

## 11 Repairs / Rapid Service


We strongly advise you not to repair defective units or modules because especially selected electronic components are used that must be handled according to the guidelines for ESD endangered components (electrostatic discharge). In particular, special manufacturing techniques are required for work on PCBs in order to avoid damage to flow-soldered PCBs, sensitive components and protective coating.

If a fault cannot be remedied by the procedures described in Section 9.2, it is advisable to send the module or the complete unit back to the manufacturer.

### 11.1 Module replacement



#### Caution!

Modules must not be inserted or removed under power! First put the miniature circuit – breakers in the OFF position . The MCB does not disconnect the unit from the input voltage.



#### Caution!

The modules of the control and protection units contain CMOS circuits. Electrostatic discharges through the terminals of the components, conductors and connector pins must be avoided by first touching earthed metal parts. This also applies to the replacement of base – mounted components such as EPROM or EEPROM components. Electrostatically protective packaging must be used for returning equipment.

When modules are replaced, the modules removed from the unit and the replacement modules must be precisely compared.

- Compare the order number on the front panel.
- Compare the jumpers inserted using the component diagrams and the jumper tables.
- Compare the labeling (order numbers) of the components on bases.

Only if all the details compared match, will replacing the module remedy the fault.

If no module that already contains components on bases and jumpers is available as a replacement, the appropriate components must be removed from the old module and fitted onto the new module.

If replacing the module does not remedy the error, please call your local Siemens maintenance service, stating the action taken to repair defective modules and the order data.