SICLIMAT™ X

SICLIMAT TP177
local operator terminal

SICLIMAT TP177 is used for local operation and display of the SIMATIC S7 controllers subordinate to the X-OS. An analog touch screen is provided for operation. SICLIMAT TP177 can be installed in a control panel door, and is suitable for local operation and display of a group of up to 4 SIMATIC S7-300 or S7-400 CPUs.

The SICLIMAT TP177 operator terminal can be connected via MPI, PROFIBUS DP or PROFINET (Ethernet). Fully user-definable plant graphics can be created for maximum operator convenience and flexibility.
The local operator terminal for SICLIMAT X, based on SIMATIC S7, offers the following outstanding system and product features:

- "Plug and play" for all standard functions
- Easy to operate, with clear and uniform guidance of the user throughout the graphical hierarchy, and a clear operating philosophy
- Fast, intuitive access to the user’s destination via system view, equipment view and data point view. The user does not see the breakdown into separate hardware (automation station and CPU).
- The user is guided through common alarm displays in various views (by system or item of equipment)
- Based on (hardware and software) standards from A&D with design and firmware upgrades specific to SICLIMAT.
- Reduction in engineering time and cost (system settings such as CPU addresses and passwords for operation are entered on the SICLIMAT TP177 terminal)
- Bus-compatible for operation and display of several systems in different SIMATIC S7 CPUs via standard MPI, PROFIBUS DP and PROFINET (Ethernet) with the facility to display systems, devices and individual data points sequentially from more than one CPU, and where relevant, to operate address points (e.g. setpoints and switch commands).
- Operation of time programs
- Facility to connect SIMATIC S7-300 and SIMATIC S7-400, including mixed configurations if required
- Storage of engineering data allows automatic recovery after restoration of power.
- Automatic display of start-graphic with system overview
- Password protection at several operator levels
- Multi-lingual: Standard version comprises English, German and French
- Local operator activities are logged in the management system (X-OS) and displayed on the TP177 operator terminal.
Function

The operating and display philosophy of SICLIMAT TP177 is based on a hierarchical structure:

- **Opening screen** (all plant)
- **Plant diagram** (all devices in a system)
- **Equipment diagram** (all groups within an item of equipment)
- **Data point graphics**
  - Plant
  - Characteristic
  - Messages
  - Measured value
  - Controller
  - Switch command
  - Setpoint
  - Output signal / positioning command
  - Numerical value
- **Time programs**
  - Daily schedules
  - Weekday programs
  - 7-day programs
  - Special date programs
  - “One-off” programs

System data

The configuration menu offers the following options:

- Entry or modification of the MPI/PROFIBUS DP or Ethernet addresses
- Password administration and user administration
- Language selection

The system setting covers the following options:

- Contrast settings
- Touch calibration
- System settings
- Other settings

Post-engineering

The standard functions of SICLIMAT TP177 are available without engineering. In principle, these can be expanded (e.g. parameter setting, color, font size, and user-definable masks and graphics). The WINCC Flexible engineering tool from Siemens A&D is required for this purpose.

Actions required before connecting SICLIMAT TP177:

- **Engineer** the automation level (SIMATIC S7) using the Engineering Manager (EM) for SICLIMAT X from Version 4.0.
- **Download** data relevant to the process into the SIMATIC S7-300 or S7400
- **Connect** the SICLIMAT TP177 via MPI or PROFIBUS DP or PROFINET to all S7 CPUs to be operated and displayed.
- **Enter system data** (e.g. CPU addresses, password etc.).
Special configuration

It is also possible to connect a number of SICLIMAT TP177 terminals to one SIMATIC S7 CPU (MPI/PROFIBUS DP or Ethernet).

Example of hardware configuration

Fully user-definable graphics:

Fully user-definable plant graphics can be created for maximum operator convenience and flexibility. The freely-defined graphics allow clear and convenient plant operation. Individual operating strategies can also be implemented. The freely defined graphics can be combined with standard functions.
### Ordering

When ordering, please specify the quantity, product name and type code.

<table>
<thead>
<tr>
<th>Type</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SICLIMAT TP177</td>
<td>6FLTP177-V100</td>
</tr>
<tr>
<td>Front plate for migration from OP7/OP17</td>
<td>6FLTP-FRONT</td>
</tr>
</tbody>
</table>

### Technical data

<table>
<thead>
<tr>
<th>Data</th>
<th>SICLIMAT TP177</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display</td>
<td>5.7&quot; (120 x 90 mm) touch screen with keypad display/hide facility. 256 colors, 320 x 240 pixels</td>
</tr>
<tr>
<td>Lines</td>
<td>12</td>
</tr>
<tr>
<td>Processor</td>
<td>RISC 32 bits, 200 MHz</td>
</tr>
<tr>
<td>Operating system</td>
<td>Windows CE</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Dimension in mm</td>
</tr>
<tr>
<td>Front plate W x H</td>
<td>212 x 156 mm</td>
</tr>
<tr>
<td>Installation dimensions W x H x D</td>
<td>198 x 142 x 47 mm</td>
</tr>
<tr>
<td>Ambient conditions</td>
<td>Operating temperature</td>
</tr>
<tr>
<td>Connections</td>
<td>Built-in interface MPI/PROFIBUS DP/Ethernet</td>
</tr>
<tr>
<td>Protection standard</td>
<td>IP65 (front), IP20 (rear)</td>
</tr>
<tr>
<td>Power supply</td>
<td>Nominal voltage DC 24 V (with polarity reversal protection)</td>
</tr>
<tr>
<td>Software</td>
<td>Engineering</td>
</tr>
<tr>
<td></td>
<td>None required for standard functions. Extended functions with WINCC Flexible (extended masks, creation of fully user-definable graphics)</td>
</tr>
<tr>
<td></td>
<td>One SICLIMAT TP177 can operate and display a maximum of 4 SIMATIC S7 CPUs (the CPU addresses are set via a standard mask on the operator terminal).</td>
</tr>
<tr>
<td></td>
<td>One SIMATIC S7-CPU can be operated and monitored from several SICLIMAT TP177 terminals simultaneously (3 TP177 per S7-300 and 4 TP177 per S7-400).</td>
</tr>
</tbody>
</table>

### Product safety

Meet the requirements for CE marking:

- EMC Directive 89/336 EEC