



SYNERGYR[®]

Service Unit

AZW30

The service unit is used to set the parameters of SYNERGYR[®] components in apartments, to collect billing data from plant with no central unit, and as a diagnostic aid.

Use

The AZW30 service unit is a component of the SYNERGYR[®] control and billing system. It is used to set the parameters of the WRI80 control and heat meter interface, of WRV... control and heat cost allocation valves and of the AEW2.2 pulse adapter. The service unit is used for central readout of billing data from the apartments. It is not suited for continuous operation. For the field of use of the SYNERGYR[®] system, refer to Data Sheets N2800 to N2803 (System Overview).

Functions

The service unit provides the following functions:

- Setting the parameters of the following SYNERGYR[®] components: Control and heat meter interface, control and heat cost allocation valve and pulse adapters located in the individual apartments
- Readout and storage of billing data from the apartments in SYNERGYR[®] plant
- Readout of plant data for service jobs such as diagnostics, fault tracing, etc.

Ordering

When ordering, please give type reference **AZW30**.

The service unit is supplied complete with connecting cable and case. Additional cables can be ordered using type reference **KF8882**. The associated **ARG30...** operating set must be ordered as a separate item.

For service unit upgrades, the current software version can be ordered separately:

<i>Description</i>	<i>Part number</i>
Program storage AZW30 (≥ 16 pairs)	4 340 1047 0

Technical design

Setting the parameters

When commissioning the plant, the parameters of all control and heat meter interfaces or control and heat cost allocation valves and adapters contained in the apartments must be individually set, using the service unit.

For this purpose, the devices have a connection facility for the service unit. The service unit is capable of storing the most important parameter settings, which can then be written into each unit whose parameters need to be set.

Data readout and storage

In plant with no central unit, the AZW30 provides readout and storage of billing data. The units in the individual apartments are queried via the building bus.

From each apartment, the service unit collects the thermal energy consumption and other consumption data (DHW, electricity, gas, etc.) acquired and stored in the apartments. The service unit generates an image of each apartment where the data are entered. The image is ready configured.

From each apartment, the image accepts:

- The current values
- The values of a set day
- Monthly figures

The service unit is capable of acquiring the data of a maximum of 198 meters. It stores the respective data on a memory card which must be inserted in a slot on the unit. The memory card is sent to the billing agency which, with the help of a reading device, loads the data into a PC. The data are also made available at the service unit's RS-232 port, from where they can be loaded directly into a PC.

Diagnostics

All units and the building bus are checked for their operating state and functioning. To do this, the service unit can be connected to any device installed in the plant.

The following parameters are checked:

- Control and heat meter interface WRI80:
Flow rate of the connected heat meter, flow and return temperatures, operating mode
- Control and heating cost allocation valve WRV...:
Flow rate, pressure differential, flow and return temperatures, operating mode
- Room units QAW...:
Actual value and setpoint of room temperature
- Communication:
Number of building bus users, RS-232 port currently active or not

Mechanical design

Note Design and handling of the service unit are very similar to the central unit's operating section (refer to Data Sheet N2841).

The service unit is portable. The housing front carries the operating section consisting of an LCD with 128 segments, buttons and a set of operating cards. The operating elements are located behind a hinged transparent cover.

The operating cards are joined together and can simply be inserted.

The service unit is powered by the unit to which it is connected.

The underside of the housing carries the RS-232 port, the slot for the memory card and a socket for the power supply when it is used as a card reading unit.

The 4-pole plug for connection to the SYNERGYR[®] units is attached to the service unit via a 1.5 m cable.

Technical data

General unit data	Operating voltage	SELV / PELV DC 9...18 V
	Rated voltage	DC 18 V
	Current draw via power supply jack	max. 200 mA
	Perm. ambient temperatures	
	Transport and storage	-25...+65°C
	Operation	0...50°C
	Weight	0.5 kg
Safety data	Degree of protection	IP 40 to EN 60529
	Safety class	III to EN 60730
Standards	Product standard	EN 60730-1
	Electromagnetic compatibility	
	Immunity (residential)	EN 61000-6-1
	Emissions (residential)	EN 61000-6-3
	CE conformity to EMC directive	2004/108/EC