



***AM_SA85 - Driver of MODBUS PLUS
Protocol for AM-SA85-000 Card
User's Manual***

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ASKOM Sp. z o. o., ul. Józefa Sowińskiego 13, 44-121 Gliwice,
tel. +48 (0) 32 3018100, fax +48 (0) 32 3018101,
<http://www.askom.com.pl>, e-mail: office@askom.com.pl

1. AM_SA85 - Driver of MODBUS PLUS Protocol for AM-SA85-000 Card

1.1. Driver Use

The AM_SA85 driver is used for data exchange between the Modbus Plus network of Schneider Automation and **asix** system computers provided with the AM-SA85-000 card of Schneider Automation.

1.2. Declaration of Transmission Channel

The full syntax of declaration of transmission channel operating according to the AM_SA85 protocol is given below:

```
logical_channel_name=AM_SA85, address [[[adapter],discrete],registers]
```

where:

| | |
|------------------|---|
| <i>AM_SA85</i> | - driver name; |
| <i>Address</i> | - address in the Modbus Plus network in the ASCII string form of R1.R2.R3.R4.R5 format, where R1 ... R5 represent sequent levels of routing to device in the network; |
| <i>adapter</i> | - adapter number; |
| <i>discrete</i> | - max. number of discrete values read in an individual telegram; |
| <i>registers</i> | - max. number of registers read in an individual telegram. |

Default values:

| | |
|------------------|--------|
| <i>adapter</i> | - 0, |
| <i>discrete</i> | - 120, |
| <i>registers</i> | - 120. |

EXAMPLE

The definition of logical name CHANNEL operating according to the AM_SA85 protocol and exchanging data with the controller no. 10 (other parameters are default ones):

```
CHANNEL=AM_SA85, 10.0.0.0.0
```

The AM_SA85 driver is loaded as a DLL automatically.

1.3. Addressing the Process Variables

The symbolic address syntax is compatible to the way of addressing used for the MODBUS protocol.

1.4. Driver Configuration

The AM_SA85 driver may be configured by using the [AM_SA85] section, which is placed in the initialization file of an **asix** application. Individual parameters are passed in separate items of the section. Each item has the following syntax:

item_name=[number [,number]] [YES] [NO]



LOG_FILE=*file_name*

Meaning - the item allows to define a file, to which all the diagnostic messages of the AM_SA85 driver and the information about the content of telegrams received by the drive will be written. If the item doesn't define a full path, the log file will be created in the current directory. The log file should be used only during the **asix** system start-up.

Default value - by default, the file log isn't created.

EXAMPLE

LOG_FILE=D:\asix\AM_SA85.LOG



LOG_FILE_SIZE = *file_size*

Meaning - it allows to determine a log file size in MB.

Default value - by default, 1 MB.



LOG_OF_TELEGRAMS=*YES/NO*

Meaning - the item allows writing to the log file (declared with use of the LOG_FILE item) the contents of telegrams transmitted during data exchange between **asix** and Modbus Plus network controllers; writing the telegrams content to the log file should be used only during the **asix** system start-up.

Default value - by default, the contents of telegrams isn't written to the log file.



SEND_TIMEOUT=*number*

Meaning - defines timeout for sending a query to a controller; the timeout is given as a multiple of 0.5 second.

Default value - by default, the item is set to 10 (5 seconds).



RECV_TIMEOUT=*number*

Meaning - defines timeout for receiving an answer from a controller; the timeout is given as a multiple of 0.5 second.

Default value - by default, the item is set to 10 (5 seconds).

| | | |
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