



CtProtherm300 Driver
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. CtProtherm300 - Driver of PROTHERM 300 DIFF Controller Protocol

1.1. Driver Use

Driver CtProtherm300 is used for data exchange between **asix** system computers and Protherm 300 DIFF PLC of Process-Electronic GmbH company. The data are transferred via RS-422 serial link.

1.2. Declaration of Transmission Channel

CtProtherm300 driver is loaded by universal **asix** system driver – UNIDRIVER. The declaration of transmission channel using CtProtherm300 driver is as follows:

```
Channel=UNIDRIVER, CtProtherm300, Port=port_number
[;RecvTimeout=ms_number]
```

where:

UNIDRIVER	- universal asix system driver;
CtProtherm300	- name of the driver for communication with Protherm controller;
<i>port_number</i>	- number of serial link (1 is passed for COM1, 2 for COM2, end so on);
<i>ms_number</i>	- timeout of waiting for the controller response (in milliseconds); by default, it is 1000 milliseconds.

By default, the following transmission parameters are passed:

- transmission speed 9600 Bd;
- number of bytes in a character;
- parity check –EVEN;
- number of stop bytes – 1.

EXAMPLE

An example declaration of the channel using CtProtherm300 driver on serial port COM2 with timeout receiving - 2000 ms is as follows:

```
PLC1 = UNIDRIVER, CTPROTHERM300, Port=2; RecvTimeout=2000
```

1.3. Addressing the Process Variables

The syntax of variable address is as follows:

V.group.unit.index

where:

<i>group</i>	- number of the group, to which the controller is assigned (a number form 0 to 9);
<i>unit</i>	- number assigned to the controller within a framework of the group (number form 0 to 9);

index - number of the variable in the controller, compatible with the specification 'Variablen-Liste fuer PT300' (in *Protherm300/Protherm300 Kommunikation* documentation).

The raw variables may have one of the following type:

- byte;
- byte table;
- float.

The type of raw variable is defined in specification '*Variablen-Liste fuer PT300*', in „*Protherm300/Protherm300 Kommunikation*“ documentation with symbol R411.0, published by Process-Electronic.

EXAMPLES OF VARIABLE DECLARATION

JJ_00, value CO (FLOAT),	V.1.2.6,	PLC1, 1, 1, NOTHING_FP
JJ_01, status STAT3 (BAJT),	V.1.2.18,	PLC1, 1, 1, NOTHING_BYTE
JJ_02, table of 4 statuses XRELi (BAJT),	V.1.2.14,	PLC1, 4, 1, NOTHING_BYTE

1.4. Time Stamp

The variables read from the Protherm300 system are stamped with local PC time.

1.5. Driver Configuration

The driver configuration is performed by using a separate section named [CTPROTHERM300]. By means of this section it is possible to declare:

- log file and its size,
- log of telegrams.

[**LOG_FILE=***file_name*

Meaning - LOG_FILE item allows to define a file to which all the diagnostic messages of the driver will be written. If item LOG_FILE doesn't define a full path, the log file will be created in the current directory. The log file should be used only during **asix** system development.

Default value - by default, the log file is not created.

Parameter:

file_name - name of the log file.

[**LOG_FILE_SIZE=***number*

Meaning - allows to define the size of the log file in MB.

Default value - by default, the item assumes that the log file has a size of 1 MB.

Parameter:

number - size of the log file in MB.

[**LOG_OF_TELEGRAMS=***YES/NO*

Meaning - LOG_OF_TELEGRAMS item allows writing to the log file (declared with use of LOG_FILE item) the contents of telegrams transmitted during data exchange between **asix** system and Protherm 300 DIFF PLC of Process-Electronic GmbH company;

writing the telegrams content to the log file should be used only during starting **asix** system.

Default value

- NO

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