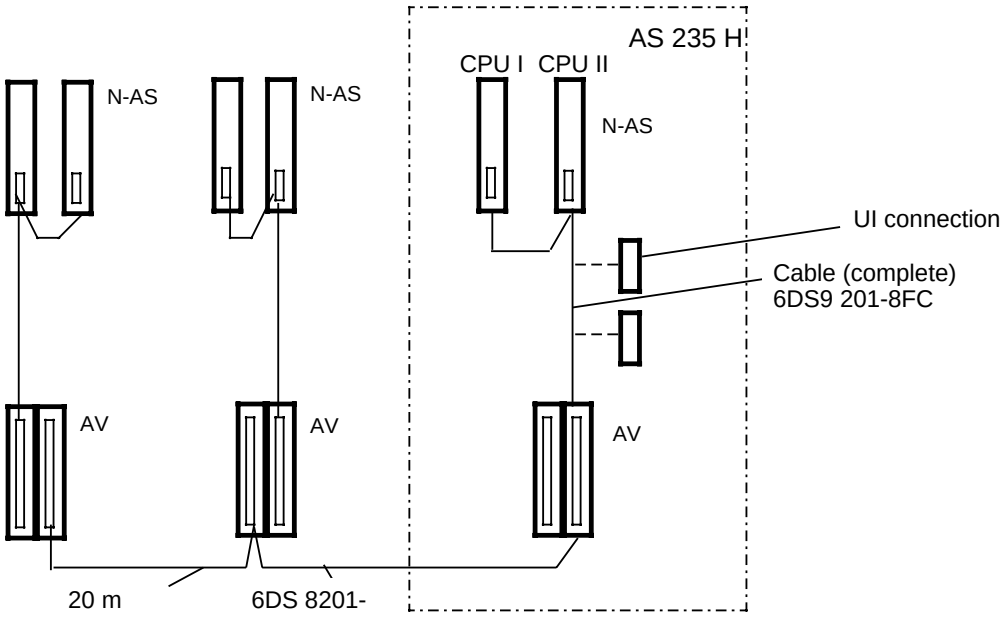
4.5 Using the Bus Components

The CS 275 bus system enables information exchange between the devices of the TELEPERM M process control system over a distance of 20 m (local bus) or 4 km (remote bus). The local bus is redundant in its standard version; the remote bus can be made redundant if required.

> **Caution**
>
> The maximum distance between devices on the local bus is 20 m; the earth potential difference between the systems may not exceed 0.2 V.

Further remote systems can be interconnected via the 4-km remote bus (inductive connection). Up to 32 local buses with up to 99 participants can communicate with each other.More details concerning the CS 275 bus system in the Manual CS 275,
Order No. C79000-G8076-C006.

4.5.1 Local Bus



AV = Connection distribution in the SES

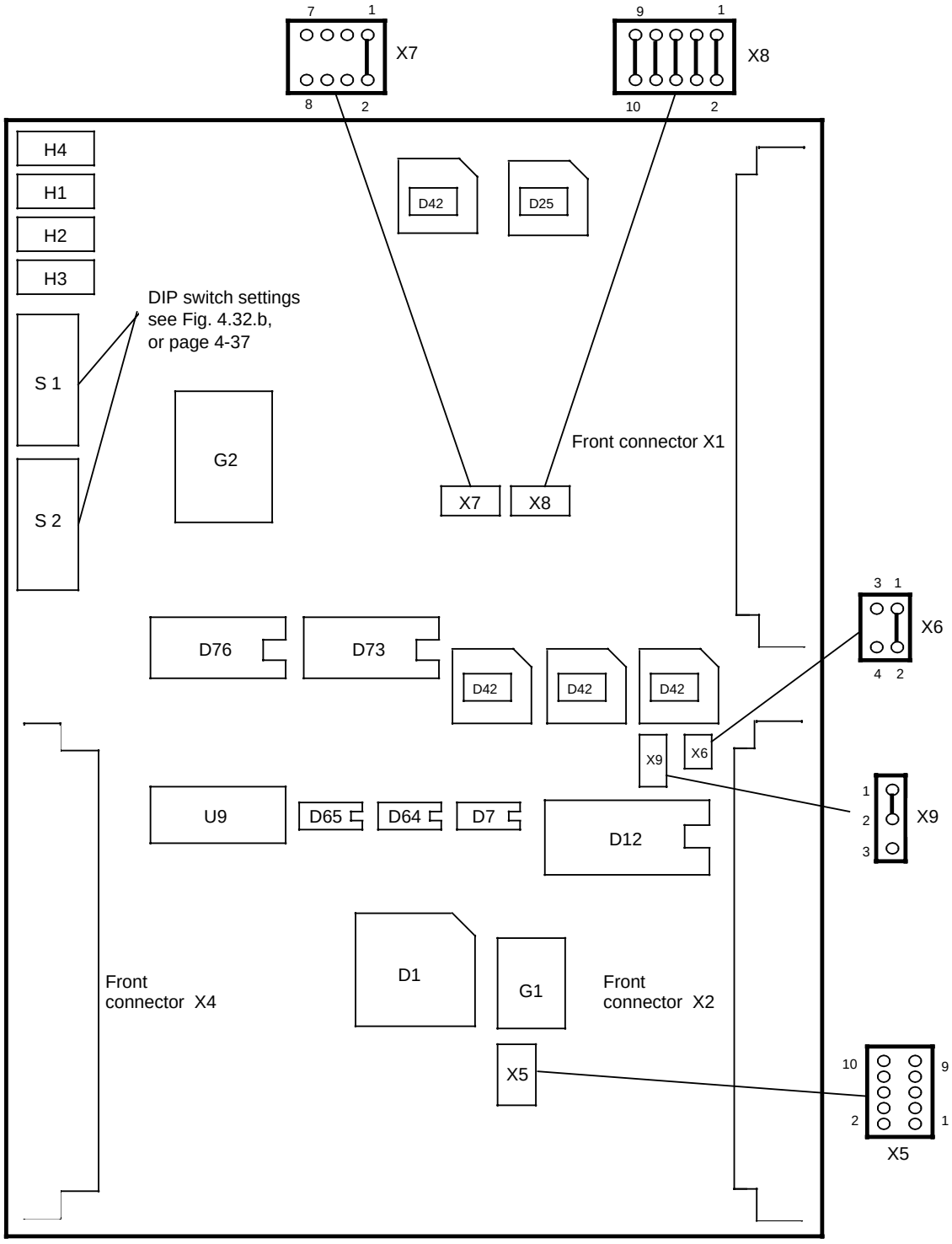
Fig. 4.13 Local bus connection

The AS may be linked with other AS or OS systems via the local bus interface module 6DS1223-8AA (N-AS) or 6DS1220-8AA (N8-H) and the connection distribution unit. The connecting cable between the systems has only a connector at one side; the open end must be connected to the connector of the next connecting cable (1:1 with regard to core color code and number of rings). A single front connector 6DS9 200-8AA must be connected to the open end of the last connecting cable.

> **Caution**
>
> The S11 and S12 switches must be set to EIN [ON] position if N-AS/N8-H is used. Both switches must be set to AUS [OFF] if an N-AS/N8-H module has not been installed.

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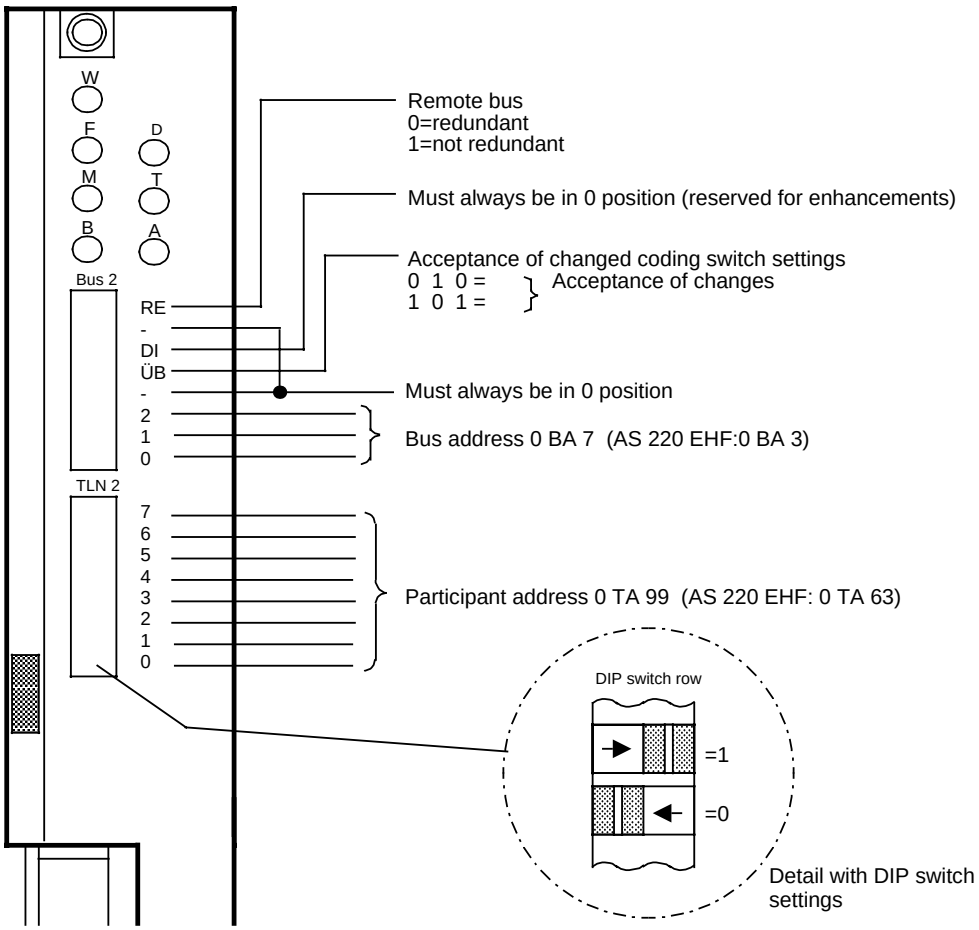
- **Local bus interface module N-AS** (6DS1 223-8AA)



Plug-in check local bus connector	X5 (9 1 / 10 2)	Local bus connector pin d18
With plug-in check Without plug-in check	0 0 0 0 0 1 0 0 0 0	Jumper inserted Irrelevant

0=Jumper removed
1=Jumper inserted

Fig. 4.35 Local bus interface module 6DS1 223-8AA



Participant address (TA)

The binary coded participant address is selected by the eight bottom DIP switches
Setting range: 0 TA 99 (AS 220 EHF: 0 TA 63)
The transmitter participant address must always be 31 if a common data (CD) link is used.

Bus address (BA)

The binary coded bus address is selected by the three bottom DIP switches of the upper switch row.
Setting range: 0 BA 7 (AS 220 EHF: 0 BA 3)

Warning

Setting BA=0 **and** TA=0 at the same time is not permitted.
Jumper setting of CPU I and CPU II must be identical.
CPU I bus address = CPU II bus address
CPU I participant address CPU I = CPU I I participant address

Bus redundancy (RE)

The CS 275 bus system permits operation on a redundant or single-structured remote bus. The required mode can be selected by the RE switch.

Setting: 0=redundant remote bus
1=non-redundant remote bus

Acceptance (ÜB)

Actuating the ÜB switch accepts the switch settings that have been changed (e.g. during the running operation).
Acceptance: 1 1 0 or 1 0 1

Fig. 4.36 Local bus interface module 6DS1 223-8AA (DIP switch settings)

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