Contents Page

Revisions **2–3**

Revised documents 2–3

Service notes **2–5**

Release contents 2–5

Engineering tools 2–5

Integration into the substation automation system 2–5

Restrictions and known errors 2–5

Calculation of RMS values 2–5

Process bus configuration 2–5

CHHOS-RIO's (PBI's) 2–5

Star coupler module not in Slot 20 2–5

Group events 2–6

Download of the configuration database 2–6

Restart after using DDT or Multiprog wt 2–6

Breakdown of LON connection to MicroSCADA 2–6

Supervision of redundant power supplies in the extension rack 2–6

LON signals 2–6

Extended ESD compliance 2–6

Event throughput on the process bus 2–6

Event session reestablishing 2–6

Bus administrator restarts 2–7

1 Revised documents

Since this is the first version of this manual, no documents are revised.

1 Release contents

Base software including:	version 3.00.010
ProConOS (by K&W)	version 2.9
SiMon	version 3.461/3.462 for AIM02 only

2 Engineering tools

REC 580*3.0 can be configured using the following tools:

- CAP 580 version 3.00.1
- Multiprog WT (by K&W) version 1.3.6.511
- DDT (Download and Debugging Tool) version 3.01.01

3 Integration into the substation automation system

LON interbay bus	
LON application layer guide-lines	version 1.3
External I/O-modules on the process bus	
MVB process bus applica-tion layer	version 1.0

4 Restrictions and known errors

4.1 Calculation of RMS values

Per AIM02 only eight RMS values can be calculated.

4.2 Process bus configuration

Adding new types of process bus devices requires not only modification of the respective database tables but also of the base software. The set of supported process bus devices therefore depends on the base software release. This release supports all devices mentioned in [PAL] except for the CHHOS-RIO's (PBI's, see below).

4.3 CHHOS-RIO’s (PBI’s)

The CHHOS-RIO's are not supported yet. Because these non-intelligent devices do not provide a Status of Station (SOS), a different supervision method has to be implemented (-> sink time supervision). Furthermore the diagnosis on the CPU module does not start-up at all because it can not find an SOS-signal in the configuration of these devices.

4.4 Star coupler module not in Slot 20

Because only 4 bits of the slot id are decoded, slot 20 can not be used for a Star coupler module (SCM). Slot 20 is causing a conflict with slot 4.

4.5 Group events

Group events are implemented however there are still implementation errors, why group events are not supported.

4.6 Download of the configuration database

A configuration database cannot be downloaded at runtime. The terminal must be stopped, restarted and then brought into the limited ready state while starting up.

4.7 Restart after using DDT or Multiprog wt

To guarantee a safe operation of the terminal, it must be restarted (via power off/on or reset) after the tools DDT or Multiprog wt have been used with an on-line connection. This is only required for devices which run in a customer's site. Such restarts are not necessary in test environments.

4.8 Breakdown of LON connection to MicroSCADA

When LON connection to MicroSCADA (station MMI) breaks down, MicroSCADA opens a new session and messages of the former session which are pending in LAC (LON Application layer Converter) get lost.

4.9 Supervision of redundant power supplies in the extension rack

The status information of the power supplies is available on the VME bus lines IRQ3 and IRQ4. In the extension rack there is no module that can monitor these lines. Therefore the power supplies cannot be directly supervised in the extension rack. The PSM03 however provides its status information on an output at the front. By connecting this output to a binary input, the status will be accessible.

4.10 LON signals

Signals coming from the LON interbay bus must only be used once in a function block program application.

4.11 Extended ESD compliance

The terminal complies with the standard ESD requirements (6/8 kV) but does not comply with the extended ESD requirements (8/15kV) stipulated by RWE.

4.12 Event throughput on the process bus

The main CPU can only accept approx. 3 analog events/sec from the process bus (VME and MVB!). Producing more events on the I/O modules over a longer period of time will result in a loss of events as soon as the buffers on the I/O modules overflow.

4.13 Event session reestablishing

When four event sessions are closed during a timeout condition, the reestablishing of those four event sessions takes longer than normal (approximately 3 minutes longer). This behavior is only observed during very high bus load.

4.14 Bus administrator restarts

Heavy disturbance (that is, TX/RX shortcut) on the MVB Bus causes a bus administrator restart.