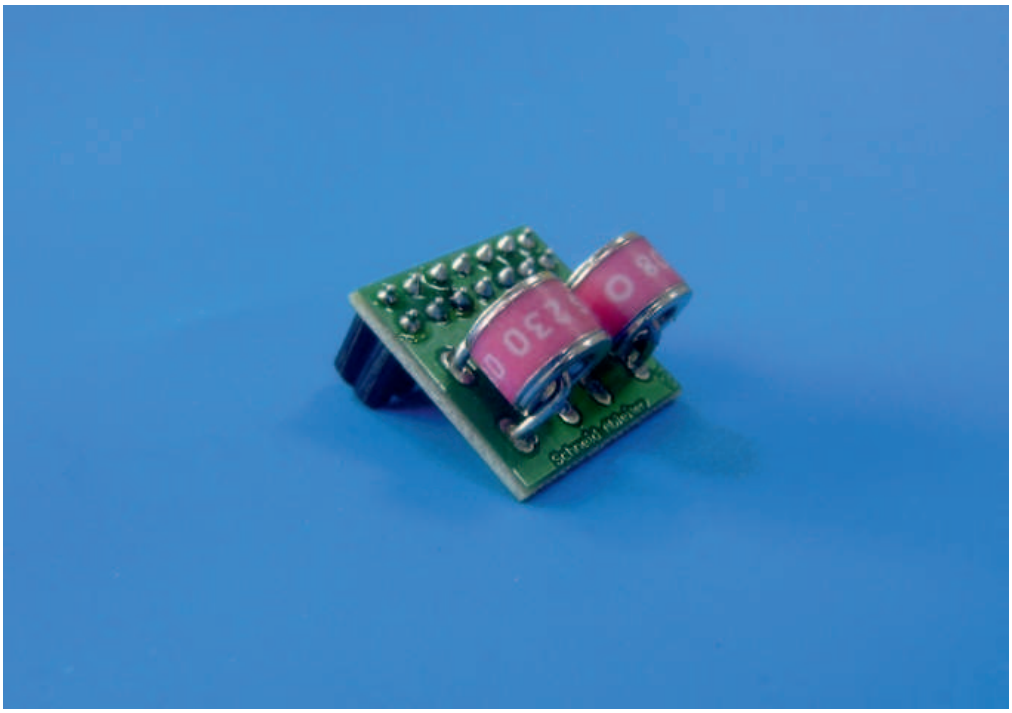
BG-COM-ABLEITERMODUL-M-BUS

AM-MBUS surge arrester module M-BUS
for integration into SCHNEID data socket

Overview

The discharge module is plugged into the respective plug of the SCHNEID data socket. The discharge module protects the data interface of the regulator against over-voltages due to indirect lightning strokes.

Please read the clamping instructions for MBUS devices.



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

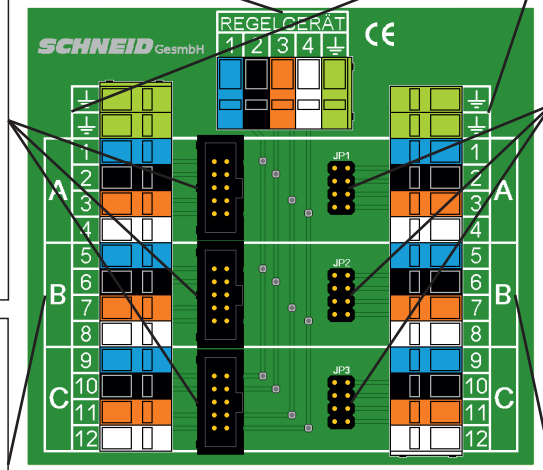
On the ground- or shield clamp the shielding of the "incoming" and "advanced" cable is connected.
Furthermore, the house grounding (or the earth strip at the district heating entering to the house) must be connected to these clamps or the grounding of district heating pipes (See picture of cable).

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.



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.

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

„Continuing" Kabel

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

Connection diagram

SCHNEID GesmbH