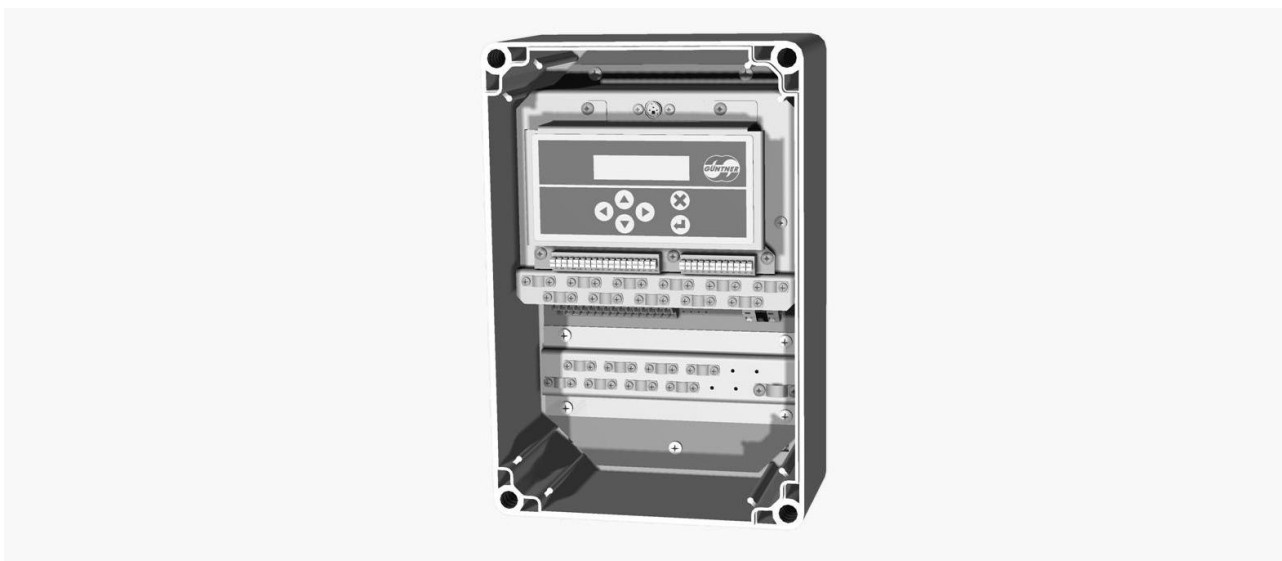


## Additional Instructions for GMM EC/xx/RD.2

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Controller GMM EC with remote Controller Module

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[www.guentner.de](http://www.guentner.de)

# 1 Additional Instructions for GMM EC/xx/RD.2

The GMM EC/xx/RD.2 offers the opportunity to operate the controller in a remote location, with the help of a CAN Repeater. This enables the user to operate the controller or to read out information from a distant location.

To do this the controller has to be removed from the GMM EC/xx/RD.2 and has to be installed in a different location (e.g. a switching cabinet).

The rail mounted controller module communicates via CAN Bus with the EC-controller that is still in the original housing. Galvanic isolation is ensured by a CAN Repeater which is mounted on top of the EC controller. The Controller distributes the data to the connected EC fans.

## ADVICE

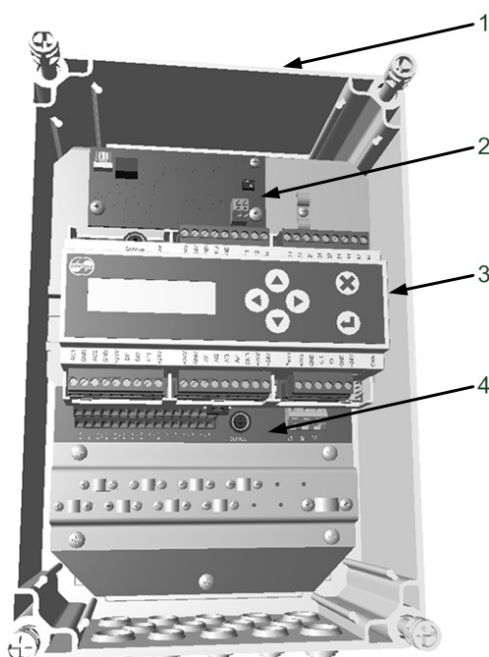
**The maximum bus length between Controller and CAN-Repeater may not exceed 350 meters.**

The controller module GRCE.1 must be powered by an external 24V DC power supply. (See datasheet GRCE.1)

The following cables can be used for the bus connection between the controller (GRCE.1) and the CAN Repeater:

Belden 9841, Lapp 2170203, Lapp 2170803, Helukabel 81910

The following picture shows the most important components:



1. GMM EC/xx/RD.2
2. CAN-Repeater
3. GRCE.1
4. EC-Controller

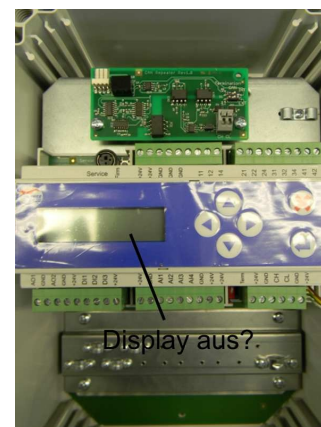
**Follow the instructions below to install the controller remotely:**

1. Power off the GMM EC. Turn off the fuse in the nearby fuse box (GPD if available). Otherwise switch off the power in the appropriate location.
2. ATTENTION: In case the heat exchanger is already in operation all EC fans will go into bypass operation when the EC controller is switched off. This means that the EC fans will run with up to 100% of the maximum speed. (Depending on the configuration)
3. Open the cover of the GMM EC (open the 4 screws)



Screw connections solve

4. Check if the display of the controller is off. This is an indication if the device is powered off.



Display off?

5. Remove the connector at the GRCE.1 on the lower right corner (labeled with CAN) and connect it to the CAN-Repeater PCB in the upper left corner.



switch to other plug

6. If there are any additional connected sensors or switches at the inputs or outputs they need to be disconnected in this location and also they need to be connected to the remote location. It might be necessary to extend these connections with appropriate shielded cables.

7. Remove the controller from the mounting rail with the help of a screw driver that is placed in the latch at the bottom of the controller.

8. By moving the bottom part of the controller slightly forward it can now be taken off the mounting rail

9. In case you need a mounting rail for the controller you can reuse this rail by unscrewing it and re-using it in a different location.



remove controller

10. Install the controller GRCE.1 in the desired location. The controller itself is protection class IP20. You need to make sure that it is mounted in an appropriate location.

## ADVICE

**The maximum cable length between GRCE.1 and CAN Repeater in the GMM EC may not exceed 350 meters**

11. The GRCE.1 must be provided with an external 24V supply. Use Clamp TB1 to feed in the power supply. (see datasheet GRCE.1)

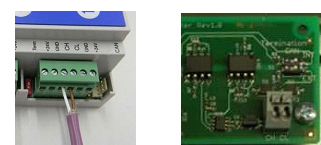


Power supply connection +  
-

12. Connect the CAN-Bus of the controller GRCE.1 with the CAN-Repeater inside the GMM EC. Use an appropriate bus cable.

Recommended cables are e.g.: Belden 9841, Lapp 2170203, Lapp 2170803, Helukabel 81910

The Clamps shown on the right side need to be connected. Check the wiring. (CH needs to be connected to CH. CL needs to be connected to CL.)



Beschriftungen auf Platine  
und Gehäuse beachten

## ADVICE

**The shield of the cable is mounted on one side only at the GMM EC under the shield clamp.**



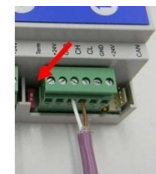
Connect CAN cable

### 13. Termination

The CAN Bus needs to be terminated internally and externally. The termination is needed on both ends of the CAN bus. The DIP switches on the CAN Repeater as well as the controller (and maybe additional devices). Need to be set correctly. This means in our case:

On the CAN-Repeater PCB (within the GMM EC housing) both switches (INT + EXT) need to be put in the ON position.

If only the GRCE.1 is connected to the bus the switch "Term" needs to be put in the ON position.



If the GRCE.1 and an additional external Bus module is connected the Term switch on the GRCE.1 needs to be in the OFF position and the Term switch on the communication module needs to be in the ON position.



Cable Connection Communication Module

14. Re-connect the wiring (e.g. temperature sensor or pressure sensor cables) to the GRCE.1. If the cables need to be extended please use appropriate shielded cables.

15. In case you have a communication module (e.g. GCMM.1 (Modbus) or GCMP.1 (Profibus) connect it on the right side of the GRCE.1 and connect it with the included ribbon cable.

16. Power on the GMM EC and the heat exchanger and after that the power supply of the GRCE.1.

17. After 10-15 seconds the GMM will start working properly. You can test functionality by changing the speed of the fans in manual mode (see operating manual).



Cable Connection Commu-  
nication Module