Application

The communication subrack CSMS10 is designed for the CMUs (communication unit) of the PKS RTU513 remote terminal unit. The communication subrack is prepared for mounting the power supply modules, the communication units, a real time clock and a bus connection unit BCU01. All necessary connections between the modules are done via the backplane of the subrack. All connections to the outside are done via the module connectors on the front



plate. The communication subrack itself has no connections to the outside.

Characteristic

There are 11 slots available for the installation of the boards. Allocation of the slots:

- 2 slots for redundant power supply units. Each module is 2 units width.
- 8 slots for communication units. Each slot is 2 units width.
- 1 slot for real time clock or bus connection unit. 1 unit width.

For the physical interfacing of boards, edge connectors of type F (DIN 41612) are used, which are directly soldered to the printed circuit board. All signals of the PKS RTU 513 system bus are connected by this connectors. The communication subrack itself has no other connectors.

The 4 pole DIL switch S1 on the communication subrack CSMS10 is used for the configuration of the PKS RTU 513 system bus and the addressing of the subrack.



Characteristic



Fig. 1: types of subrack

Address Settings

The 4 pole DIL switch (S1_x) specifies the PKS RTU513 system bus and the address of the communication subrack. Each PKS RTU513 communication unit has to be fixed in the communication subrack for operation. Fasten each board by the two fixing screws in the upper and lower fixing rail of the subrack. The front plate is then connected (grounded) to PE.

S1_x	Means	
S1-1	off	1 st 513CSMS10
	on	1 nd 513CSMS10
S1-2	off	Not used
S1-3	off	Not used
S1-4	on	Only one subrack
	off	Two subracks (Set in both subracks)

Table 1: address setting



Settings



Fig. 2: Allocation of the Slots in CSMS10



Fig.3 Grounding and Monitoring



Settings



Fig. 4: Address Scheme



Technical Data

In addition to the PKS RTU 513 general technical data, the following applies:

Subrack

Dimension	19", 3 HE, 21 slots following DIN 41494
Dimension	1 slot = 4 units = 20,32 mm
	133 x 483 x 200 mm
	(H x W x D)

Mechanical Layout

Printed circuit board	3HE, Euro card format (160 x 100)
Front panel	4R, 1 Slot (20 mm)
weight	approx. 0.2 kg

Types of Connection

Environmental conditions

Temperature	-10 65 °C
Relative humidity	5 95 % (non condensing)

Slot configuration

Slot address 1, board address P1 and slot address 9, board address P2 for two redundant power supply modules. Each is 2 slots in width.

Slot addresses/board addresses17/8, 25/7, 33/6, 41/5, 49/4, 57/3, 65/2 and 73/1 for the communication units. Each is 2slots in width.

Slot address 81, board address 0 for the real time clock or bus connection unit BCU01. 1 Slot in width.

Protection Earth- / Shield Terminal

Must be caused by electric conductive screwing to the frame or a cable plug screwed to the rack.

