



Weatherlink

Forecast control

Subscription to weather forecasts which leads to reduced heating costs. Weatherlink generates energy savings and also a comfortable indoor environment, benefiting both property owners and tenants.

- Improved economy (annual savings of up to 1 €/m²)
- Reduced energy consumption (up to 20 kWh/m² annually)
- Reduced carbon dioxide emissions, thus protecting the environment
- Enhanced indoor comfort

When using forecast control, the heating of the building is not only controlled by the outdoor temperature. Factors like wind, sun, rain and fog are also taken into consideration.

Weatherlink is an intelligent sensor which is connected to your control and supervision system instead of the existing outdoor temperature sensor, to control the building's heating system.

This is what you get:

- Reduced energy costs: Energy costs are reduced by 10–15 % per property.
- Environmental-friendly system: Reduced energy consumption leading to reduced emissions of carbon dioxide, nitrogen oxide, sulphur etc.
- Satisfied tenants: A uniform indoor climate enhancing comfort and increasing well-being.
- Satisfied personnel: Automatic adjustment to each type of weather leads to fewer complaints from tenants and more time for preventive measures.

Multiple opportunities for energy-savings

Today Weatherlink can be used for heating and gives good results in almost all residential properties, hospitals, retirement homes and commercial buildings in countries with a seasonal climate. Energy-savings of 10 % are not unusual.

Forecast control offers the largest savings when used in conjunction with a heating control system where the heating system alone affects the indoor climate. However, Weatherlink can also be used in buildings with multiple systems (ventilation and cooling systems).

A contract of a minimum of 3 years is signed, with a cost corresponding to approximately a third of the possible savings, i.e. two thirds go to the property owner. A GSM/GPRS subscription is included in the monthly cost.

- Fewer complaints about the heating – releasing more resources for caretaking
- Simpler property management, our system handles the changes in the weather
- Most suitable for buildings with hydronic heating systems

Investment for both the environment and the property owner

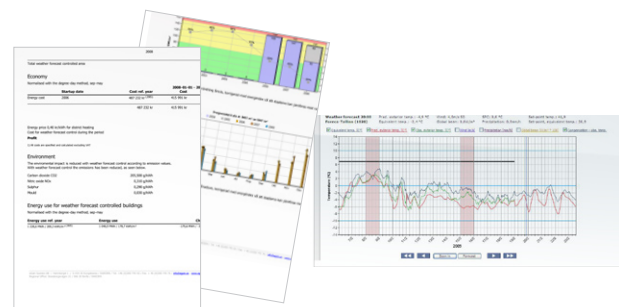
Weather forecast control makes it possible to minimise energy consumption while reducing the building's effect on the environment. Carbon dioxide emissions are reduced on average by 1.3 kg/m² each year. At the same time, a uniform indoor climate is achieved, leading to satisfied tenants.

Energy analyses and energy reports

Certified energy experts consistently evaluate all installations and once every six months submit a written energy report. The report contains an analysis of each property with energy statistics, set control curves and suggestions of possible additional improvements.

The energy experts also take part in joint follow-up meetings to discuss the results achieved. From common experiences, suggestions are made on further improvements of the function.

As an additional service, a written energy report is produced once a year, in which energy-savings and environmental as well as economic profits for all properties with forecast control are compared with the reference year, to account for the effects of forecast control.



THE CHALLENGER IN BUILDING AUTOMATION

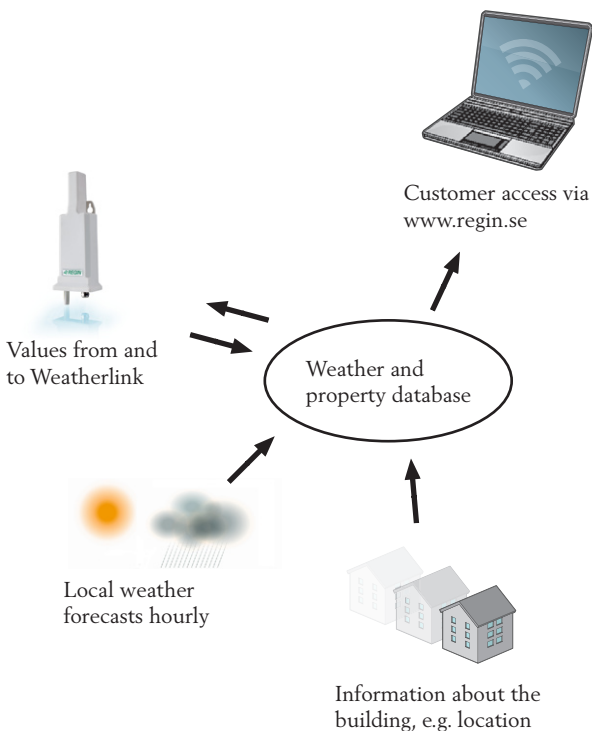
The principles of weather forecast control

In a system using weather forecast control, the energy requirement is based on weather prognoses and facts about the building. The heating supply is adjusted to create a uniform indoor temperature with as low energy consumption as possible. The forecast receiver is used instead of the outdoor temperature sensor.

You will receive a detailed and local 5-days prognosis from your weather prognosis supplier, containing hour values for temperature, wind speed, wind direction, solar radiation, cloudiness, and rainfall. The prognosis covers an area of 100 km².

From these weather prognoses and the building's energy balance, an equivalent temperature is calculated. The energy balance is based on e.g. the area of the building, the ground area, the construction year and possible renovation year, the facade and window areas in the four cardinal points, the shape of the building and its location in different directions, the type of heating system etc. The equivalent temperature is used instead of the outdoor temperature to control which heating should be supplied to the building in order to maintain a uniform and desired indoor temperature.

The equivalent temperature is sent to the forecast receiver which validates the accuracy of the prognosis and fine adjusts the prognosis with consideration to local temperature differences at your building. The forecast receiver converts the signal so it can be connected to all types of controllers.

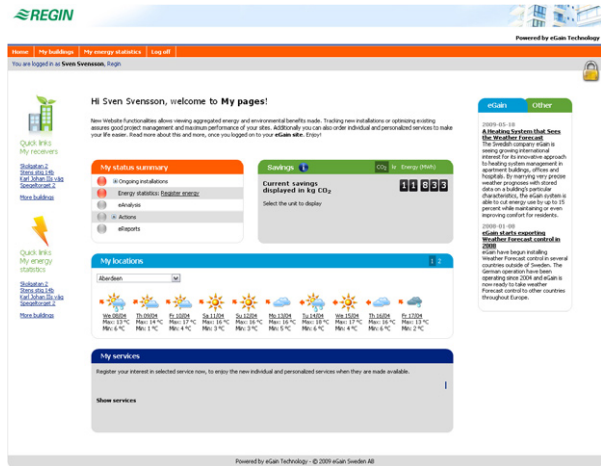


The forecast receiver has integrated operation reliability, which means that your heating system will continue to function and go back to controlling the climate using the outdoor temperature, should a weather prognosis not be obtained or be so incorrect that it cannot be used.

Energy follow-up

The customer can access all properties using forecast control via the Internet, and view a graphic presentation with detailed weather prognoses, settings for control curves and monthly energy statistics, corrected by means of an energy index.

Using energy performance measurements, reference values and a classification of the building compared with other reference buildings, you can find out if the building's energy consumption is high or low.



Certified energy experts

Included in the forecast agreement is continuous access to certified energy experts who offer advice, suggestions of control curve optimisation, measurement logs and analyses of flat temperatures etc.

Signal converter CONV-A-PT1000

When the forecast receiver is intended to be used together with Corrigo E or Optigo OP10, the signal converter CONV-A-PT1000 must be used. It is available for ordering from Regin.

Cooperation with the property owner

Weatherlink is a service which is signed for 3 years with a monthly payment relative to the size of the property.

The property owner reports facts about the building to a server on the Internet and looks at the effects of forecast control and is given suggestions of how to optimise the system even further.

By taking the building's characteristics and future weather prognoses into consideration, there is potential for saving both energy and money.

Properties in and outside of Europe

Due to high roaming costs, properties in European countries must be at least 4000 m². For countries outside of Europe, contact Regin for a quotation.

Start-up packages

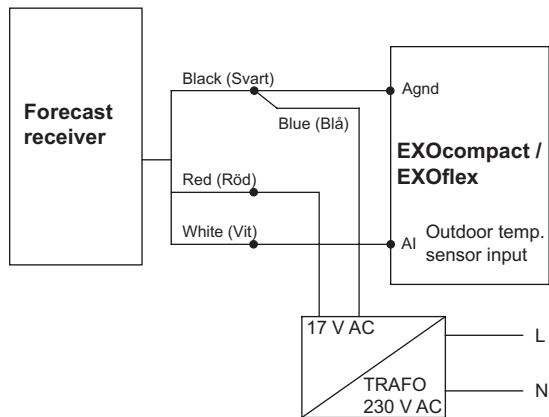
- Weatherlink-C** Start-up package for Corrigo, contains forecast receiver, transformer and the signal converter CONV-A-PT1000
- Weatherlink-EXO** Start-up package for EXO, contains forecast receiver and transformer

Technical data

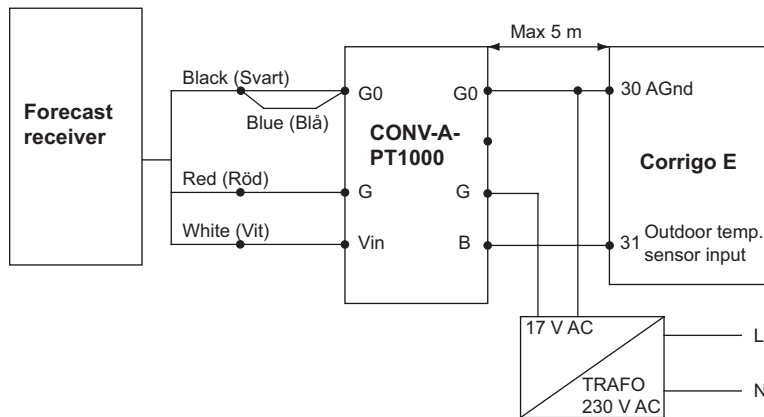
Output signal CONV-A-PT1000	0...10 V corresponds to -50...+50°C
Dimensions CONV-A-PT1000	81 x 81 x 38 mm (WxHxD), standard wallbox
Protection class CONV-A-PT1000	IP55
Dimensions forecast receiver	85 x 260 x 45 mm (WxHxD)

Wiring

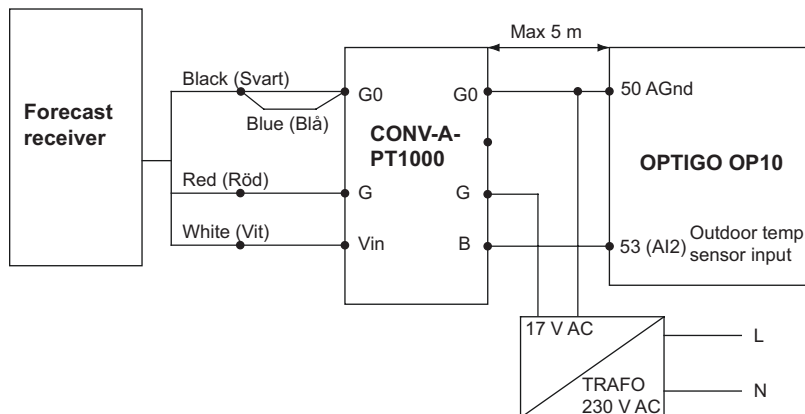
Connection with EXOcompact / EXOflex



Connection with Corrigo E



Connection with Optigo OP10



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