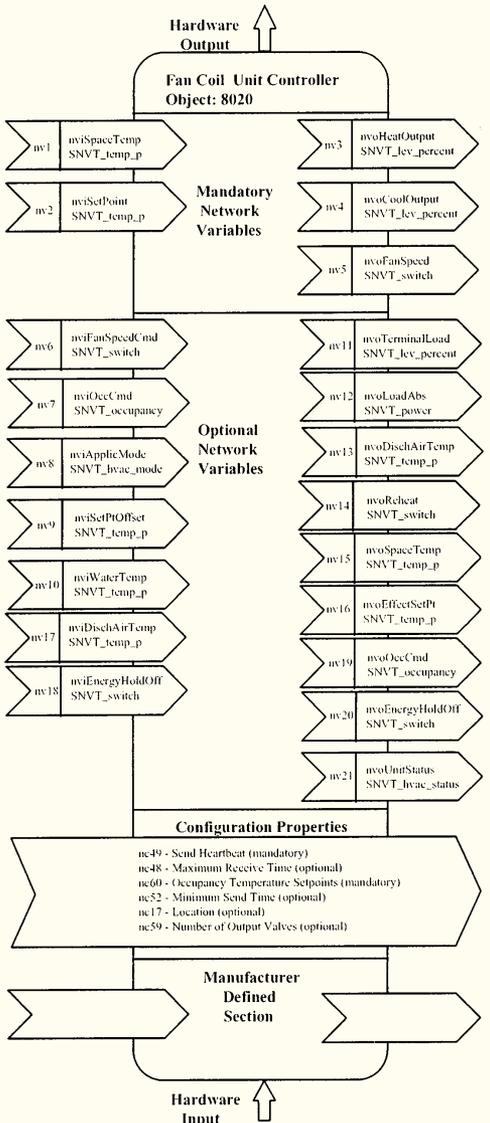- Available with setpoint knob for wall mounting.

DESCRIPTION

The W7762A and B are LONMARK® compliant Hydronic Controllers in the Excel 10 family product line. These controllers provide room temperature control using different heating and cooling sequences. The controller is provided with default configuration settings and is fully operable on installation. The controller can be configured with job-specific settings. A variety of optional wall modules interface with the Hydronic Controllers and provide the following options: setpoint adjustment, an occupancy bypass button and LED. All wall modules include a space temperature sensor, however a remote return air sensor can also be used.
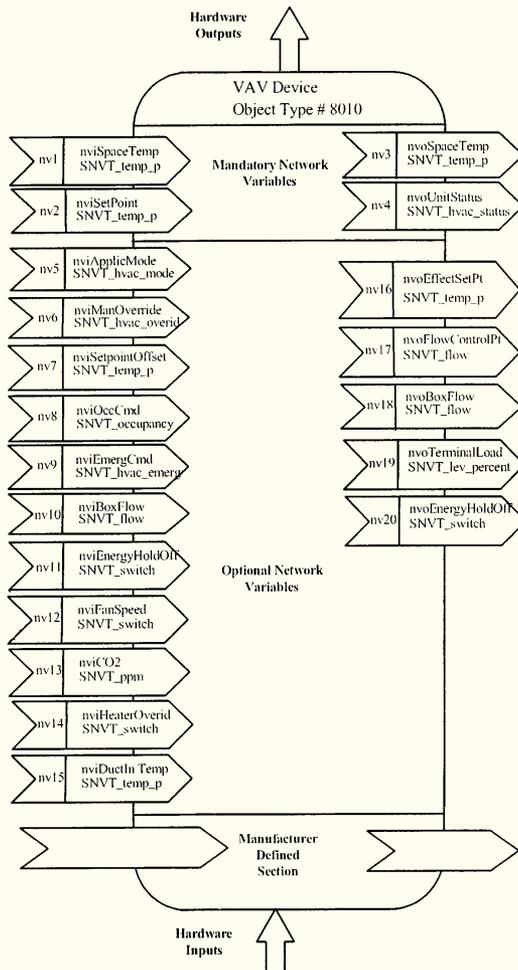
FEATURES

- LONMARK® HVAC profile #8020.
- Stand-alone operation or on high speed 78 kbaud LONWORKS® FTT network.
- Uses Echelon LonTalk® protocol.
- Factory-configured default parameters.
- Wide range of supported valves and actuators.
- Available with setpoint knob for wall mounting.

LNS Plug-In Enabled

LNS Plug-In Enabled

LONMARK® Functional Profile

W7763 Chilled Ceiling Controllers support the LONMARK® Functional Profile #8020

LONMARK® Functional Profile

W7762 Hydronic Controllers support the LONMARK® Functional Profile #8020

Fan Coil Unit Controller Object: 8020 — Mandatory Network Variables, Optional Network Variables, Configuration Properties, Manufacturer Defined Section (both columns):

- nv1 nviSpaceTemp SNVT_temp_p
- nv2 nviSetPoint SNVT_temp_p
- nv3 nvoHeatOutput SNVT_lev_percent
- nv4 nvoCoolOutput SNVT_lev_percent
- nv5 nvoFanSpeed SNVT_switch
- nv6 nviFanSpeedCmd SNVT_switch
- nv7 nviOccCmd SNVT_occupancy
- nv8 nviApplicMode SNVT_hvac_mode
- nv9 nviSetPtOffset SNVT_temp_p
- nv10 nviWaterTemp SNVT_temp_p
- nv17 nviDischAirTemp SNVT_temp_p
- nv18 nviEnergyHoldOff SNVT_switch
- nv11 nvoTerminalLoad SNVT_lev_percent
- nv12 nvoLoadAbs SNVT_power
- nv13 nvoDischAirTemp SNVT_temp_p
- nv14 nvoReheat SNVT_switch
- nv15 nvoSpaceTemp SNVT_temp_p
- nv16 nvoEffectSetPt SNVT_temp_p
- nv19 nvoOccCmd SNVT_occupancy
- nv20 nvoEnergyHoldOff SNVT_switch
- nv21 nvoUnitStatus SNVT_hvac_status

Configuration Properties
- nc49 - Send Heartbeat (mandatory)
- nc48 - Maximum Receive Time (optional)
- nc60 - Occupancy Temperature Setpoints (mandatory)
- nc52 - Minimum Send Time (optional)
- nc17 - Location (optional)
- nc59 - Number of Output Valves (optional)

Excel 10

W7751H Smart VAV Controller

DESCRIPTION

The W7751H Smart VAV is a LONMARK® compliant Variable Air Volume (VAV) Box Controller with integrated Actuator in the Excel 10 family product line. This VAV Box Controller provides Pressure Independent air flow control and Pressure Dependent damper control. The W7751H Controller provides two additional outputs that control a fan or VAV box reheat coils. The heaters can be staged electric or modulating hot water. Supply and exhaust pressurization control are provided on a zone basis.

FEATURES

- LONMARK® compliant HVAC profile #8010
- Stand-alone operation or on high speed 78 kbaud LONWORKS® FTT network.
- Uses Echelon LonTalk® protocol.
- Pressure Independent or Pressure Dependent Single or Dual Duct Variable Air Volume (VAV) control.
- Uses a Microbridge air flow sensor with patented dual integral restrictor design.
- Easy user access to air flow sensor inputs.
- Floating hot water, two-stage electric or modulating hot water heat.
- Provides patented nonlinear floating algorithm for velocity control loops.
- Individual zone pressurization for supply and exhaust control.
- Factory configured with critical user parameter default values.
- Supports motion sensor interface, via network, for enhanced energy savings.
- Supports pressurize and depressurize, night purge, and morning warmup sequences.
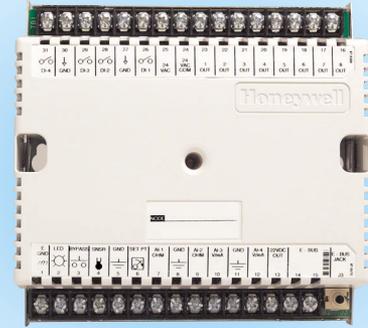
LNS Plug-In Enabled

LONMARK® Functional Profile

W7751H Controller supports the LONMARK®, Functional Profile #8010 VAV Controller

Excel 10

W7750A, B, C Constant Volume AHU Controller

DESCRIPTION

The W7750A,B,C is the LONMARK® compliant Constant Volume Air Handling Unit (CVAHU) Controller in the Excel 10 product line family. It is designed to control single zone temperature control.

FEATURES

- LONMARK® HVAC profile #8030.
- Stand-alone operation or on high speed 78 kbaud LONWORKS® FTT network.
- Uses Echelon LonTalk® protocol.
- Factory-configured default parameters.
- Wide range of supported valves and actuators.
- Available with setpoint knob for wall mounting.
- LON service pin and LED.
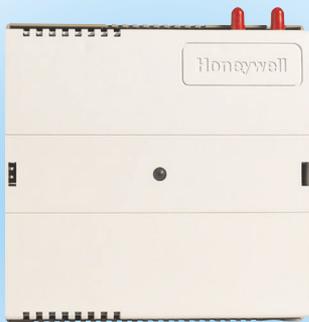
LNS Plug-In Enabled

LONMARK® Functional Profile

W7750 Controllers support the LONMARK® Functional Profile #8030 Roof Top Unit Controller
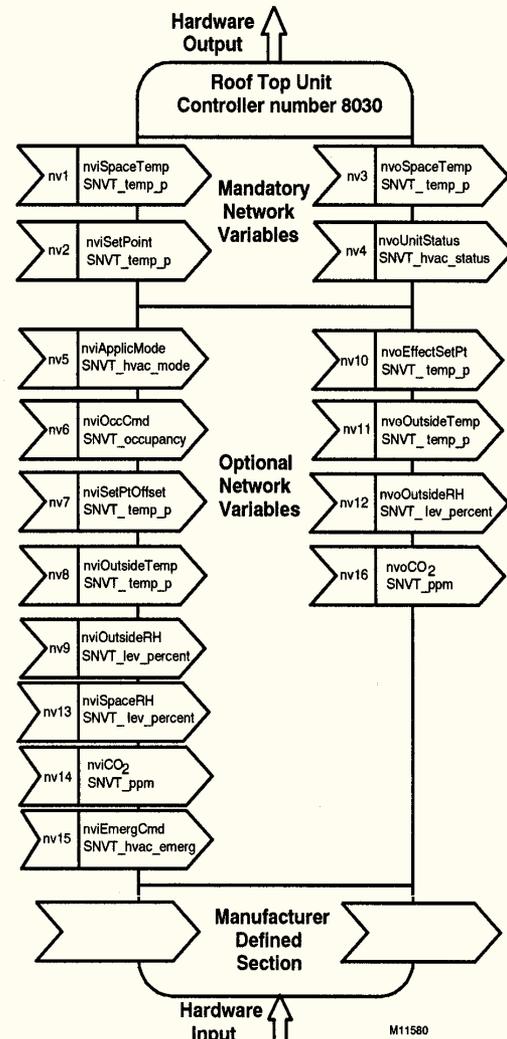
Excel 10

W7751D, F VAV II Controller

DESCRIPTION

The W7751D,F are LONMARK® compliant Variable Air Volume (VAV) Controllers in the Excel 10 family product line. These VAV systems provide pressure independent or pressure dependent air flow control and series or induction fan control using single and dual duct applications. VAV systems generally provide cool air only to the zones. The W7751 controllers provide additional outputs that control VAV box reheat coils. The heaters can be staged electric or modulating hot water. Supply and exhaust pressurization control are provided on a zone basis.

FEATURES

- LONMARK® HVAC profile #8010.
- Stand-alone operation or on high speed 78 kbaud LONWORKS® FTT network.
- Uses Echelon LonTalk® protocol.
- Capable of stand-alone operation.
- Designed for Pressure Independent or Pressure Dependent Single or Dual Duct Variable Air Volume (VAV) and Constant Volume Air Terminal Unit control.
- Uses a Microbridge air flow sensor with patented dual integral restrictor design.
- Easy user access to air flow sensor inputs.
- Energy saving setpoint reset for electrical demand limit control.
- Floating or modulating hot water or three-stage electric heat.
- Series or induction fan control.
- Provides patented nonlinear floating algorithm for velocity control loops.
- Individual zone pressurization for supply and exhaust control.

LONMARK® Functional Profile

W7751 Controllers support the LONMARK®, Functional Profile number 8010 VAV Controller

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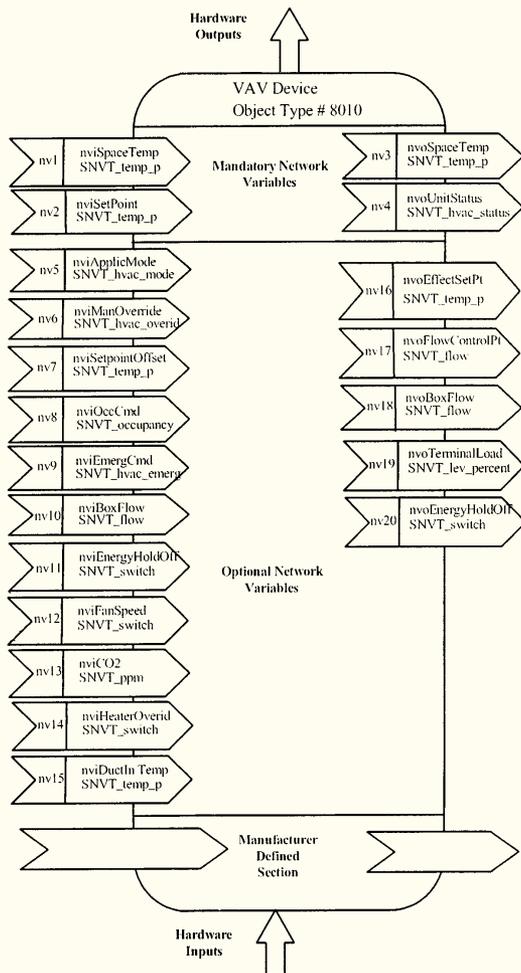
Excel 50

Controller

DESCRIPTION

The Excel 50 is a LONMARK® compliant freely programmable as well as configurable controller for HVAC primary plant control, air handling units, boilers, heating circuits and for district heating applications.

The Excel 50 controller is available with or without operator interface. The housing is mountable inside a cabinet on a DIN-rail or in a cabinet front door.

The controller has 8 analog inputs, 4 analog outputs, 4 digital inputs and 6 digital outputs. 3 out of 4 digital inputs can be used as totalizers. The digital outputs allow the direct drive of 3-position actuators (up to the maximum load).

The PC-based application selector helps to get the optimum configuration. The preconfigured applications which are stored in the application module are activated with a code number entered via the HMI.
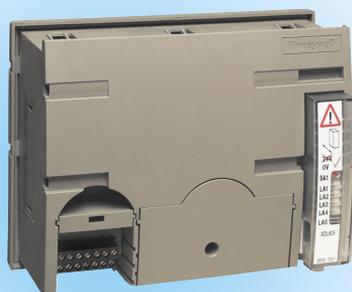
FEATURES

- LONWORKS® Network connection
- Free Topology Transceiver (FTT10/FT-X1)
- Reduced engineering and start-up costs: Simply select a pretested configurable application with the Lizard Application Selector tool
- Easy and flexible installation: screw terminal mounting inside cabinet (DIN rail) or in cabinet front door

LONMARK® Functional Profile
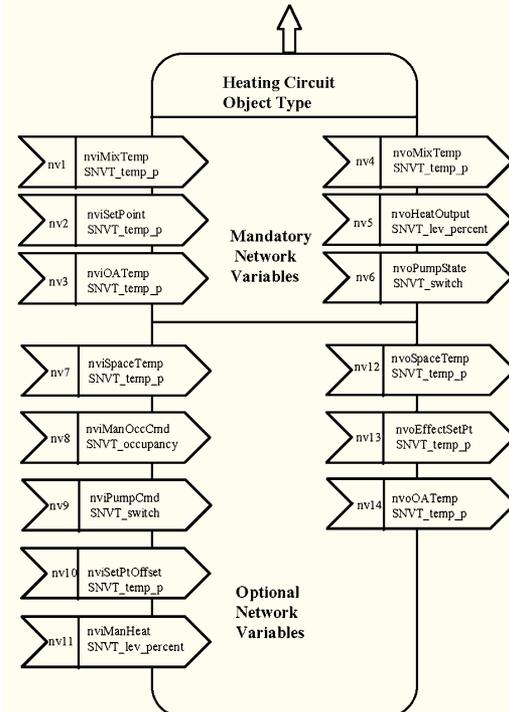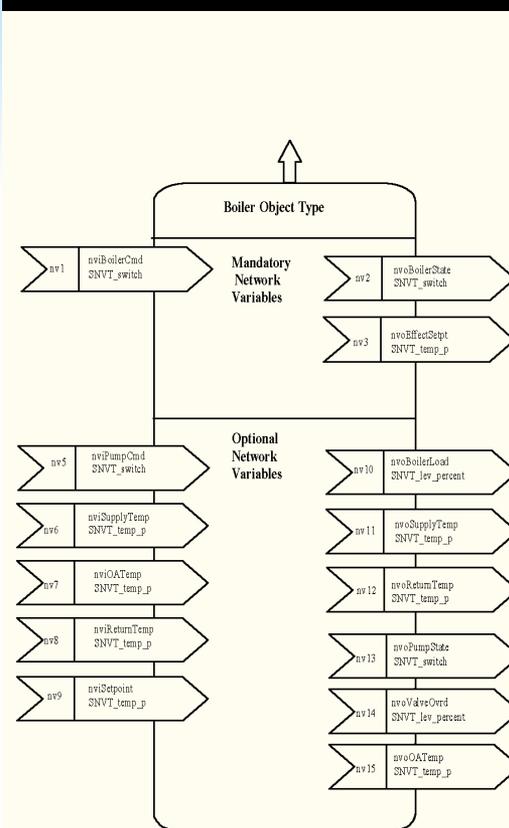
Controller

DESCRIPTION

Excel 500 Smart is a LonMark® compliant freely programmable controller for medium to large HVAC applications.
It supports up to 512 NVs. It can function on a LonWorks® network with Excel 10 and Excel 50 controllers, other Ecxel 500 controllers and their Distributed I/O modules, and third-party LonWorks® devices and centrals.

FEATURES

- Automatic binding of Excel 500 controllers and Distributed I/O modules.
- Simple drag and drop binding of Honeywell and other LonWorks® devices through CARE tool
- 512 NVs supported
- NV-Booster® functionality avoids multiple NVs with many-to-one bindings and thus reduces the number of Excel 500 controllers needed.
- The Excel 500 controller allows conversion of NV types.
- Built-in interface for remote communication (Modem, ISDN, GSM, TCP/IP modem)
- Free Transceiver (FTT10A, FT-X1)
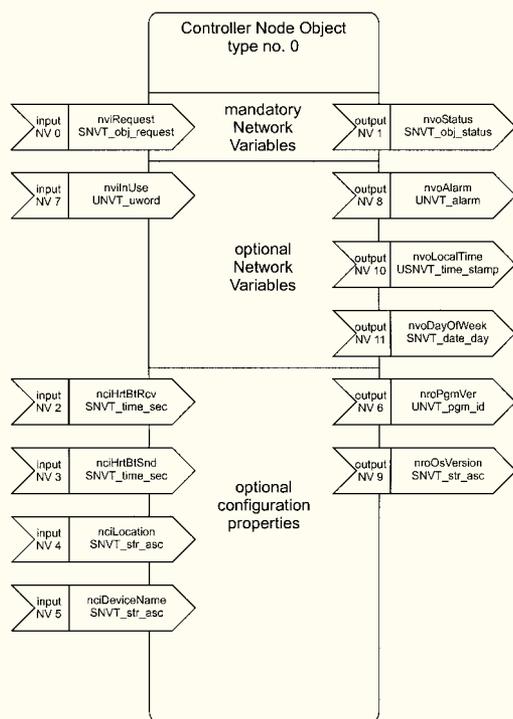
DESCRIPTION

Different versions available:

Analog Input Module (XFL521)
- 8 analog inputs (12 bit resolution) NTC, PT 1000, 0...10 V dc, 0 (4)...mA
- auxiliary voltage for potent. status detection (10 V dc)

Analog Output Module (XFL522)
- 8 analog outputs (8 bits, 0...10V dc)
- 8 LEDs (red)
- 3 pos. actuator via MCD3

Digital Input Module (XFL523)
- 12 fast digital inputs (can be used as totalizers for up to 20 Hz)
- 12 LEDs with selectable colors
- auxiliary voltage (18V dc) for switch status detection
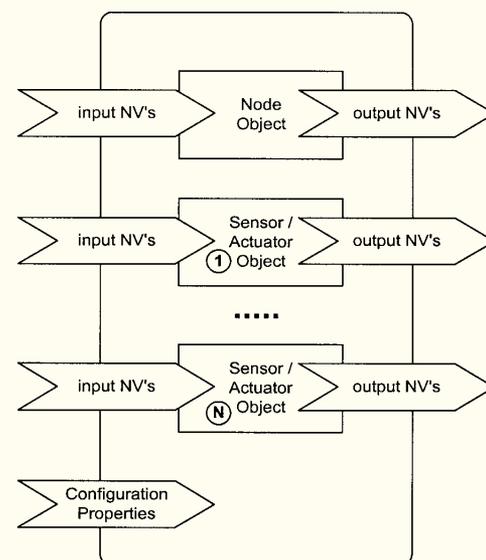
Digital Output Module (XFL524)
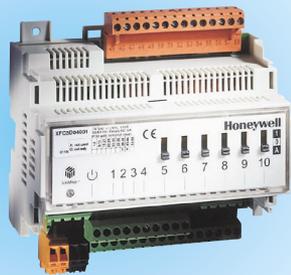- 6 changeover contacts (230V ac/2A)
- 6 LEDs

FEATURES

- LonMark® compliant
- FTT 10A Transceiver
- Optional manual override module with feedback signal on LonWorks® bus.
- Reduced engineering and start-up cost due to:
  - Plugable Manual Disconnector Modules
  - Optional Manual Override Module
  - Spring tension terminals
  - Modules can be exchanged under power

LNS Plug-In Enabled

LonMark® Functional Profile

Controller Node Object type no. 0

input NV 0 — nviRequest SNVT_obj_request	mandatory Network Variables
input NV 7 — nviInUse UNVT_uword	
input NV 2 — nciHrtBtRcv SNVT_time_sec	optional Network Variables
input NV 3 — nciHrtBtSnd SNVT_time_sec	
input NV 4 — nciLocation SNVT_str_asc	optional configuration properties
input NV 5 — nciDeviceName SNVT_str_asc	

output NV 1 — nvoStatus SNVT_obj_status
output NV 8 — nvoAlarm UNVT_alarm
output NV 10 — nvoLocalTime USNVT_time_stamp
output NV 11 — nvoDayOfWeek SNVT_date_day
output NV 6 — nroPgmVer UNVT_pgm_id
output NV 9 — nroOsVersion SNVT_str_asc

LonMark® Functional Profile

input NV's — Node Object — output NV's

input NV's — Sensor / Actuator (1) Object — output NV's

•••••

input NV's — Sensor / Actuator (N) Object — output NV's

Configuration Properties

Smart I/O Modules

DESCRIPTION

Different versions available with varying Input/Output mix:

Analog inputs:
Sensors: NTC, PT1000, NI1000, NI1000TK5000, PT100 3-wire
0(2)…10 V, 0(4)…20mA, slow digital input

Analog outputs:
0…10 Vdc or 0…20 mA
optional manual override + LED´s

Digital input:
Dry contact or totalizer with up to 20 Hz
optional LED´s

Digital output:
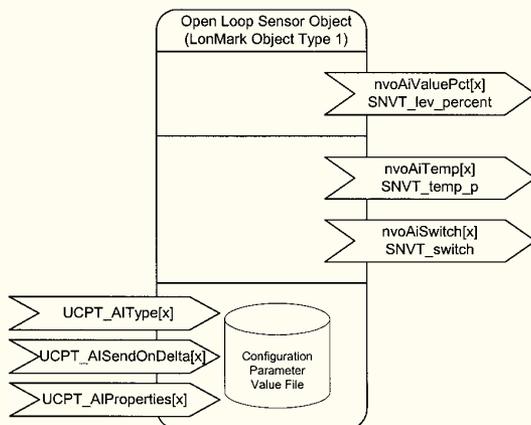2 relays NO, 2 changeover relays
optional manual override + LED´s

FEATURES

Excel Smart I/O are LONWORKS® I/O modules which can be used for a wide range of applications due to their flexibility regarding:

- I/O mix and I/O characteristic
- Fuse box mounting and wall mounting
- Variants with 24 Vac or 230 Vac power supply
- Variants with removable terminals or fixed terminals
- Easy wiring, e.g.
  - T-connectors for uninterrupted bus communication and power supply.
  - Ground terminal per signal
  - Auxiliary terminals for power supply of field devices
- Variants with manual overrides with feedback signal on LON and status LED (configurable via plug-in)
- Optional terminal covers and swivel labels for application specific information
- Flash memory for download of future applications
- FTT10A

LNS Plug-In Enabled

LONMARK® Functional Profile

Open Loop Sensor Object
(LonMark Object Type 1)

nvoAiValuePct[x]
SNVT_lev_percent

nvoAiTemp[x]
SNVT_temp_p

nvoAiSwitch[x]
SNVT_switch

UCPT_AIType[x]

UCPT_AISendOnDelta[x]

UCPT_AIProperties[x]

Configuration Parameter Value File

Actuators for ZoneControl

M7410G Small Linear Valve Actuators for radiators, zone control and HVAC applications

DESCRIPTION

The M7410G small linear actuators are specifically designed to provide LONMARK® capabilities together with the radiator and zone valve series of small linear valves. They are used in fan coil units, induction units, small reheaters, recoolers and for zone control applications. Furthermore they are employed in electronic temperature control systems using hot and/or cold water as the controlled medium.
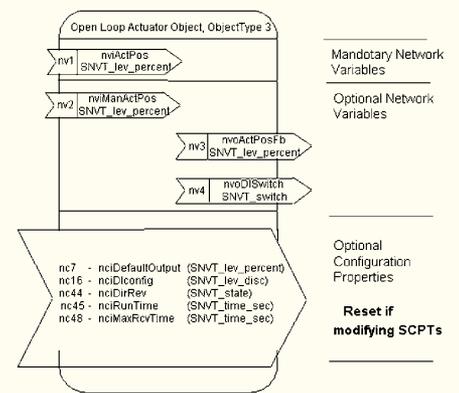Specific versions are available with PI control algorithm for simple room loops.

FEATURES

- FTT10A communication
- Digital Input can be used for window or humidity switch
- Simple wiring
- Supplied with prewired connection cable
- Simple, standardized valve/actuator coupling – no tools required for mounting
- Visual valve position indicator furnished with actuators
- Manual operation provided by the valve adjustment cap
- High - precision proportional valve actuator
- Actuator types fit onto standard Radiator valves and Honeywell zone valves
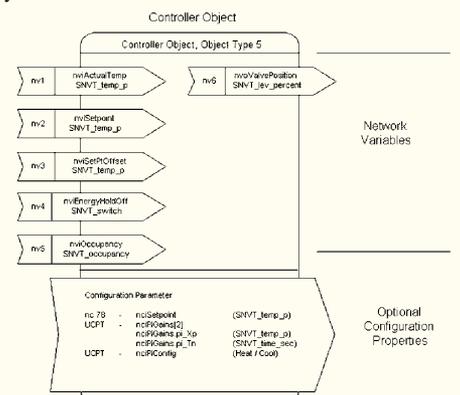- Stroke position on signal failure selectable

Only V2:
- PI temperature control loop
- Occupancy based control for energy saving

LNS Plug-In Enabled

LONMARK® Functional Profile

Open Loop Actuator Object, ObjectType 3

nv1 nviActPos SNVT_lev_percent

nv2 nviManActPos SNVT_lev_percent

nv3 nvoActPosFb SNVT_lev_percent

nv4 nvoOiSwitch SNVT_switch

Mandatory Network Variables

Optional Network Variables

nc7 - nciDefaultOutput (SNVT_lev_percent)
nc16 - nciDiconfig (SNVT_lev_disc)
nc44 - nciDirRev (SNVT_state)
nc45 - nciRunTime (SNVT_time_sec)
nc48 - nciMaxRcvTime (SNVT_time_sec)

Optional Configuration Properties

Reset if modifying SCPTs

Only V2:

Controller Object

Controller Object, Object Type 5

nv1 nviActualTemp SNVT_temp_p

nv2 nviSetpoint SNVT_temp_p

nv3 nviSetPtOffset SNVT_temp_p

nv4 nviEnergyHoldOff SNVT_switch

nv5 nviOccupancy SNVT_occupancy

nv6 nvoValvePosition SNVT_lev_percent

Network Variables

Configuration Parameter

nc 78 - nciSetpoint (SNVT_temp_p)
UCPT - nciPiGains[2]
       - nciPiGains.pi_Xp (SNVT_temp_p)
       - nciPiGains.pi_Tn (SNVT_time_sec)
UCPT - nciPiConfig (Heat / Cool)

Optional Configuration Properties

Application Oriented Actuators

ML7420G Large Linear Actuators for HVAC applications

LNS Plug-In Enabled

DESCRIPTION

This LONMARK® compliant actuator series offers two digital inputs or two digital outputs which can be used for a more application oriented actuator integration. The actuators are used in electronic temperature control systems using hot steam and/ or cold water as the controlled medium. They fit in commercial and in semi-industrial applications and offer application oriented features as well as a rugged and stable design.

FEATURES

- FTT10A communications
- Feature set depending on model
  - V1: LON communication
  - V2: + 2 digital outputs
  - V3: + 2 digital inputs
- Simple standardized valve/ actuator coupling
- Manual operation provided by operation knob
- Operational information about functional defects

LONMARK® Functional Profile
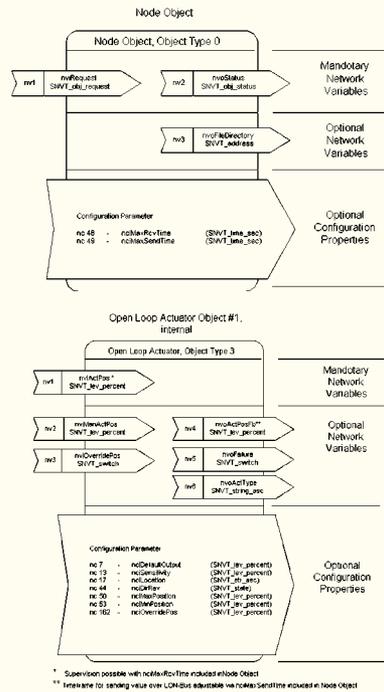
Only V2:
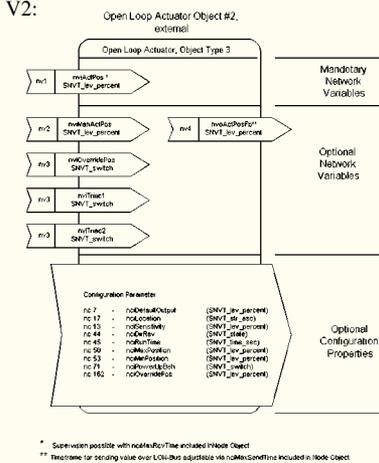


Only V3:
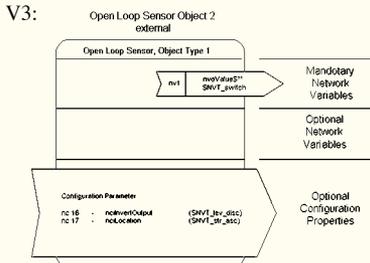
Multisensor

C7115

DESCRIPTION

Sensor for room control, monitoring occupancy, light and temperature.

FEATURES

- Occupancy sensor (built-in)
- Light sensor (built-in)
- Temperature sensor (built-in); analog input can be used to directly connect a NTC20K sensor (C type)
- 2 switch inputs
- 1 analog input; can connect any 0…10V signal such as humidity, CO_2 (B type)
- 2 switch outputs
- Occupancy controller (built-in)
- Light controller (built-in)
- Digital inputs and outputs can be used for general purpose, or to form a dual light switching actuator. The built in controller objects allow any light control application, e.g. daylight harvesting

LNS Plug-In Enabled

LONMARK® Functional Profile
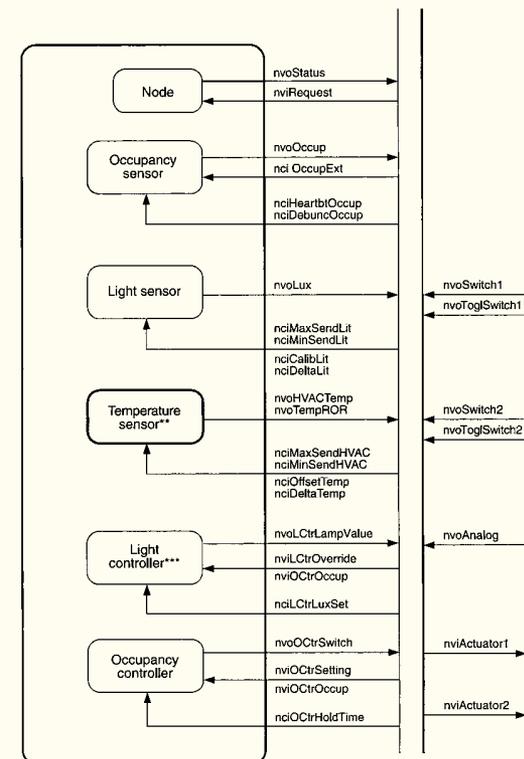
Temperature Sensors

LF20/VF20/T7425A Temperature Sensors for HVAC applications
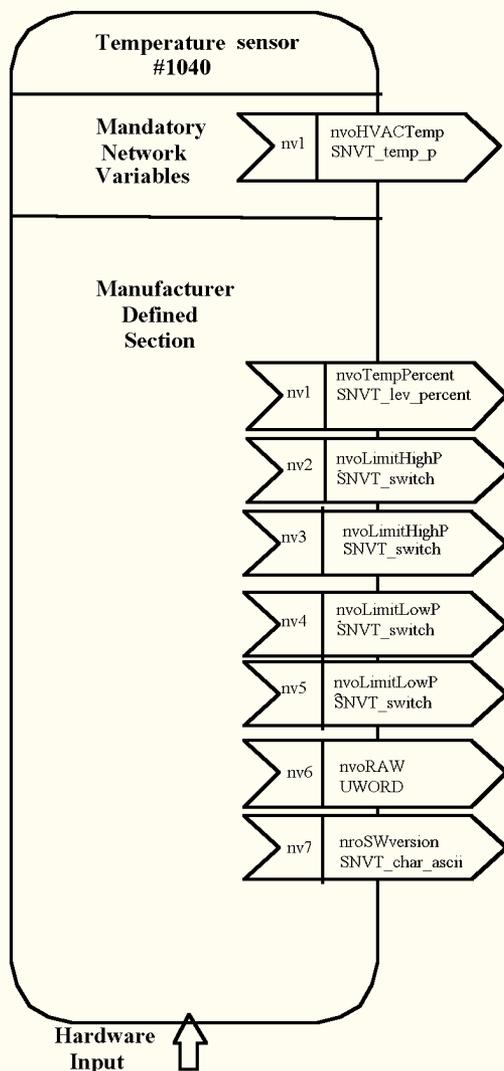
DESCRIPTION

These LONMARK® compliant temperature sensors give customers an effective new capability in energy management and product flexibility. The sensors work with standard SNVT´s to provide most flexible interoperability with all controllers which are based on LONWORKS® technology. Using standard Echelon configuration tools, the sensors can be configured with job specific settings.

FEATURES

- LONMARK® temperature profile #1040
- FTT10A Transceiver
- Factory configured default parameters
- LONWORKS® service and operation LED visible without disassembly
- Easy plug connection
- Protection class IP54/65

LNS Plug-In Enabled

LONMARK® Functional Profile

Temperature sensor #1040

Mandatory Network Variables	nv1	nvoHVACTemp SNVT_temp_p

Manufacturer Defined Section

	nv1	nvoTempPercent SNVT_lev_percent
	nv2	nvoLimitHighP SNVT_switch
	nv3	nvoLimitHighP SNVT_switch
	nv4	nvoLimitLowP SNVT_switch
	nv5	nvoLimitLowP SNVT_switch
	nv6	nvoRAW UWORD
	nv7	nroSWversion SNVT_char_ascii

Hardware Input

Pressure Sensors

SN/SKN/SKVN Pressure Sensors for HVAC applications
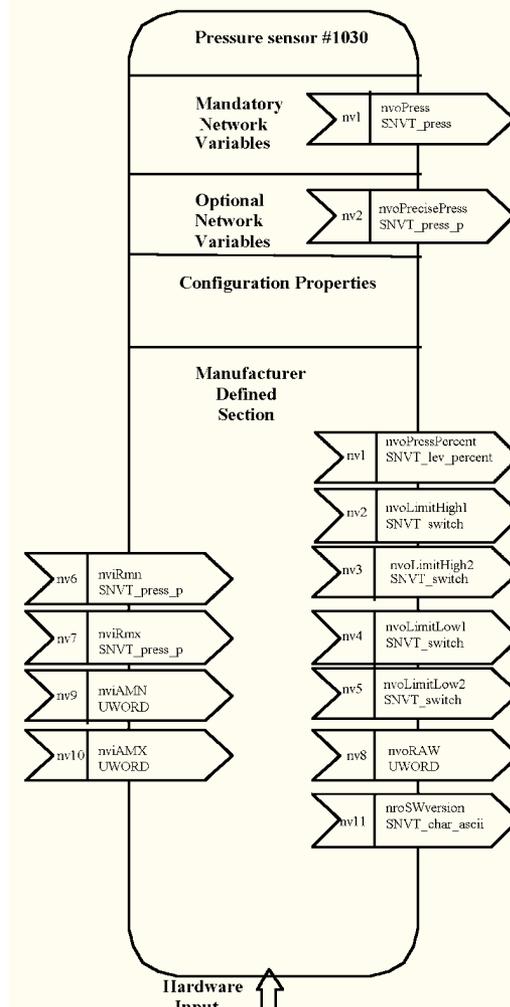
DESCRIPTION

These LONMARK® compliant pressure sensors are provided with default configuration settings. Standard Echelon configuration tools can be used to configure job specific settings. The power and bus connection is simply connected by M12 plug (included).

FEATURES

- LONMARK® pressure profile #1030
- Direct mounting on the pressure line
- FTT10A Transceiver
- Factory configured default parameters
- LONWORKS® service and operation LED visible without disassembly
- Easy plug connection
- Protection class IP65

LNS Plug-In Enabled

LONMARK® Functional Profile

Pressure sensor #1030

Mandatory Network Variables	nv1	nvoPress SNVT_press
Optional Network Variables	nv2	nvoPrecisePress SNVT_press_p

Configuration Properties

Manufacturer Defined Section

nv6	nviRmn SNVT_press_p		nv1	nvoPressPercent SNVT_lev_percent
nv7	nviRmx SNVT_press_p		nv2	nvoLimitHigh1 SNVT_switch
nv9	nviAMN UWORD		nv3	nvoLimitHigh2 SNVT_switch
nv10	nviAMX UWORD		nv4	nvoLimitLow1 SNVT_switch
			nv5	nvoLimitLow2 SNVT_switch
			nv8	nvoRAW UWORD
			nv11	nroSWversion SNVT_char_ascii

Hardware Input

FISS

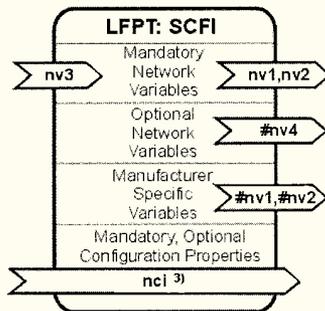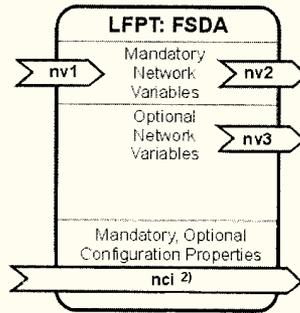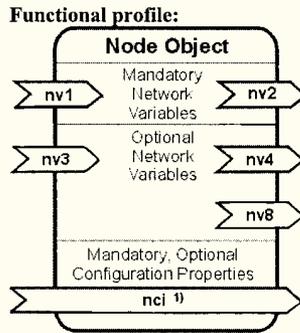## Q7014C Input / Output Module for automated fire damper action and maintenance

DESCRIPTION

The Fire & Smoke Damper Controller Q7014C is designed to integrate 0°/95° damper actuators and fire/smoke detectors into interoperable LONWORKS® networks to prevent the dispersion of smoke or toxic gases or to perform area isolation in fire/smoke damper actuation plants.

FEATURES

- Interfaces Fire/Smoke Detector information:
  - Fire/Smoke Alarm
  - Pollution (>70%) Warning
  - Air Flow Failure
  - Electronic Failure
- Monitoring of damper status
- Thermal fuse override
- Parameter setting of actuator drive time monitoring
- Automated maintance
- LED´s and wiring visible through transparent cover
- Robust design, protection standard IP65
- Conformity to LONMARK® functional profiles:
  - FPT#11001 for Fire Smoke Damper Actuator
  - FPT#11003 for Smoke (Conventional) Fire Initiator

LONMARK® Functional Profile

Functional profile:

Node Object

nv1	Mandatory Network Variables	nv2
nv3	Optional Network Variables	nv4
		nv8

Mandatory, Optional Configuration Properties

nci [1]

LFPT: FSDA

| nv1 | Mandatory Network Variables | nv2 |
| | Optional Network Variables | nv3 |

Mandatory, Optional Configuration Properties

nci [2]

LFPT: SCFI

nv3	Mandatory Network Variables	nv1,nv2
	Optional Network Variables	#nv4
	Manufacturer Specific Variables	#nv1,#nv2

Mandatory, Optional Configuration Properties

nci [3]
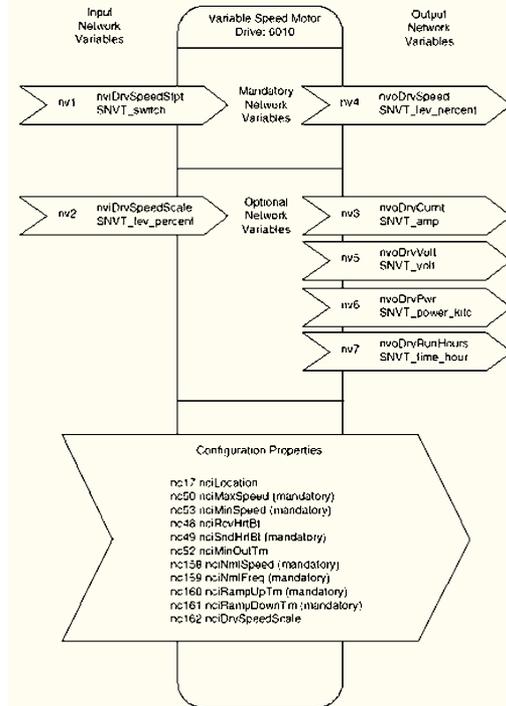

NX Series

Inverters

DESCRIPTION

For controlling speed and/or torque of electric motors running pumps, fans, conveyors, mixers, lifts, cranes or other specific applications. Available as NXS, NXP and NXL series to meet different application requirements.

FEATURES

- LONMARK® compliant, profile No. 6010.
- FTT 10A Transceiver
- LONWORKS® interface as compact plug-in card
- Built-in chokes and RFI filters available
- Easy to set up.
- NXS/NXP: same operating interface in all sizes
- NXL: simple numeric keypad
- PC tools available for easy commissioning and software updates
- Available in various IP classes
- Variety of practical accessories

LONMARK® Functional Profile

The Excel VRL frequency converters support the LONMARK functional profile #6010 for Variable Speed Motor Drives.

Input Network Variables	Variable Speed Motor Drive: 6010	Output Network Variables
nv1 nviDrvSpeedStpt SNVT_switch	Mandatory Network Variables	nv4 nvoDrvSpeed SNVT_lev_percent
nv2 nviDrvSpeedScale SNVT_lev_percent	Optional Network Variables	nv3 nvoDrvCurnt SNVT_amp
		nv5 nvoDrvVolt SNVT_volt
		nv6 nvoDrvPwr SNVT_power_kilo
		nv7 nvoDrvRunHours SNVT_time_hour

Configuration Properties

nc17 nciLocation
nc50 nciMaxSpeed (mandatory)
nc53 nciMinSpeed (mandatory)
nc48 nciRcvHrtBt
nc49 nciSndHrtBt (mandatory)
nc52 nciMinOutTm
nc158 nciNmlSpeed (mandatory)
nc159 nciNmlFreq (mandatory)
nc160 nciRampUpTm (mandatory)
nc161 nciRampDownTm (mandatory)
nc162 nciDrvSpeedScale

SynOpsys

Workstation

DESCRIPTION

SynOpsys is a web based workstation monitoring building management and cooling & refrigeration systems. It provides access to Honeywell and third party devices connected via a LONWORKS® network.

FEATURES

Openess
- Open LONWORKS® architecture (with or without LNS)
- Network engineering with CARE or standard LNS network engineering tools
- Easy integration of LONMARK® devices

Advanced LONWORKS® features
- Full access to EXCEL 5000 controller datapoints, parameters alarms and schedules via the LONWORKS® network
- Pre-defined graphic templates for Honeywell Excel 10 controllers

Low engineering effort
- Plug and play LONWORKS® workstation for Honeywell EXCEL 5000 system controllers
- Automatic detection and recognition of devices connected to the LONWORKS® network
- Pre-defined graphic templates for Honeywell Excel 10 controllers

Web based technology
- HTML pages for data display
- Full graphic support
- Remote access (Internet or modem) using standard Web browser

Advanced building management features
- Enhanced alarming (printer, e-mail, history files, reports)
- Enhanced graphical trending
- Multi-language capacity

LNS Plug-In

Honeywell provides LNS plug-ins for most of its LONWORKS® based products and is continually extending the availability of these plug-ins. The LNS plug-ins will operate on all LNS based tools designed to support the standard LNS plug-in interface.

The plug-ins provide a simple, effective and trouble free configuration and installation of our LONWORKS® products with tools based on Echelon® LNS LONWORKS® systems. There are many different tools available on the market using this technology, which ensure consistent and trouble free implementation of integrated LONWORKS® concepts using LONWORKS® products from different manufacturers.

Integration Tools

Excel CARE

The All-In-One engineering tool for LONWORKS® networks and the EXCEL 5000® OPEN system.

Powerful and Open
- Integrated open LONWORKS® engineering and support of freely programmable controllers
- Covers any LONWORKS® device equipped with LNS plug-ins within a LONWORKS® network
- More flexible use of Honeywell's Smart I/O Modules
- Project Manager capability for unlimited project size with support for LONWORKS® and C-Bus devices
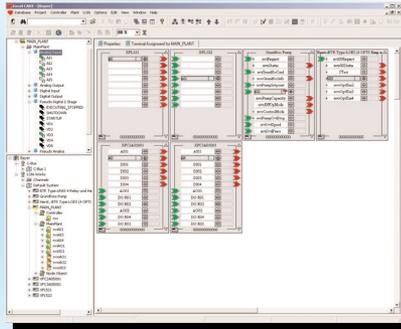
Cost Cutting
- Single tool for engineering and start up, avoiding LNS database related fees
- Intelligent Autobinding Mechanism thus saving time ('One-Click-LONWORKS®-Engineering)

User-friendly
- More plant replicate functionality to copy plants, LONWORKS® devices, device configurations and bindings
- Graphical trend to monitor datapoints
- Data export function to MS-Excel

Excelon

"The LONWORKS® Analyzer"

Your cost saver for any LONWORKS® installation

- Explore all Nodes connected within a LONWORKS® network
- View the Property of Nodes like Domain, Program ID, Statistic Data
- Download Node Program
- Read and Write Network Variables
- Trending of NV Values
- Analyzing the Network Traffic
- Analyzing the LonTalk Protocol