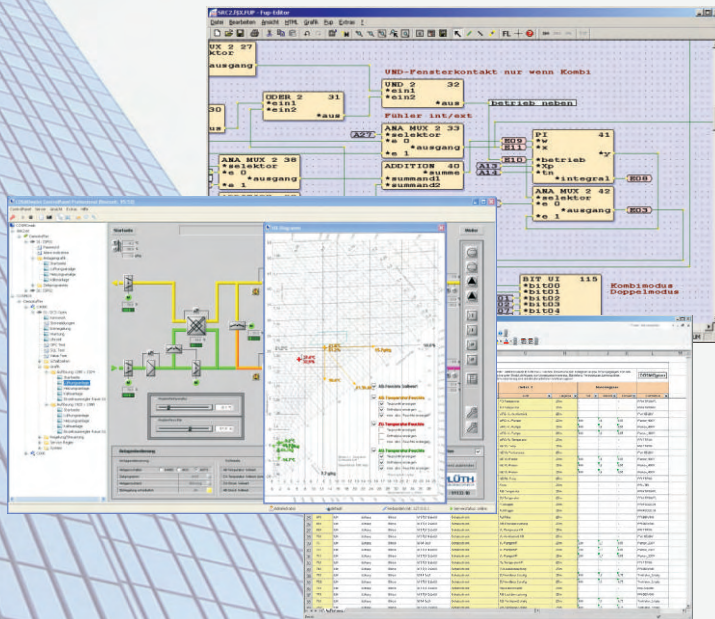


Chapter 6.1

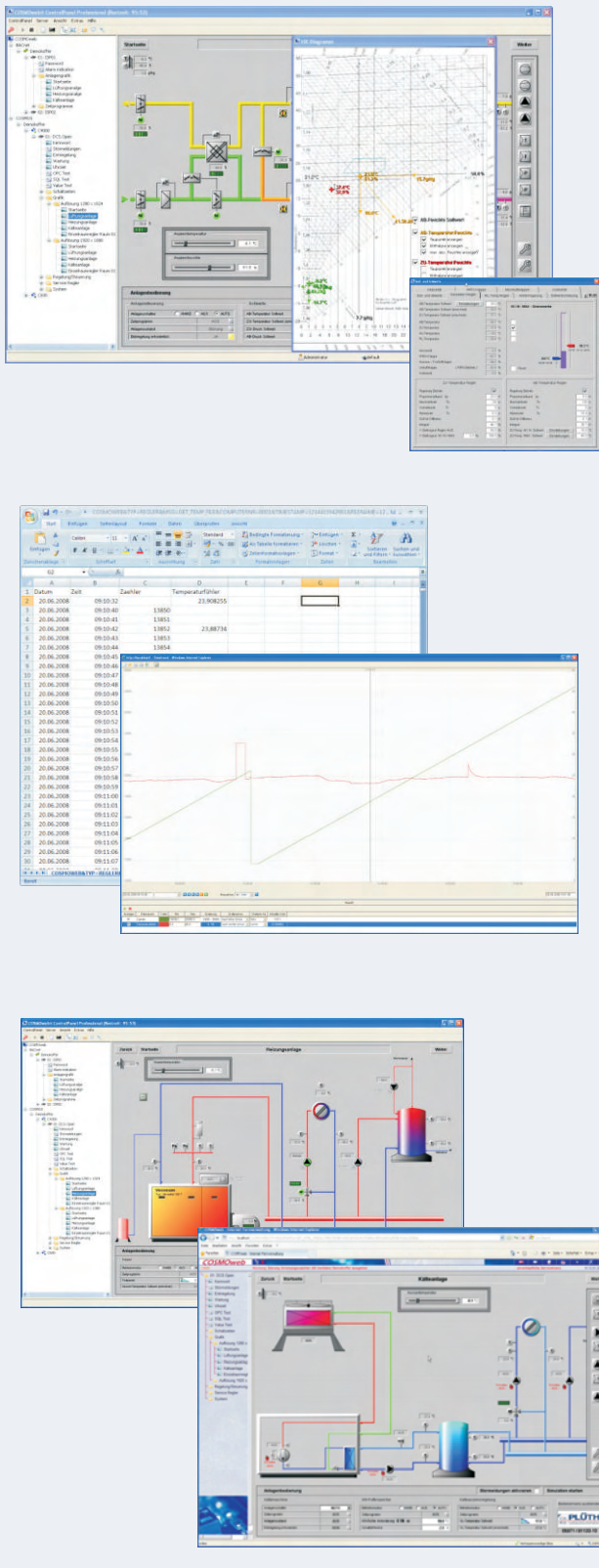
COSMOS Software

6.1



Information

6.1



COSMOweb allows a web-based Building Management-Software (BMS) for operating, monitoring, parameterization and extensive alarm management of control and regulation devices (controller). The presentation of the information is transmitted via standard browser.

A touch screen able navigation is possible via installation graphics as well as via tree structure. The manufacturer independent communication will be done via the BACnet extension.

COSMOS BASICline controllers can be operated from bus version 2.25.

Following modules are included in the basic package:

Trend log

- Historicization of trend data when change in value
- Free definable polling interval of each data point
- Auto calling to decentralized COSMOS controller

Trend visualization

- Graphical visualization of trend data
- Unlimited number of trends in each diagram
- Free selection of trend data of various controller
- Free parameterization of the ordinates of each trend chart
- Formula administration, pre-parameterized trend data selection
- Visualization of actual values at one time, possibility of comparison
- Zoom function for clear visualization of range view
- Print function
- CSV-export for processing with external programs, e.g. Excel

Event Client

- Software for notification of newly occurred events to any number of PC's in the network
- Alarming with definable sound
- Pop-up window

Modem module

For operating and monitoring of decentralized controller via telecommunication network, DSL, Internet

Graphical process visualization

- Displaying of installation graphics with graphical objects for visualization of set- actual / measured and event data as pictures, slider, progress bar, texts lines, color objects
- Supported graphic formats: vector graphics WMF, JPG, PNG, GIF, animated GIF
- Process-oriented rotation, flashing, positioning and resizing of graphic objects
- Auto zoom function: auto scaling of the installation graphics to corresponding resolution

Information

In addition to the scope of delivery for the basic package, the functionality of COSMOweb can be expanded using the following modules.

- L** = Log book
- E** = Event server
- A** = Event Control Center
- S** = SQL - Module
- O** = OPC - Module
- BAC.F** = Fidelio Hotel booking system
- Mx** = Energy manager
- BACx** = BACnet expansion

COSMOweb supported operating systems:

- WinXP
- Windows Server 2003
- Windows 7 (32 and 64 Bit)
- Windows Server 2008 (32 and 64 Bit)

Order example:

DS-CWB2
COSMOweb basic package with 250 data points

DS-CWB2.S
COSMOweb basic package with 250 data points and SQL module

DS-CWB10.E
COSMOweb basic package with 1000 data points and event server

DS-CWB2.L.E.BAC5
COSMOweb basic package with 250 data points, log book, event client and expansion module native BACnet with up to 500 BACnet objects

Note:

When ordering a BACnet expansion module, the number of COSMOweb data points does not necessarily be the same as the number of BACnet objects.

The scope of delivery for COSMOweb does not include hardware, such as server PC, interface cards, modem, etc.

Lizensierung

COSMOweb Licensing

To simplify and accelerate updates and expansions for the BMS software COSMOweb, a new license model will be implemented from version 7.0.

The basic license for COSMOweb will be done via a hardware dongle. Basic packages and expansion modules are activated via a license file.

When ordering a COSMOweb, you will receive a hardware dongle with a serial number and a license file. The COSMOweb runs only in connection with the license file and the hardware dongle.

For later COSMOweb increase of data points and / or the addition of COSMOweb expansion modules only a license file will be sent and replaced.

The serial number (SN) of the hardware dongle is required for updates and expansions of the COSMOweb. Please include the serial number when placing your order.

Update of already running COSMOweb Versions:

When updating an old COSMOweb version, you receive a license file with the corresponding options. This license file is linked up to the hardware dongle of the project. No changes are made on the hardware dongle. When ordering, however, the serial number of the hardware dongle has to be indicated.

Note:

The reduction of the data points and / or COSMOweb expansion is not possible after delivery of the license file.

Update prices on COSMOweb Version 7:

The costs for an update for COSMOweb version 7 depends on the age of the last update. The update costs are determined by the current price list for each used COSMOweb incl. options.

Age	Update costs
till 1 year	150,00 Euro net
till 2 years	10 %*, at least 150,00 Euro net
till 3 years	20 %*, at least 150,00 Euro net
till 4 years	40 %*, at least 150,00 Euro net
till 5 years	60 %*, at least 150,00 Euro net
from 5 years	80 %*, at least 150,00 Euro net



Example: CWB5.E.O --> 3,5 years old

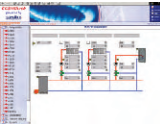






CWB5	1710,00 Euro list price	40% of the list prices = 684,00 Euro gross
CWB.E	633,00 Euro list price	40% of the list prices = 253,20 Euro gross
CWB.O	843,00 Euro list price	40% of the list prices = 337,20 Euro gross
		<u>Total update costs = 1274,40 Euro gross</u>

* percent of the list price according the current price list.

COSMOweb basic package

Type

	<p>COSMOweb basic package for up to 250 physical data points. The following modules are included in the basic package: Dynamic visualization, Modem module, Data logger X-RAM, Data logger on hard disk and RSD-transfer.</p>	<p>DS-CWB2</p>
	<p>COSMOweb basic package like CWB2 however for up to 500 physical data points.</p>	<p>DS-CWB5</p>
	<p>COSMOweb basic package like CWB2 however for up to 1000 physical data points.</p>	<p>DS-CWB10</p>
	<p>COSMOweb basic package like CWB2 however for up to 2000 physical data points.</p>	<p>DS-CWB20</p>
	<p>COSMOweb basic package like CWB2 however for up to 5000 physical data points.</p>	<p>DS-CWB50</p>
	<p>COSMOweb basic package like CWB2 however for up to 10.000 physical data points.</p>	<p>DS-CWB100 <i>New</i></p>
	<p>COSMOweb basic package like CWB2 however for up to 20.000 physical data points.</p>	<p>DS-CWB200 <i>New</i></p>
	<p>COSMOweb basic package with unlimited number like CWB2 however for unlimited number of physical data points.</p>	<p>DS-CWB00</p>
	<p>COSMOweb Professional for project planning and a customer service tool. Complete package COSMOweb with all expansion modules and additional offline parameterizing for data back-up, however, without BACnet modules and without COSMOS DataManager. Incl. service and hotline. NOTE: - Participation at the training seminar COSMOweb Professional is prerequisite for the purchase of this software (Page 11.1 - 2) - COSMOweb Professional must not be used in projects or as BMS GLT !</p>	<p>DS-CWB00prof</p>

COSMOweb Expansion modules	Type
 <p>COSMOweb expansion module Logbook Software module to protocol user access. The software module records parameter changes which were effected via COSMOweb, indicating date, time, old and new effective dates. Further to this, user logins and logouts are recorded with date, time and user name. All protocols are saved in a database.</p>	DS-CWB.L
 <p>COSMOweb expansion module Event server Software module for relaying of events. (Alarm and reporting system); as SMS (TAP, UCP, GSM), E-Mail, Printer FAX, ASCII and COSMOweb</p>	DS-CWB.E
 <p>COSMOweb expansion module Event Control Center for the management of alarms and messages.</p> <p>The Event Control Center (ECC) is the central software for displaying and processing of the alarms and messages. It provides the ability to configure user-specific views for the display and therefore show all relevant information directly to the user. In addition to the time of recording the acknowledgements, it offers many more options for filtering and processing of alarms and messages.</p> <p>Important note:  For the application of the Event Control Center additionally the COSMOweb expansion module Logbook is necessary.</p>	DS-CWB.A 
 <p>COSMOweb expansion module SQL-Module Software module for bi-directional data exchange with other systems via a SQL database.</p>	DS-CWB.S
 <p>COSMOweb expansion module OPC-Server Software module for bi-directional data exchange with other systems via OPC protocol.</p>	DS-CWB.O

COSMOweb Fidelio Hotel booking system

Type



**COSMOweb expansion module
BACnet connection
Fidelio Hotel booking system**

DS-CWB.BAC.F



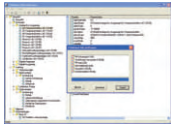
Software module for linking the Hotel booking system Fidelio on COSMOS via the BACnet protocol. This module makes the room allocation available such as Check-In, Check-Out and Pre-CheckIn as a BACnet object. Each BACnet device in the network can access on this information. Automatic selection and alignment of the room allocation on system start.

Note: For the application of the Hotel booking system additionally a BACnet expansion module is necessary.

COSMOweb Energy manager	Type
<p>COSMOweb Energy manager is the software for monitoring, acquisition and assessment via meters for various energy consumers. Assessment of meters effected web-based via the Internet Browser.</p> <p>Data assessment realized via gas, electricity, water, garden water, heat or pulse meters</p> <p>Possible inputs are:</p> <ul style="list-style-type: none"> - M-Bus meters - Contact inputs - Inputs from system-internal events <p>Programme functions:</p> <ul style="list-style-type: none"> - Definition of automatic metering - Definition of manual metering - Definition of virtual metering - Definition of counter priority stages <ul style="list-style-type: none"> - Main meter - Intermediate meter - End meter - Virtual meter - Preparing of accounts for assessment of building sections - Dual language software: German - English - Automatic switching of language via selected browser language - Defining of consumption cost - Assessment of various reporting forms <ul style="list-style-type: none"> - Table - Excel - Statics <p> Important note: Automatic linking of meters requires the use of the COSMOweb expansion module SQL Server (refer to page 6.1 - 5).</p> 	<p>COSMOweb Energy manager, for connecting of max. 25 meters DS-CWB.M02</p> <p>COSMOweb Energy manager, for connecting of max. 100 meters DS-CWB.M1</p> <p>COSMOweb Energy manager, for connecting of max. 500 meters DS-CWB.M5</p> <p>COSMOweb Energy manager, for connection of max. 1000 meters DS-CWB.M10</p> <p>COSMOweb Energy manager, for connection of max. 2000 meters DS-CWB.M20</p> <p>COSMOweb Energy manager, fo connection of max. 5000 meters DS-CWB.M50</p> <p>COSMOweb Energy manager, for connection of unlimited number of meters DS-CWB.M00</p>

COSMOweb Expansion modules native BACnet

Type



COSMOweb expansion module native BACnet

Software module for connection of other data points via the BACnet protocol. The software module is integrated as a native BACnet driver into COSMOweb. There will be no conversion via other protocols.



Note:
For BACnet connection is a COSMOweb basic package necessary.

COSMOweb expansion module native BACnet with up to 250 BACnet Objects

DS-CWB.BAC2

COSMOweb expansion module native BACnet with up to 500 BACnet Objects

DS-CWB.BAC5

COSMOweb expansion module native BACnet with up to 1000 BACnet Objects

DS-CWB.BAC10

COSMOweb expansion module native BACnet with up to 2000 BACnet Objects

DS-CWB.BAC20

COSMOweb expansion module native BACnet with up to 5000 BACnet Objects

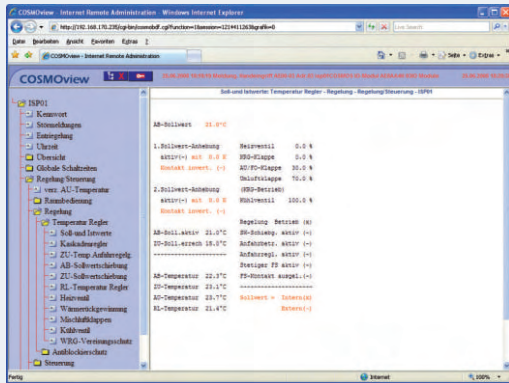
DS-CWB.BAC50

COSMOweb expansion module native BACnet with unlimited numbers of BACnet Objects

DS-CWB.BAC00

Information

6.1

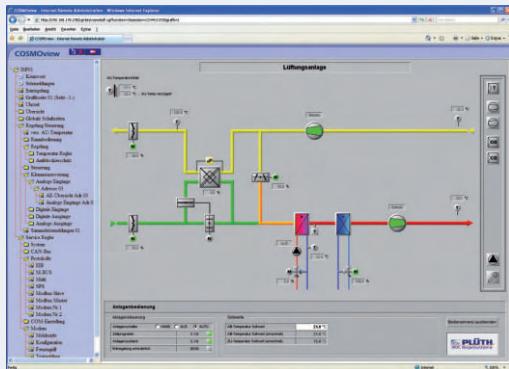


Activation of the graphical web-server on COSMOS OPEN controller.

COSMOview facilitates the operation and the use of your building services installations. COSMOview is available with graphic or text-guided user interface.

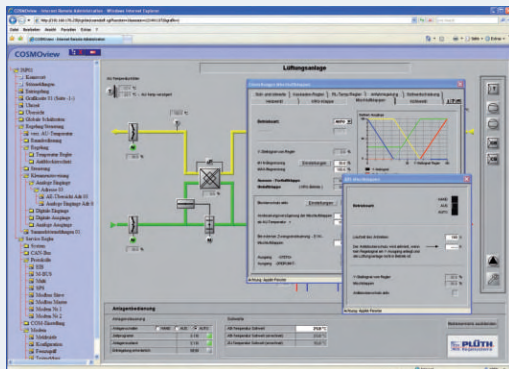
Depending on the licensing state, using the internal web server of COSMOS OPEN allows COSMOview to load either the graphic or the text-guided user menu and to parameterise the relevant COSMOS OPEN. The internal web server is operated via the standard Internet Explorer.

The text-guided version is standard and as such it is always activated for use. The graphical version is activated for 6 months, starting at the date of delivery by DEOS control systems. Thereafter, further unlimited licensing must be purchased.



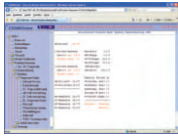
COSMOview functions

- displays the project with graphic objects as images, control lines, columns, text items or colored objects for setpoint and actual value.
- supports vector graphics in WMF format.
- automatic size adjustment for all objects to match the current window (Autozoom),
- process-related size adjustment, flashing, rotating, positioning of objects.



COSMOview

Typ



COSMOview x00/0

Activation of graphical user interface for COSMOS 600x/0 OPEN and COSMOS 500x/0 OPEN

DS-CV0



COSMOview x00/5

Activation of graphical user interface for COSMOS 600x/5 OPEN and COSMOS 500x/5 OPEN, COSMOS 800/5 OPEN, COSMOS 700/5 OPEN

DS-CV5

COSMOview x00/12

Activation of graphical user interface for COSMOS 800/12 OPEN and COSMOS 700/12 OPEN

DS-CV12

COSMOview x00/32

Activation of graphical user interface for COSMOS 800/32 OPEN and COSMOS 700/32 OPEN

DS-CV32

COSMOview x000/C1

Activation of graphical user interface for COSMOS 4000 OPEN C1 and COSMOS 3000 OPEN C1

DS-CVC1

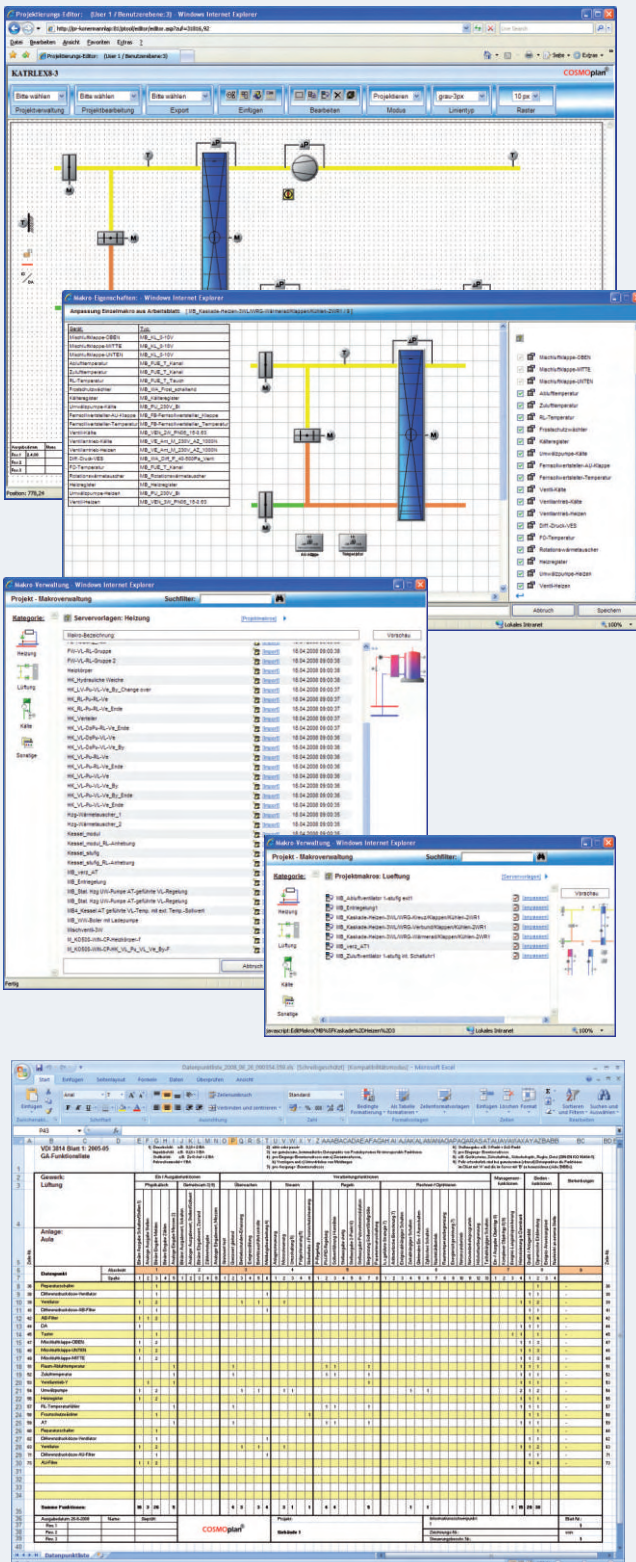
COSMOview x000/C2

Activation of graphical user interface for COSMOS 4000 OPEN C2 and COSMOS 3000 OPEN C2

DS-CVC2

Information

6.1



Today more than ever before, continuous cost reduction and optimizing of operational events are essential for the success of your company. Ever shorter set-up times with higher quality standards require effective tools. Employ suitable software to improve your company's efficiency. The software will handle many chores which currently are still done in long hand. DEOS control systems will show the way to intelligent planning and project management. COSMOplan is a totally new tool for truly minimizing your planning work for measuring and control projects.

Using COSMOplan will reduce the time required to a fraction. It prepares control schemes using prefabricated installation and component macros. Based on these features COSMOplan will generate all documents required for planning and project management, such as:

- Information lists acc. to VDI 3814
- Lists of cables
- Lists of cable lengths
- Lists of field equipment
- Lists of motors
- Lists of valves
- Valve dimensioning
- Calculation of switch cabinet size
- Calculation of loss at switch cabinet
- Functional description of measuring and control
- GAEB 90/2000 Export








Change or amend installations, individual components or text sections - and all lists are updated accordingly. COSMOplan not only supports during the planning phase, it also ensures optimum overview during project development and realization thus providing the basis for a time-referenced status and for continuous documentation.

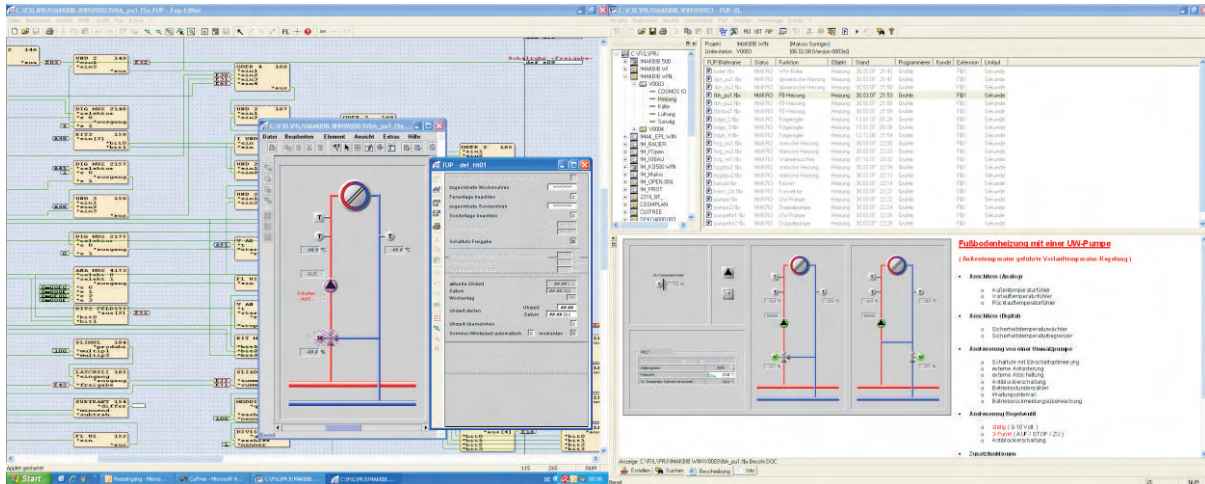
COSMOplan is based on advanced Intranet and Internet technology and runs in the well-known Internet Explorer (MS). The use of this browser tool minimizes time/consuming training times, and no advanced knowledge of CAD software or CAD knowledge as such are required.

COSMOplan supports the following standards:

- VDI 3814
- DIN 19227 and 1946

and for planning a such, it is neutral and independent as to the make of equipment.

COSMOplan		Type
	<p>COSMOplan planning tool</p> <p>with completely new user surface and automatic interface for our programming and visualization tool FUP XL</p> <p>COSMOplan</p> <p>Full version - Single license License for one work place</p>	<p>DS-COSMOplan1</p>
	<p>COSMOplan</p> <p>Full version - Triple license License for three work places</p>	<p>DS-COSMOplan3</p>
	<p>COSMOplan</p> <p>Full version - Five ea. license License for five work places</p>	<p>DS-COSMOplan5</p>
	<p>COSMOplan</p> <p>Full version- Ten ea. licence License for ten work places</p>	<p>DS-COSMOplan10</p>
	<p>COSMOplan Hotline software service contract</p> <p>The contract covers support for the software product COSMOplan. The contract obliges the licensee to pay a net amount of 15% of the list price for each year of contract.</p>	
	<p>COSMOplan - Your corporate logo</p> <p>Incorporating your logo into COSMOplan</p>	<p>DS-COSMOplan-logo</p>
	<p>COSMOplan online</p> <p>Online full version COSMOplan use via internet</p> <p>Advantages:</p> <ul style="list-style-type: none"> - control from everywhere - multi-place system - current server data - automatic data saving - automatic updates 	<p>DS-COSMOplan-online</p>



6.1

Functional descriptions

Function plan programming software FUP XL for COSMOS OPEN / BASICline incl. dongle

- Graphics function planning editor
- Graphics editor for preparing of COSMOWeb visualization
- Comprehensive module library for measuring and control and for heating/air-conditioning/ventilation systems
- Comprehensive module library for measuring and control and for heating/air-conditioning/ventilation systems which can be amended at random
- Preparing and managing of own function libraries.
- PC master processor / basis software
- Integrated development environment
- Compiler for target system COSMOS OPEN included

System requirements

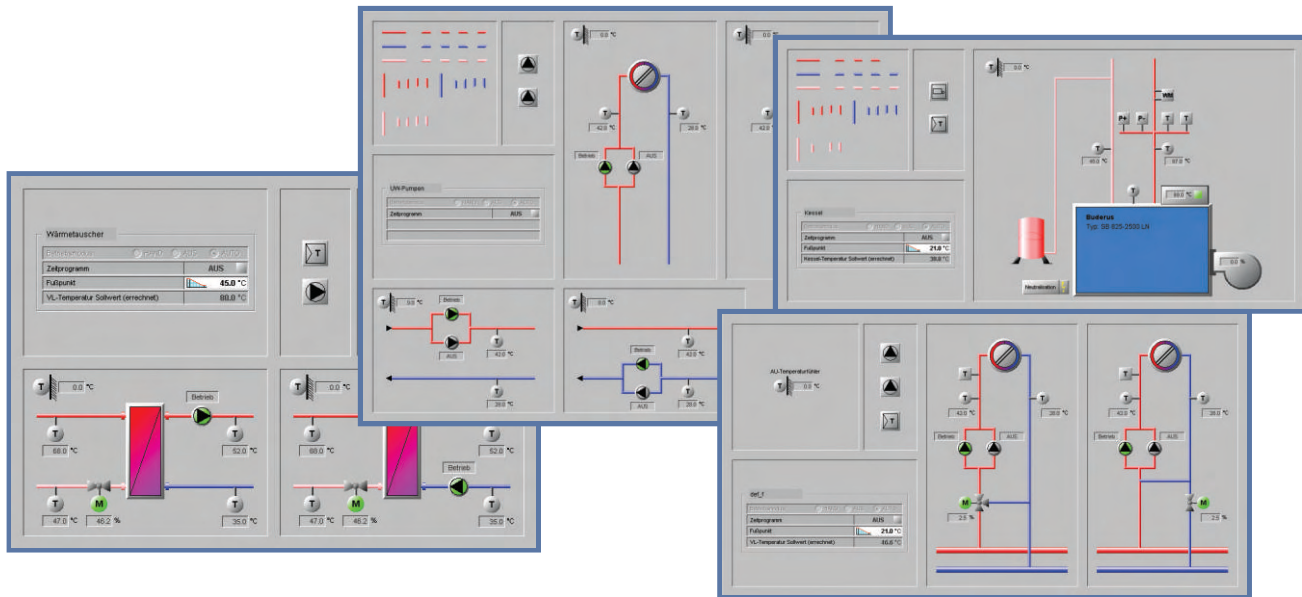
- | | |
|------------------|---|
| Operating system | Windows 2000 / Windows XP |
| Data drive | CD-ROM |
| RAM | min. 512 MB RAM |
| Graphics | 1280 x 1024 Pixel HiColor |
| Interface | for respective dongle, 1 free USB or 1 free parallel port |
| Documentation | Word 2000 and up |
- Requirement for module inscriptions / descriptions depending on COSMOS components being used:
- COSMOS 500 - RS232 interface for loading of programmes into controllers
 - COSMOS OPEN - TCP/IP for loading of programmes into controller

Software

Type

	<p>FUP XL** function plan programming software, full version, incl. technical support</p> <p>NOTE: To programme the system COSMOS BASICline, you also need the ANSI-C compiler.</p>	<p>DS-FUP XL**</p>
	<p>ANSI-C compiler for COSMOS BASICline Assembler kit incl. Bank-Linker for COSMOS 500</p> <p>NOTE: The use of the ANSI-C compiler requires a parallel port at the computer.</p>	<p>DS-Ansi-C-Compiler</p>

** Prerequisite: Training seminar FUP XL and the purchase of and training in the software COSMOWeb Professional (also refer to pages 6.1 - 4 and 11.1 - 2)



6.1

Functional description

MacLib
Macro library for efficient projecting and programming of heating/ ventilation/air-conditioning systems. The macro library comprises both standard installation and comprehensive flexible special solutions.

The MacLib is fully integrated into the FUP XL development environment. Dynamic visualizations for COSMOWeb are automatically generated through interplay of FUP XL and COSMOWeb.

Excerpt from the macro functions

Excerpt for application with heating systems

- Weather-related boiler management (control of burner, 2-stage, 0-10 Volt or modulating)
- Hot water boiler incl. anti-legionella programme and charging pump
- Static heating, weather-related management with optimized switching, RA temperature monitoring and circulating pump
- Floor heating, weather-related management with optimized switching and circulating pump

Excerpt for application with ventilation systems

- Add-air fan, 2-stage (external control via switch clock, summer nights cooling or cool-down protection)
- Extraction fan, 2-stage (external control or via switch clock)
- Exhaust air temperature control with heating valve / heat recovery / cooling valve (external rheostat for desired value)
- Filter monitoring for two filters (optional)
- Refrigerating machine with 2 compressors and one evaporator (temperature demand via outside air temperature and switch clock)

Excerpt for application with various equipment

- Calculating of 24 hour mean value of outside air temperature
- Assessing of highest desired value from up to 8 desired values (e.g. for boiler)
- time control with effective time extension

Software	Type
<p>MacLib</p> <p>HVAC Macro library for the engineering tool FUP XL.</p>	<p>DS-MacLib</p>
<p>Software service support / contract</p> <p>The contract comprises update service for DS-MacLib. Agreement to this contract implies the licensee's obligation for paying the annual contract fees.</p>	<p>DS-MacLib/SPV</p>

NOTE :
A training seminar is prerequisite for the purchase of the Macro Library. (Page 11.1 - 3)

Products 2011 / 02