SIRIUS ACT with PROFINET

Sales slides

Free to use | © Siemens 2024 | SIRIUS ACT 3SU1

SIEMENS

SIRIUS ACT
convinces with its flexible communication

Flexible communication

Benefits

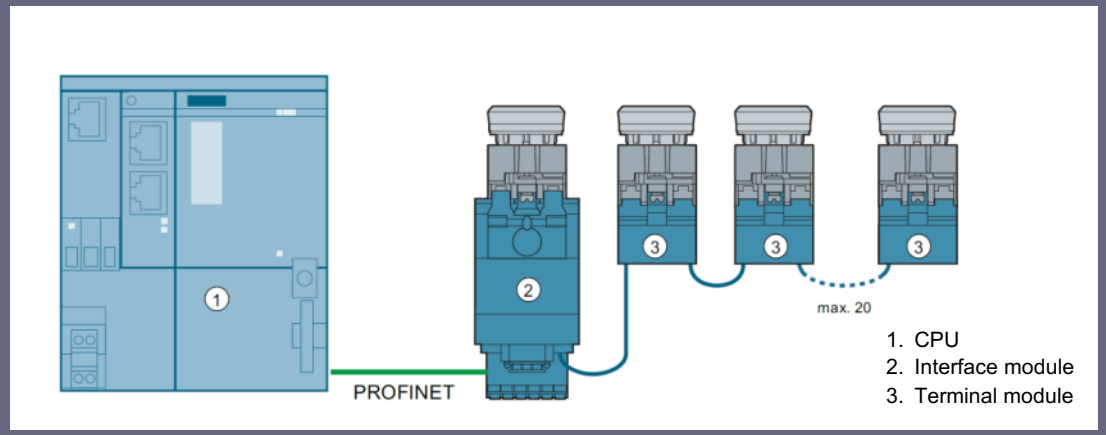
- Reduced wiring outlay and thus less sources of error during installation and commissioning
- High flexibility for modifications due to the modular plug-in design
- Extended diagnostics and parameterization options resulting from integration in the TIA Portal
- Safety Integrated option: EMERGENCY STOP incorporated via PROFIsafe/ASIsafe communication
- Communication solutions for PROFINET (control panel), IO-Link (enclosure solution/ID key-operated switch) and AS-i (enclosure solution/EMERGENCY STOP connection for the control panel)

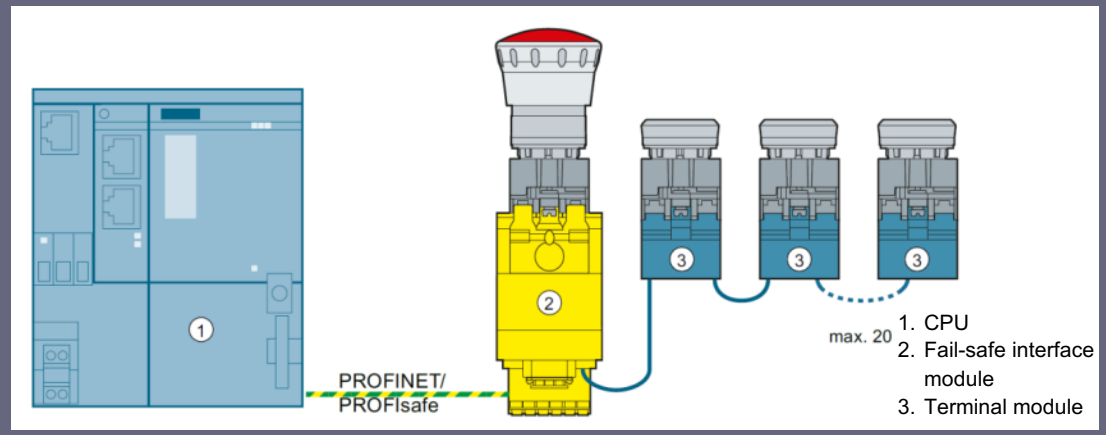
Reduce your wiring outlay through diverse communication solutions!

 Free to use | © Siemens 2024 | SIRIUS ACT 3SU1

SIEMENS

SIRIUS ACT with PROFINET
Flexibility in all applications





System data

- Maximum configuration: 1 interface module + 20 terminal modules
- Cable length between the modules: 1 meter
- Total cable length (IM – TM): 10 meters
- Power supply: 24 V DC

 Free to use | © Siemens 2024 | SIRIUS ACT 3SU1

SIEMENS

SIRIUS ACT with PROFINET
Flexibility in all applications

SIRIUS ACT PROFINET with PROFIsafe (Safety)

- If there is a safety-relevant SIRIUS ACT device (e.g. EMERGENCY STOP up to SIL 3) in the application, it can be integrated easily via the fail-safe interface module (IM F).
- Safety-relevant → connection to IM F

SIRIUS ACT PROFINET without safety

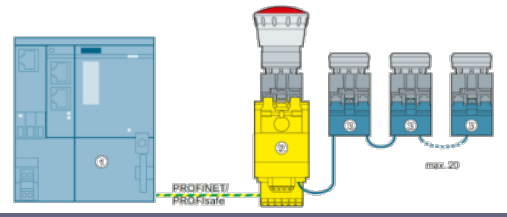
- All devices that are not safety-related can be integrated with the interface module (IM).

SIRIUS ACT PROFINET combined with standard cabling

- A combination of terminal modules with standard modules is also possible.
- For this purpose, the terminal module is snapped directly onto the back of the three already mounted contact modules.

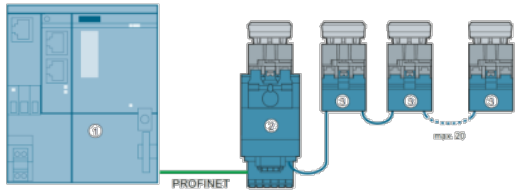
SIRIUS ACT application WITH safety

1. CPU
2. Fail-safe interface module
3. Terminal module

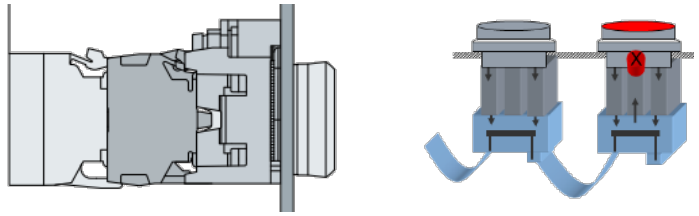


SIRIUS ACT application WITHOUT safety

1. CPU
2. Interface module
3. Terminal module



SIRIUS ACT standard contact modules + communication application

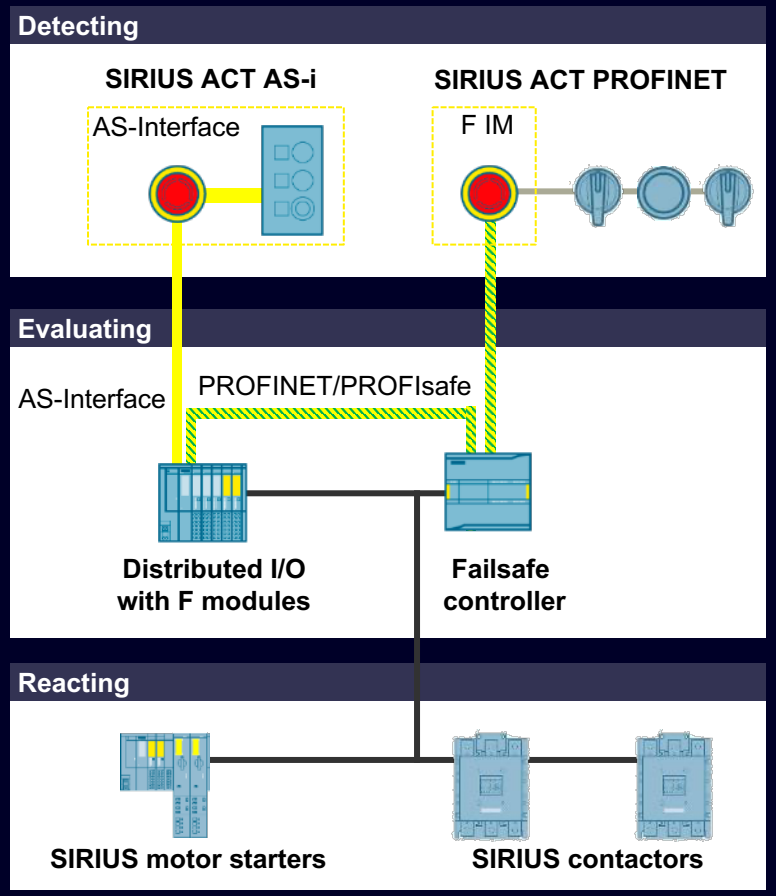


 Free to use | © Siemens 2024 | SIRIUS ACT 3SU1

SIEMENS

SIRIUS ACT
is part of the integrated safety technology

Integrated safety technology



Features

- SIRIUS ACT can be integrated easily and quickly into the safety technology of an automation process via PROFINET/PROFIsafe.
- SIRIUS ACT enclosures and devices can be integrated easily and quickly into the safety technology of an automation process via ASIsafe.
- SIRIUS ACT is also integrated in the Safety Evaluation Tool.

>

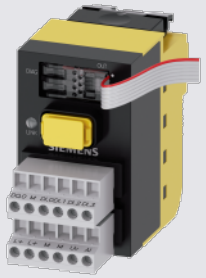
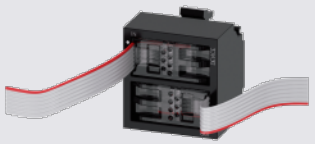
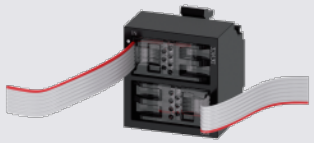
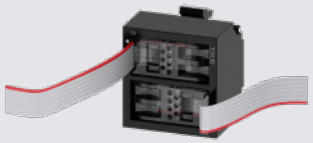
Customer benefits

- Reduces components and wiring
- Extended diagnostic capabilities
- Integrated in the TIA Portal
- Quick creation of reports and determination of the safety integrity level (SIL/PL) achieved via Safety Evaluation Tool

Free to use | © Siemens 2024 | SIRIUS ACT 3SU1

SIEMENS

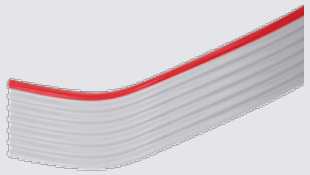
SIRIUS ACT with PROFINET
Just a few components for a complex Panel

Interface module IM	Interface module IM	Interface module F IM F Safety	Terminal module TM (command module)	Terminal module TM (command and LED module)	Terminal module TM (LED module)
					
• PROFINET • 24 V power supply Spring-loaded terminal and screw terminal	• PROFINET • 4 DI (digital inputs) • 1 DQ (digital output) • 1 AI (analog input) • 24 V power supply Spring-loaded terminal and screw terminal	• PROFINET/ PROFIsafe • 4 DI (digital inputs) • 1 DQ (digital output) • 1 AI (analog input) • 24 V power supply Spring-loaded terminal and screw terminal	• For mounting on all non-illuminated SIRIUS ACT actuators, max. 2 mechanical signals • Non-illuminated pushbuttons, selectors	• For mounting on all illuminated SIRIUS ACT actuators, max. 2 mechanical signals **Colors:** red, green, yellow, white, amber, blue	• For mounting on all SIRIUS ACT indicator lights **Colors:** red, green, yellow, white, amber, blue

 Free to use | © Siemens 2024 | SIRIUS ACT 3SU1

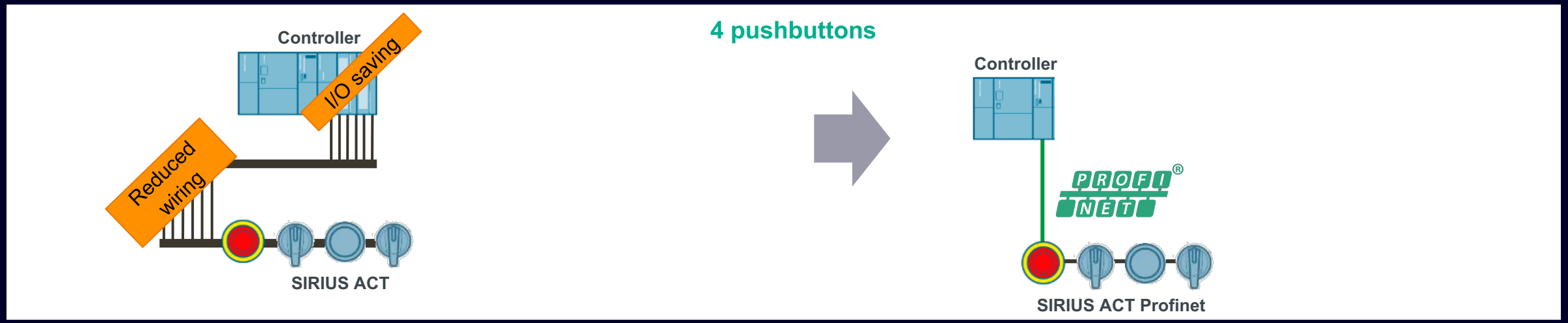
SIEMENS

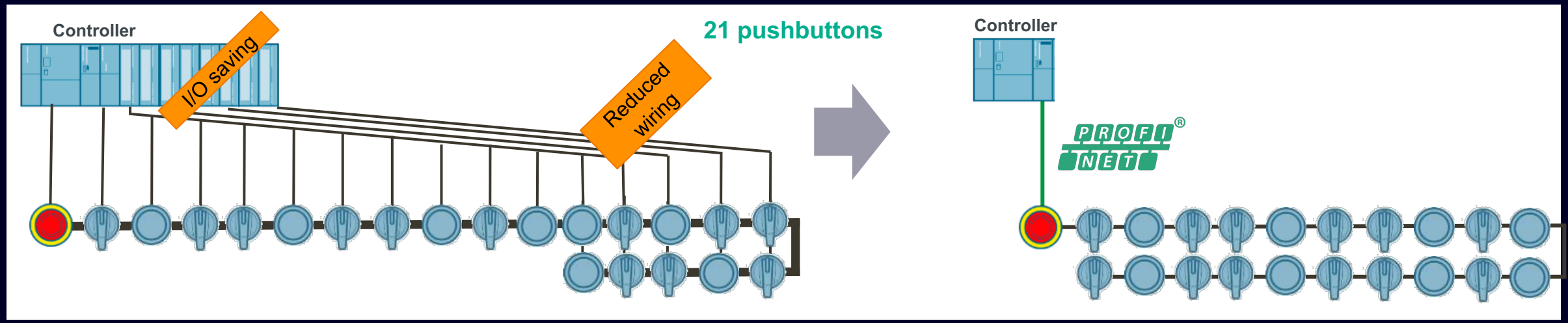
SIRIUS ACT with PROFINET
Accessories facilitate handling

Memory module	Integrable LEDs	Cable
		
Enables fast device replacement without engineering tools and product-specific engineering know-how Optional for IM; always available for IM F.	Enhanced flexibility thanks to fast LED replacement on the interface module.	7-wire flat ribbon cable **Grid:** 1.27 mm **Cross-section:** 0.081 mm² (per stranded wire) 5-meter cable or 10-meter cable possible

Free to use | © Siemens 2024 | SIRIUS ACT 3SU1
SIEMENS

SIRIUS ACT with PROFINET
1st benefit: Reduced wiring

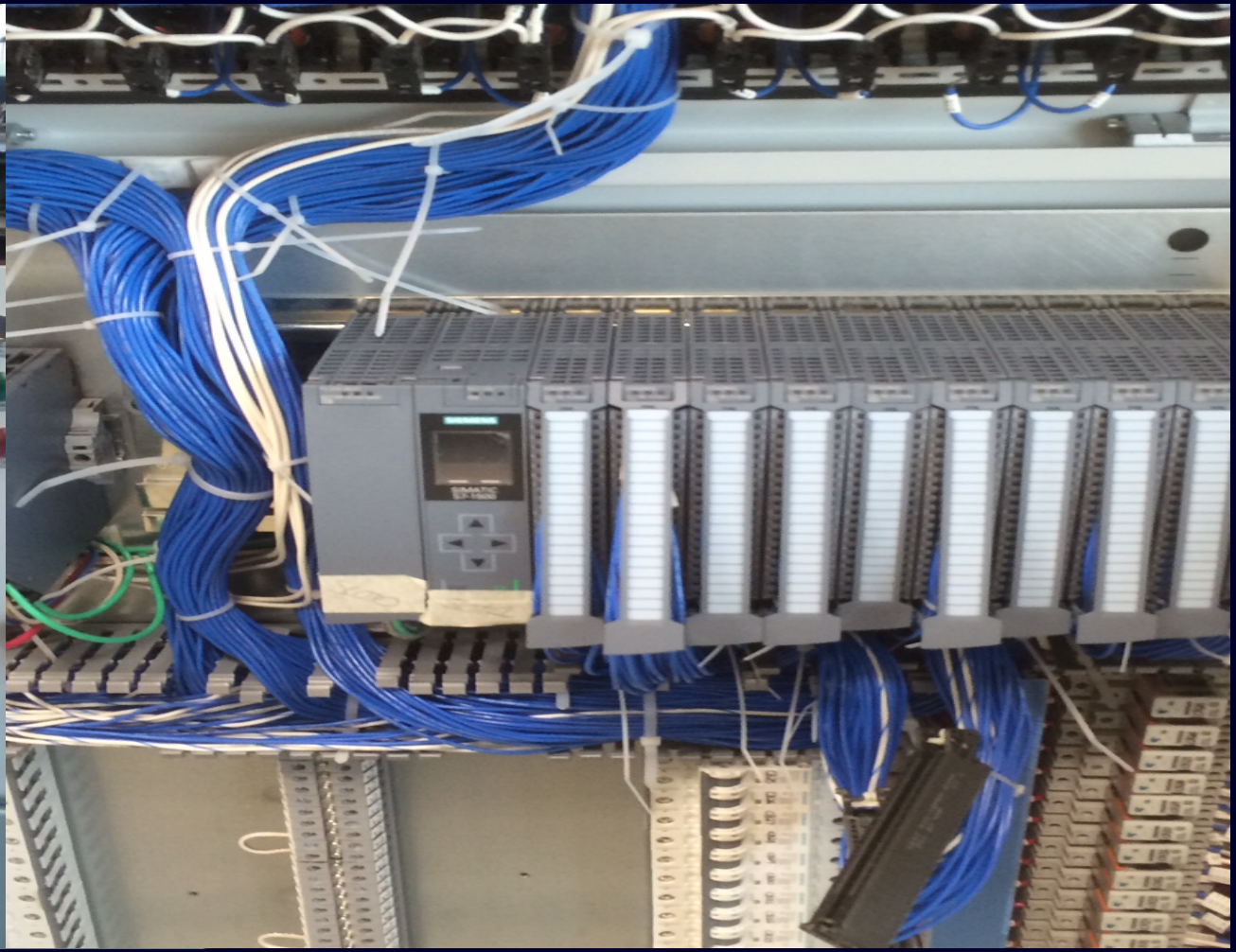




 Free to use | © Siemens 2024 | SIRIUS ACT 3SU1

SIEMENS

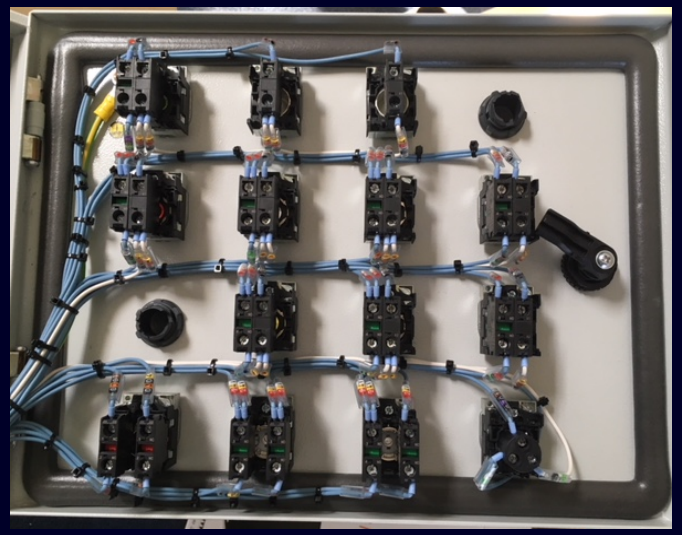
SIRIUS ACT with PROFINET
1st benefit: Reduced wiring

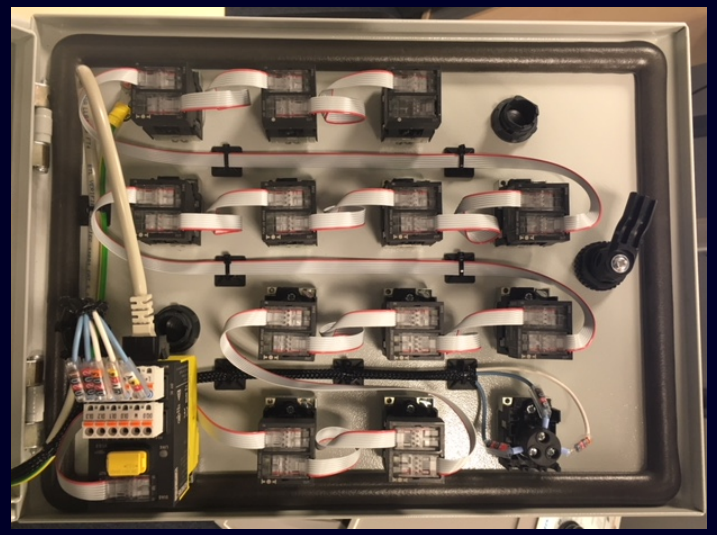


 Free to use | © Siemens 2024 | SIRIUS ACT 3SU1

SIEMENS

SIRIUS ACT with PROFINET
1st benefit: Reduced wiring





- Significantly reduced wiring
- Easy connection to HMI via PROFINET
- Quick and easy installation
- Reduces fault probability

Saves installation time: 60%* vs. standard cabling

* Source: SIRIUS ACT Hands-on Trainings worldwide

 Free to use | © Siemens 2024 | SIRIUS ACT 3SU1

SIEMENS

SIRIUS ACT with PROFINET
2nd benefit – Diagnostics option

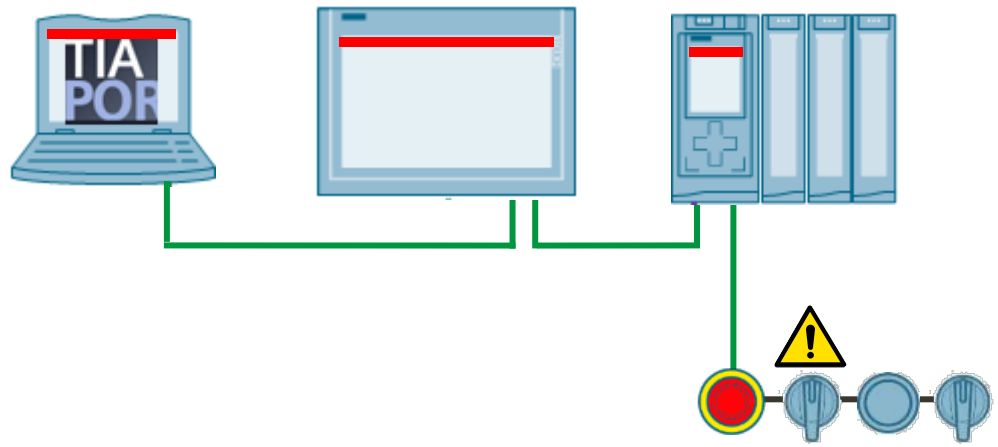
Features

- LED test: All LEDs light up for 2 seconds when the supply voltage is applied
- Diagnostics via status LED
- Function tests can be performed without controller

Customer benefits

- Fast fault detection on the device
- Function test possible without controller and without controller know-how
- System configuration possible without subject-specific know-how

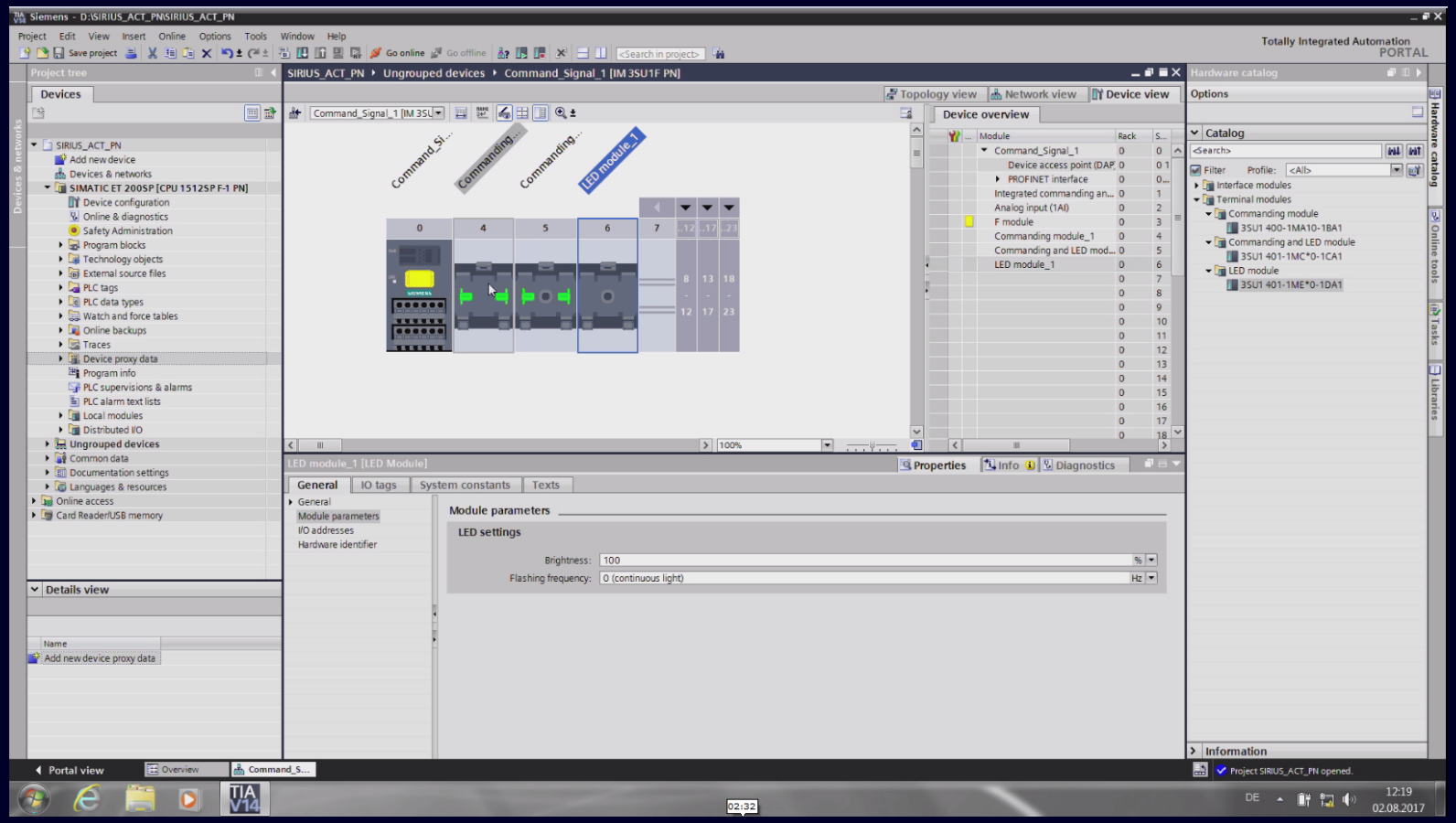
Extended diagnostics and parameterization options resulting from integration in the TIA Portal



 Free to use | © Siemens 2024 | SIRIUS ACT 3SU1

SIEMENS

SIRIUS ACT with PROFINET
3rd benefit: Simple configuration



Features

- SIRIUS ACT PN integrated into the TIA Portal
- Visual representation in the TIA Portal for better matching with hardware structure
- Simple and fast hardware configuration thanks to visual representatives

Customer benefits

- No addressing of individual modules, physical addressing according to sequence
- Standardized data management
- Time saving thanks to intuitive hardware configuration

 Free to use | © Siemens 2024 | SIRIUS ACT 3SU1

SIEMENS

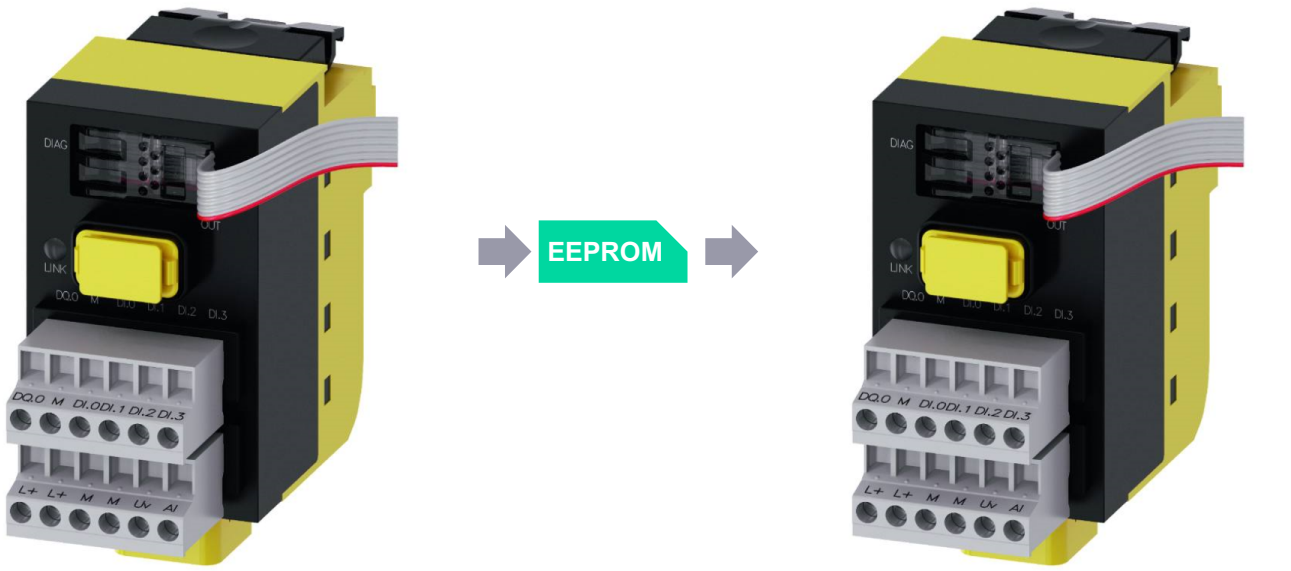
SIRIUS ACT with PROFINET
Device replacement without software and plant stop

Features

- Remove EEPROM
- All data is stored on the EEPROM
- Insert EEPROM in a new device

Customer benefits

- Devices can be replaced by persons who have no special knowledge
- Rapid device replacement
- No/short system downtime



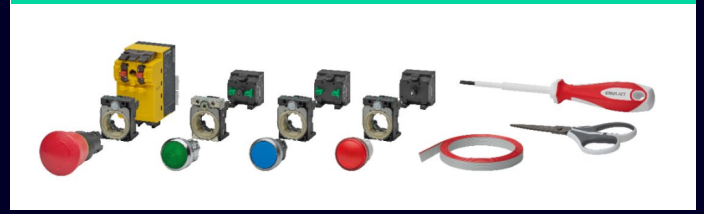
 Free to use | © Siemens 2024 | SIRIUS ACT 3SU1

SIEMENS

Starter kits

3SU1900-0XA10-0AA0

3SU1900-0XB10-0AA0

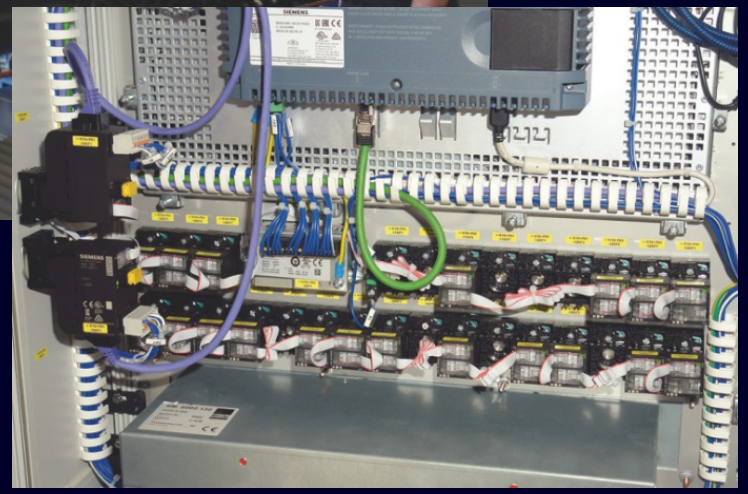


Test our digital communication solution

 Free to use | © Siemens 2024 | SIRIUS ACT 3SU1

SIEMENS

Customer example - BELFOR DeHaDe



BELFOR DeHaDe relies on complete networking!

- BELFOR specializes in machine repair, basic machine overhaul, machine refurbishment, modernization and automation.
- BELFOR has upgraded a machine tool for machining huge gas turbine rotors with SIRIUS ACT PROFINET at the Berlin gas turbine plant so that it is now state-of-the-art.

- The advantage of this combination is not only the reduced installation effort, but also the fact that the command and signaling devices can be connected directly to the machine control system via PROFINET and can thus be used or expanded very flexibly.
- Users also benefit from comprehensive diagnostics from the time of installation in the factory.

According to BELFOR DeHaDe General Manager Detlef Müller,
"this combination already proves very useful with just three or four pushbuttons".

 Free to use | © Siemens 2024 | SIRIUS ACT 3SU1

SIEMENS

SIRIUS ACT with PROFINET
Summary

One universal system for all SIRIUS ACT devices:

- ✓ Quick and easy mounting on SIRIUS ACT standard components
- ✓ Reduced wiring
- ✓ High flexibility due to additional interfaces (DI, DQ, AI)
- ✓ Integrated safety technology
- ✓ Integration into the TIA Portal

More information:
To the website "SIRIUS ACT with PROFINET"
To the web story "Belfor relies on complete networking"

SIEMENS

Contact

Siemens AG

Smart Infrastructure
Siemenspromenade 10
91058 Erlangen, Germany

siemens.com/sirius-command

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

All product designations may be trademarks or other rights of Siemens AG, its affiliated companies or other companies whose use by third parties for their own purposes could violate the rights of the respective owner.

SIEMENS