

C O R R I G O



Corrigo

Powerful controllers for air treatment, heating and boiler control for small to mid-sized applications





Versatile and easy to handle

Corrigo is a range of effective controllers which are easy to install and adjust according to your preferences. They can be used as stand-alone units or as part of a larger network.

Easy configuration

The controller arrives with pre-programmed applications and its settings can be configured using the buttons and display, or via a PC using the E tool® software, downloadable free of charge from our web site.

24 V AC or 24 V DC

Corrigo can be used with both 24 V AC or 24 V DC power supply. Connecting Corrigo to a UPS ensures transmission of alarms and important data even if the main power supply fails.

Available in different versions

- *With or without built-in display; an external display unit can also be connected*
- *8, 15 or 28 I/O, with expansion options, offers freedom to control many different functions*



Models with and without display



Open for communication

Wide range of communication options

Corrigo is available featuring communication via RS485 (Modbus/EXOnline), TCP/IP or LON. Models featuring one, two or three communication ports are available. Corrigo is also available in a version with integrated web server and TCP/IP port, as well as support for BACnet communication.

Mobile building control

Building Access is an application for controlling a Corrigo with integrated web server directly via an Android-based phone or tablet. Control and monitor your buildings whenever you want, regardless of location. The app is entirely free of charge and can either be downloaded from Google Play or ordered from Regin.



REGIN	
Overview - Ventilation	
Climate	
Outdoor Temperature	-3.9 °C
Room Temperature	22.3 °C
Ventilation	
Ventilation mode	Stopped
Current Temperature	20.1 °C
Desired Temperature	20.0 °C
Alarm	
Serious Alarms	There are Alarms
Other Alarms	There are Alarms

Building Access



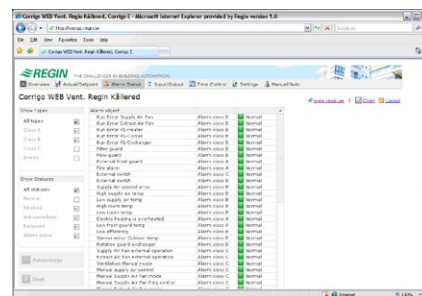
User-friendly interfaces

Whether you communicate with the controller directly via the display or through the Internet, the information is just as clear and easy to understand.

You can change parameters, handle alarms and read values in the step-by-step menus of the display, or in the graphical user interface of the E tool® configuration software. Different menus are shown depending on the operator's access level.



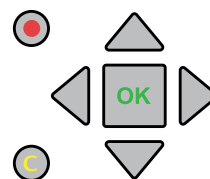
The display has 4 rows of 20 characters each and is backlit, making it easier to read regardless of the light conditions in the room.



A user-friendly interface using a web browser on your PC.



The display supports several different languages.



The menus are organized in a horizontal tree structure. The navigation, setting and reading of parameters is handled through the buttons on the controller.



READY STEADY GO

Easy to install and commission

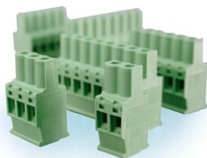
Corrigo has been developed in accordance with our **Ready-Steady-Go** concept in order to simplify installation and commissioning.



CAB-STD... are ready-made cabinets adapted especially for Corrigo controllers with 15 or 28 I/O.



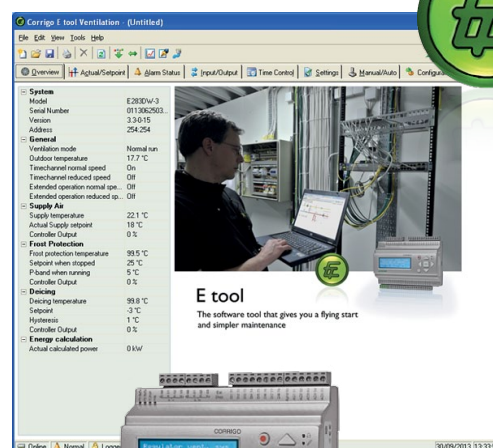
FCME is a front-mounting kit available as an accessory, making the controller easier to mount in a cabinet.



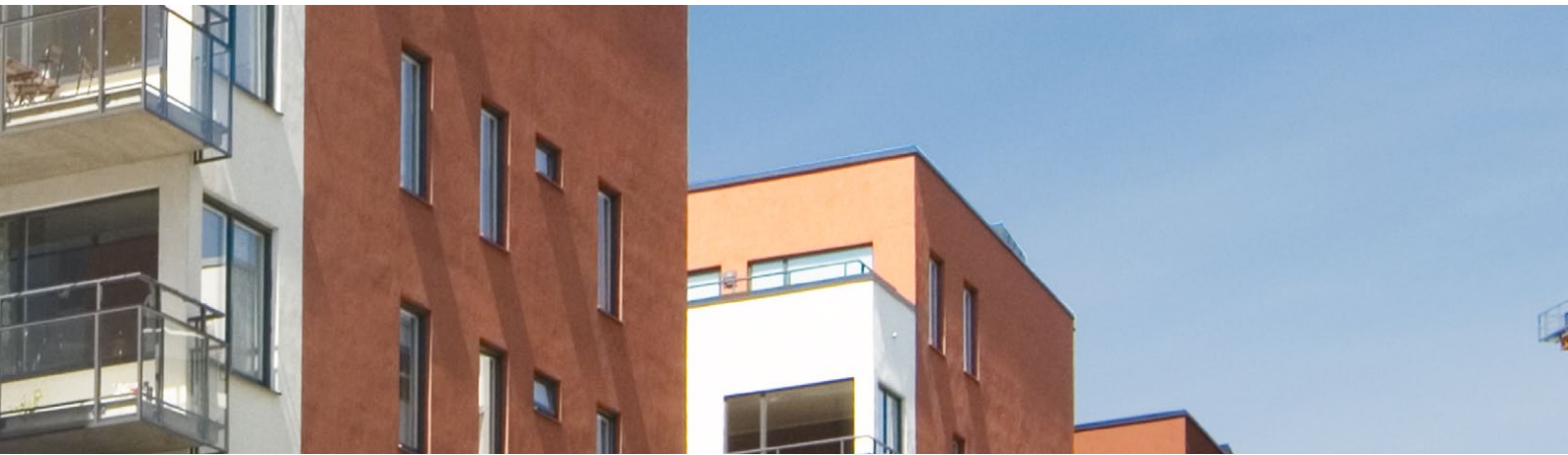
The PLTCE terminal blocks enable easy access even after cabinet mounting.

E tool® offers endless possibilities

- The most powerful configuration tool on the market
- Free download from www.regin.se
- A variety of programmable functions
- Settings can be copied between controllers
- Customisable alarm descriptions
- Tool for operation, service and troubleshooting



Corrigo can also be configured directly via the display and buttons without using a PC; a practical way of handling commissioning, even though E tool® offers a better overview.



Displays for easy handling

Touch display

ED-TCV is a pressure sensitive graphical display that can be connected to a dual port Corrigo running a ventilation application and used in order to change settings, handle alarms, etc.

Remote control units

By connecting Corrigo to the ED-RU series of room units, it is possible to control temperature in single rooms from a distance of up to 300 m (via RS485 communication).

External display units

The E3-DSP and ED9200 external display units can be connected to a Corrigio. E3-DSP can be used at a range of up to 100 m (via RS485 communication).

Displays for panel mounting

DP102 and DP156 consist of a touch screen with integrated PC and can be used as a graphic display for Corrigio with integrated web server. The displays are intended for mounting in, for example, a cabinet door.



ED-TCV is a user-friendly touch display



ED-RU remote control units are available in many different models



ED9200 and E3-DSP



DP102 and DP156



Corrigo with integrated web server

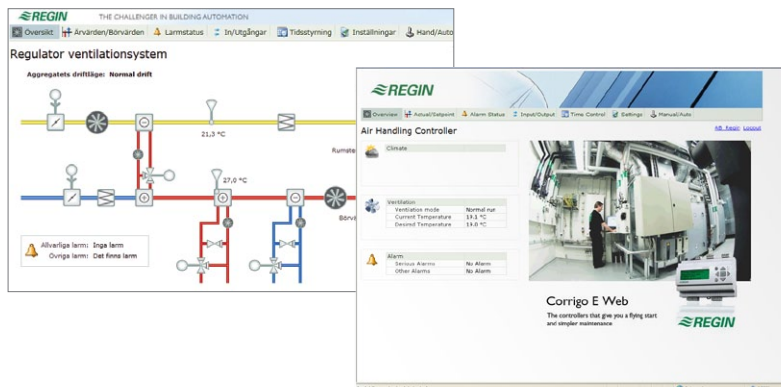
Corrigo is available in models with an integrated web server and a port for TCP/IP communication. This is the ideal solution for small to mid-sized buildings; enabling control, supervision and following up on status, events, trends and alarms via the Internet, a local network or integrated SCADA systems.

Cloud service for controller access

CLOUDigo enables connection of Corrigo controllers with integrated web server to a user account in order to easily view and administer buildings. Values can be logged and read for up to one year at a time. CLOUDigo supports Corrigo version 3.0 and later.

Animated flow overview

For the ventilation and heating applications, an animated flow overview is displayed in Corrigo with integrated web server. It is dynamic, adjusting automatically to the Corrigo configuration.





Ventilation control

Control functions

1. *Supply air control*
2. *Outdoor temperature compensated supply air control*
3. *Cascaded room temperature control*
4. *Cascade connected extract air temperature control*
5. *Outdoor temperature dependent switching between room control and supply air control*
6. *Outdoor temperature dependent switching between extract air control and supply air control*

Additional temperature control functions

- *Support control heating/cooling*
- *Free cooling/heating*
- *Cooling recovery*
- *Enthalpy control*
- *External setpoint*

Additional control functions

- *Humidity control*
- *An extra control circuit for after-treatment*
- *Recirculation control*
- *Possible to expand with more inputs and outputs*
- *Two port models can control two VACON/Lenze/Omron/Emerson frequency converters via Modbus communication.*
- *Pretreatment (type "Puit Canadien")*
- *Energy visualizer: Software calculating the air handling unit's energy consumption, enabling a reduced consumption of energy and examining whether an energy measure had the desired result. By connecting the signal to a supervisory logging system, it is possible to monitor energy consumption over time.*

Temperature control of:

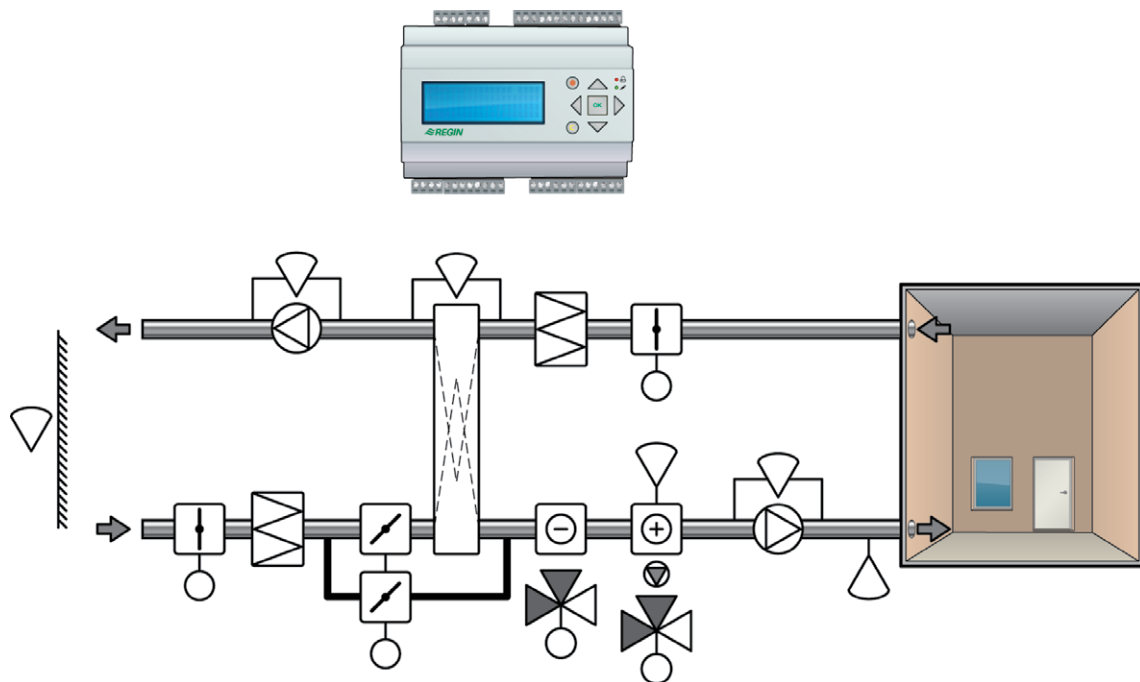
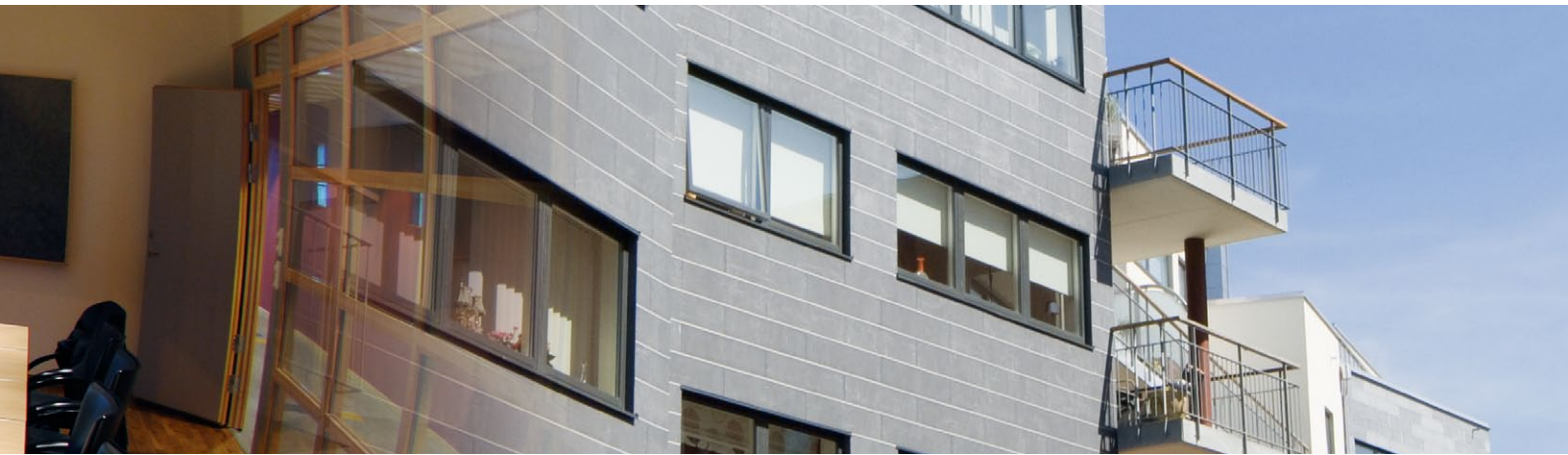
- *Water heating, electric heating*
- *Heat exchangers, mixing dampers*
- *Water cooling, DX cooling*

Air control of:

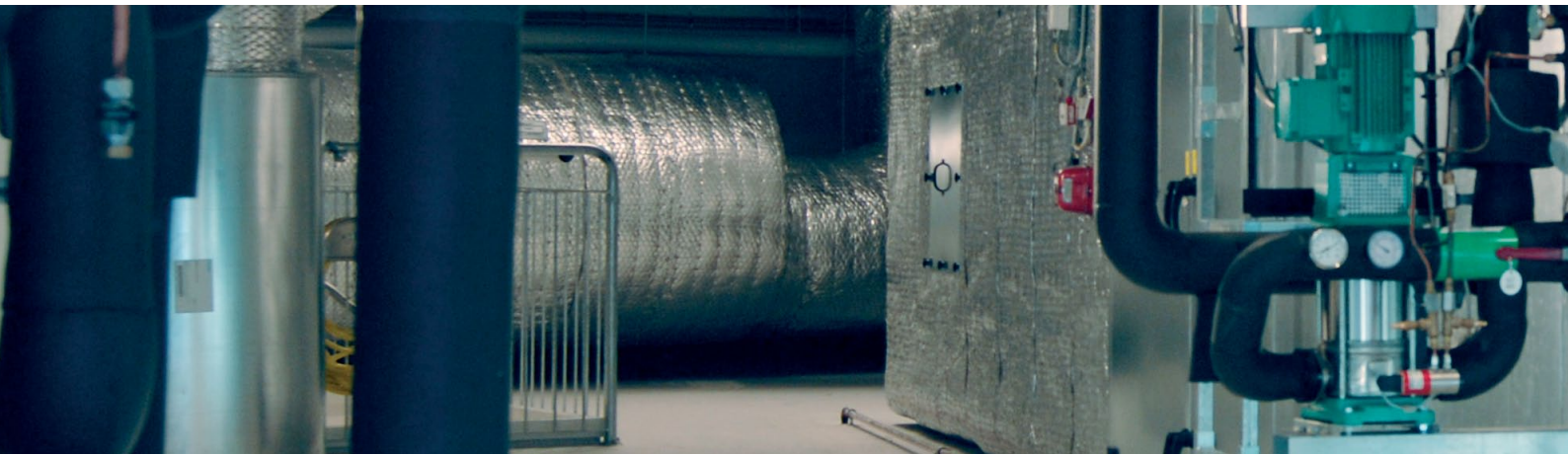
- *1-speed fan*
- *2-speed fan*

Frequency converters via:

- *Pressure control*
- *Air flow control*
- *Manual rotational speed control in percentages*
- *One external 0...10 V input signal*
- *Supply air pressure control with slave controlled extract air*
- *Pressure controlled supply air with flow controlled extract air for balanced ventilation*



Air handling unit



Under development

Heating, domestic hot water and boiler control

Heating circuits (up to 3 circuits)

- One setpoint curve for each circuit
- Pump control with pump stop saves energy
- Frost protection
- Wind compensation
- Consideration to building inertia
- Night setback
- Power limitation

Domestic hot water (up to 2 circuits)

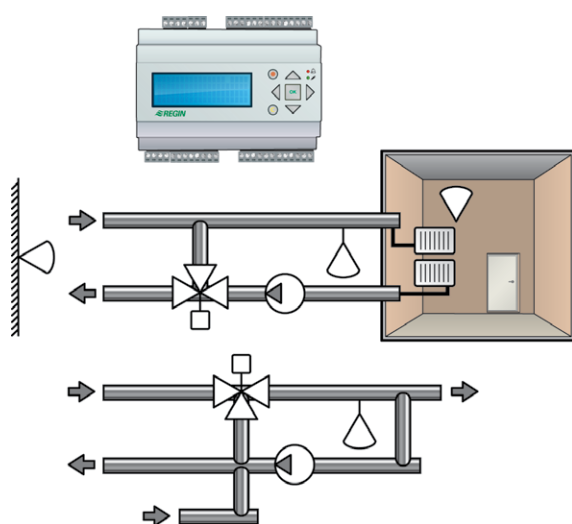
- Pump control
- Daily overheating, preventing growth of Legionella
- Night setback

Boiler control

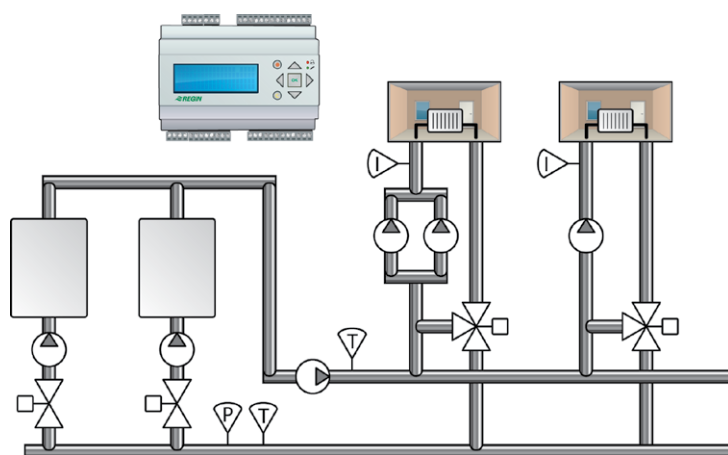
- 1-4 boilers, of which one boiler can be configured for analogue control (0...10 V)
- Modulating PI-control or thermostat control
- Setpoint settings: fixed, dependent on outdoor temperature or current heating requirements of the heating circuits
- Automatic switching between boilers if an alarm occurs
- Pump control with automatic pump exercise
- Limitation of return temperature to the boilers

Other functions

- Control of the storage tank pump
- Pressure control of a variable speed pump in order to maintain constant pressure in the system
- Cold and hot water monitoring via pulse and energy leakage alarms
- Digital timer channels for door locks, lighting etc.
- Possible to expand with more inputs and outputs
- Two port models can communicate with M-Bus meters
- New control circuit for district cooling with dew point control
- Control of bypass valve for district cooling
- Optimizer function



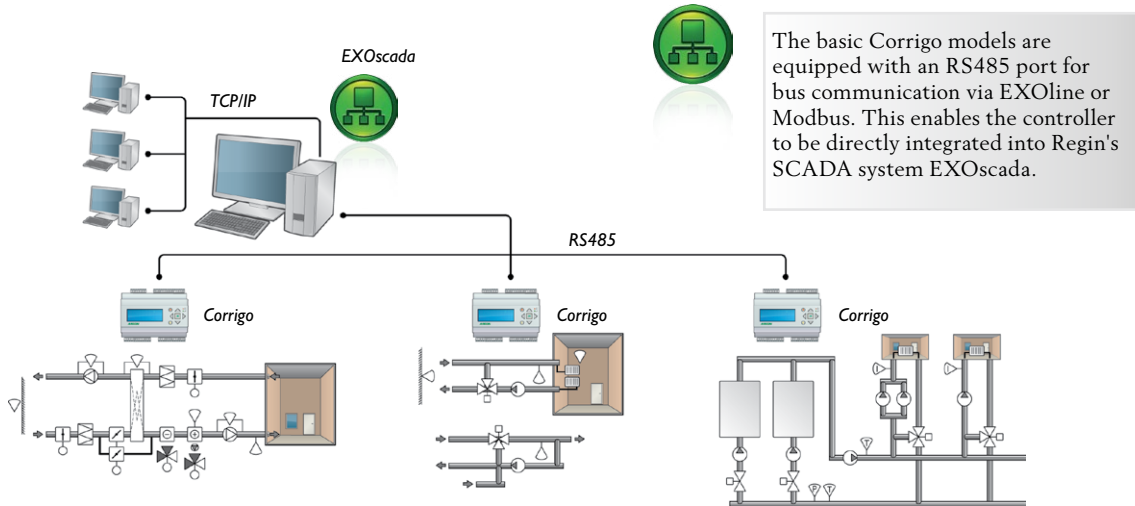
Heating and domestic water control



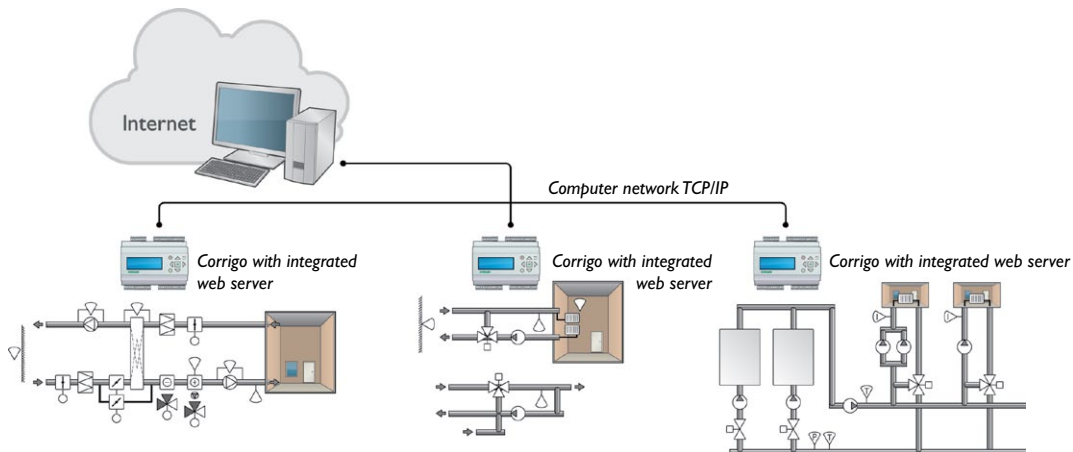
Boiler control

Integrated in systems

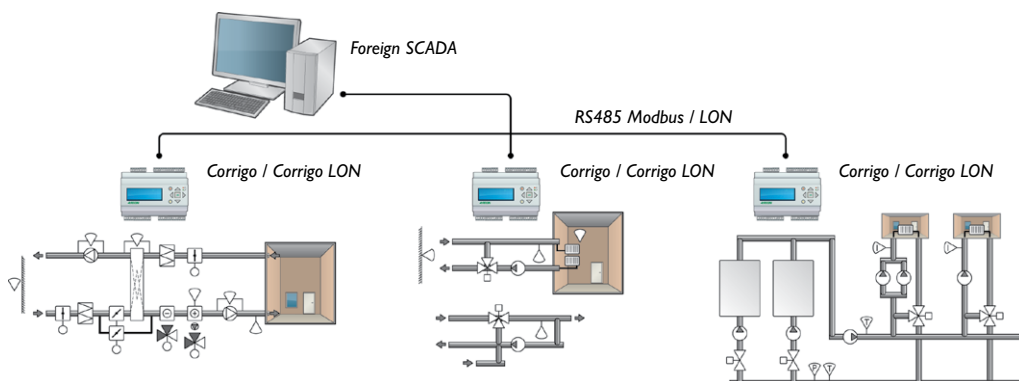
Corrigo in an EXOscada system



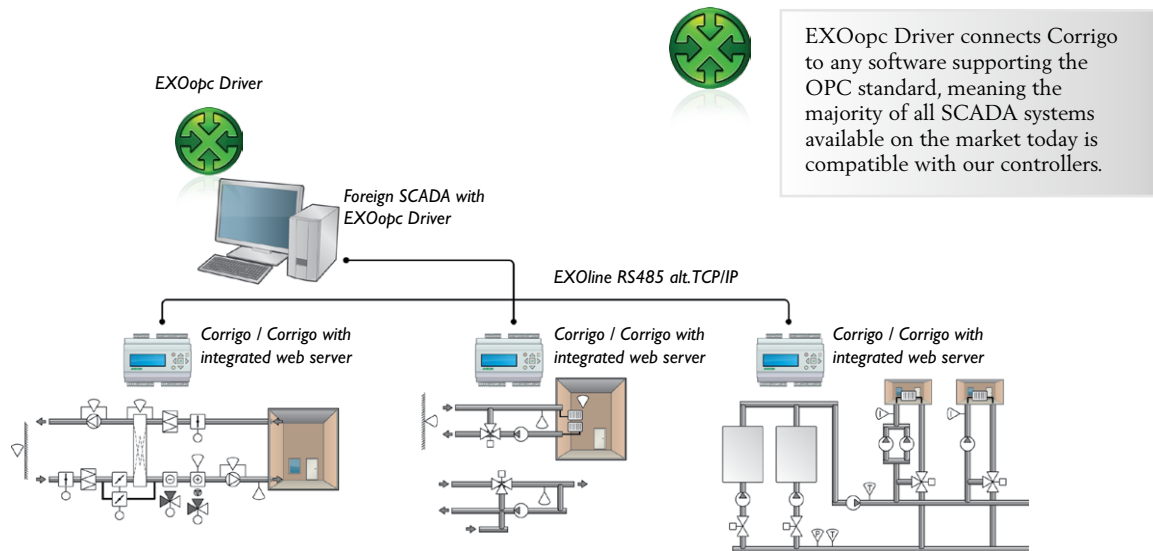
Corrigo with integrated web server in a network



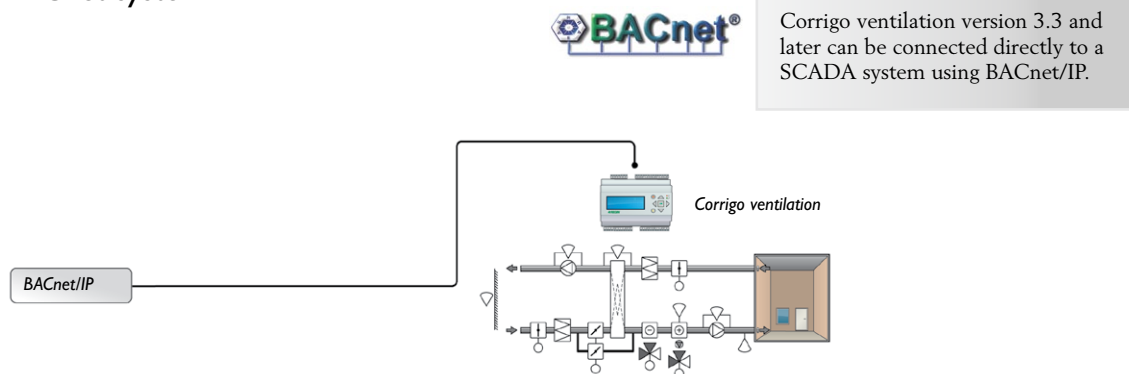
Integrated directly in a foreign SCADA system via Modbus/LON



Integrated with a foreign SCADA system via Regin's EXOopc Driver



BACnet system





Model overview

	E81-3	E81D-3	E151-3	E151W-3	E151D-3	E151DW-3	E15D-S-LON	E152W-3	E152DW-3	E281-3	E281D-3	E281W-3	E281DW-3	E282W-3	E282DW-3	E28D-S-LON	E283W-3	E283DW-3
Inputs	5	5	8	8	8	8	8	8	16	16	16	16	16	16	16	16	16	16
Outputs	3	3	7	7	7	7	7	7	12	12	12	12	12	12	12	12	12	12
RS485	●	●	●		●		●	●	●	●			●	●	●	●	●	●
BACnet/IP				●		●		●			●	●	●	●		●	●	
LON							●									●		
TCP/IP				●		●		●			●	●	●	●			●	●
2 ports								●	●				●	●				
3 ports																●	●	
Display		●			●	●	●		●		●		●		●	●		●

Complete solutions





Technical specifications

Technical data	
Power supply	24 V AC $\pm 15\%$, 50...60 Hz or 20...36 V DC
Power consumption	5 VA, 3 W (DC) W models: 9 VA, 5 W (DC)
Ambient temperature	0...50°C
Storage temperature	-40...+50°C
Ambient humidity	Max. 90 % RH
Protection class	IP20 (E-DSP IP44)
Memory back-up	Built-in long-life battery with long time back-up of all settings
Display	Backlit, LCD, 4 rows of 20 characters each
Dimensions (WxHxD)	148 x 123 x 58 mm, 8, 5 modules
Mounting	DIN-rail
Communication	RS485, EXOline (free protocol) and Modbus as standard. LON and TCP/IP / BACnet/IP optional.
Inputs	
Analogue inputs (AI)	For a PT1000 sensor or 0...10 V DC
Digital inputs (DI)	For potential-free contacts
Outputs	
Analogue outputs (AO)	0...10 V DC, 1 mA, short-circuit proof
Digital outputs (DO)	Mosfet 2 A each, max. 8 A total, 24 V AC or DC



AB Regin

Head office

Box 116, S-428 22 Källered,
Sweden

Phone: +46 31 720 02 00

Fax: +46 31 720 02 50

info@regin.se

www.regincontrols.com



THE CHALLENGER IN BUILDING AUTOMATION