

Infinite Possibilities

Introduction to Industrial Controls

sirius

SIEMENS

CONTENTS



Ahead of progress: **Industrial Controls with innovative strength**

TOTALLY INTEGRATED

Part of the big whole:

System solutions with a future 04

INDUSTRY SECTORS

Well proven:

SIRIUS in operation 06

SIRIUS References 07

SIRIUS PRODUCTS AND SYSTEMS

SIRIUS concrete 10

Best setup:

The Program 15

SERVICE & SUPPORT

Always there for you:

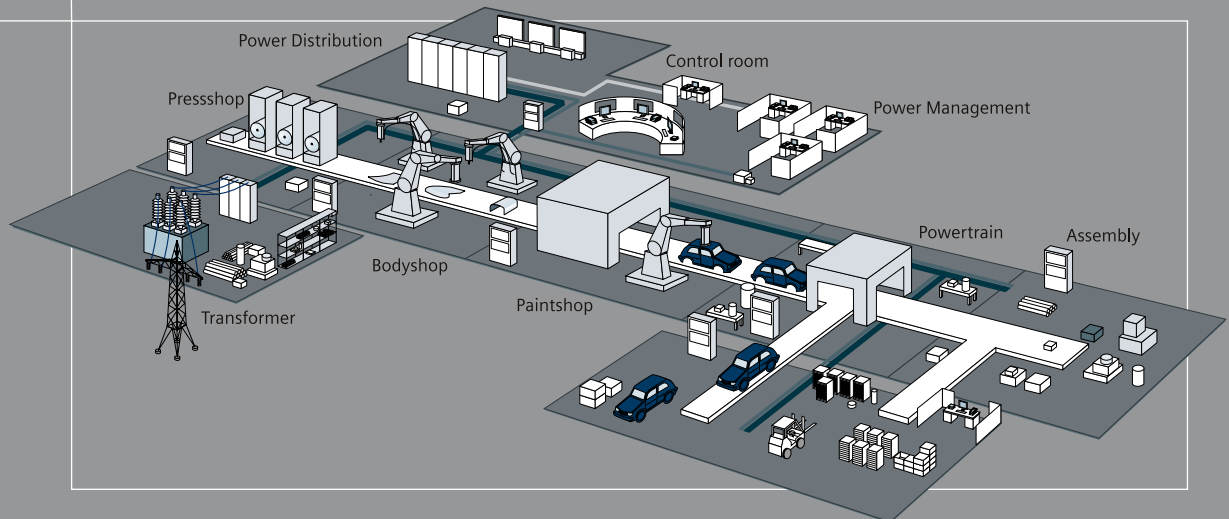
Service, Support and Training 16

The requirements in the field of industrial controls are high: Economic solutions are in demand; solutions that can be easily integrated in control cabinets or decentralized systems are optimally matched and communicate with each other perfectly. We provide the answer with our innovative complete program: SIRIUS industrial controls that puts you critical steps ahead of progress.

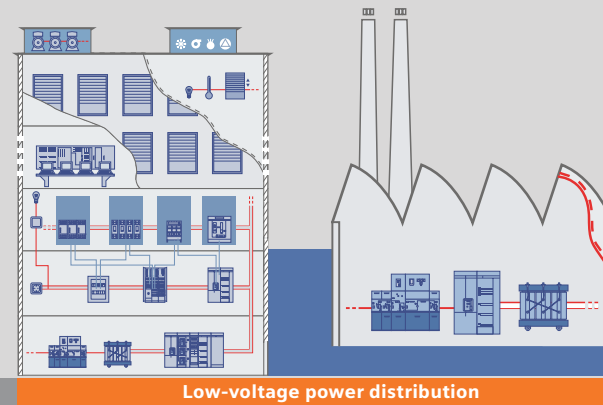
No matter which application or feeder, you will find everything that you require for switching, protecting or starting of loads in our SIRIUS family of products. Products for monitoring and controlling, detecting, commanding, signaling and supplying round off the spectrum. With Totally Integrated Automation and Safety Integrated our product portfolio can be bundled to optimized systems.

In combination with SENTRON switching devices and SIVACON power distribution boards, busway systems and cubicle systems for efficient low-voltage energy distribution, SIRIUS industrial controls deliver the global standard for trailblazing solutions. In each solution the mighty trio shines not only with long years of experience in mechanics, electronics and software, but also with consistent innovative power.

Whether in the automobile industry or other industry sectors – SIRIUS industrial controls offer reliability over all levels of automation.



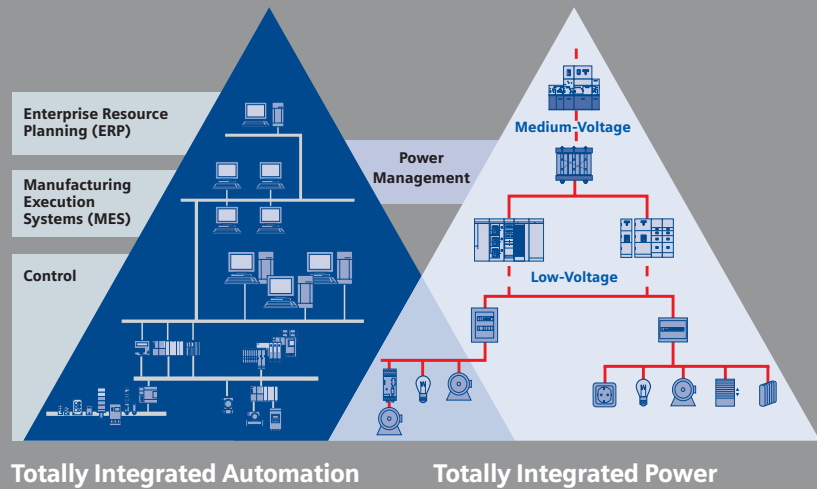
Part of the big whole: System solutions with a future

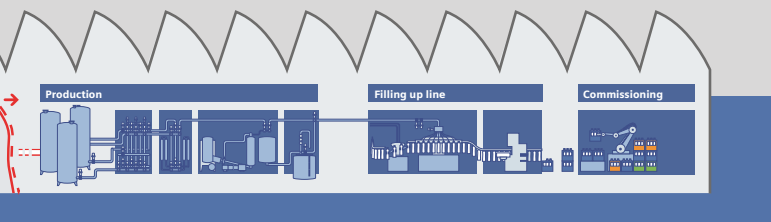


Do you want to harness the greatest possible potential for your operations? No matter how complex they are? Let Siemens meet your needs. We emphasize global solutions. We not only consider the field of industrial controls as a whole, but we also include related products, systems and solutions.

Totally Integrated Automation

With Totally Integrated Automation, Siemens is offering a global, integrated product and system spectrum for efficient automation of the entire production process. For all industry sectors. From delivery of goods through production all the way to sales. The advantages are far-reaching. Reduced interface expenditure provides the highest transparency over all levels. Best interoperability between all components reduces complexity. Engineering and operation can be realized more rapidly and global diagnostic possibilities increase system availability.





Industrial controls

Totally Integrated Power

With Totally Integrated Power we achieve global solutions for electric power distribution in commercial and industrial buildings. From medium voltage all the way to the outlet. The principle: Continuity in planning and projection, harmonized products and systems as well as communication and software tools for connection of power distribution systems to industrial automation and building automation. The result: significant savings potential for all project participants – from planning and construction down to application.

Low-voltage power distribution

Totally Integrated Power stands for superior individual products which are integrated in a logical complete system. For example the SIVACON systems in low-voltage power distribution cover the whole spectrum from 25 A to 6300 A or 7400 A – with switchgear as well as busway systems 8PS. Your optimal solution for economic planning and secure operation.

Also in charge of power distribution: the family of SENTRON switching devices. It covers the whole spectrum from 16 A to 6300 A – from proven switch disconnectors to the carefully thought out circuit breakers VL and WL. SENTRON circuit breakers and switch disconnectors enable ease of use through their modular structure in connection and assembly, extensive accessories and global use through international standards.

Of course, our offer in low-voltage power distribution also includes the appropriate software package, which takes charge of the sizing, configuration, visualization and control of your power distribution.

Safety Integrated: Integrated safety technology from one hand

For machine manufacturer to machine operator it holds true: The safe interaction of man and machine must continue without interruption. The solution: our safety concept Safety Integrated on the basis of Totally Integrated Automation. Whether for simple safety functions or highly complex tasks – our program offers you maximum safety.

Safety Integrated is a unique, complete and global safety program and covers all tasks in the field of safety technology: from detection, evaluation and response, from sensor to actuator, from control all the way to drives. Our products fulfill the applicable safety standards in the industry, including TÜV, NFPA and UL.

All Safety Integrated products or systems can be seamlessly integrated into standard automation. With this they are particularly flexible and economical, accelerate the engineering, increase the availability of the system and enable a practice-oriented machine operation. With the extensive product, support and service offering of Safety Integrated you are always safe.

Well proven: **SIRIUS in operation**

With our extensive spectrum of SIRIUS industrial controls we support nearly all sectors of industry in meeting their essential requirements and optimizing their potential.



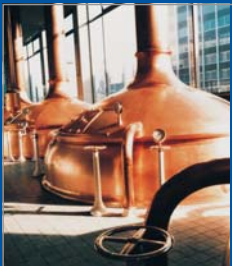
In the chemical industry one single malfunction of the pump system can cause catastrophic environmental damage. In order to reduce errors to a minimum, a special control device was developed on the basis of our AS-i system. The solution provides maximum safety while minimizing costs.

Chemicals



For water one needs modern technology that works reliably and guarantees a high service life. Our devices are used globally in a multitude of pumping stations necessary for the supply of drinking water. Through the use of the SIRIUS product family, plant operators can save space and time as well as lower costs.

Water



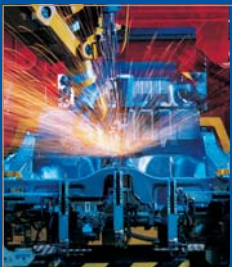
The food and beverage industry must document processes continuously and manufacture products efficiently. For this reason they use decentralized starter technology. Through extensive data gathering, a preventive maintenance concept can be developed.

Food & Beverage



The oil and gas industry must meet the highest safety and reliability requirements. Thus only those devices and protective systems may be used which are certified under the guideline 94/9/EG (Atex 100a). In order to reduce the risk of plant shutdowns, many plant operators place their trust in SIRIUS industrial controls.

Oil & Gas



The automobile industry values flexible solutions, above all, due to the continuously increasing variety of models. Our motor starter ET 200S offers optimum flexibility and expandability through modularization and decentralization. The investment protection is guaranteed through the linking of existing field buses.

Automotive



The primary objective of the pharmaceutical industry is to optimize the entire manufacturing process. For control and monitoring of the process flow and to prevent malfunctions, the SIMOCODE pro motor management system is used.

Pharmaceuticals

SWITCHING

Hot action for SIRIUS solid-state switching devices



GEISS Thermoforming specialized in vacuum thermoforming machines. These machines use upper and lower heating to make thermoplastic polymers soft then pull them over the workpiece with the help of vacuum jets. Wear-free switching devices are used to run heating elements reliably even with high switching frequencies. SIRIUS solid-state switching devices are perfectly suited for this. They do an excellent job of switching a heating capacity of e.g. 30 kW, and are particularly compact to save space.



PROTECTING

How it works with overseas export



Good news for anyone who has to design the control cabinets of export machines: SIRIUS is offering the first global combination circuit breaker/protective motor switch, which meets UL 489. Due to its standard design, control cabinets can be uniformly designed. Thus fuse-free protection of motors and non-motor loads is possible. For circuit protection above 100 A our comprehensive SENTRON offering is available, and UL approved.



STARTING

Overdrive gear for compressors in sewage treatment plants



Binowa, a manufacturer of control systems for biological sewage treatment plants, puts its trust in SIRIUS High Feature soft starter for controlling compressors for oxygen supply. The reason: The multitalented 3RW44s have all the functions of a modern motor feeder already on board – an integrated bridging contact system, an electronic overload relay, device overload as well as thermistor motor protection. The perfect solution in order to realize high compressor performance at 250 kW and above with low costs and high efficiency due to the gentle startup and soft stopping of motors.



STARTING

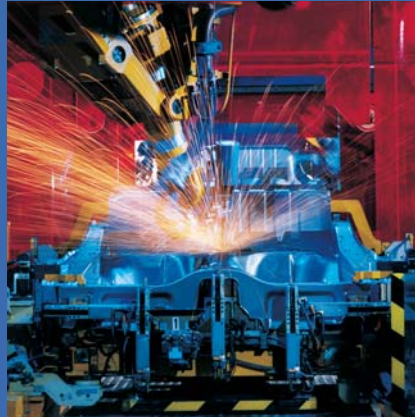
Fresh meat at Edeka



Each hour in the meat logistics at Edeka, up to 1,500 E1 and E2 containers are automatically emptied, washed, dried and sorted in a chaotic process. For Reba-System, the company assigned to develop the electronics concept for this, one thing was critical: a transparent, simple structure with minimum maintenance expenditure. The SIRIUS 3RV19 infeed system with spring-loaded terminals perfectly meets the requirements. Its modular construction provides for easy assembly, wiring and maintenance, since the individual feeders can be replaced even during operation.

MONITORING & CONTROLLING

How the BMW 3 series gets on the street safely



In the Munich factory a BMW 3 series rolls off the belt every 68 seconds. Delays or even a standstill at the final assembly line are an absolute taboo, as they really cut into the money in the automobile industry. An innovative monitoring and EMERGENCY STOP concept are all the more important to consistently eliminate such losses.



That's why experts in driving pleasure place their trust in the intelligent monitoring relay SIRIUS 3UG, thus securing an on-time delivery.

MONITORING AND CONTROLLING

SIMOCODE pro keeps beer quality high

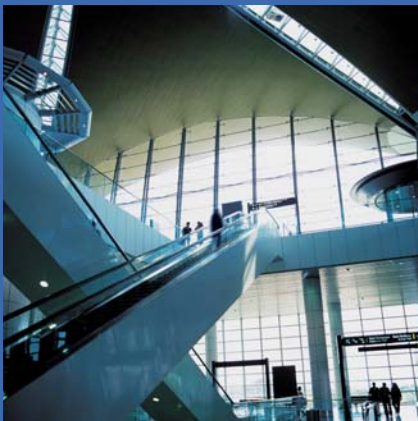


Beer quality in Germany has its own laws. SIMOCODE pro makes sure no one can doubt this in an internationally established brewery in Munich. For the modern and flexible SIRIUS motor management system monitors and controls the expensive processing technology with watchful eyes. Day and night. From fermentation to aging all the way to bottling and storage. So that beer continues to taste so good.



DETECTING

SIRIUS keeps the elevator industry moving



Escalators make special demands on personal protection. To ensure that the young and old, large and small are reliably transported, manufacturers place their trust in the detection of the conveyors on SIRIUS position switches. With



the smallest case dimensions, reliable snap action contacts and positive opening operation per EN 81 they fulfill all the requirements in order to provide maximum safety on escalators.

COMMANDING & SIGNALING

How Swiss mail carriers keep their cool

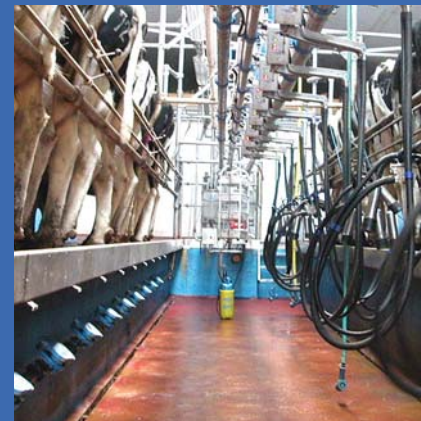


They say that the Swiss as a rule are more laid back, but in spite of that fact, the mail must be delivered quickly. To ensure that the highly automated Swiss mail distribution center successfully sorts and coordinates, our SIRIUS 3SB3 pushbuttons and indicator lights are on the job. In response to a special customer request, 18 different special lockings are installed in the enclosure, in order to guarantee safe operation over all process phases. This is how the mail gets delivered in Switzerland!



SUPPLYING

For happy cows



"Milk stoppage" is an unpleasant affair both for the cow as well as the dairy farmer. This is also what a milk producing operation noticed when there were more and more breakdowns of



this type in their own automatic milking machine. Even more annoying: The engineers couldn't find any explanation.

The remnants of the milk remained in the udder of the cow for undetectable reasons and caused serious inflammations. This was an unbearable circumstance which almost ruined a 6th generation dairy farmer. SIRIUS remedied the situation. The cause for the dilemma was current fluctuations. Through the installation of an additional power supply this situation was improved and the stress factor for the cows during the milking operation was eliminated. Now the milk is running like clockwork and we have learned: SIRIUS even makes cows happy.

AS-INTERFACE

Each piece of luggage must get to the right plane – Munich Airport relies on the AS-Interface



The structure of Terminal 2 at the Munich Airport is one of the most challenging traffic technology projects due to its size and the short building time. A complex luggage conveyance system was supposed to be implemented on 260,000 m² in only 10 months. Each day, 100,000 pieces of luggage had to be conveyed through the system in less than 30 minutes. The pre-assembly, trial run and startup were implemented in significantly shorter times through the use of the AS-Interface. The simplicity and flexibility of AS-Interface enabled trouble-free and cost-effective wiring of 11,000 conveyance elements.



SIRIUS SAFETY INTEGRATED

ASIsafe simplifies industrial protection at UPS



At UPS thousands of packages are handled daily on a 700 m long sorting system. Just as important as the smooth operation is the safety of the employees. This is a clear case for ASIsafe. When UPS wanted to increase the speed of the system, the flexible AS-Interface won them over because it had the ability to be integrated into existing systems. The startup took place during operation – and the entire changeover was implemented with a time savings of 30%. Thanks to ASIsafe UPS can now operate even faster.



SIRIUS SAFETY INTEGRATED

Safe wheel mounting at Opel in Ruesselsheim



The wheel mounting on the completely assembled vehicle bodies is performed partially automatically, partially by hand. The safety requirements are correspondingly high. In order to implement the necessary functions on cell level as a safe and flexible system, ASIsafe is used along with the plant-wide PROFIBUS. The reason: installation, startup and maintenance can be implemented economically and results like productivity, quality and availability are guaranteed. So that the Opel rolls safely.



SWITCHING



Whether it's reliable contactors, easy to operate relays or innovative solid-state switching devices for the toughest applications – SIRIUS offers everything to do with the safe and reliable switching of motors and resistive loads.



Solid-state switching devices

The ideal solution, especially for applications with high switching frequency, because it saves costs and space, with nearly unlimited service life.



Contactors

Whether it's with air or vacuum – SIRIUS contactors prove themselves under the most extreme conditions – high contact reliability as well as service life.



Coupling technology

Everything in the way of switching coupling relays and semiconductor couplers that you require for electrical isolation, amplification and signal matching as well as for switching small loads.

PROTECTING



Protect motors and systems effectively and increase system availability – SIRIUS protects from overload and short circuit, temperature-sensitively or current-sensitively. So that everything keeps moving.



Overload Relays

No matter what need or budget – SIRIUS protects motors from overloading, phase unsymmetry or failure.



Circuit Breakers

Switch off safely with SIRIUS 3RV in case of short circuit and reliably protect motors and systems from overload.

The concrete advantages:

- **The SIRIUS modular system:** Contactors, circuit breakers and overload relays form a matched, modular system
- Economic solid-state switching devices with high service life
- Simple layout of the contactors with only 7 standardized sizes for 3 to 250 kW
- High contact reliability of the contactors even under the most extreme conditions with no derating up to 60 °C
- Depending on the design, rapid tool-free assembly and wiring with cage clamp technology
- Coupling technology in a single voltage or in wide range voltage AC/DC 24–240 V
- Reduced warehousing costs through type reduction and uniform accessories
- Simple and quick installation
- Can be used globally due to comprehensive approvals

STARTING



Accelerate: with fuseless combinations of circuit breaker and contactor or combinations with contactor and overload relay, from direct starters and star-delta combinations all the way to soft starters. Or decentralize your system with communication-capable motor starters.



Soft starter

A wide and flexible assortment for gentle startup and controlled stop.



Load feeders

Due to the integrated pre-wiring, the fuseless load feeders can be installed quickly and easily. They are the optimal solution, particularly in centralized control systems.



Feed system

The convenient current supply system provides distribution for a group of load feeders up to 11 kW in cage clamp technology.



Motor starter for ECOFAST

The robust starter solution in high degree of protection with standardized plug connections as well as terminal connection for AS-Interface or PROFIBUS.



Motor starter ET 200S

The complete pre-wired motor starter to the SIMATIC ET 200S system is available as direct or reversing motor starters and can be replaced during operation without tools.



Motor starter ET 200pro

As a part of the ET 200pro system, designed in IP65 degree of protection, protect and switch any three-phase loads.



Motor starter AS-Interface

The fast and easy connection option for 24 V DC motors plus sensors in the lowest power range up to 70 watts.

MONITORING & CONTROLLING



With countless relays and safety relays as well as the intelligent and communication-capable motor management system SIMOCODE pro you can monitor and control motors and systems easily and reliably.



Motor management

The flexible, modular motor management system SIMOCODE pro for motors with constant speeds implements all motor protection and control functions, determines operational, diagnostic and statistical data and regulates communication between automating systems and motor feeder via PROFIBUS DP.



Relay

One of the most comprehensive relay programs on the market is SIRIUS relays. Whether you need voltage, phase, power, time or temperature monitoring relays – you will find everything you need.



Interface converter

The interface converters are used for electrical isolation and conversion of electric signals. For a rapid adaptation to higher order control systems.



Safety relay

Whether emergency stop, protective door monitoring or pressing and stamping protection – our vast product portfolio ranges from economical standard components to innovative, highly flexible multi-function devices. All provide for a transparent, efficient safety chain.



Thermistor motor protection

Our temperature-sensitive devices SIRIUS 3RN precisely and reliably measure the temperature directly on the motor.

- Quick planning and installation through simple wiring and useful connection and assembly accessories
- Low space requirements
- Reduced engineering and start up with motor starters for decentralized solutions through linking to Totally Integrated Automation and Software Motor starter ES

The highlights:

- SIMOCODE pro: high system availability and optimal motor utilization for significant productivity increases
- Broad spectrum of multi-functional and user-friendly relays in one family
- Safety relays: reliable basis of a transparent and economical safety chain
- Thermistor motor protection: evaluation devices for warning and switching off all the way to evaluation devices for 6 sensor circuits (multiple motor protection)

DETECTING



Shut off machines and systems immediately in case of an accident? No problem for SIRIUS detecting devices for standard and safety applications.



Standard Position switches

With standardized enclosures and practically-oriented actuators, our position switches show their strengths in every application.



Position switches with separate actuator

The tamper-proof combination of switch part and multiple coded actuator for monitoring the position of doors, covers or protective bars – also available with tumbler or special devices, such as a short stroke switch.



Hinge switches

The fixed, positive connection between switch and hinge offers maximum protection from overload and manipulation of swiveling doors or shutters.



Magnetically-operated switches

The ideal guard for protective doors because it is non-contact.

The concrete advantages:

- Standardized designs and functions
- Simple installation, wiring and maintenance
- Numerous drive variants
- Low switching tolerances

www.siemens.com/sirius-detecting

COMMANDING & SIGNALING

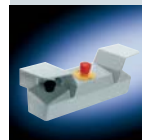


In the dialog between man and machine special attentiveness is needed. Therefore, SIRIUS offers you extensive possibilities for the signaling of warnings or system faults – both acoustic and visual.



Pushbuttons units and indicator lights

Highest functionality, modern and flat design as well as special user-friendly installation – convincing all across the board.



Two-hand operation consoles

So that the hands of the operating personnel remain where they belong.



Foot switches

Ideal when the operator's hands are supposed to be free.



Integrated signal lamps

Mounted directly to the machine to supply important visual signals.

The Highlights:

- Screw or cage clamp technology
- Communication via AS-Interface connection
- EMERGENCY STOP installation
- Long service life thanks to LED technology
- Flat, ergonomic shape, combined with touch-sensitive keyboard

www.siemens.com/sirius-commanding

SUPPLYING



Modest in space requirements, but all the more reliable – SIRIUS provides the right voltage for electrical systems.



Power supplies

Uniform voltage to minimize down times – our power supply devices supply electrical systems with constant voltage.



Transformers

The professionals for the right voltage in any situation.

The concrete advantages:

- Tremendous space-savings through compact design
- Robust, safe and reliable
- Can be used globally due to comprehensive approvals
- Supply for PLC available

www.siemens.com/sirius-supplying

AS-INTERFACE

No other bus system combines all automation components in the field so simply, safely and transparently as AS-Interface. You get all the components for installation, operation, and maintenance of an AS-Interface network in one product. As an integral component of Totally Integrated Automation, AS-Interface enables automation solutions which allow transparency in record keeping, planning and communication.



Master

The AS-i Master combines components with the higher level control system. It independently organizes the data traffic on the AS-i line and provides the sensor and actuator signals at an interface.



Power supplies

As an integral component of the AS-Interface network, the power supplies generate a regulated direct voltage of 30 V DC with high constancy and low residual ripple.



Slaves

The standard, safe slaves which can be used in the field or control cabinet contain the AS-Interface electronics as well as connectivity for sensors and actuators. Via the slaves, the data reach the higher order control system quite easily.

Comprehensive accessories

For assembly and installation of a complete AS-Interface network or of individual components we offer comprehensive accessories which facilitate the application and expansion of AS-Interface as well as lowering infrastructure costs.

Software

Comprehensive software tools enable simple planning and detailed diagnosis of the AS-Interface network.



ASIsafe

ASIsafe (AS-Interface Safety at Work) is the failsafe version of AS-Interface: Both safety and standard data are transported on one and the same bus system.

SIRIUS SAFETY INTEGRATED

SIRIUS Safety Integrated is our program for failsafe switching technology. Our solutions for transparent safety tasks on cell level protect man, machine and environment as well as increase system availability. In conjunction with standard field buses, such as PROFIBUS or AS-i, SIRIUS Safety Integrated solves network related problems.



maximum pressing and stamping safety, effective cable-operated switches, which can be used as EMERGENCY-STOP devices in particularly long and hazardous areas, as well as signaling columns.

Safety relays

For optimal monitoring and evaluation of failsafe sensors. The spectrum ranges from economic standard components to innovative multifunction devices for almost every application.

Detecting devices

For continuous control of all processes between humans and machines, such as the monitoring of protective devices or the detection of dangerous movements of machine parts.

ASIsafe Safety Monitor

The heart of ASIsafe is monitoring of the information transmitted via AS-Interface cable. In the case of the interruption of the safety circuit or malfunction of the safety sensors, the monitor puts the system in a safe state.

Commanding and Signaling Devices

We offer everything required for an immediate machine or system shut-off: EMERGENCY-STOP control devices, two-hand operation consoles for

Safety Motor Starter ET 200 Solutions

As a component of the distributed SIMATIC ET 200S I/O system with IP20, our motor starters provide for a failsafe motor shut-off.



The Highlights:

- Easy assembly and operation through simple structure
- Simple and transparent diagnosis and parametrization
- Integrated safety technology (ASIsafe)
- Integral component of Totally Integrated Automation

The concrete advantages:


- High profitability via reduced installation and engineering expenditures
- Changes and expansions can be implemented easily due to product compatibility
- Fast error detection through built-in diagnostic capability
- Integral component of Totally Integrated Automation

Best setup: The Program



Simply on.
Simply off.
Day and night.

Switching



Simply always wide awake.

Detecting




Simply in safe hands.

Protecting




Simply always know what is happening.

Commanding and Signaling



The easy way to get things moving.

Starting



Limitless possibilities.

Supplying



See everything easily.

Monitoring and Controlling

AS-Interface



SIRIUS Safety Integrated



Systems

Always there for you: Service, Support and Training

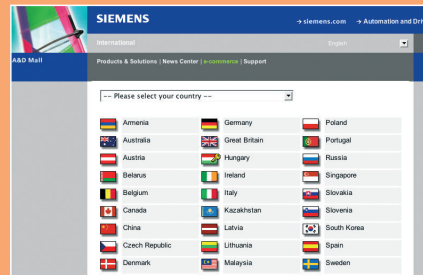


Technical Assistance

Looking for the right device for your application? Got a technical question, need a replacement part or looking for an on-site specialist? We'll help you. Our experienced team of engineers and technicians will be glad to help you:

- Personally from Monday–Friday 8:00 to 5:00 PM (Central European Time) at the following telephone number: **+49 (911)-895-5900**
- Via e-mail at: **technical-assistance@siemens.com**
- via fax: **+49 (911)-895-5907**

At **www.siemens.com/lowvoltage/technical-assistance** you can search the FAQ database around the clock for information and solutions for your problem or send your question directly to a technical consultant via Support Request.



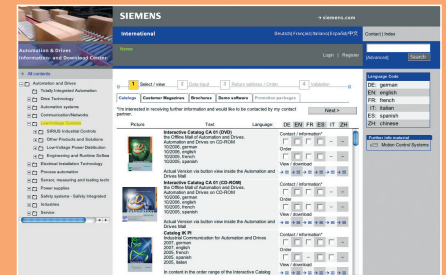
E-Business

Around the clock access to our entire portfolio? The A&D Mall makes it possible.

At **www.siemens.com/automation/mall**

you will find a comprehensive information and ordering platform. Whether you want to select products, track delivery status or find out important information about service, support or training – the A&D Mall has everything worth knowing.

You can get more detailed technical information about the products at: **www.siemens.com/automation/support**



Catalogs and Information Material

In the information and download center you will find all of the current catalogs, client magazines, brochures, demo software and instruction manuals for downloading or ordering.

www.siemens.com/lowvoltage/catalogs

Configurators

You can find our offering of product configurators at **www.siemens.com/lowvoltage/configurators**



Training

At numerous locations worldwide, our training centers offer you continuing education programs all about automation and industrial solutions. We also offer self-paced training software for more time and cost effective training. You will find everything about our comprehensive training program on the Internet at:

www.siemens.com/sitrain-cd

Or contact us personally via the Infoline telephone number:

+49 (180) 5 23 56 11

Or fax us:

+49 (180) 5 23 56 12



Something new in Life Cycle Support: Asset Management

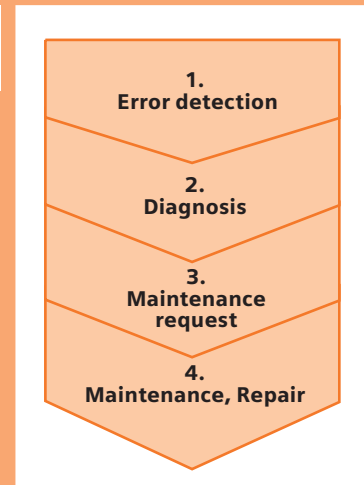
Systems operators in all branches would like to increase their productivity. The most effective lever: higher availability. The economically optimum mix consists of:

- Freedom from maintenance
- Advance failure warning
- Preventive maintenance
- Rapid debugging

To this end, we developed SIRIUS components like such as contactors with RLT (remaining life time) display, or the motor management system SIMOCODE pro with a system-supported diagnostics, particularly in combination with the latest version V6.1 of our process system SIMATIC PCS 7, which has an integrated Asset Management tool.

More information at:

www.siemens.com/maintenance



A success factor for more productive and economical assets: Asset Management

SERVICE & SUPPORT

SERVICE & SUPPORT

Fax Order +49/911/978-3321 CD/Z1311

Newsletter

Always up to date: Our regular Newsletter gives you current information about industrial controls and power distribution. Simply register under www.siemens.com/lowvoltage/newsletter

Please send the selected information to the following address:

Company/Department

Name

Street, Postal Code/City

Telephone/Fax

E-mail

MONITORING AND CONTROLLING	<input type="checkbox"/> SIRIUS Solid-state switching devices		
	<input type="checkbox"/> SIRIUS Infeed system	<input type="checkbox"/> SIRIUS Engineering load feeders	<input type="checkbox"/> SIRIUS Motor starter
DETECTING	<input type="checkbox"/> SIRIUS Soft starter	<input type="checkbox"/> SIMATIC ET 200pro	
	<input type="checkbox"/> SIRIUS Motor management system SIMOCODE pro	<input type="checkbox"/> SIRIUS Relays	<input type="checkbox"/> SIRIUS Safety Relays
COMMANDING AND SIGNALING	<input type="checkbox"/> SIRIUS Position switches		
	<input type="checkbox"/> SIRIUS Pushbuttons and indicator lights	<input type="checkbox"/> SIRIUS Signaling columns and integrated signal lamps	<input type="checkbox"/> SIRIUS Cable-operated switches
SUPPLYING	<input type="checkbox"/> SIVENT Fans	<input type="checkbox"/> SIDAC Reactors & filters	<input type="checkbox"/> SIDAC & SIVENT Solutions
	<input type="checkbox"/> Motor starter ES	<input type="checkbox"/> SIMOCODE ES	
ENGINEERING	<input type="checkbox"/> Soft starter ES		
	<input type="checkbox"/> SIRIUS Safety Integrated	<input type="checkbox"/> AS-Interface	<input type="checkbox"/> SIRIUS Connection systems
SIRIUS AND MORE	<input type="checkbox"/> ECOFAST	<input type="checkbox"/> AS-i News	<input type="checkbox"/> SIRIUS Modular system

Siemens AG

Automation and Drives
Low-Voltage Controls and Distribution
P.O. Box 48 48
90327 NUREMBERG, GERMANY

www.siemens.com/lowvoltage/technical-assistance
www.siemens.com/sirius

The information provided in this brochure contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.

All product designations may be trademarks or product names of Siemens AG or supplier companies whose use by third parties for their own purposes could violate the rights of the owners.