

Micro Automation Sets

For Building Automation

Brochure • July 2008



MICRO AUTOMATION SET

SIEMENS

Micro Automation Sets

Compact Solutions for your Success

Micro Automation Sets are carefully matched combinations of automation components from the Siemens portfolio. They are tailored to solve various automation issues and can be used for applications in the fields of industry, machine building and building services technology – simple, inexpensive and tested.

Lots of added value :

- You can solve small automation tasks faster and easier.
- An integrated, tested solution package is available which you can fully rely on.
- You receive all information and data from one source.
- By combining standard components in one network, you safely can solve your automation task whilst making interesting cost saving.

Our Micro Automation Sets not only help you to find the right product quickly – we also support you in using them with our “plug-and-play” tools for a fast start-up:

Functions in detail – Micro Application Examples

The Micro Application Examples show you what a concrete application can look like. All Sets are based on real-world applications as well as extensive tests and simulations. In this way, you benefit from detailed documentation and perfectly matched products.

Plug and Play for every phase – free start-up software examples

We offer codes and parameter sets for programming the application. This means “plug and play” at your ease – whether at the planning, engineering or commissioning.

www.siemens.com/microset

Micro Automation Set can be used for applications in industry, machine building and building services technology – with the most varied of products from our wide-ranging portfolio.

■ Drive Technology

Starting, controlling and positioning with standard drives

■ Building Automation

Controlling, monitoring and signaling in building services applications

■ Remote Control

Remote monitoring and control in distributed facilities

■ Communication

Human machine interfacing in industrial applications and simple networking

■ Measuring & Sensor Technology

Recording, measuring and evaluation of non-electrical values

Building automation

Controlling, monitoring and signalling in building services applications

The degree of automation in buildings increases in order to achieve goals like

- Simple connection of maintenance groups like electric, heating and blinds through open bus system
- Different manufacturers devices easily connectable
- Service personnel can be informed early and target-oriented about faults and service intervals
- Reduction of the on-site troubleshooting through remote maintenance

Thus, you get more comfort, safety and operating efficiency.

Applications

- Commercial buildings
- Industrial buildings
- Residential buildings
- Building automation
 - Lighting
 - Shading, light control
 - Windows, overhead lighting, doors
 - Heating
 - Ventilation
 - Security systems
 - Fire doors
 - Surveillance
 - Energy management
 - Operation/displays
 - Interfaces/gateways

Occupants and users of buildings most of all want to feel safe and comfortable. Owners are also interested in keeping energy and management costs as low as possible, and investors demand in addition an attractive return on investment. An intelligent, high-performance solution for the building infrastructure allows to reconcile all these different aspects: safety, comfort and economic efficiency.

Over the last years, a steady trend has been observed: an increasing networking of applications – and that especially in residential and functional buildings. Built-in system intelligence, communication capability and networking of components or of entire building complexes and estates offer not only a high degree of comfort, manageability and safety but also significant saving potential.

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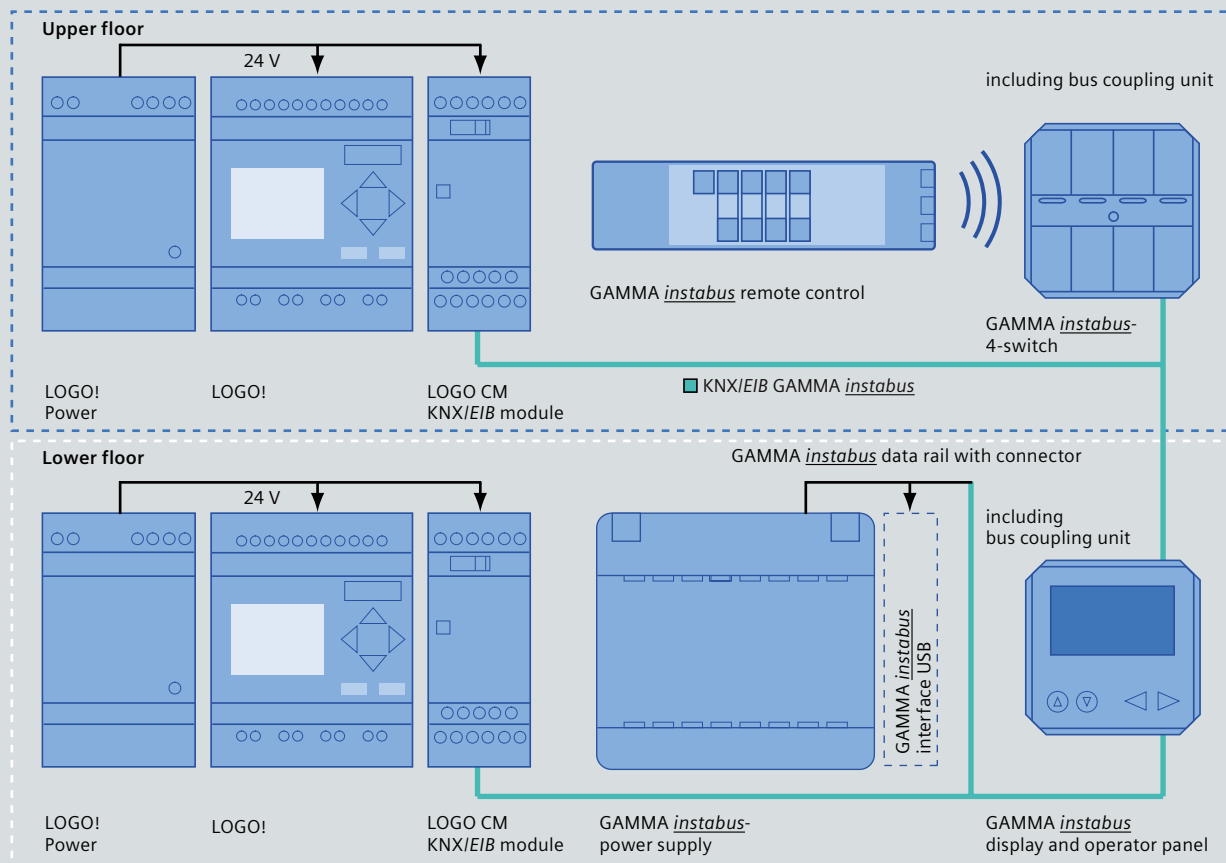
Autonomous switching in the GAMMA *instabus* network in building automation systems

Controlling, monitoring and signaling over a shared cable – with GAMMA *instabus*

- LOGO! can be networked via LOGO!CM KNX/EIB communications modules.
- The functionality of LOGO! can be expanded using GAMMA *instabus* function components.
- LOGO! functions even when the GAMMA *instabus* fails.
- LOGO! can be used as a master or slave in the GAMMA *instabus*.
- Changes to the LOGO! parameterization/configuration can also be made with a PC.
- A host of building installation tasks can be solved with LOGO!.
- LOGO! can be expanded with GAMMA *instabus* sensors.



MAS 8 hardware





Application areas

This Micro Automation Set is particularly suitable for cable-based building automation. The GAMMA *instabus* allows to control, monitor and report all functions and processes via one common line, e.g.:

- Building installations
- Building automation
- Residential buildings
- Commercial buildings

Technical specification

Products

LOGO! Power (24 V/1,3 A), primary-switched power supply Supply voltage Output voltage Output current	6EP1 3 311-1SH02 AC 85 ... 264 V DC 24 V 1,3 A
LOGO! (12/24 RC), Logic module Supply voltage Inputs/outputs	6ED1 052-1MD00-0BA5 DC 12/24 V 8 DI/4 DO (relay) , expandable to 24 DI/16 DO
LOGO!CM KNX/EIB communications module Supply voltage Digital inputs max./digital outputs max. Analog inputs max. Analog outputs max.	6BK1 700-0BA00-0AA1 AC/DC 24 V, -15% ... 20% 16/12 8 2
GAMMA <i>instabus</i> power supply Supply voltage Output current	5WG1 125-1AB21 AC 120 ... 230 V 640 mA
GAMMA <i>instabus</i> remote control Adjustable channels Transmission range	5WG1 425-7AB21 8 of 64 approx. 20 m
GAMMA <i>instabus</i> switch Number of switching cycles Display elements	5WG1 235-2AB11 20.000 4
GAMMA <i>instabus</i> display and operator panel Number of messages Number of characters per message	5WG1 585-2AB11 16 30 chars per line, max. 3 lines
GAMMA <i>instabus</i> bus coupling unit	5WG1 114-2AB02

Accessories

GAMMA <i>instabus</i> interface USB	5WG1 148-1AB02
GAMMA <i>instabus</i> date rail with link	5WG1 190-8AB01
GAMMA <i>instabus</i> bus connector	5WG1 193-8AB01
Serial interface cable	Retail

Configuration Software/ Tools

LOGO! Soft Comfort V5.0	6ED1 058-0BA01-0YA0
LOGO! PC cable	6ED1 057-1AA00-0BA0
ETS3 start up-software for KNX/EIB	www.ets3.com

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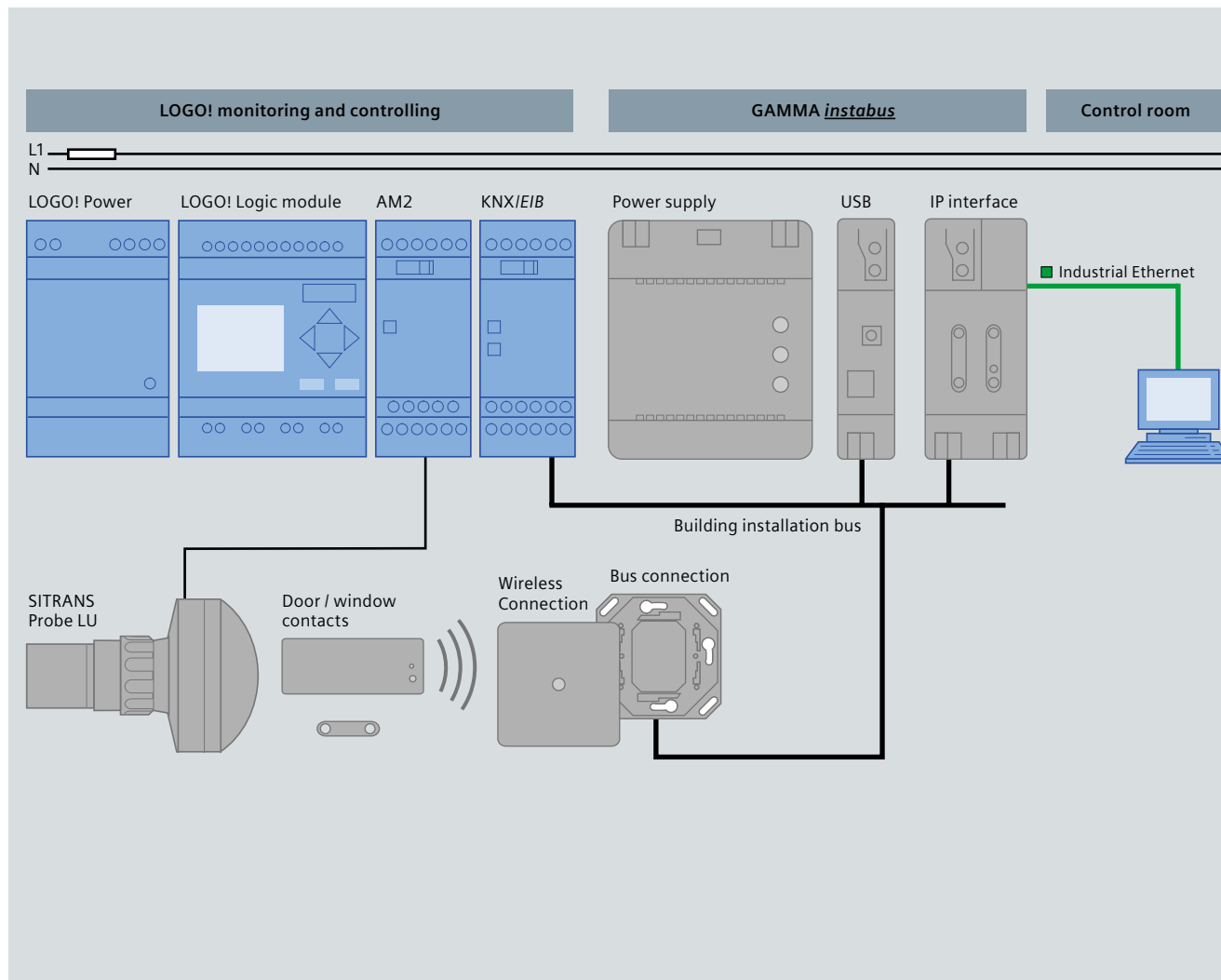
Integration via communication with KNX/EIB

Data acquisition, transfer and logging with LOGO! and KNX/EIB building system technology

- KNX/EIB building system technology, Micro Automation via Ethernet (TCP/IP) and web-based visualization working together as one system
- Completely networked – sensors for digital and analog data logging can be connected via LOGO! with GAMMA *instabus* components
- LOGO! process data are available via GAMMA *instabus* in many systems (e.g. Ethernet, infrared, wireless, ISDN, PRO-FIBUS DP, USB, RS232)
- Visualization, logging and archiving of LOGO! process data on PCs
- GAMMA *instabus* components configuration via Internet



MAS 28 hardware





Application areas

The Micro Automation Set is particularly suitable for geographically distributed buildings that have the need of centralized monitoring, e.g.:

- Controlling of heating oil purchases
- Measurement of rain water tank levels
- Measurement of road salt or bulk good containers and tanks
- Monitoring of chemicals in the water and waste water industries

Technical specification

Products

LOGO! Power (24 V/2,5 A), primary-switched power supply Supply voltage Output voltage Output current	6EP1 3 32-1SH42 AC 85 ... 264 V DC 24 V 2,5 A
LOGO! (12/24 RC), Logic module Supply voltage Inputs/outputs	6ED1 052-1MD00-0BA5 DC 10,8 ... 24 V 8 DI/4 DO (relay)
LOGO! (AM2), expansion module	6ED1 055-1MA00-0BA0
LOGO!CM KNX/EIB communications module Supply voltage Digital inputs max./digital outputs max. Analog inputs max. Analog outputs max.	6BK1 700-0BA00-0AA1 DC 24 V 16/12 8 2
GAMMA <i>instabus</i> power supply, N125/01, 160 mA Supply voltage Output voltage/current	5WG1 125-1AB01 AC 120 ... 230 V DC 29 V/640 mA
GAMMA <i>instabus</i> USB interface N 148/11 Supply voltage Interfaces Transmission rate	5WG1 148-1AB11 DC 29 V USB interfaces Max. 12 MBit/s
GAMMA <i>instabus</i> -IP interface N 148/21 Supply voltage	5WG1 148-1AB21 DC 24 V
SITRANS Probe LU, Ultrasound sensor Supply voltage Measuring range of sensor measuring range mA/HART	7ML5 221-1AA11 DC 24 V 0,25 ... 6 m 4 ... 20 mA
Door/window contacts GAMMA wave AP 260, Radio transmitter with battery	5WG3 260-3AB11
Connector wave / <i>instabus</i> UP 140	5WG3 140-2HB11
Bus connection UP 114	5WG1 114-2AB02
Configuration Software/ Tools	
LOGO! Soft Comfort V5.0 ETS3 Professional Version 3.0d	6ED1 058-0BA01-0YA0 www.konnex.org/knx-tools
IPAS ComBridge Studio Suite / Core and Webtab Services	LOGO! PC cable USB cable (Type A/Type B) www.ipas-products.com
	6ED1 057-1AA00-0BA0 available from specialist dealers

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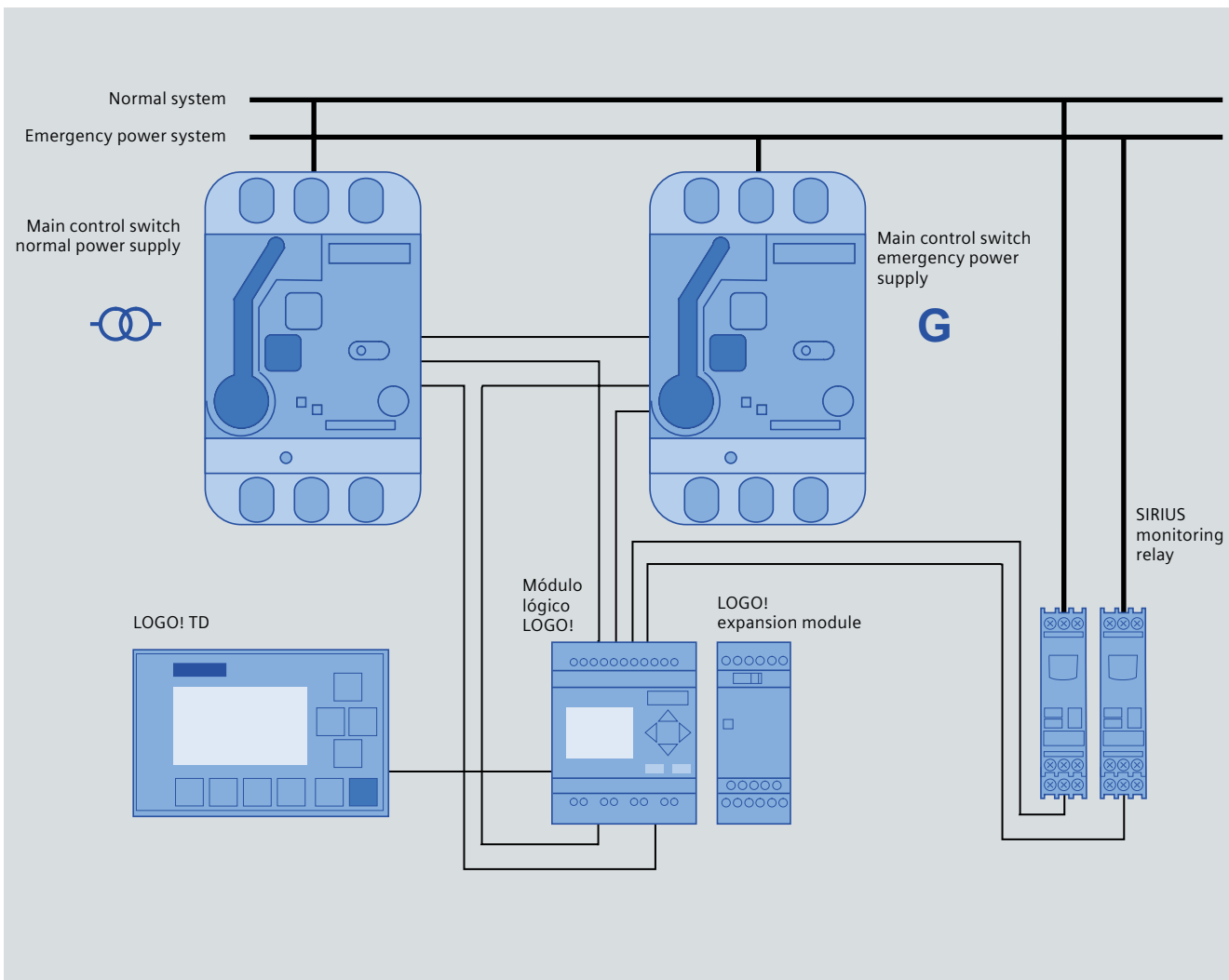
Automatic transfer switch equipment (ATSE) for continuous power supply

Automatic transfer switch from normal power supply to emergency power supply using LOGO! and SENTRON MCCBs

- Simple solution of an automatic system transfer to ensure continuous power supply in case of a power failure.
- Cost-effective control unit by using standard products.
- Expandable and flexible due to the use of the LOGO! logic module for controlling and monitoring the automatic transfer operation.
- Easy handling with the help of text display LOGO! TD
- The high demand of load transfer switch is fulfilled by SENTRON 3VL circuit breakers.
- Clearly reduced overhead and time without using service engineers
- Optimum power management by the option of power shedding when switching to emergency power supply.



MAS 29 hardware





Application area

The Micro Automation Set is particularly suitable for plants in which increased system availability has to be ensured. Continuous monitoring of the main power supply for availability ensures the automatic changing over to the emergency power supply if necessary.

Examples:

- Building technologies:
 - Computer rooms (banks, insurance companies, etc.)
 - Ventilation, air conditioning, lighting systems (malls, administrations, etc.)
 - Paging and telephone systems (service enterprises, etc.)
- Infra structure:
 - Docks and railway systems
 - Airport lighting
 - Traffic light controllers
- Industry:
 - Production lines for continuous production (foundries, chemical processes, etc.)
 - Engine rooms on ships

Technical specification

Products

LOGO! (12/24 RC), Logic module Supply voltage Inputs/outputs	6ED1 052-1MD00-0BA6 DC 10,8 ... 28,8 V 8 DI (4 AI)/4 DO (relay), expandable up to 24 DI/16 DO/8 AI/2 AO
LOGO! (DM8 24R), expansion module Inputs/outputs	6ED1 055-1HB00-0BA0 4 DI/4 DO (relay)
LOGO! TD, text display, 4 function keys, IP65 Supply voltage	6ED1 055-4MH00-0BA0 DC 12 V/AC/DC 24 V
SENTRON circuit breaker VL 160N 3-pole, plant protection with shunt release with auxiliary/alarm switch	3VL2 705-1DC33-8CD1 (2 Stück) AC 415 V AC/DC 24 V 2 HS (1 NO + 1 NC) + 1 AS(1 NO)
Motorized operating mechanism with spring energy store Supply voltage	3VL9 300-3MQ00 (2 units) AC/DC 220 ... 250 V
SIRIUS monitoring relay 3UG4 Three-phase line monitoring	3UG4 617-1CR20 (2 units) 3x AC 160 ... 690 V, 50...60 Hz
SIRIUS contactor relay with RC element	3RH1 122-1BB40 3RT1 916-1CB00

Accessories

LOGO! USB PC-Kabel	6ED1 057-1AA01-0BA0
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Configuration Software/ Tools

LOGO! Soft Comfort V6.0	6ED1 058-0BA02-0YAO
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Get more information

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