Efficient programming, configuration, commissio-ningand control of technical installations in building with Saia PG5® DDC.Plus automation objects and templates

For speed and comfort in engineering the technical systems of buildings, consistency is required in the automation objects used at the functional, control and management levels.

The two automation libraries «HeaVAC» and «DDC-Suite» form the basis of object structure. These libraries are made up of ready-made function objects called FBoxes (e.g. representing a fan motor or reheater) so that user programs can be created and their parameters set individually.

Control objects for Saia PCD® Text-Panels, Saia PCD® Web-Panels and the Saia PCD® management system coordinate with the function library and can be used to create control concepts that meet customer requirements.

Consistency among all available objects ensures program quality in installations and minimizes the costs of program writing and service.

Features

- ▶ Automation objects that suit HeaVAC-specific installations
- ▶ Function objects for creating the user program
- ▶ Control objects that coordinate with the Saia PG5® HMI-Editor for text-oriented control panels
- ▶ Graphics and control objects that coordinate with the Saia PG5® Web-Editor for web-based control panels
- ▶ Graphics and control objects that coordinate with the Saia Visi.Plus management system

- ▶ Consistency throughout windows used to set and adjust parameters of all objects.
- ▶ Easy symbol and resource assignment with group addressing
- ▶ Complete system templates for the commonest applications, e.g. heating circuit, boiler, hot water tank, ventilation systems
- ▶ All templates are adaptable to individual use
- ▶ Web-Panel templates available with 2D or 3D visual effects
- ▶ Considerable reduction of programming time for system program and entire user prompting

Function library for Saia PCD/PCS systems

Comprehensive HeaVAC and DDCSuite libraries provide system integrators with a basis on which to build fast, efficient, customer-specific system programs. Ready-made system components are encapsulated as function objects in these libraries. Their parameters can be set and adjusted with the appropriate configuration and adjustment windows. Such objects as, for example, a fan motor will include all necessary functions: enable; operating status; service and error messages; and the cap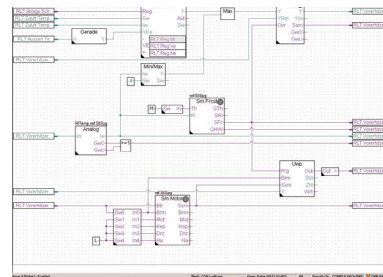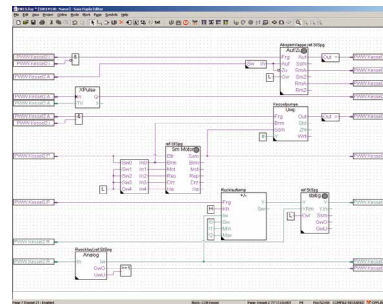ture of switching cycles and running times. Through group addressing, fast error-free links can be made to user prompting and visualization. To simplify the construction of complete sections of an installation, the library also includes system templates, e.g. for the heating circuit, water heater, boiler and ventilation systems.

PG5
Programming and configuration tool

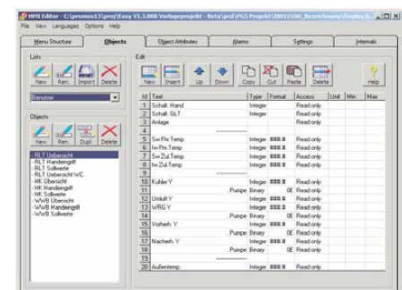Function box for motor control with parameter window

DDC-Suite features

This library differs from the HeaVAC library in the strictness of its attention to a high level of integration for individual, HeaVACspecific functions. Moreover, from version 2.0 it has also been possible to add: the automatic set-up of offline trend tracking, generation of Web-Panel-compatible alarm entry, automatic construction of BACnet objects, and automatic editing of customer documentation.

System templates

Text-Panel library for user prompting on text-oriented control panels

HMI-Editor
User prompting with Text-Panels

Control object for text-oriented control panel

System integrators can use this library to build customer-specific user prompting for Saia PCD® Text-Panels. These control objects can be used to adjust all necessary parameters, such as set-points and time-switch functions, in accordance with the technical realities of an installation.

All object templates are also supplied in source code.
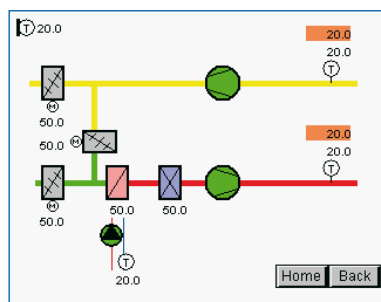Users can adapt the structure and text of templates to the customer's needs, as required.

Web-Panel library for user prompting on web-based control panels

For perfect adaptation of the comprehensive Saia PCD® Web-Panel range to the requirements of a building's technical systems, a library of graphics and control objects has been developed with a regard to demands for engineering efficiency. Since all control objects have a parameter structure that matches the function library, very fast linking of automation objects or entire automation templates is possible through group addresses in the user program.

The control objects comprise the graphical symbol in 2D or 3D format and a corresponding adjust window, through which object parameters are configured.

Alongside the control objects themselves, the graphically oriented «Saia PG5® Web-Editor» configuration software also includes all the control templates that users find in the function library.
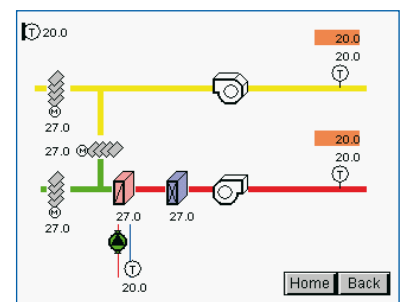

Web-Editor
User prompting with Web-Panels

Web-Panel

Graphical object: fan
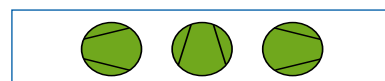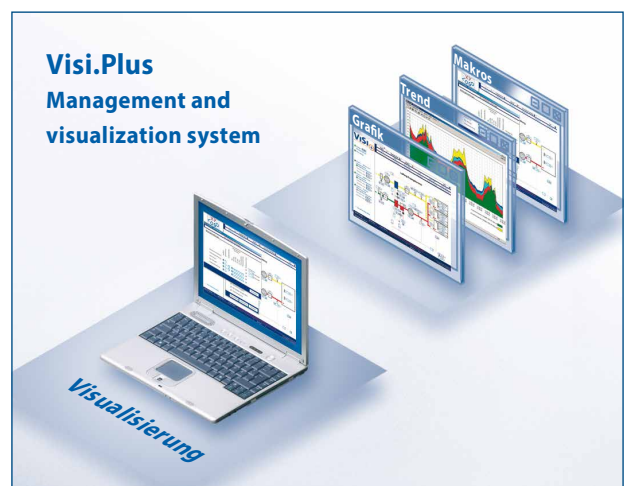

2D template for ventilation system

3D template for ventilation system

Visi.Plus library for the operation and management of a building's technical systems

To ensure consistency, all graphics and control objects have also been created for the Saia Visi.Plus building management system. A built-in mechanism allows all objects used in a project to be ported to this management system. It dispenses with the laborious assigning of individual resources, a process in which errors can occur. As with the Web-Panel library, here too objects consist of graphical symbols and the appropriate parameter windows.

System integrators can use the ready-made automation templates (e.g. for the heating circuit, water heater, boiler and ventilation systems) to build complete installations and adapt them to the customer's wishes very speedily.
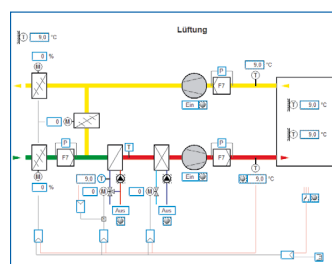
For uniform structuring of the complete project, navigation pages are available that can be used to configure project navigation as a whole at the click of a mouse.

Visi.Plus
Management and visualization system

Visualisierung

Graphical object: fan

Navigation page

Control template

Object control window

Customer benefit

With Saia PG5® DDC-Plus automation objects and automation templates, the technical systems of a building can be programmed, parameters set, then operated, monitored and managed consistently across all levels. Make these advantages work for you! Minimize engineering costs and raise the quality of your systems at the same time.

Overview of DDC-Plus automation objects

	Saia PG5® Core Package	Saia PG5® HVAC Package	Saia PG5® Extended Package	
	Standard library	HeaVAC library	HLK- library	DDC-Suite library
PG5 Function objects	X	✓	✓	✓
HMI-Editor Control objects	X	✓	✓	✓
Web-Editor Graphics & control objects	X	✓	✓	✓
Visi-Plus Graphics & control objects	X	✓	✓	✓

Ordering information

Saia PG5® programming tool

Saia PG5® Core Package Programming software with editors (IL, Fupla, Graftec), network configurators, standard libraries (Analog, Communication, Arithmetic & Logic), application libraries (Alarming, Blinds-Lighting, E-Mail, Trending [HDLog], Energy Meter, DALI, Modbus, EIB, EnOcean, JCI N2-Bus), Web Editor and FBox Builder (basic version)	PG5 – Core Package
PG5 – Building Standard Package (building automation) Same as Saia PG5® Core Package and associated libraries (HVAC, Belimo MP-Bus, LonWorks, Room controllers and Modem), BACnet	PG5 – HVAC Package
PG5 – Building Advanced Package (building automation) Same as Saia PG5® HVAC Package and associated DDC Suite library	PG5 – Extended Package

Saia PG5® options – Add-on libraries

PG5 – HVAC Library HVAC Library for building automation	PG5 – HVAC
PG5 – DDC-Suite Library Advanced library for building automation including all system objects for Fupla, HMI-Editor, Web-Editor and Visi.Plus	PG5 – DDC-Suite
PG5 – Web-Editor («Basic Version») Software package for Saia PCD® Web control panels including all system macros	PG5 Web Editor «basic version»