

Plant Operating Software

Operating, service and alarm software

CD V5.0 or higher

ACS712

PC software for the remote operation, monitoring and commissioning of heating, ventilation and district heating plant and remote readout of consumption data. Windows version

Use

- Remote management with the OZW775 and OZW771 central communication units:
 - Remote operation and monitoring of Synco™ plants whose devices (primary controller, single room controllers, room units) are connected via Konnex bus
- Remote management with the OCI600 and OCI611 central communication units:
 - Remote operation and monitoring of heating plant whose devices (controllers, pulse adapters, temperature sensors/adapters, digital input modules and relay modules) are connected via LPB (Local Process Bus)
- Remote management with the M-bus central units OZW10 and OZW111:
 - Remote operation and monitoring of M-bus-compatible devices (controllers and meters) in community and district heat substations
 - Acquisition of consumption data of M-bus-compatible meters for consumption cost billing
 - Acquisition of consumption data from radio-based consumption meters of the Siemeca™ AMR system, transmitted to the M-bus central unit OZW10 via the M-bus interface of the WTX16 or WTT16 network node
- Diagnosis and commissioning of LPB controllers with OCI69 and OCI700 service interfaces
- Diagnosis and commissioning of KNX controllers with OCI700 service interface
- Reception of alarms in plants with OZW30 and OCI55

Functions

Operating software

The operating software provides a number of applications, depending on the selected software package.

| <i>Application</i> | <i>Description</i> |
|----------------------------|--|
| Plant Diagram user-defined | Visualization and remote operation of data points with graphic display of plant. Graph, data points and interconnections are defined by the user |
| Popcard | Visualization and remote operation of all transmitted data points of the connected devices |
| • Standard | Predefined pages and data points of each device |
| • User-defined | Pages and data points as defined by the user |
| Offline Trend | Acquisition and presentation of the dynamic behavior of selected data points, without connection to the plant |
| Parameter Settings | Reading and editing the setting parameters of a device in tabular form |
| Plant Navigation | Plant view in the form of a tree structure. The view corresponds to the addressing of the devices |
| Connections | Type of connections |
| • Direct | With standard null modem cable or standard USB cable (connector type A to B) |
| • Modem | Via telephone modems |

Alarm software

The alarm software is an overriding program included in all software packages.

| <i>Application</i> | <i>Description</i> |
|--------------------|---|
| Alarm | Alarms from the central unit or the plant are received, stored, displayed and output on a printer |
| System Report | Information from the central unit or the plant is received, stored, displayed and output on a printer |
| Connections | Type of connection |
| • Direct | With standard null modem cable or standard USB cable (connector type A to B) |
| • Modem | Via telephone modems |

Service software

The service software has a fixed functionality and is included in all software packages.

| <i>Application</i> | <i>Description</i> |
|----------------------|---|
| Popcard | Visualization and remote operation of all transmitted data points of the connected devices |
| • Standard | Predefined pages and data points of each device |
| • User-defined | Pages and data points as defined by the user |
| Online Trend | Acquisition and presentation of the dynamic behavior of selected data points of the plant with connection to the plant |
| Parameter Settings | Reading and editing the setting parameters of a device in tabular form |
| Commissioning Report | Logging the setting parameters of individual devices, device groups or of the entire plant |
| Plant Navigation | Plant view in the form of a tree structure. The makeup of the tree structure corresponds to the addressing of the devices |
| Connection | Directly with standard null modem cable or standard USB cable (connector type A to B) |

Functions with central units

The functions are dependent on the type of central unit or the type of service interface.

| Function | Type of central unit / service interface | | | | | | | | | |
|----------------------|--|--------|--------|--------|---------------------|--------|-------|-------|-------|--------|
| | OZW775 | OZW771 | OCI600 | OCI611 | OZW10 ³⁾ | OZW111 | OZW30 | OCI55 | OCI69 | OCI700 |
| Plant Diagram | ● | ● | ● | ● | ● | ● | | | ● | ● |
| Popcard | ● | ● | ● | ● | ● | ● | | | ● | ● |
| Trend | | | | | | | | | | |
| • Online | ● | ● | ● | ● | ● | ● | | | ● | ● |
| • Offline | ● | | ● | | | | | | | |
| Parameter Settings | ● | ● | ● | ● | ● | ● | | | ● | ● |
| Commissioning Report | ● | ● | ● | ● | ● | ● | | | ● | ● |
| Plant Navigation | ● | ● | ● | ● | ● | ● | | | ● | ● |
| Alarm | ● | ● | ● | ● | ● | ● | ● | ● | | |
| System Report | ● | ● | ● | ● | ● | ● | ● | ● | | |
| Connections | | | | | | | | | | |
| • Direct | ● 2) | ● 1) | ● 1) | ● 1) | ● 1) | ● 1) | ● 1) | ● 1) | ● 1) | ● 2) |
| • Modem | ● | ● | ● | ● | ● | ● | ● | ● | | |

1) With standard null modem cable

2) With standard USB cable (connector type A to B)

3) Version V3.0 or higher

Equipment combinations

Number of plants

With all programs, the number of plants are unlimited.

Number of devices per plant

With the operating software, the number of devices per plant are limited. By contrast, with the alarm software and the service software, the number of devices are unlimited. To limit the number of devices, a credit is available with ACS712. Every device connected to the plant charges that credit with a device-specific value. The number of devices that can be operated are limited by the credit amount.

- The credit with ACS712 is **200**
- The device-specific credits are as follows:

| Type of product | Device-specific credit |
|--|------------------------|
| OCI600, OCI611, OZW10, OZW111, OZW771, OZW775 | 10 |
| OCI69, OCI700, WTX16, WTT16, KNX line coupler | 0 |
| Synco™ RMU7..., RMH7..., RMB7..., RMK7..., RMS7... | 8 |
| Synco™ RLU2..., SEZ2... | 8 |
| Synco™ RXB...* | 2 |
| Synco™ QAW740 | 1 |
| SIGMAGYR® RVL..., RVP..., RVD... | 8 |
| SONOHEAT®, SONOGR® | 3 |
| Siemeca™ WF.21..., WF.26... | 2 |
| Siemeca™ WHE21..., WHE36 | 1 |
| Siemeca™ AEW21.2 and AEW36.2 per input | 1 |
| PadpulsM1 | 1 |
| Third-party device with own Device Description | 8 |
| Unknown device without own Device Description | 8 |

* only RXB... with KNX logo

PC hardware

| PC component | Minimum requirement |
|--------------|--|
| Processor | Pentium-compatible 300 MHz, recommended 600 MHz |
| RAM | 128 MB, recommended 256 MB |

| <i>PC component</i> | <i>Minimum requirement</i> |
|---------------------|---|
| Hard disk | 1.9 GB free memory (Windows XP) 2.0 GB with 1.0 GB free memory (Windows 2000) Recommended: additional 20 MB free memory per plant |
| Screen | VGA standard driver 800 × 600, 256 colors Recommended: SVGA standard driver 1028 × 768 |
| Ports | USB 1.1 and higher or serial COM up to 19,200 Baud (directly or via modem) Parallel port for copy protection |
| Operating system | <ul style="list-style-type: none"> Windows XP, service pack 1 Windows 2000, service pack 3 |
| Diskette drive | 3½", 1.44 MB, for diskette with log file |
| CD-ROM or DVD drive | |

Modems

Modems are required if communication takes place via the telephone network. The drivers of the modems installed under Windows can be used.

Type summary

ACS712 is supplied as a complete set. Copy protection (dongle) and log file (license) are included.

| <i>Type reference</i> | <i>Dongle CMD.01</i> |
|-----------------------|----------------------|
| ACS712 | Included |

Ordering and delivery

Standard package

Ordering

When ordering, please give type reference **ACS712**.

Delivery

The standard package is supplied as a set in a box, consisting of:

- CD-ROM with
 - operating software
 - service software
 - alarm software
 - batchjob software (extra license requested)
 - documentation
- Copy protection CMD.01
- Diskette with key for copy protection
- Installation instructions

Documentation

Software

| <i>Type reference</i> | <i>Document and reference number</i> |
|-----------------------|--|
| ACS7... | Installation Instructions CE1G5640xx User Manual CE1U5640en (ACS Operation, ACS Service) User Manual CE1U5641en (ACS Alarm) User Manual CE1U5642en (ACS Batchjob) |
| ACS700 | Data Sheet CE1N5641en |
| ACS712 | Data Sheet CE1N5643en |
| ACS713 | Data Sheet CE1N5644en |
| ACS715 | Data Sheet CE1N5645en |
| ACS741 | Data Sheet CE1N5647en |
| ACS785 | Data Sheet CE1N5648en |

Systems

| <i>Type of system</i> | <i>Document and reference number</i> |
|---|--------------------------------------|
| Synco™ 700 / Synco™ RXB HVAC Controls with Konnex Interface | Range Description CE1S3110en |
| Konnex bus | Data Sheet CE1N3127en |
| Konnex bus, system description | Basic Documentation CE1P3127en |
| Local Process Bus (LPB), System Engineering | Basic Documentation CE1P2370E |
| Local Process Bus (LPB), Basic Engineering Data | Data Sheet CE1N2032E |
| Local Process Bus (LPB), Basic System Data | Data Sheet CE1N2030E |
| M-bus System | Basic Documentation CE1P5361en |
| M-bus System, Basic System Data | Data Sheet CE1N5361E |
| Siemeca™ AMR system | Data Sheet CE1N2870en |

Central units

| <i>Type of central unit</i> | <i>Document and reference number</i> |
|-----------------------------------|--|
| Central communication unit OZW775 | Data Sheet CE1N5663en Installation Instructions CE1G5663en Commissioning Instructions CE1C5663en |
| Central communication unit OZW771 | Data Sheet CE1N3117en Basic Documentation CE1P3117en Installation Instructions CE1G3117xx |
| Central communication unit OCI600 | Data Sheet CE1N2529E Basic Documentation CE1P2529en User Manual CE1U2529E |
| Central communication unit OCI611 | Data Sheet CE1N2533en Installation Instructions CE1G2533xx |
| M-bus central unit OZW10 | Data Sheet CE1N5362E User Manual CE1U5362E |
| M-bus central unit OZW111 | Data Sheet CE1N5363en Installation Instructions CE1G5363xx |
| Service interface OCI700 | Data Sheet CE1N5655de |

Technical design

Operating and service software

General

The operating software and the service software include applications with the following features:

- The following applications can be started several times and operated in parallel:
 - Plant Diagram
 - Popcard
 - Online Trend
 - Offline Trend
 - Parameter Settings
 - Commissioning Report
- Several applications can be used simultaneously (e.g. Plant Diagram and Popcard)
- Active applications (e.g. Online Trend) can operate in the background
- User-defined adjustments can be made in the following applications and views:
 - Plant Diagram
 - Popcard

The software contains a device description of each supported device. The device descriptions define

- the data points with the associated features
- the links to the applications

Plant Diagram

This application permits the graphic presentation of plant (individual devices or groups of devices) with the following choices:

- Automatic updating of process values in the diagram
- Changing setpoints in the diagram
- Links to other diagrams can be established

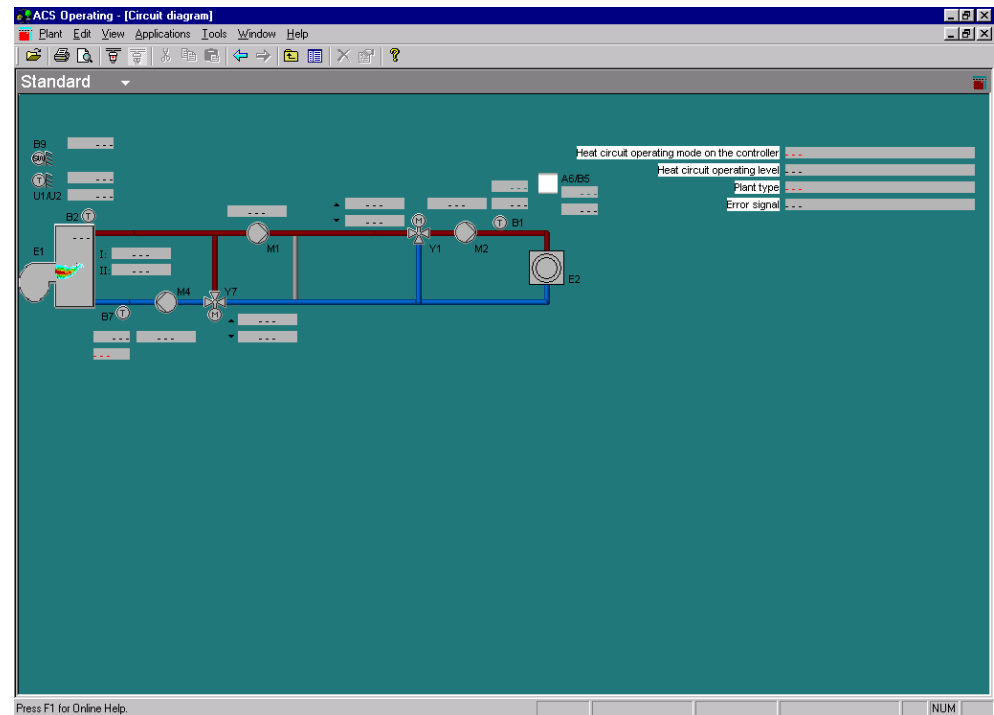
A user-defined plant diagram is created as follows:

- Use external graphic software (e.g. Micrografx Picture Publisher™) for the graphic presentation. The graphs can be adopted in bitmap format

- For the inclusion of data points and links, the application has an Editor integrated

All plant diagrams will be stored in a separate library. They can also be created without having a connection to the plant (offline).

The plant diagrams can be printed out.



This application is used to visualize the transmitted data points of each device and their values.

Each type of device uses standard popcards. Makeup and contents of the operating pages are predefined

User-defined popcards can be created for each device and each node. Data points of all subordinate devices can be added to popcards that are assigned to a node. Standard and user-defined popcards can be copied to devices of the same type or to superposed nodes.

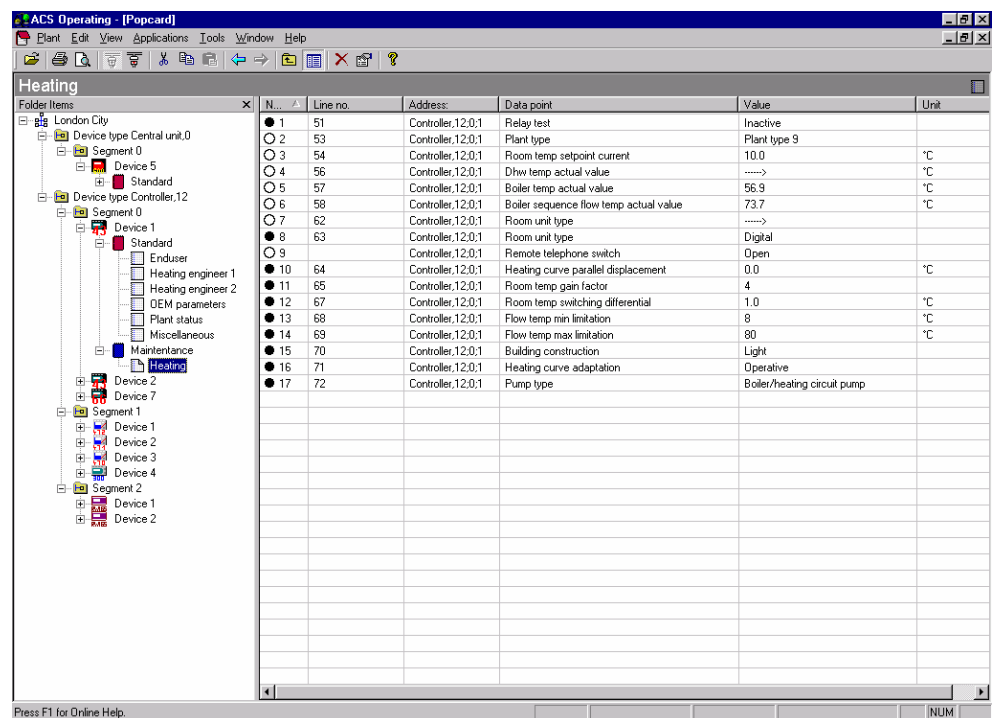
The user-defined popcards offer the following features:

- They can consist of several user-defined pages
- Each page can be subdivided into several user-defined sections
- Freely selectable data points and separators can be assigned to the popcards, the pages and the sections

Switching between the standard and the user-defined popcards is possible at any time.

Each selected page is automatically updated. The updating process will be visualized.

The operating pages can be printed out and exported as an ASCII file.



The screenshot shows the 'ACS Operating - [Popcard]' window. On the left is a 'Folder Items' tree view showing a hierarchy: London City > Device type Central unit,0 > Segment 0 > Device 5 > Standard > Device type Controller,12 > Segment 0 > Device 1 > Heating. The 'Heating' folder is selected. On the right is a table with columns: N., Line no., Address, Data point, Value, and Unit. The table contains 17 rows of data points for the selected 'Heating' device.

| N. | Line no. | Address | Data point | Value | Unit |
|------|----------|-------------------|--|-----------------------------|------|
| ● 1 | 51 | Controller,12,0,1 | Relay test | Inactive | |
| ○ 2 | 53 | Controller,12,0,1 | Plant type | Plant type 9 | |
| ○ 3 | 54 | Controller,12,0,1 | Room temp setpoint current | 10.0 | °C |
| ○ 4 | 56 | Controller,12,0,1 | Dhw temp actual value | -----> | °C |
| ○ 5 | 57 | Controller,12,0,1 | Boiler temp actual value | 56.9 | °C |
| ○ 6 | 58 | Controller,12,0,1 | Boiler sequence flow temp actual value | 73.7 | °C |
| ○ 7 | 62 | Controller,12,0,1 | Room unit type | -----> | |
| ● 8 | 63 | Controller,12,0,1 | Room unit type | Digital | |
| ○ 9 | | Controller,12,0,1 | Remote telephone switch | Open | |
| ● 10 | 64 | Controller,12,0,1 | Heating curve parallel displacement | 0.0 | °C |
| ● 11 | 65 | Controller,12,0,1 | Room temp gain factor | 4 | |
| ● 12 | 67 | Controller,12,0,1 | Room temp switching differential | 1.0 | °C |
| ● 13 | 68 | Controller,12,0,1 | Flow temp min limitation | 8 | °C |
| ● 14 | 69 | Controller,12,0,1 | Flow temp max limitation | 80 | °C |
| ● 15 | 70 | Controller,12,0,1 | Building construction | Light | |
| ● 16 | 71 | Controller,12,0,1 | Heating curve adaptation | Operative | |
| ● 17 | 72 | Controller,12,0,1 | Pump type | Boiler/heating circuit pump | |

This application allows any data points of a plant to be logged.

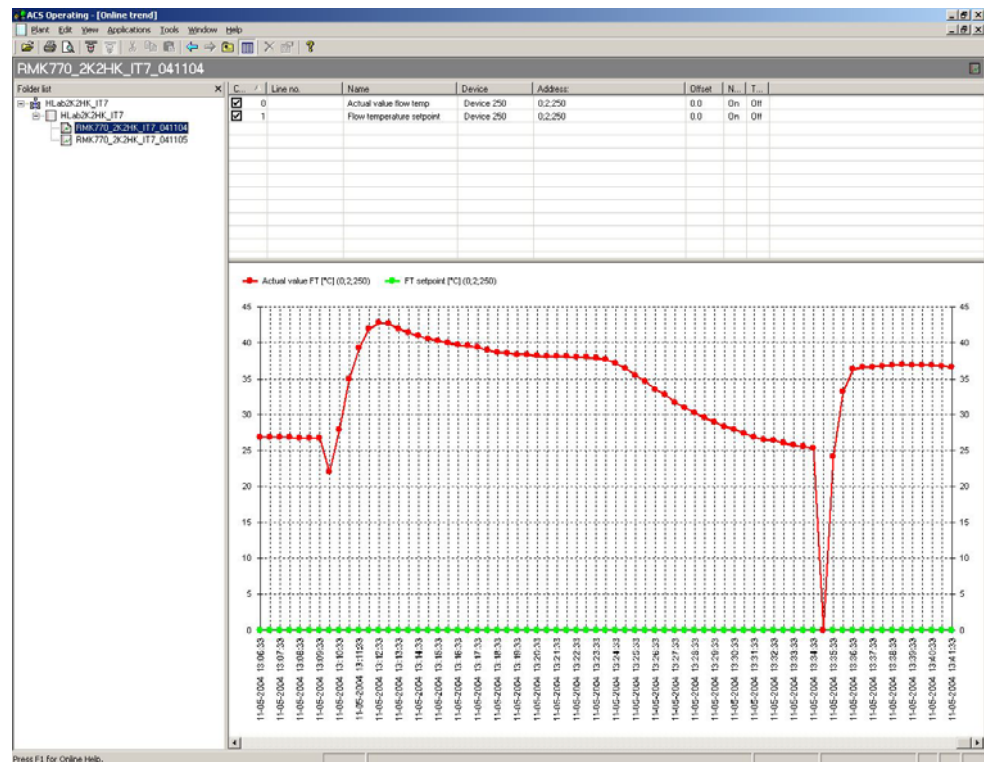
The description, the selected data points of all devices of the plant and the sample interval are defined in the trend definition. Start and end of logging can be defined in the offline trend.

In trend logging, the cyclically queried data are stored and graphically presented. Earlier trend logging can be graphically shown again at any time.

The Trend application can be performed online or offline:

- Online Trend: The connection between plant and PC is established. All acquired data are stored directly on the PC. The graphic presentation of trend logging takes place online
- Offline Trend: There is no connection between plant and PC. All acquired data will be downloaded and stored on the memory card in the central unit. The graphic presentation of logging is made after uploading logging

Trend logging can be printed out and exported as an ASCII file.



Parameter Settings

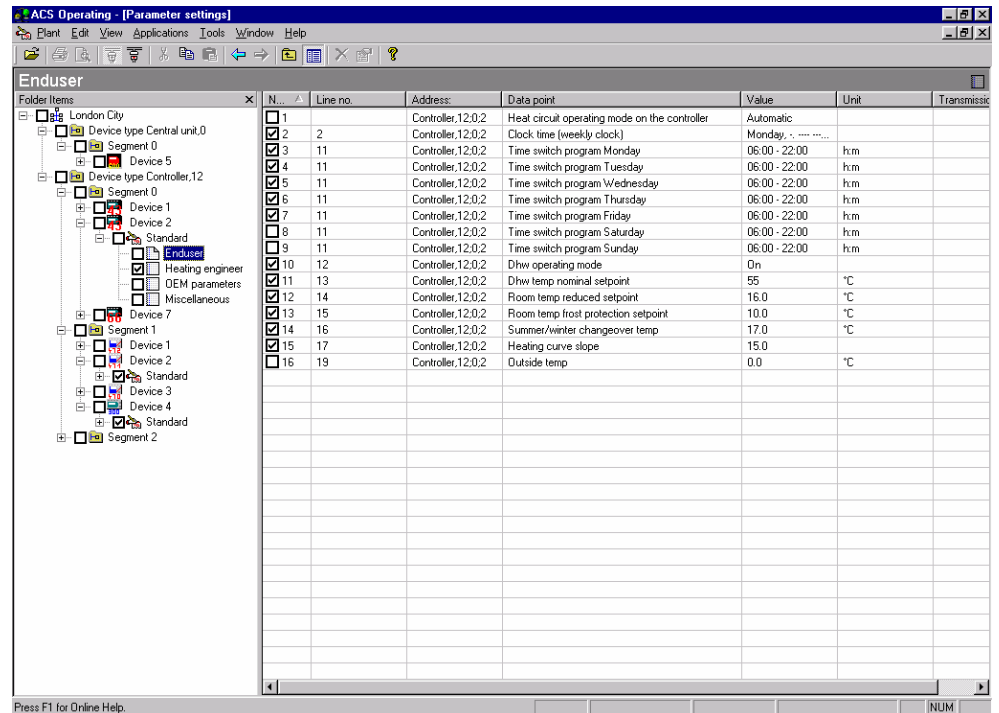
This application is used to download, upload or compare the settings of the connected devices.

The settings can be

- stored as a parameter set
- compared with a stored parameter set
- compared with the standard parameter set
- overwritten with a stored parameter set
- overwritten with the standard parameter set

The parameter sets can be edited either online or offline. The individual data points of a parameter set can be selected. The transmission result of uploading, downloading or comparing is displayed online.

The parameter set can be printed out and exported as an ASCII file.



| N... | Line no. | Address | Data point | Value | Unit | Transmissi |
|-------------------------------------|----------|-------------------|---|-------------------|------|------------|
| <input type="checkbox"/> | 1 | Controller,12.0.2 | Heat circuit operating mode on the controller | Automatic | | |
| <input type="checkbox"/> | 2 | Controller,12.0.2 | Clock time (weekly clock) | Monday, - - - - - | | |
| <input checked="" type="checkbox"/> | 3 | Controller,12.0.2 | Time switch program Monday | 06:00 - 22:00 | h.m | |
| <input checked="" type="checkbox"/> | 4 | Controller,12.0.2 | Time switch program Tuesday | 06:00 - 22:00 | h.m | |
| <input checked="" type="checkbox"/> | 5 | Controller,12.0.2 | Time switch program Wednesday | 06:00 - 22:00 | h.m | |
| <input checked="" type="checkbox"/> | 6 | Controller,12.0.2 | Time switch program Thursday | 06:00 - 22:00 | h.m | |
| <input checked="" type="checkbox"/> | 7 | Controller,12.0.2 | Time switch program Friday | 06:00 - 22:00 | h.m | |
| <input checked="" type="checkbox"/> | 8 | Controller,12.0.2 | Time switch program Saturday | 06:00 - 22:00 | h.m | |
| <input checked="" type="checkbox"/> | 9 | Controller,12.0.2 | Time switch program Sunday | 06:00 - 22:00 | h.m | |
| <input checked="" type="checkbox"/> | 10 | Controller,12.0.2 | Dhw operating mode | On | | |
| <input checked="" type="checkbox"/> | 11 | Controller,12.0.2 | Dhw temp nominal setpoint | 55 | °C | |
| <input checked="" type="checkbox"/> | 12 | Controller,12.0.2 | Room temp reduced setpoint | 16.0 | °C | |
| <input checked="" type="checkbox"/> | 13 | Controller,12.0.2 | Room temp frost protection setpoint | 10.0 | °C | |
| <input checked="" type="checkbox"/> | 14 | Controller,12.0.2 | Summer/winter changeover temp | 17.0 | °C | |
| <input checked="" type="checkbox"/> | 15 | Controller,12.0.2 | Heating curve slope | 15.0 | | |
| <input checked="" type="checkbox"/> | 16 | Controller,12.0.2 | Outside temp | 0.0 | °C | |

Commissioning Report

This application is used to log the setting values of individual devices, groups of selected devices or of entire plants.

The data points of the selected devices are stored with data point designation, value, unit and status.

The commissioning report can be printed out and exported as an ASCII file.

ACS Operating - [Commissioning Report]
Plant Edit View Applications Tools Window Help

Folder Items
London City
Installation
Commissioning report: 2002-01-08
Device 3
Enduser
Switching program
Holiday period 1-8
Heating engineer
Service
Miscellaneous

| No. | Line no. | Address | Data point | Value | Unit |
|-----|----------|-------------------|----------------------|---------|------|
| 1 | | Controller,12;1;3 | Heat circuit oper... | Standby | |
| 2 | | Controller,12;1;3 | Manual operation | Off | |
| 3 | | Controller,12;1;3 | Room temp setp... | 0.0 | °C |
| 4 | | Controller,12;1;3 | Analog heating ... | 41.5 | °C |
| 5 | | Controller,12;1;3 | Analog heating ... | 61.5 | °C |
| 6 | | Controller,12;1;3 | Outside temp | 16.9 | °C |
| 7 | | Controller,12;1;3 | Flow temp actua... | 44.6 | °C |
| 8 | | Controller,12;1;3 | Boiler temp actu... | --- | °C |
| 9 | | Controller,12;1;3 | Room temp actu... | --- | °C |
| 10 | 1 | Controller,12;1;3 | Room temp nomi... | 20.0 | °C |
| 11 | 2 | Controller,12;1;3 | Room temp redu... | --- | °C |
| 12 | 3 | Controller,12;1;3 | Room temp setp... | --- | °C |
| 13 | 14-17 | Controller,12;1;3 | Clock time | --- | |
| 14 | | Controller,12;1;3 | Error signal | --- | |

Press F1 for Online Help.

Filter ON

NUM

Alarm software

General

The alarm software consists of the following applications for the reception and further handling of alarms and of the plant's operating status:

- Alarm
- System Report

Alarm

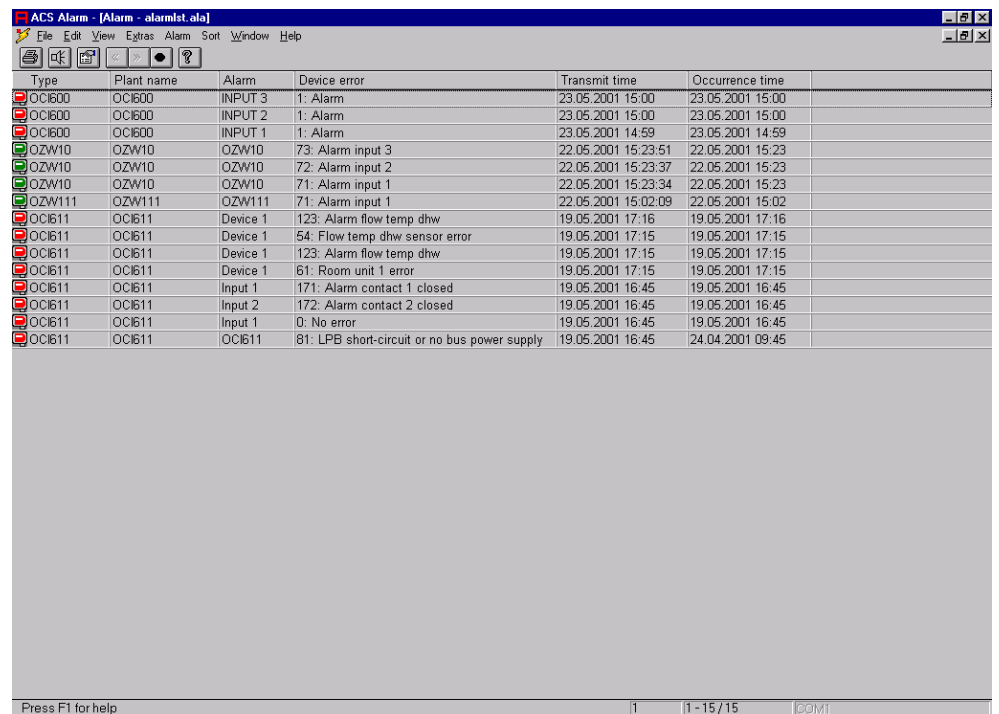
Every alarm received from the plant is entered in an alarm list.

The alarm reception sequence can be configured:

- Acoustic signal
- A popup window opens. The alarm is entered in the alarm list only when the window is closed
- Printout on a printer
- Any combination of the 3 choices

The user can select the columns of the alarm list. The column designations and the arrangement of the individual columns can be configured on a user-specific basis.

The entire alarm list can be exported as an ASCII file. Also, to facilitate further handling in other programs, the alarms received are automatically exported to an ASCII file.



The screenshot shows the 'ACS Alarm - [Alarm - alarmlist.ala]' window. It features a menu bar (File, Edit, View, Extras, Alarm, Sort, Window, Help) and a toolbar. Below is a table with the following columns: Type, Plant name, Alarm, Device error, Transmit time, and Occurrence time. The table contains 15 rows of alarm data. At the bottom, there is a status bar with the text 'Press F1 for help', a page indicator '1', a range indicator '1 - 15 / 15', and a 'print' button.

| Type | Plant name | Alarm | Device error | Transmit time | Occurrence time |
|--------|------------|----------|--|---------------------|------------------|
| OC1600 | OC1600 | INPUT 3 | 1: Alarm | 23.05.2001 15:00 | 23.05.2001 15:00 |
| OC1600 | OC1600 | INPUT 2 | 1: Alarm | 23.05.2001 15:00 | 23.05.2001 15:00 |
| OC1600 | OC1600 | INPUT 1 | 1: Alarm | 23.05.2001 14:59 | 23.05.2001 14:59 |
| OZW10 | OZW10 | OZW10 | 73: Alarm input 3 | 22.05.2001 15:23:51 | 22.05.2001 15:23 |
| OZW10 | OZW10 | OZW10 | 72: Alarm input 2 | 22.05.2001 15:23:37 | 22.05.2001 15:23 |
| OZW10 | OZW10 | OZW10 | 71: Alarm input 1 | 22.05.2001 15:23:34 | 22.05.2001 15:23 |
| OZW111 | OZW111 | OZW111 | 71: Alarm input 1 | 22.05.2001 15:02:09 | 22.05.2001 15:02 |
| OC1611 | OC1611 | Device 1 | 123: Alarm flow temp dhw | 19.05.2001 17:16 | 19.05.2001 17:16 |
| OC1611 | OC1611 | Device 1 | 54: Flow temp dhw sensor error | 19.05.2001 17:15 | 19.05.2001 17:15 |
| OC1611 | OC1611 | Device 1 | 123: Alarm flow temp dhw | 19.05.2001 17:15 | 19.05.2001 17:15 |
| OC1611 | OC1611 | Device 1 | 61: Room unit 1 error | 19.05.2001 17:15 | 19.05.2001 17:15 |
| OC1611 | OC1611 | Input 1 | 171: Alarm contact 1 closed | 19.05.2001 16:45 | 19.05.2001 16:45 |
| OC1611 | OC1611 | Input 2 | 172: Alarm contact 2 closed | 19.05.2001 16:45 | 19.05.2001 16:45 |
| OC1611 | OC1611 | Input 1 | 0: No error | 19.05.2001 16:45 | 19.05.2001 16:45 |
| OC1611 | OC1611 | OC1611 | 81: LPB short-circuit or no bus power supply | 19.05.2001 16:45 | 24.04.2001 09:45 |

System Report

The system report is used to monitor plant operation.

It contains general information about the plant, such as type of central unit, phone number of the plant and plant name. Also, a system report of the OCI600 central unit can transmit alarms, meter readings or the number of operating hours.

The system report can be output on a printer.

ACS Alarm - [System report - alarmlist.alo]

File Edit View Extras Alarm Sort Window Help

| Type | Transmit time | Phone number | Plant name |
|--------|------------------|--------------|------------|
| OCI600 | 08.01.2002 11:05 | 041 724 5121 | OCI600 |
| OCI600 | 08.01.2002 11:35 | 041 724 5121 | OCI600 |
| OCI600 | 08.01.2002 13:44 | 041 724 5121 | OCI600 |

Press F1 for help

11 - 3 / 3COM1

General functions

Plant Navigation

For plant navigation, the plant is presented in the form of a tree structure. The following applications support this mode of presentation:

- Plant Diagram
- Popcard
- Online Trend
- Offline Trend
- Parameter Settings
- Commissioning Report

The plant view in the form of a tree structure can either be shown or hidden.

The screenshot shows the 'ACS Operating - [Popcard]' window. On the left, a 'Folder Items' tree structure is displayed, showing a hierarchy of buildings and equipment. The 'Enduser' folder is selected. On the right, a table displays data points with columns: No., Line no., Address, Data point, Value, and Unit. The table lists various temperature and time switch data points.

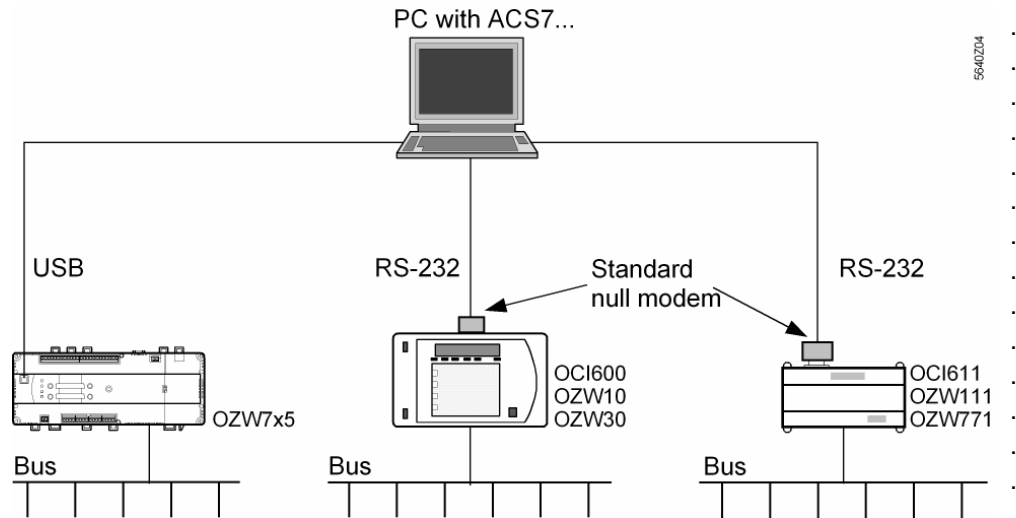
| No. | Line no. | Address | Data point | Value | Unit |
|-----|----------|---------------|--|---------------|------|
| 1 | 1 | Regler,12,1,2 | Room temp nominal setpoint | 20.0 | °C |
| 2 | 2 | Regler,12,1,2 | Room temp reduced setpoint | 14.0 | °C |
| 3 | 3 | Regler,12,1,2 | Room temp setpoint holiday mode/frost protection | 10.0 | °C |
| 4 | 5-10.1 | Regler,12,1,2 | Time switch program 1 Monday | 06:00 - 22:00 | h:m |
| 5 | 5-10.2 | Regler,12,1,2 | Time switch program 1 Tuesday | 06:00 - 22:00 | h:m |
| 6 | 5-10.3 | Regler,12,1,2 | Time switch program 1 Wednesday | 06:00 - 22:00 | h:m |
| 7 | 5-10.4 | Regler,12,1,2 | Time switch program 1 Thursday | 06:00 - 22:00 | h:m |
| 8 | 5-10.5 | Regler,12,1,2 | Time switch program 1 Friday | 06:00 - 22:00 | h:m |
| 9 | 5-10.6 | Regler,12,1,2 | Time switch program 1 Saturday | 06:00 - 22:00 | h:m |
| 10 | 5-10.7 | Regler,12,1,2 | Time switch program 1 Sunday | 06:00 - 22:00 | h:m |
| 11 | 14 | Regler,12,1,2 | Dhw temp nominal setpoint | 55 | °C |
| 12 | | Regler,12,1,2 | Dhw temp actual value warmer | 0.0 | °C |
| 13 | 17-22.1 | Regler,12,1,2 | Time switch program 2 Monday | 05:00 - 22:00 | h:m |
| 14 | 17-22.2 | Regler,12,1,2 | Time switch program 2 Tuesday | 05:00 - 22:00 | h:m |
| 15 | 17-22.3 | Regler,12,1,2 | Time switch program 2 Wednesday | 05:00 - 22:00 | h:m |
| 16 | 17-22.4 | Regler,12,1,2 | Time switch program 2 Thursday | 05:00 - 22:00 | h:m |
| 17 | 17-22.5 | Regler,12,1,2 | Time switch program 2 Friday | 05:00 - 22:00 | h:m |
| 18 | 17-22.6 | Regler,12,1,2 | Time switch program 2 Saturday | 05:00 - 22:00 | h:m |
| 19 | 17-22.7 | Regler,12,1,2 | Time switch program 2 Sunday | 05:00 - 22:00 | h:m |
| 20 | | Regler,12,1,2 | Error signal | No error | |

Connections

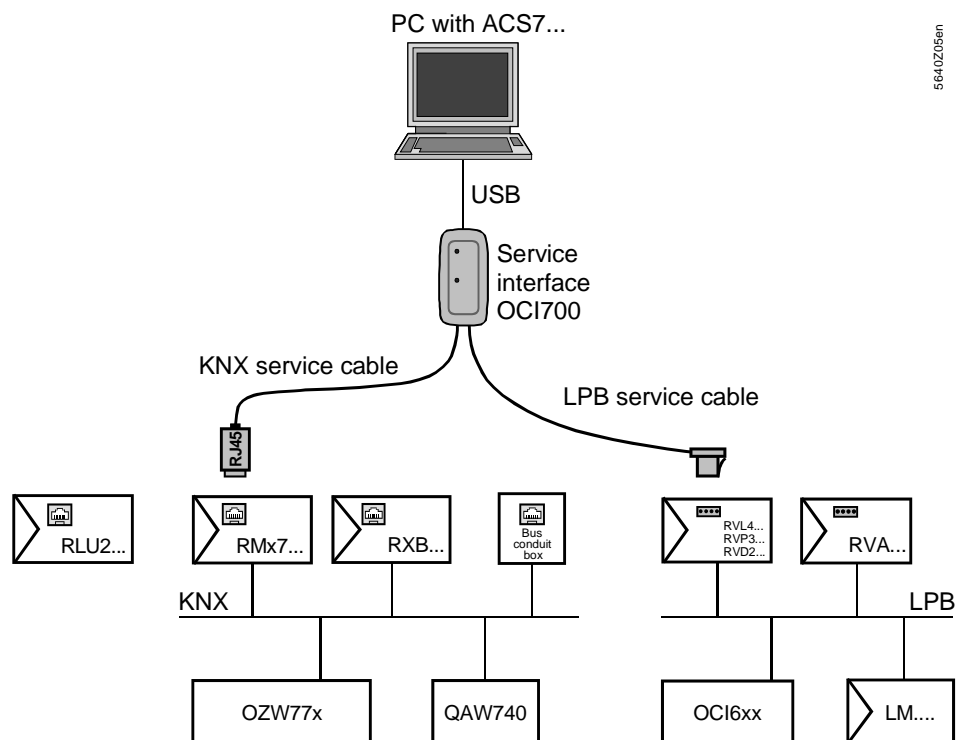
Communication with the central units can take place either directly or via modem.

Direct connection for plant supervision

In the case of a direct connection, a standard null modem or standard USB cable is required between central unit and PC.

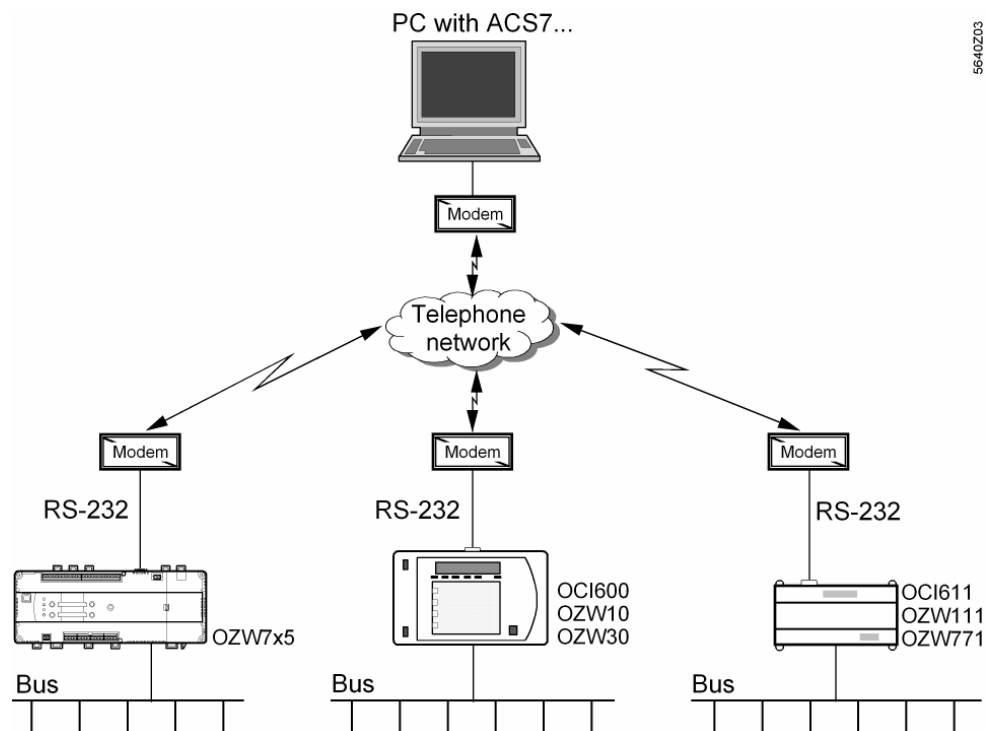


Direct connection for service



Telephone connection

In the case of a connection via the telephone network, a Hayes-compatible modem is required on each side.



For more detailed information about RS-232 cables, standard null modems and modems, refer to the various pieces of Basic Documentation.

Commissioning notes

The software must be installed according to the Installation Instructions supplied with the CD.

General note

The programs offer the standard Windows Help functions, so a description of the commands and menus is available at any time.