The HDD31-90 is a combination unit consisting of a 640 Kbyte 3.5" diskette unit (different brands) and a 40 Mbyte 3.5" hard disk unit (made by Rodime), Fig. 1. The HDD31-90 is intended for use as a back-up unit in the SattCon31-90. 16 Mbytes of the 40 Mbytes on the hard disk are accessible for data storage. (If further technical data is needed in addition to the "Technical data", refer to each manufacturer for more detailed information.)

Mounting and connection
The HDD31-90 unit is mounted just to the right of the CU35 board.

Power supply
The HDD31-90 must be supplied with 0, +5 and +12V DC. The supplies are connected via spade terminals to the back plane of the SattCon31-90. The HDD31-90 is delivered with F-connectors and cabling for mounting in the rack. The F-connector is located lowest in the rack, at the X2 position. Refer to the following table and Figs. 2 and 3 for the connections.

<table>
<thead>
<tr>
<th>HDD31-90</th>
<th>SattCon31-90</th>
</tr>
</thead>
<tbody>
<tr>
<td>GND z2</td>
<td>Chassis</td>
</tr>
<tr>
<td>0 V z6 (F-connector)</td>
<td>Spade terminal marked (0V) to the right in the lower row on the back plane.</td>
</tr>
<tr>
<td>+5 VDC z8 (F-connector)</td>
<td>Spade terminal (+5V), second from left in the upper row on the back plane.</td>
</tr>
<tr>
<td>+12 VDC z4 (F-connector)</td>
<td>Spade terminal (+12V), third from left in the upper row on the back plane.</td>
</tr>
</tbody>
</table>

Connection of the hard disk unit
The hard disk unit is connected to the CU35 board via the enclosed 50-pole ribbon cable, carrying the SCSI bus.

Connection of the diskette unit
The diskette unit is connected to the SattCon31-90 system via the 34-pole ribbon cable on the CU33-FD. In order to extract the ribbon cable from the HDD31-90, there is a slot on the right side of the front panel of the central CU33-FD board. Thus, the cable from the HDD31-90 is fed under the central rack, put up between the central boards of CU33-FD and CU35, finally penetrating between the front panels of these two units. Please note! The guiding column of the ribbon connector must be correctly oriented when connected to the front of the CU33-FD.

Connection of several HDD31-90s
If several HDD31-90 units are required, all except the first must be supplied with power separately. The units are installed side by side. The 50-pole ribbon cable for the hard disk unit is "looped" from unit to unit. For the diskette units the 34-pole ribbon cable is connected in parallel from unit to unit. This is also true when connecting an extra FDD unit. The SattCon31-90 can handle up to four diskette units, including any extra FDD units.

Identity settings
For each HDD31-90 unit which is connected, the identity must be set for the hard disk and the diskette units. The identities are set by means of jumpers located on the units. Please find instructions for the hard disk unit on the next page. For instructions for the diskette unit, please refer to the manual for the specific drive (may be of different brands).

Termination resistors
The SCSI bus must be terminated at both ends, i.e. if more than one unit is connected the termination resistances must be disconnected in the unit or units in between. See Figs. 3, 4 and 5.

Formatting the hard disk unit
The hard disk unit in the HDD31-90 must be formatted before use, which it's not when delivered. For further details please refer to "SattCon31-90 Accessories".

493-0163-11
**Technical data**

**Associated system**
SattCon 31-90

**Memory capacity**
- Diskette: 640 Kbyte (formatted)
- Hard disk: 40 (16) Mbyte (formatted)

**Power supplies**
+12, +5 and 0V DC

**Current consumption**
- Normal operation: 1.0A (+5V), 0.5A (+12V)
- Starting surge: 2.5A (+12V)

**Bus system**
SCSI (Small Computer System Interface)

**Temperature range**
+10C - +50C

**Humidity**
10% - 85%, no condensation

**Dimensions**
H233.2 x D160.0 x B60.6 mm

**Ordering number**
HDD31-90 492-5332-01