

Can the data from a Risycor be passed on to a BMS?

With the increasing success of Risycor preventing problems predictively in heating and cooling installations, the demand for data export of the logged values to the building management system is also increasing. BacNet and ModBus are requested, but LON, KNX and other older protocols are also regularly mentioned.

Is this necessary?

No. Each Risycor has a volt-free contact that must be connected to the BMS. (See [application guideline](#) p 22.23.24).

Is this possible?

Theoretically, yes, but not really...

A Risycor is not a sensor that measures a value and allows it to be passed on such as a temperature or pressure sensor. A Risycor is a monitoring device that, by means of repetitive comparative measurements and complicated algorithms, is able to calculate the average corrosion rate at that location in a system after a certain time (max 7 days). It is therefore not possible to mount, connect and read out a Risycor, as is the case with a “normal” sensor for “normal” measurement values. Furthermore, with regard to WHAT a Risycor measures (YCR is yearly corrosion rate), it is important to realise that it is absolutely necessary to “average out” (attenuate) this measured value, because physically there can be very large variations, which are, however, completely irrelevant in the context of what one wants to know. Moreover, any signalling of an increased corrosion rate is NEVER urgent. It is only when a structural or recurring problem occurs that follow-up action is required. This is explained in our application guideline.

We could build an inverter that artificially converts the data from a Risycor into a virtual measurement signal, but that would actually be a deception.

Does it make sense?

We don't think so.

It does not provide added value, ease of use or anything else to know the corrosion values of your installation on a daily basis.

As a user, you want two things:

- timely notification if things go wrong
- annual overview of the situation, in order to be able to assess whether everything is right, or whether adjustments may still need to be made.

For this purpose, the volt-free alarm, which according to our recommendation must be connected to the BMS, is used in accordance with our application guideline. Besides this alarm, it makes sense to occasionally (e.g. 1 x / year) view the GRAPHIC of the corrosion rate, via the Resus

PC Dashboard, or for those who would like to be able to do this remotely, via the Resus Cloud Dashboard (or via a “third party” Dashboard) who can get this data via an API with the Resus Cloud application. The graph provides a meaningful overview of the state of affairs and allows you to make well-founded decisions as to whether adjustments are useful.

“But still, I want to see the data in my BMS.”

Of course, everyone is free to want to read out the corrosion measurement data in the BMS. To do this, a graphical interface must be programmed for the BMS that allows to read and interpret the evolutions in the corrosion rate on a time axis. The dashboards of Resus can serve as an example. Such performance will rarely be free of charge.

A Risycor CXI independently connects to the Resus Cloud, where the customer can consult the data via the Resus Cloud Dashboard.

If the customer wants to read this data via a dashboard of his BMS supplier or another party (e.g. boiler manufacturer that also supplies a cloud-based dashboard application), a connection can be made via an API between the Resus Cloud and the “third party” cloud.