



Lindab **Pascal** system management

TCP communication Guide 3.1
Modbus - EXOline - Bacnet

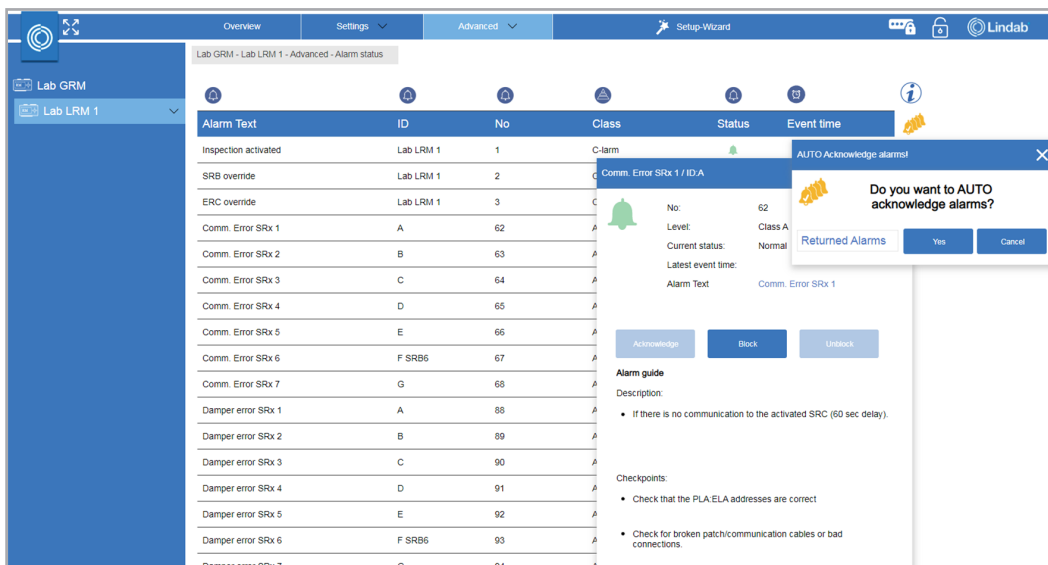


Pascal 3.1 TCP communication Guide

Regula Master HTML version 3.1-1-00

Alarms handling

The following describes how to handle alarms with TCP communication to Regula Master HTML – the procedure and which commands to use. In the webserver Pascal Operate the alarms for the configured controllers are listed in the Advanced section, which is reserved for “service” login, but active alarms will be readable for user and operator login as well. Here is an example for a Local RM:



The Auto Acknowledge alarms function in Pascal Operate makes it possible to write “acknowledge” to more (returned) alarms with fewer clicks - the function can typically reach app. five alarms at a time.

Modbus/EXoline TCP

In the Lindab Pascal Signal list Modbus–Exoline there are alarm signal registers listed in both Discrete Inputs and in Input registers. The alarm signals in the Discrete Inputs are showing actual values (0/1, second by second), which is only intended for monitoring, e.g. error diagnostics. To see alarm/error status use **Input register** signals **2000-2178**.

These alarms can have the following values: 1=Normal; 2=Blocked; 4=Cancelled; 5=Returned 7= Alarm

Commands for these alarms are found in **Holding register** signals **3000-3001**. In Holding register 3000, set the alarm number, where 1 = Input register 2000, 2 = Input register 2001, etc. (alarm number = Input register number – 1999). Alarm numbers can also be seen in Pascal Operate Alarm status.

In Holding register 3001, the command for the selected alarm number is set. The possible commands are 1=Acknowledge, 2=Block, 3=Unblock.

A Cancelled or Returned alarm will be set into Normal, after an Acknowledge command.

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Bacnet TCP

In Bacnet TCP the status alarms are shown as **Multi-state Input** signals (object instance **62-179**).

The alarms can have the following values: Normal(2); Blocked(3); Cancelled(4); Returned(6); Alarm(8).

Commands for these alarms are found in **Analog Value-901 AlaCmdPtNo** and **Analog Value-902 AlaCmdExe**. In Analog Value-901 AlaCmdPtNo, set the alarm number of the Multi-state Input signal (**62-179**). Alarm numbers can also be seen in Pascal Operate Alarm status.

In Analog Value-902 AlaCmdExe, the command for the selected alarm number is set. The possible commands are 1=Acknowledge, 2=Block, 3=Unblock.

A Cancelled or Returned alarm will be set into Normal, after an Acknowledge command.

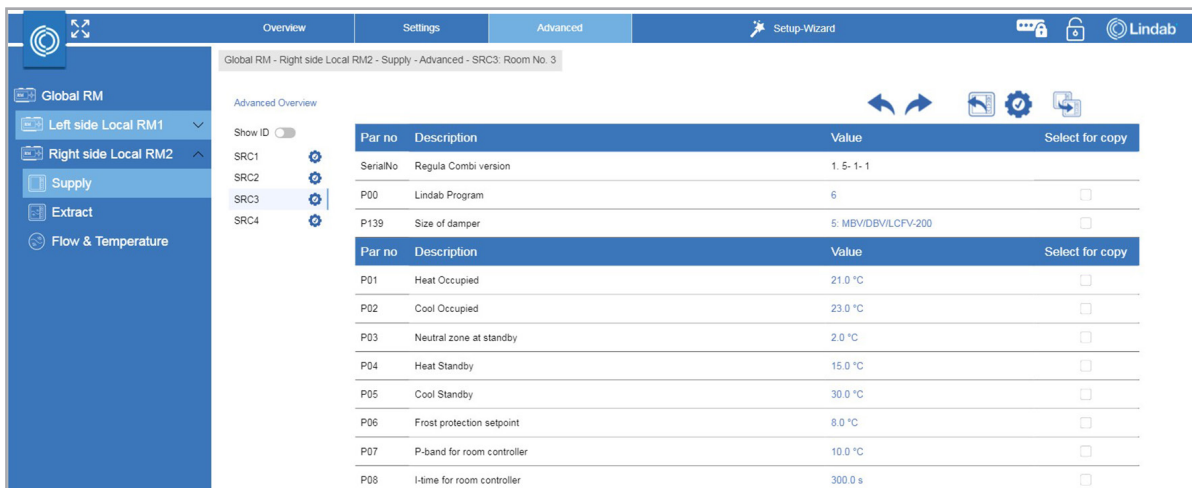
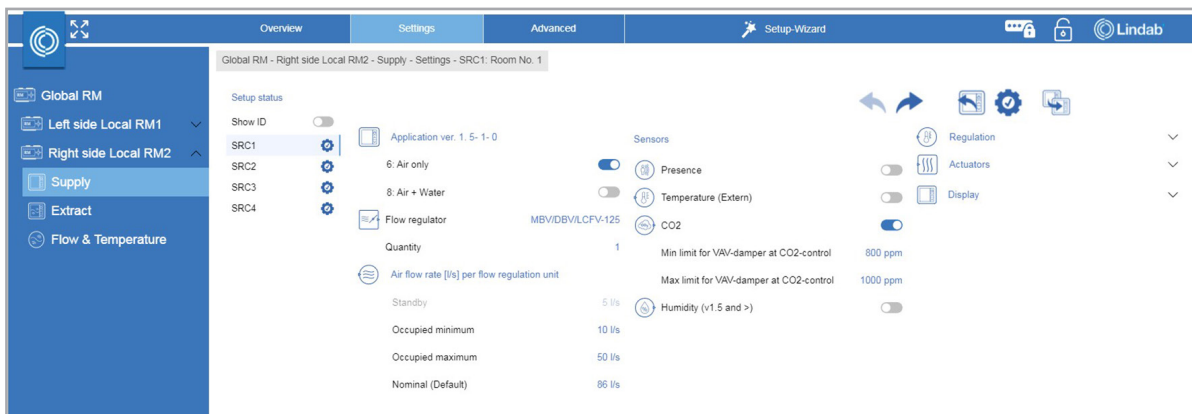
SRC commissioning parameters

For the 26 SRCs there are several commissioning parameters which both can be read and written to. However, as it is commissioning parameters, all of them are not continuously updated in the Regula Master, so they must be read and written, one SRC at a time. In the webserver Pascal Operate that is what is done for SRCs in Settings and Advanced menu when clicking on the "Update settings" and "Confirm settings" icons:



Blue "Confirm settings" icon - parameter settings in Operate webserver corresponds to the actual settings in the SRC.

Red "Confirm settings" icon - press the icon to write the new parameter settings to the SRC, or press the "Update settings" icon to reset the Operate parameter setting values to what is read from the SRC.



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Modbus/EXoline TCP

In the Lindab Pascal Signal list Modbus–Exoline, selected SRC commissioning parameters are listed in the **Holding register** signals **100-611**, sorted in SRC numbers. These are values which are stored in each room controller (SRC).

Reading SRC parameters procedure:

1. Prior to reading SRC parameter(s), use **Holding register** signal **98**, by writing the SRC number value (1-26) into **register 98**, to update all the parameter values of that SRC.
2. Read the desired SRC parameter Holding register of that SRC.

Writing SRC parameters procedure:

1. Prior to writing value(s) into the SRC parameter(s), use **Holding register** signal **98**, by writing the SRC number value (1-26) into **register 98**, to update all the parameter values of that SRC.
2. Write the value(s) to the desired SRC parameter(s) in the Holding register.
3. Write the SRC number value (1-26) into **register 99**, to commit changes of parameter value(s) of that SRC.

Bacnet TCP

Selected SRC commissioning parameters are listed as **Analog Value** signals (object instance **10113-12623**), sorted in SRC numbers. These are values which are stored in each room controller (SRC).

Reading SRC parameters procedure:

1. Prior to reading SRC parameter(s), use the signal **Analog Value-10098 SRC_ReadCommand**, by writing the SRC number value (1-26) into that register, to update all the parameter values of that SRC.
2. Read the desired SRC parameter Analog Value signal(s) of that SRC.

Writing SRC parameters procedure:

1. Prior to reading SRC parameter(s), use the signal **Analog Value-10098 SRC_ReadCommand**, by writing the SRC number value (1-26) into that register, to update all the parameter values of that SRC.
2. Write the value(s) to the desired SRC parameter(s) in the Analog Value signal(s).
3. Write the SRC number value (1-26) into **Analog Value-10099 SRC_WriteCommand**, to commit changes of parameter value(s) of that SRC.



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We at Lindab have therefore made it our most important objective to contribute to an indoor climate that improves people's lives. We do this by developing energy-efficient ventilation solutions and durable building products. We also aim to contribute to a better climate for our planet by working in a way that is sustainable for both people and the environment.

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