



# Corrigo heating

The easy way to control

Controller for heating and boiler control in buildings.

Corrigo makes every step from installation to operation and maintenance easier than ever. Simply connect the controller, enter any settings as desired and start up. Corrigo is a series of controllers that can be used either stand-alone or integrated into a network using BACnet, Modbus and EXOline. It has built-in support for many languages and is designed for DIN-rail or standard cabinet mounting.

## Many areas of application

Corrigo is intended for control of heating substations in buildings. It supports control of up to 3 heating circuits and 2 DHW circuits. Corrigo heating also has built-in boiler control for a total of 4 boilers and also controls remote cooling circuits (1 circuit). It has built-in support for dew point control of a cooling unit. It also has Delta T control over the heat exchanger.

## Great flexibility through number of ports and expansion units

Corrigo is available in models featuring one, two or three communication ports, giving you as an end user great flexibility regarding connectivity. In order to expand the number of I/O:s of a controller, up to two expansion units (Corrigo) can be connected. The maximum input/output number is 3\*28, making a total of 84.

See all connection options offered by Corrigo in the model overview on page 3 (below).

### Quick facts about Corrigo

- Easy installation: Connect the controller, set the parameters as desired and start up
- Supports control of up to 3 heating circuits, 2 DHW circuits and 1-4 boilers
- Control of a remote cooling circuit with built-in dew point control support
- Supports communication via BACnet, Modbus and EXOline
- Delta T control over the exchanger

### Supports communication via EXOline, Modbus or BACnet

Corrigo supports communication via BACnet/IP, EXOline/Modbus using the TCP/IP port. Controllers with one or more serial ports also support BACnet MS/TP, EXOline and Modbus. This enables integration of the controller into existing networks and monitoring of the system via the Internet, a mobile device or from a local computer.

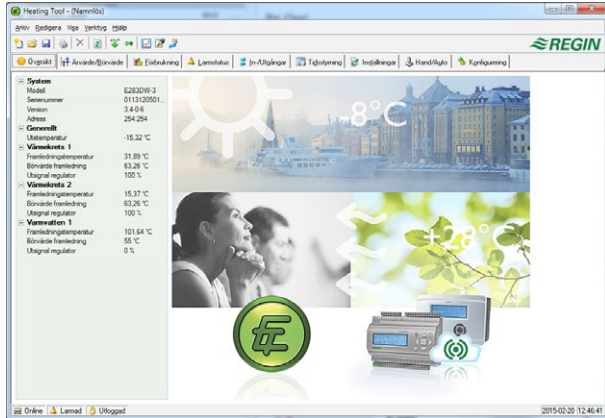
Connection via a network enables adjusting setpoints, saving settings and supervising system functions from anywhere in the world.



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**Monitor your installation using E tool®**

Corrigo enables easy connection of E tool®, a PC-based software that enables comprehensive configuration and supervision of an installation via a graphical interface. This helps conserve time as the program provides an excellent overview of all settings.



**Expansion units**

Any Corrigo controller can be used as an expansion unit. However, units without a display are normally utilised since no information will be shown in the display of the expansion unit. These units must however be initialised using an external display.

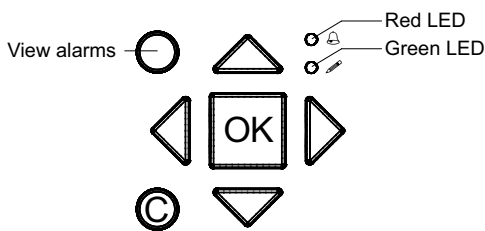
**Simple navigation both with or without display**

Corrigo is available with or without display. In units with a built-in display, it is of course backlit. The display light is normally dimmed but is activated when a button is depressed and automatically turned off after a certain period of inactivity.

There are two LEDs on the front:

- The alarm LED is marked with the symbol
- The “write enable” LED is marked with the symbol

The display menu system is handled using seven buttons:



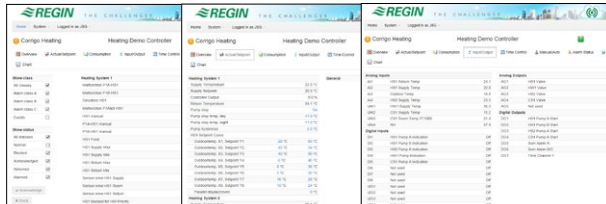
Models without a display can be mounted in e.g. a cabinet and controlled from outside using the E3-DSP display unit, which functions as an external display at a distance of up to 100 m.

In a Corrigo with a blue display (3rd generation) it is also possible to use both an internal and an external display at the same time.

**Integrated web server**

The E...-W-3 models contain an integrated web server, easy to commission and configure using E tool®. The web server can be used both in internal intranet and external Internet solutions.

The web server will automatically upload the information and values required to the web pages. Real time charts are also available.



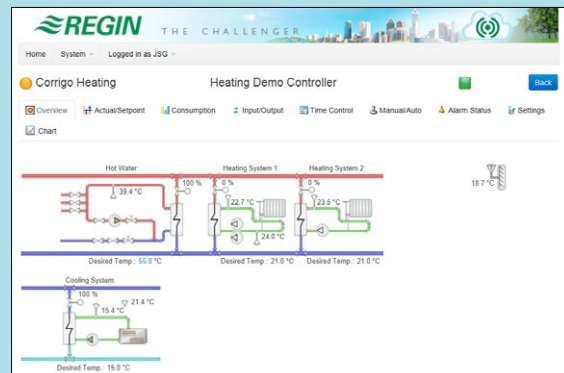
*The web server is comprehensive and easy to use*

**CLOUDigo – easy, web-based control of your system**

As of E tool® v. 3.0, it is possible to connect a Corrigo to CLOUDigo, a cloud-based service that makes it very easy to supervise a Corrigo via the Internet.

Simply tick the checkbox in E tool® and load the TCP/IP-settings to locate the server available in the cloud. This step can also be performed via the display. Once done, the Corrigo will by itself locate the CLOUDigo server in which all settings are stored. The user then navigates to the same server and controls the heating system from there.

For more information, see “CLOUDigo user guide”, available for download from [www.regincontrols.com](http://www.regincontrols.com).



*Operating screen for CLOUDigo*

## Models

	E81-3	E81D-3	E151-3	E151W-3	E151D-3	E151DW-3	E15D-S-LON	E152W-3	E152DW-3	E152DWM-3	E281-3	E281D-3	E281W-3	E281DW-3	E282W-3	E282DW-3	E28D-S-LON	E282DWM-3	E283W-3	E283DW-3	E283DWM-3	E28D-S-WEB	E282D-S-WEB	E28-S-WEB	E282-S-WEB
AI*	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
DI*	3	3	4	4	4	4	4	4	4	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
UI*	-	-	-	-	-	-	-	-	-	-	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
AO*	1	1	3	3	3	3	3	3	3	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
DO*	2	2	4	4	4	4	4	4	4	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
RS485	•	•	•		•		•	•	•		•	•			•	•	•		•	•	•		•		•
BACnet/IP				•		•		•	•	•			•	•	•	•		•	•	•	•				
LON							•										•						•	•	•
TCP/IP				•		•		•	•	•			•	•	•	•		•	•	•	•		•	•	•
M-Bus										•								•				•	•	•	•
1 port	•	•	•	•	•	•	•				•	•	•	•									•	•	•
2 ports								•	•	•					•	•	•	•					•	•	•
3 ports																			•	•	•				
Display		•			•	•	•		•	•		•		•			•	•	•		•	•			

\* AI=analogue inputs, DI=digital inputs, AO=analogue outputs, DO=digital outputs, UI=universal inputs (can be configured to function as either analogue input or digital input)

All third generation (E...-3) Corrigo controllers support external displays.

## Accessories

For a complete list of accessories, see Regin's web site, [www.regincontrols.com](http://www.regincontrols.com).

## Technical data

Supply voltage	24 V AC $\pm 15\%$ , 50...60 Hz or 21...36 V DC
Power consumption	5 VA, 3 W (DC), model E...W-S-WEB: 9 VA, 5 W (DC)
Ambient temperature	0...50°C
Storage temperature	-20...+70°C
Ambient humidity	Max. 95 % RH, non-condensing
Protection class	IP20
Connection	Disconnectable terminals, 4 mm <sup>2</sup>
Memory backup	Built-in battery with long life gives long backup time of all settings incl. real time.
Display	Backlit LCD (blue), 4 rows of 20 chars. each
<b>CE</b>	<b>EMC emissions and immunity standard:</b> This product conforms to the requirements of the EMC Directive 2004/108/EC through product standards EN 61000-6-1 and EN 61000-6-3. <b>RoHS:</b> This product conforms to the Directive 2011/65/EU of the European Parliament and of the Council.

## Inputs

Analogue inputs	For PT1000 sensors (-50...800°C, accuracy $\pm 0.4^\circ\text{C}$ ) or 0...10 V DC (scaleable, accuracy $\pm 0.15\%$ of full output signal). 12 bit resolution in the A/O conversion.
Digital inputs	For potential free contacts

## Outputs

Analogue outputs	0...10 V DC, 1 mA, short-circuit proof
Digital outputs	Mosfet outputs, 24 V AC or DC, 2 A continuous. Max. 8 A totally.

## Communication ports

TCP/IP port (E...W-3)	Web server, EXOline, TCP/IP, BACnet/IP
LON port (E...-S-LON)	LON communication (generation 2 only)
RS485	EXOline, Modbus RTU, BACnet MS/TP

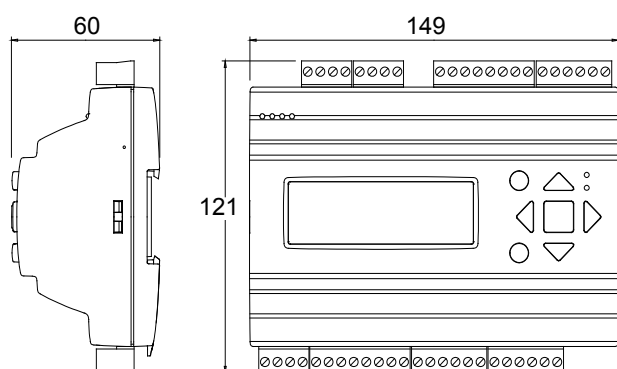
## Indications

Operation indication	Supply voltage is indicated with green LED
Alarm indication	Plain text and blinking red LED
Sum alarm	Outputs can be configured: Sum alarm, Sum alarm A, Sum alarm B/C

## E tool®

System requirements	Computer with operating system MS Windows 2000, XP, Vista, Windows 7 or Windows 8
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## Dimensions



Measurements in mm

## Product documentation

Document	Type
Manual Corrigo heating application	Manual for Corrigo heating
Manual E tool®	Manual for the configuration software E tool® and web configuration
Product sheet and instruction E3-DSP	Information about accessories for Corrigo
Product sheet and instruction E0R-3/E0R230K-3	
Instruction FMCE	
Instruction RM6-24/D / RM6H-24/D	

The product documentation can be downloaded from [www.regincontrols.com](http://www.regincontrols.com).

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