



## Line

**Automation solutions for demanding applications**

- ▶ Industrial grade I/O extension
- ▶ Basis for room automation
- ▶ Simple to install and highly efficient



Saia Burgess Controls products have been at the heart of industrial measurement, control and automation solutions for more than 30 years. Their long life cycles, adaptability and expandability are convincing arguments in their favour. This principle also applies to room automation systems from Saia Burgess Controls.

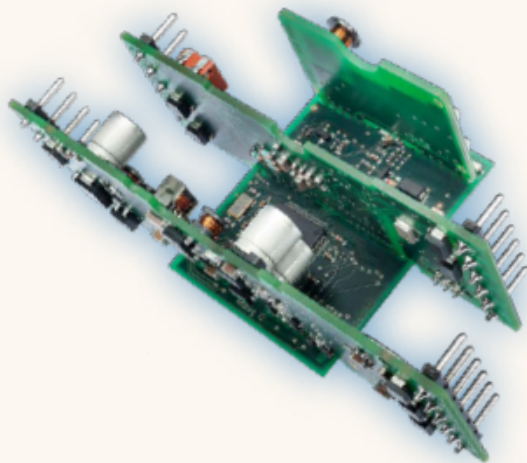
# SBC E-Line System

Technology Platform for «Lean Automation»



## Innovation inside, rugged outside

- ▶ Redesigned housings according to DIN 43880 in widths 17.5, 35, 70 and 105 mm
- ▶ Industrial inputs/outputs with highest packing density in the smallest space
- ▶ Direct board bond in compact construction minimizes interference susceptibility
- ▶ Meets stringent requirements of PLC hardware standard IEC 6 1131-2
- ▶ Optional: housing cover for your automation control cabinet



## Easy to install and commission

- ▶ Plug-in terminals
- ▶ Status LEDs for each input/output (e.g. for operating voltage, communication, error reporting)
- ▶ RS-485 communications interface to automation system with address switch
- ▶ USB service interface for setting parameters and updating software
- ▶ NFC interface for smartphone app to allow easy adjustment of module settings. Also transferable to other devices (data cloning)



## Analogue I/O

PCD1.W5300

The extension module is designed as an analogue extension for the PCD1.M0 series, providing four inputs or outputs to suit all common industrial sensor types. Each input or output is electrically isolated and can be configured separately to be read and triggered individually by the control unit. The product also scores high for ease of service: mechanical address switches allow for clear, simple commissioning by any electrician. Costly specialists are not needed here.



**Inputs**  
4x analogue  
0...10V, ±10V,  
±20 mA,  
Pt / Ni 1000, NTC, KTY,  
0...2,5 kΩ, 0...7,5 kΩ,  
100Ω...100 kΩ

**Outputs**  
4x analogue  
0...10V, ±10V  
(10 mA max.)

## Light and Blind

PCD1.G1100

Alongside its two analogue and two relay outputs, the light and shade module also has four digital inputs. Operators can choose whether to use the Inrush relays either for direct switching of two lighting groups or to control one blind. Through integral measurement of the load current, blinds can be positioned and defects located. Digital inputs can be used by the operator to connect electrical switches. All inputs/outputs are permanently available to the PLC program via the communications port.



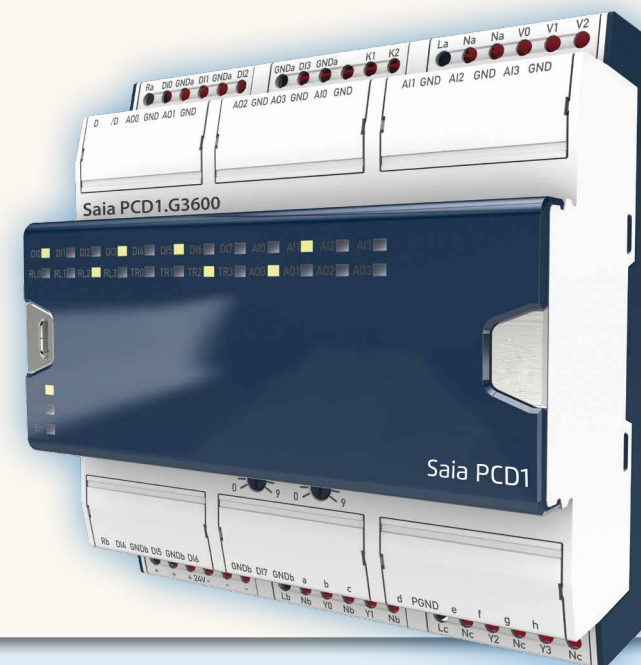
**Inputs**  
4x digital

**Outputs**  
2x analogue 0...10V (3,3 mA max.)  
2x relay 250 VAC / 30VDC,  
max. switching current 8 A, Inrush 15 A,  
inc. electrically isolated current measurement

## Room Automation

PCD1.G3600

The Saia PCD1 extension module has been specifically tailored to the demanding needs of room automation. With the help of this solution, controller tasks can be combined as required from the HeaVAC and electrical plant areas. Using a variety of inputs, all the relevant sensors for measuring temperature, atmospheric humidity, CO<sub>2</sub>, VOC and digital 24 VAC/VDC signals are detected. Triac and 0...10 V outputs allow valves to be adjusted noiselessly. Fan-coil devices can also be driven directly. All inputs/outputs are available to the PLC in RIO mode.



**Inputs**  
8x digital  
4x analogue  
0...10 V, ±10V,  
±20 mA,  
Pt / Ni 1000, NTC, KTY,  
0...2,5 kΩ, 0...7,5 kΩ,  
100 Ω...100 kΩ

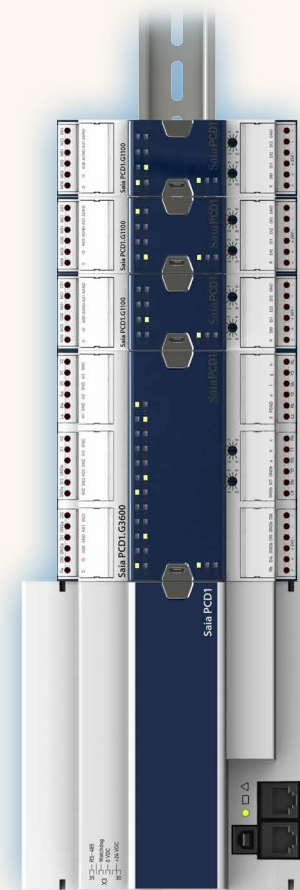
**Outputs**  
4x analogue 0...10V (3,3 mA max.)  
4x triac 24 VAC or 230 VAC (1 A max.)  
1x relay 250 VAC / 30 VDC,  
max. switching current 10 A, Inrush 65 A  
3x relay 250 VAC / 30 VDC,  
max. switching current 6 A, Inrush 15 A

## Application Example

Room Automation PCD1.M0 and E-Line

In combination with a freely programmable Controller, E-Line extension modules ensure outstanding room automation. In addition to the integral inputs and outputs, users can benefit from numerous innovative features. For example, these devices are capable of mobile operation, with web+IT functionalities already onboard. Moreover, the Saia PCD1.M0 offers a range of ways to integrate additional systems within the room concerned across standard communications ports.

### Example of system configuration: comfort of conference room



#### Input/output modules for:

- VAV box activation
- Thermal valves for underfloor heating and cooling ceiling
- 2 blinds/shutters
- 3 light switching circuits
- 6 light circuits, 0...10 V dimmer
- Relay for screen and projector
- Integration of electric switches, occupancy sensors and temperature/CO<sub>2</sub>/VOC sensors

3x PCD1.G1100 Light & Blind  
1x PCD1.G3600 Room I/O module  
1x PCD1.M0160E E-Controller

**Inputs**  
6x DI | 2x AI for 0...10 V, PT 1000

**Variable**  
4x digital input/output

**Outputs**  
4x digital 24 V  
1x PWM 24 V

**Interfaces**  
Ethernet, USB, RS-485  
Slot A for optional interfaces

# System structure

Control, regulate, operate and monitor



S-Bus



E-Line extension modules are ideal for extending the I/O capabilities of programmable web panels. The process then becomes easy to visualize. In addition, simple control tasks can be carried out directly on the panel.



Ethernet



S-Bus

Connection to web panels via PCD controllers also functions smoothly. Automation systems have the crucial advantage of requiring little space and being switchbox-compatible

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