

## Outgoing terminal to terminal Mbus

The four-pin cable to MBus device is connected here:

- PE (green) ---> Screen
- 1 (blue) ---> M-Bus + train 1
- 2 (gray) ---> Mbus 1 strand
- 3 (orange) ---> M-Bus + train 2
- 4 (white) ---> Mbus line 2

The shield of the connecting cable must be grounded at both ends!

## Ground- or shielding terminal

On the ground- or shield clamp the shielding of the "incoming" and "advanced" cable is connected.

Furthermore, the house grounding (or the earth strip at the district heating entering to the house) must be connected to these clamps or the grounding of district heating pipes (See picture of cable).

These are important prerequisites for the protection of the system against indirect lightning strikes.

## Surge arrester MBus

The surge arrester has additional arrester for holding surges in the system. It may only one module be used per clamp print.

The module can be connected to three different plug-places. Depending on the slot is either the Strand 1 (terminal 1,2,3,4), Phase 2 (terminal 5,6,7,8) or Phase 3 (terminal 9,10,11,12) connected to the output terminal block.

## Incoming cable

The clamping print is designed for a twelve-pin cable. As "incoming cable" that cable is referred, which comes from the visualization computer.

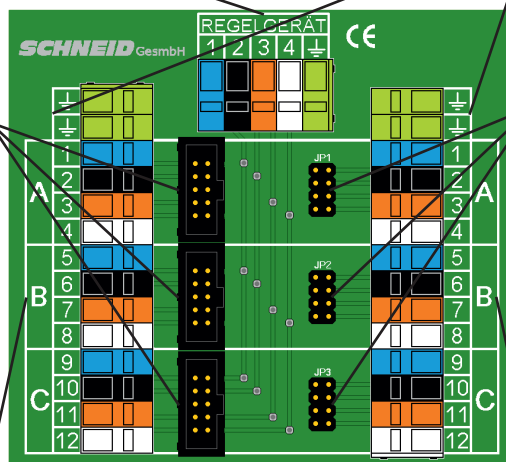
Terminal layout:

PE Shield / Earth in the example shown  
PE Shield / Earth

1 Mbus + strand 1	active	outgoing terminal
2 Mbus - strand 1	active	outgoing terminal
3 Mbus + strand 2	active	outgoing terminal
4 Mbus - strand 2	active	outgoing terminal

5 Mbus + strand 3		
6 Mbus - strand 3		
7 Mbus + strand 4		
8 Mbus - strand 4		

9 Mbus + strand 5		
10 Mbus - strand 5		
11 Mbus + strand 6		
12 Mbus - strand 6		



## Short-circuit-plug

Only if the respective short-circuit plug is connected the individual wire strands

Phase 1 (1,2,3,4),  
Phase 2 (5,6,7,8) and  
Phase 3 (9,10,11,12) from the "incoming" side to the "continuing" side are connected.

For measuring the cable during the operation, at both cable-ends the respective shorting plugs have to be pulled.

## „Continuing“ Cabel

As a „continuing“ cable is called, which goes on until the last controller. Is a branch expected, the second "continuing" cable must also be connected here.

Terminal assignment

PE shield/earth shown in the example  
PE shield/earth

1 Mbus+ strand 1	switched	when shorting plug fitted
2 Mbus- strand 1	switched	when shorting plug fitted
3 Mbus+ strand 2	switched	when shorting plug fitted
4 Mbus- strand 2	switched	when shorting plug fitted

5 Mbus+ strand 3	switched	when shorting plug fitted
6 Mbus- strand 3	switched	when shorting plug fitted
7 Mbus+ strand 4	switched	when shorting plug fitted
8 Mbus- strand 4	switched	when shorting plug fitted

9 Mbus+ strand 5	switched	when shorting plug fitted
10 Mbus- strand 5	switched	when shorting plug fitted
11 Mbus+ strand 6	switched	when shorting plug fitted
12 Mbus- strand 6	switched	when shorting plug fitted