

Operating manual EFR4001IP

updated: 2022-07-28 oa
from firmware: 0-00

- Modbus TCP communication protocol

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1 Important Information

Please also read the general operating manual of the EFR4001IP carefully and observe the safety instructions.

2 Interface Parameters

TCP Port: 502

Max. TCP connections: 1

The Modbus TCP protocol must be activated via the integrated web server of the EFR4001IP:

- Enter the IP address of the device in the web browser (on computers in the same networks)
- Select the menu tab „network“
- Activate Modbus TCP



3 Telegram Structure

According to Modbus TCP specification.

For details, refer to the Modbus original documentation, available at:

<http://www.modbus.org>

4 Supported Function Codes

| Function code | Designation | Use |
|---------------|--------------------------|------------------------------|
| 3 (03H) | Read Holding Registers | Read data from the registers |
| 16 (10H) | Write Multiple Registers | Write data into registers |

5 Data Types

The following data types are used in the Modbus registers:

| Data type | Size | Range of numbers |
|---------------|------------------------------------|----------------------------|
| signed int | 16 Bit, register value | -32768 ... 32767 |
| unsigned int | 16 Bit, register value | 0 ... 65535 |
| signed long | 32 Bit, divided over two registers | -2147483648 ... 2147483647 |
| unsigned long | 32 Bit, divided over two registers | 0 ... 4294967296 |

6 Modbus Register Tables

6.1 Reading measured values, status values and min. / max. (state: EFR4001IP)

- Modbus function code 0x03 (Read Holding Registers)

| Adr. hex | Data type | | Register | Range of values | | Prog. -Nr. | | | | | | | |
|------------------|-------------|---------------------|-----------------------------|-----------------|---------|------------|---|---|---|---|---|---|---|
| | | | | Min. | Max. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0x00B0 0x00B1 | signed long | <i>low high</i> | Actual value U - L1 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x | x |
| 0x00B2 0x00B3 | signed long | <i>low high</i> | Actual value U - L2 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x | x |
| 0x00B4 0x00B5 | signed long | <i>low high</i> | Actual value U - L3 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x | x |
| 0x00B6 0x00B7 | signed long | <i>low high</i> | Actual value I - L1 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x | x |
| 0x00B8 0x00B9 | signed long | <i>low high</i> | Actual value I - L2 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x | x |
| 0x00BA 0x00BB | signed long | <i>low high</i> | Actual value I - L3 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x | x |
| 0x00BC 0x00BD | signed long | <i>low high</i> | Actual value P - L1 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x00BE 0x00BF | signed long | <i>low high</i> | Actual value P - L2 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x00C0 0x00C1 | signed long | <i>low high</i> | Actual value P - L3 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x00C2 0x00C3 | signed long | <i>low high</i> | Actual value P - L123 [W] | -999999 ... | 999999 | x | x | x | x | x | x | x | x |
| 0x00C4 0x00C5 | signed long | <i>low high</i> | Actual value S - L1 [VA] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x00C6 0x00C7 | signed long | <i>low high</i> | Actual value S - L2 [VA] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x00C8 0x00C9 | signed long | <i>low high</i> | Actual value S - L3 [VA] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x00CA 0x00CB | signed long | <i>low high</i> | Actual value S - L123 [VA] | -999999 ... | 999999 | x | x | x | x | x | x | x | x |

| Adr. hex | Data type | | Register | Range of values | | Prog. -Nr. | | | | | | | |
|------------------|-------------|-------------|---|---|------------|------------|---|---|---|---|---|---|---|
| | | | | Min. | Max. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0x00CC 0x00CD | signed long | low high | Actual value Q - L1 [VAr] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x00CE 0x00CF | signed long | low high | Actual value Q - L2 [VAr] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x00D0 0x00D1 | signed long | low high | Actual value Q - L3 [VAr] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x00D2 0x00D3 | signed long | low high | Actual value Q - L123 [VAr] | -999999 ... | 999999 | x | x | x | x | x | x | x | x |
| 0x00D4 0x00D5 | signed long | low high | Actual value $\cos \varphi$ - L1 [0,0001] | -10000 ... | 10000 | x | x | x | x | x | x | x | x |
| 0x00D6 0x00D7 | signed long | low high | Actual value $\cos \varphi$ - L2 [0,0001] | -10000 ... | 10000 | x | x | x | x | x | x | x | x |
| 0x00D8 0x00D9 | signed long | low high | Actual value $\cos \varphi$ - L3 [0,0001] | -10000 ... | 10000 | x | x | x | x | x | x | x | x |
| 0x00DA 0x00DB | signed long | low high | Actual value frequency [0,01 Hz] | 4000 ... | 7000 | x | x | x | x | x | x | x | x |
| 0x00DC 0x00DD | signed long | low high | Actual value $\Phi \varphi * \angle(U-L1, U-L2)$ [0,001 °] | 0 ... | 360000 | x | x | x | x | x | x | x | x |
| 0x00DE 0x00DF | signed long | low high | Actual value $\Phi \varphi * \angle(U-L1, U-L3)$ [0,001 °] | 0 ... | 360000 | x | x | x | x | x | x | x | x |
| 0x00E0 0x00E1 | signed long | low high | Actual value $\Phi \varphi * \angle(U-L2, U-L3)$ [0,001 °] | 0 ... | 360000 | x | x | x | x | x | x | x | x |
| 0x00E2 0x00E3 | signed long | low high | Actual value $\Phi \varphi * \angle(I-L1, I-L2)$ [0,001 °] | 0 ... | 360000 | x | x | x | x | x | x | x | x |
| 0x00E4 0x00E5 | signed long | low high | Actual value $\Phi \varphi * \angle(I-L1, I-L3)$ [0,001 °] | 0 ... | 360000 | x | x | x | x | x | x | x | x |
| 0x00E6 0x00E7 | signed long | low high | Actual value $\Phi \varphi * \angle(I-L2, I-L3)$ [0,001 °] | 0 ... | 360000 | x | x | x | x | x | x | x | x |
| 0x00E8 | signed int | | Status measured value I - L1 | 0 = measured value ok 1 = measuring range exceeded 2= measuring range below 3= simulation | | x | x | x | x | x | x | x | x |
| 0x00E9 | signed int | | Status measured value I - L2 | | | x | x | x | x | x | x | x | x |
| 0x00EA | signed int | | Status measured value I - L3 | | | x | x | x | x | x | x | x | x |
| 0x00EB | signed int | | Status measured value U - L1 | | | x | x | x | x | x | x | x | x |
| 0x00EC | signed int | | Status measured value U - L2 | | | x | x | x | x | x | x | x | x |
| 0x00ED | signed int | | Status measured value U - L3 | | | x | x | x | x | x | x | x | x |
| 0x00EE | signed int | | Status measured value P - L1 | | | x | x | x | x | x | x | x | x |
| 0x00EF | signed int | | Status measured value P - L2 | | | x | x | x | x | x | x | x | x |
| 0x00F0 | signed int | | Status measured value P - L3 | | | x | x | x | x | x | x | x | x |
| 0x00F1 | signed int | | Status measured value P-L123 | | | x | x | x | x | x | x | x | x |
| 0x00F2 0x00F3 | signed long | low high | On time K1 [min.] | 0 ... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x00F4 0x00F5 | signed long | low high | On time K2 [min.] | 0 ... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x00F6 0x00F7 | signed long | low high | On time K3 [min.] | 0 ... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x00F8 | signed int | | Current error (error) | 0 = currently no error 1 = error | | x | x | x | x | x | x | x | x |
| 0x00F9 | signed int | | Error memory (limit error) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x00FA | signed int | | Error memory (load difference) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x00FB | signed int | | Error memory (AD converter) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x00FC | signed int | | Error memory (adjustment values) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x00FD | signed int | | Error memory (parameter over range) | 0 ... | 99 | x | x | x | x | x | x | x | x |

*All angles are counterclockwise.

| Adr. hex | Data type | Register | Range of values | | Prog. -Nr. | | | | | | | |
|-------------|-------------|--|---|--|------------|---|---|---|---|---|---|---|
| | | | Min. | Max. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0x00FE | signed int | Error memory (scaling analogue output) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x00FF | signed int | Error memory (check current transformer) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x0100 | signed int | Error memory (min. 2 same load values) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x0101 | signed int | Error memory (reserve) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x0102 | signed int | Relay status K1 | 0 (off)... | 1 (on) | x | x | x | x | x | x | x | x |
| 0x0103 | signed int | Relay status K2 | 0 (off)... | 1 (on) | x | x | x | x | x | x | x | x |
| 0x0104 | signed int | Relay status K3 | 0 (off)... | 1 (on) | x | x | x | x | x | x | x | x |
| 0x0105 | signed int | Alarm status 0 (K1 / step 1) | 0 = alarm off 1 = delay time on 2 = alarm on 3 = alarm delay 4 = alarm locked | | x | x | x | x | x | x | x | x |
| 0x0106 | signed int | Alarm status 1 (K2 / step 2) | | | x | x | x | x | x | x | x | x |
| 0x0107 | signed int | Alarm status 2 (K3* / step 3) | | | x | x | x | x | x | x | x | x |
| 0x0108 | signed int | Alarm status 3 (step 4) | | | x | | | | | | | |
| 0x0109 | signed int | Alarm status 4 (step 5) | | | x | | | | | | | |
| 0x010A | signed int | Alarm status 5 (step 6) | | | x | | | | | | | |
| 0x010B | signed int | Alarm status 6 (step 7) | | | x | | | | | | | |
| 0x010C | signed long | low high | Device status | Only for internal service purposes | x | x | x | x | x | x | x | x |
| 0x010D | | | | | | | | | | | | |
| 0x010E | signed long | low high | Serial number | | x | x | x | x | x | x | x | x |
| 0x010F | | | | | | | | | | | | |
| 0x0110 | signed long | low high | Operating hours | hours [h] | x | x | x | x | x | x | x | x |
| 0x0111 | | | | | | | | | | | | |
| 0x0112 | signed int | | Firmware version, Application | e. g. 0x0B01 (hex) -> 12720-1411-01 (Dec) | x | x | x | x | x | x | x | x |
| 0x0113 | signed int | | Firmware version, Bootloader | | x | x | x | x | x | x | x | x |
| 0x0114 | signed long | low high | Min. value U - L1 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x |
| 0x0115 | | | | | | | | | | | | |
| 0x0116 | signed long | low high | Max. value U - L1 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x |
| 0x0117 | | | | | | | | | | | | |
| 0x0118 | signed long | low high | Min. value U - L2 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x |
| 0x0119 | | | | | | | | | | | | |
| 0x011A | signed long | low high | Max. value U - L2 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x |
| 0x011B | | | | | | | | | | | | |
| 0x011C | signed long | low high | Min. value U - L3 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x |
| 0x011D | | | | | | | | | | | | |
| 0x011E | signed long | low high | Max. value U - L3 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x |
| 0x011F | | | | | | | | | | | | |
| 0x0120 | signed long | low high | Min. value I - L1 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x |
| 0x0121 | | | | | | | | | | | | |
| 0x0122 | signed long | low high | Max. value I - L1 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x |
| 0x0123 | | | | | | | | | | | | |
| 0x0124 | signed long | low high | Min. value I - L2 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x |
| 0x0125 | | | | | | | | | | | | |
| 0x0126 | signed long | low high | Max. value I - L2 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x |
| 0x0127 | | | | | | | | | | | | |
| 0x0128 | signed long | low high | Min. value I - L3 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x |
| 0x0129 | | | | | | | | | | | | |
| 0x012A | signed long | low high | Max. value I - L3 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x |
| 0x012B | | | | | | | | | | | | |
| 0x012C | signed long | low high | Min. value P - L1 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x |
| 0x012D | | | | | | | | | | | | |
| 0x012E | signed long | low high | Max. value P - L1 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x |
| 0x012F | | | | | | | | | | | | |
| 0x0130 | signed long | low high | Min. value P - L2 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x |
| 0x0131 | | | | | | | | | | | | |

* In the case of programs 7 and 8, the relay **K3** reacts in three steps successively according to VDE-AR-N 4105.

| Adr. hex | Data type | | Register | Range of values | | Prog.-Nr. | | | | | | | |
|------------------|---------------|-------------|---|--|------------|-----------|---|---|---|---|---|---|---|
| | | | | Min. | Max. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0x0132 0x0133 | signed long | low high | Max. value P - L2 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x0134 0x0135 | signed long | low high | Min. value P - L3 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x0136 0x0137 | signed long | low high | Max. value P - L3 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x0138 0x0139 | signed long | low high | Min. value P - L123 [W] | -999999 ... | 999999 | x | x | x | x | x | x | x | x |
| 0x013A 0x013B | signed long | low high | Max. value P - L123 [W] | -999999 ... | 999999 | x | x | x | x | x | x | x | x |
| 0x013C 0x013D | signed long | low high | Sum of connected loads via relay [W] | 0... | 150000 | x | x | x | x | x | x | x | x |
| 0x013E 0x013F | unsigned long | low high | Controlled load via analogue output I [W] | 0... | 50000 | x | x | x | x | x | x | x | x |
| 0x0140 0x0141 | unsigned long | low high | Controlled load via analogue output U [W] | 0... | 50000 | x | x | x | x | x | x | x | x |
| 0x0142 | signed int | | Digital input Y1 | 0... | 1 | x | x | x | x | x | x | x | x |
| 0x0143 | signed int | | Digital input Y2 | 0... | 1 | x | x | x | x | x | x | x | x |
| 0x0144 | signed int | | Digital input Y3 | 0... | 1 | x | x | x | x | x | x | x | x |
| 0x0145 | signed int | | Digital input Y4 | 0... | 1 | x | x | x | x | x | x | x | x |
| 0x0146 | signed int | | Hardware Version | 00... | | x | x | x | x | x | x | x | x |
| 0x0147 | signed int | | Status timer function K1 | 0=auto/off, 1=on for, 2=off for, 3=manually on, 4=manually off | | x | x | x | | | | | |
| 0x0148 | signed int | | Status timer function K2 | | | x | x | x | | | | | |
| 0x0149 | signed int | | Status timer function K3 | | | x | x | x | | | | | |
| 0x014A | signed int | | Status timer function Out I | | | x | x | x | | | | | |
| 0x014B | signed int | | Status timer function Out U | | | x | x | x | | | | | |
| 0x014C 0x014D | unsigned long | low high | Actual time of Timer function K1 [s] | 0... | 86400 | x | x | x | | | | | |
| 0x014E 0x014F | unsigned long | low high | Actual time of Timer function K2 [s] | 0... | 86400 | x | x | x | | | | | |
| 0x0150 0x0151 | unsigned long | low high | Actual time of Timer function K3 [s] | 0... | 86400 | x | x | x | | | | | |
| 0x0152 0x0153 | unsigned long | low high | Actual time of Timer function Out I [s] | 0... | 86400 | x | x | x | | | | | |
| 0x0154 0x0155 | unsigned long | low high | Actual time of Timer function Out U [s] | 0... | 86400 | x | x | x | | | | | |
| 0x0156 0x0157 | signed long | low high | Feed-in L1 [Wh] | -2147483648 | ...0 | x | x | x | x | x | x | x | x |
| 0x0158 0x0159 | signed long | low high | Feed-in L2 [Wh] | -2147483648 | ...0 | x | x | x | x | x | x | x | x |
| 0x015A 0x015B | signed long | low high | Feed-in L3 [Wh] | -2147483648 | ...0 | x | x | x | x | x | x | x | x |
| 0x015C 0x015D | signed long | low high | Feed-in L123 [Wh] | -2147483648 | ...0 | x | x | x | x | x | x | x | x |
| 0x015E 0x015F | signed long | low high | Draw L1 [Wh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x0160 0x0161 | signed long | low high | Draw L2 [Wh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x0162 0x0163 | signed long | low high | Draw L3 [Wh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x0164 0x0165 | signed long | low high | Draw L123 [Wh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |

| Adr. hex | Data type | | Register | Range of values | | Prog.-Nr. | | | | | | | |
|------------------|-------------|---------------------------|--|-----------------|------------|-----------|---|---|---|---|---|---|---|
| | | | | Min. | Max. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0x0166 0x0167 | signed long | <i>low</i> <i>high</i> | Draw – feed-in L123 [Wh] | -2147483648 | 2147483647 | x | x | x | x | x | x | x | X |
| 0x0168 0x0169 | signed long | <i>low</i> <i>high</i> | Own consumption at K1 [kWh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x016A 0x016B | signed long | <i>low</i> <i>high</i> | Own consumption at K2 [kWh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x016C 0x016D | signed long | <i>low</i> <i>high</i> | Own consumption at K3 [kWh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x016E 0x016F | signed long | <i>low</i> <i>high</i> | Own consumption at Out I [kWh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x0170 0x0171 | signed long | <i>low</i> <i>high</i> | Own consumption at Out U [kWh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x0172 0x0173 | signed long | <i>low</i> <i>high</i> | Own consumption at K123 + Out I + U [kWh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |

6.2 Reading measured values, status values and min. / max. (state: EFR4000IP)

- Modbus function code 0x03 (Read Holding Registers)

| Adr. hex | Data type | | Register | Range of values | | Prog. -Nr. | | | | | | | |
|------------------|-------------|-------------|---|---|------------|------------|---|---|---|---|---|---|---|
| | | | | Min. | Max. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0x0000 0x0001 | signed long | low high | Actual value U - L1 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x | x |
| 0x0002 0x0003 | signed long | low high | Actual value U - L2 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x | x |
| 0x0004 0x0005 | signed long | low high | Actual value U - L3 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x | x |
| 0x0006 0x0007 | signed long | low high | Actual value I - L1 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x | x |
| 0x0008 0x0009 | signed long | low high | Actual value I - L2 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x | x |
| 0x000A 0x000B | signed long | low high | Actual value I - L3 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x | x |
| 0x000C 0x000D | signed long | low high | Actual value P - L1 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x000E 0x000F | signed long | low high | Actual value P - L2 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x0010 0x0011 | signed long | low high | Actual value P - L3 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x0012 0x0013 | signed long | low high | Actual value P - L123 [W] | -999999 ... | 999999 | x | x | x | x | x | x | x | x |
| 0x0014 0x0015 | signed long | low high | Actual value frequency [0,01 Hz] | 4000 ... | 7000 | x | x | x | x | x | x | x | x |
| 0x0016 | signed int | | Status measured value I - L1 | 0 = measured value ok 1 = measuring range exceeded 2= measuring range below 3= simulation | | x | x | x | x | x | x | x | x |
| 0x0017 | signed int | | Status measured value I - L2 | | | x | x | x | x | x | x | x | x |
| 0x0018 | signed int | | Status measured value I - L3 | | | x | x | x | x | x | x | x | x |
| 0x0019 | signed int | | Status measured value U - L1 | | | x | x | x | x | x | x | x | x |
| 0x001A | signed int | | Status measured value U - L2 | | | x | x | x | x | x | x | x | x |
| 0x001B | signed int | | Status measured value U - L3 | | | x | x | x | x | x | x | x | x |
| 0x001C | signed int | | Status measured value P - L1 | | | x | x | x | x | x | x | x | x |
| 0x001D | signed int | | Status measured value P - L2 | | | x | x | x | x | x | x | x | x |
| 0x001E | signed int | | Status measured value P - L3 | | | x | x | x | x | x | x | x | x |
| 0x001F | signed int | | Status measured value P - L123 | | | x | x | x | x | x | x | x | x |
| 0x0020 0x0021 | signed long | low high | On time K1 [min.] | 0 ... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x0022 0x0023 | signed long | low high | On time K2 [min.] | 0 ... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x0024 0x0025 | signed long | low high | On time K3 [min.] | 0 ... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x0026 | signed int | | Current error (error) | 0 = currently no error 1 = error | | x | x | x | x | x | x | x | x |
| 0x0027 | signed int | | Error memory (limit error) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x0028 | signed int | | Error memory (load difference) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x0029 | signed int | | Error memory (AD converter) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x002A | signed int | | Error memory (adjustment values) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x002B | signed int | | Error memory (parameter over range) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x002C | signed int | | Error memory (scaling analogue output) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x002D | signed int | | Error memory (check current transformer) | 0 ... | 99 | x | x | x | x | x | x | x | x |

| Adr. hex | Data type | | Register | Range of values | | Prog. -Nr. | | | | | | | |
|------------------|-------------|-------------|--|---|----------|------------|---|---|---|---|---|---|---|
| | | | | Min. | Max. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0x002E | signed int | | Error memory (min. 2 same load values) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x002F | signed int | | Error memory (reserve) | 0 ... | 99 | x | x | x | x | x | x | x | x |
| 0x0030 | signed int | | Relay status K1 | 0 (off)... | 1 (on) | x | x | x | x | x | x | x | x |
| 0x0031 | signed int | | Relay status K2 | 0 (off)... | 1 (on) | x | x | x | x | x | x | x | x |
| 0x0032 | signed int | | Relay status K3 | 0 (off)... | 1 (on) | x | x | x | x | x | x | x | x |
| 0x0033 | signed int | | Alarm status 0 (K1 / step 1) | 0 = alarm off 1 = delay time on 2 = alarm on 3 = alarm delay 4 = alarm locked | | x | x | x | x | x | x | x | x |
| 0x0034 | signed int | | Alarm status 1 (K2 / step 2) | | | x | x | x | x | x | x | x | x |
| 0x0035 | signed int | | Alarm status 2 (K3* / step 3) | | | x | x | x | x | x | x | x | x |
| 0x0036 | signed int | | Alarm status 3 (step 4) | | | x | | | | | | | |
| 0x0037 | signed int | | Alarm status 4 (step 5) | | | x | | | | | | | |
| 0x0038 | signed int | | Alarm status 5 (step 6) | | | x | | | | | | | |
| 0x0039 | signed int | | Alarm status 6 (step 7) | | | x | | | | | | | |
| 0x003A 0x003B | signed long | low high | Device status | Only for internal service purposes | | x | x | x | x | x | x | x | x |
| 0x003C 0x003D | signed long | low high | Serial number | | | x | x | x | x | x | x | x | x |
| 0x003E 0x003F | signed long | low high | Operating hours | hours [h] | | x | x | x | x | x | x | x | x |
| 0x0040 | signed int | | Firmware version, Application | e. g. 0x0B01 (hex) -> 12720-1411-01 (Dec) | | x | x | x | x | x | x | x | x |
| 0x0041 | signed int | | Firmware version, Bootloader | | | x | x | x | x | x | x | x | x |
| 0x0042 0x0043 | signed long | low high | Min. value U - L1 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x | x |
| 0x0044 0x0045 | signed long | low high | Max. value U - L1 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x | x |
| 0x0046 0x0047 | signed long | low high | Min. value U - L2 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x | x |
| 0x0048 0x0049 | signed long | low high | Max. value U - L2 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x | x |
| 0x004A 0x004B | signed long | low high | Min. value U - L3 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x | x |
| 0x004C 0x004D | signed long | low high | Max. value U - L3 [0,1 V] | 1 ... | 3300 | x | x | x | x | x | x | x | x |
| 0x004E 0x004F | signed long | low high | Min. value I - L1 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x | x |
| 0x0050 0x0051 | signed long | low high | Max. value I - L1 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x | x |
| 0x0052 0x0053 | signed long | low high | Min. value I - L2 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x | x |
| 0x0054 0x0055 | signed long | low high | Max. value I - L2 [mA] | 1 ... | 1200000s | x | x | x | x | x | x | x | x |
| 0x0056 0x0057 | signed long | low high | Min. value I - L3 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x | x |
| 0x0058 0x0059 | signed long | low high | Max. value I - L3 [mA] | 1 ... | 1200000 | x | x | x | x | x | x | x | x |
| 0x005A 0x005B | signed long | low high | Min. value P - L1 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x005C 0x005D | signed long | low high | Max. value P - L1 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x005E 0x005F | signed long | low high | Min. value P - L2 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |

* In the case of programs 7 and 8, the relay **K3** reacts in three steps successively according to VDE-AR-N 4105.

| Adr. hex | Data type | | Register | Range of values | | Prog.-Nr. | | | | | | | |
|------------------|---------------|-------------|---|--|------------|-----------|---|---|---|---|---|---|---|
| | | | | Min. | Max. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0x0060 0x0061 | signed long | low high | Max. value P - L2 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x0062 0x0063 | signed long | low high | Min. value P - L3 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x0064 0x0065 | signed long | low high | Max. value P - L3 [W] | -350000 ... | 350000 | x | x | x | x | x | x | x | x |
| 0x0066 0x0067 | signed long | low high | Min. value P - L123 [W] | -999999 ... | 999999 | x | x | x | x | x | x | x | x |
| 0x0068 0x0069 | signed long | low high | Max. value P - L123 [W] | -999999 ... | 999999 | x | x | x | x | x | x | x | x |
| 0x006A 0x006B | signed long | low high | Sum of connected loads via relay [W] | 0... | 150000 | x | x | x | x | x | x | x | x |
| 0x006C 0x006D | unsigned long | low high | Controlled load via analogue output I [W] | 0... | 50000 | x | x | x | x | x | x | x | x |
| 0x006E 0x006F | unsigned long | low high | Controlled load via analogue output U [W] | 0... | 50000 | x | x | x | x | x | x | x | x |
| 0x0070 | signed int | | Digital input Y1 | 0... | 1 | x | x | x | x | x | x | x | x |
| 0x0071 | signed int | | Digital input Y2 | 0... | 1 | x | x | x | x | x | x | x | x |
| 0x0072 | signed int | | Digital input Y3 | 0... | 1 | x | x | x | x | x | x | x | x |
| 0x0073 | signed int | | Digital input Y4 | 0... | 1 | x | x | x | x | x | x | x | x |
| 0x0074 | signed int | | Hardware Version | 00... | | x | x | x | x | x | x | x | x |
| 0x0075 | signed int | | Status timer function K1 | 0=auto/off, 1=on for, 2=off for, 3=manually on, 4=manually off | | x | x | x | | | | | |
| 0x0076 | signed int | | Status timer function K2 | | | x | x | x | | | | | |
| 0x0077 | signed int | | Status timer function K3 | | | x | x | x | | | | | |
| 0x0078 | signed int | | Status timer function Out I | | | x | x | x | | | | | |
| 0x0079 | signed int | | Status timer function Out U | | | x | x | x | | | | | |
| 0x007A 0x007B | unsigned long | low high | Actual time of Timer function K1 [s] | 0... | 86400 | x | x | x | | | | | |
| 0x007C 0x007D | unsigned long | low high | Actual time of Timer function K2 [s] | 0... | 86400 | x | x | x | | | | | |
| 0x007E 0x007F | unsigned long | low high | Actual time of Timer function K3 [s] | 0... | 86400 | x | x | x | | | | | |
| 0x0080 0x0081 | unsigned long | low high | Actual time of Timer function Out I [s] | 0... | 86400 | x | x | x | | | | | |
| 0x0082 0x0083 | unsigned long | low high | Actual time of Timer function Out U [s] | 0... | 86400 | x | x | x | | | | | |
| 0x0084 0x0085 | signed long | low high | Feed-in L1 [Wh] | -2147483648 | ...0 | x | x | x | x | x | x | x | x |
| 0x0086 0x0087 | signed long | low high | Feed-in L2 [Wh] | -2147483648 | ...0 | x | x | x | x | x | x | x | x |
| 0x0088 0x0089 | signed long | low high | Feed-in L3 [Wh] | -2147483648 | ...0 | x | x | x | x | x | x | x | x |
| 0x008A 0x008B | signed long | low high | Feed-in L123 [Wh] | -2147483648 | ...0 | x | x | x | x | x | x | x | x |
| 0x008C 0x008D | signed long | low high | Draw L1 [Wh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x008E 0x008F | signed long | low high | Draw L2 [Wh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x0090 0x0091 | signed long | low high | Draw L3 [Wh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x0092 0x0093 | signed long | low high | Draw L123 [Wh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |

| Adr. hex | Data type | | Register | Range of values | | Prog.-Nr. | | | | | | | |
|------------------|-------------|---------------------------|--|-----------------|------------|-----------|---|---|---|---|---|---|---|
| | | | | Min. | Max. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0x0094 0x0095 | signed long | <i>low</i> <i>high</i> | Draw – feed-in L123 [Wh] | -2147483648 | 2147483647 | x | x | x | x | x | x | x | X |
| 0x0096 0x0097 | signed long | <i>low</i> <i>high</i> | Own consumption at K1 [kWh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x0098 0x0099 | signed long | <i>low</i> <i>high</i> | Own consumption at K2 [kWh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x009A 0x009B | signed long | <i>low</i> <i>high</i> | Own consumption at K3 [kWh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x009C 0x009D | signed long | <i>low</i> <i>high</i> | Own consumption at Out I [kWh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x009E 0x009F | signed long | <i>low</i> <i>high</i> | Own consumption at Out U [kWh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |
| 0x00A0 0x00A1 | signed long | <i>low</i> <i>high</i> | Own consumption at K123 + Out I + U [kWh] | 0... | 2147483647 | x | x | x | x | x | x | x | x |

6.3 Parameter read and write

- Modbus function code 0x03 (Read Holding Registers)
- Modbus function code 0x10 (Write Multiple Registers)

| Adr. hex | Data type | | Register | Range of values | | Prog. -Nr. | | | | | | | | | |
|-------------|-------------|------|---|--------------------------------------|------------|------------|---|---|---|---|---|---|---|--|---|
| | | | | Min. | Max. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| 0x0200 | signed int | | Program number | 1... | 8 | x | x | x | x | x | x | x | x | | |
| 0x0201 | signed int | | Current transformer-Primary [A] | 1... | 1000 | x | x | x | x | x | x | x | x | | |
| 0x0202 | signed int | | Current transformer - Secondary [0,1 A] | 1... | 50 | x | x | x | x | x | x | x | x | | |
| 0x0203 | signed long | low | Power at K1 (step 10 W) [W] | 0... | 500000 | x | x | x | x | | | | | | |
| 0x0204 | | high | | | | | | | | | | | | | |
| 0x0205 | signed long | low | Power at K2 (step 10 W) [W] | 0... | 500000 | x | x | x | x | | | | | | |
| 0x0206 | | high | | | | | | | | | | | | | |
| 0x0207 | signed long | low | Power at K3 (step 10 W) [W] | 0... | 500000 | x | x | x | x | | | | | | |
| 0x0208 | | high | | | | | | | | | | | | | |
| 0x0209 | signed int | | Phase on relay K1 | -5=L123, -4=L3, -3=L2, -2=L1, -1=off | | x | x | x | x | | x | | | | |
| 0x020A | signed int | | Phase on relay K2 | | | x | x | x | x | | x | | | | |
| 0x020B | signed int | | Phase on relay K3 | | | x | x | x | x | | x | | | | |
| 0x020C | signed int | | Relay function K1 | -2 = 11-12 | -1 = 11-14 | x | x | x | x | | | | | | |
| 0x020D | signed int | | Relay function K2 | -2 = 21-22 | -1 = 21-24 | x | x | x | x | | | | | | |
| 0x020E | signed int | | Relay function K3 | -2 = 31-32 | -1 = 31-34 | x | x | x | x | | | | | | |
| 0x020F | signed long | low | Delay on K1 [s] | 0... | 86399 | x | x | | x | x | x | x | x | | |
| 0x0210 | | high | Delay on [s] | | | | | | | | | | | | |
| 0x0211 | signed long | low | Delay on K2 [s] | 0... | 86399 | x | x | | x | x | x | x | x | | |
| 0x0212 | | high | | | | | | | | | | | | | |
| 0x0213 | signed long | low | Delay on K3 [s] | 0... | 86399 | x | x | | x | x | x | x | x | | |
| 0x0214 | | high | | | | | | | | | | | | | |
| 0x0215 | signed long | low | Min. on K1 [s] | 10... | 86399 | x | x | | x | | | | | | |
| 0x0216 | | high | Min. on [s] | 10... | 86399 | | | | | | | | | | x |
| 0x0217 | signed long | low | Min. on K2 [s] | 10... | 86399 | x | x | | x | | | | | | |
| 0x0218 | | high | | | | | | | | | | | | | |
| 0x0219 | signed long | low | Min. on K3 [s] | 10... | 86399 | x | x | | x | | | | | | |
| 0x021A | | high | | | | | | | | | | | | | |
| 0x021B | signed long | low | Delay off K1 [s] | 10... | 86399 | x | x | | x | | | | | | |
| 0x021C | | | Delay off [s] | 10... | 86399 | | | | | | | | | | x |
| | | | Delay off K1 [0,01s] | 0... | 359999 | | | | | | | | | | |
| 0x021D | signed long | low | Delay off K2 [s] | 10... | 86399 | x | x | | x | | | | | | |
| 0x021E | | high | Delay off K2 [0,01s] | 0... | 359999 | | | | | | | | | | |
| 0x021F | signed long | low | Delay off K3 [s] | 10... | 86399 | x | x | | x | | | | | | |
| 0x0220 | | high | Delay off K3 [0,01s] | 0... | 359999 | | | | | | | | | | |
| 0x0221 | signed long | low | Load regulation K1 [s] | 10... | 86399 | x | x | | x | | | | | | |
| 0x0222 | | high | | | | | | | | | | | | | |
| 0x0223 | signed long | low | Load regulation K2 [s] | 10... | 86399 | x | x | | x | | | | | | |
| 0x0224 | | high | | | | | | | | | | | | | |
| 0x0225 | signed long | low | Load regulation K3 [s] | 10... | 86399 | x | x | | x | | | | | | |
| 0x0226 | | high | | | | | | | | | | | | | |
| 0x0227 | signed long | low | Power K1 on (step 10 W) [W] | -999990... | 999990 | x | x | | x | x | x | x | x | | |
| 0x0228 | | high | Switch off value (step 10 W) [W] | | | | | | | | | | | | x |
| 0x0229 | signed long | low | Power K2 on (step 10 W) [W] | -999990... | 999990 | x | x | | x | x | x | x | x | | |
| 0x022A | | high | | | | | | | | | | | | | |
| 0x022B | signed long | low | Power K3 on (step 10 W) [W] | -999990... | 999990 | x | x | | x | x | x | x | x | | |
| 0x022C | | high | | | | | | | | | | | | | |

| Adr. hex | Data type | Register | Range of values | | Prog.-Nr. | | | | | | | |
|------------------|--|--|--|----------|-----------|---|---|---|---|---|---|---|
| | | | Min. | Max. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0x022D 0x022E | signed long <i>low</i> <i>high</i> | Power K1 off (step 10 W) [W] | -999990... | 999990 | x | x | | x | x | x | x | x |
| 0x022F 0x0230 | signed long <i>low</i> <i>high</i> | Power K2 off (step 10 W) [W] | -999990... | 999990 | x | x | | x | x | x | x | x |
| 0x0231 0x0232 | signed long <i>low</i> <i>high</i> | Power K3 off (step 10 W) [W] | -999990... | 999990 | x | x | | x | x | x | | |
| 0x0233 | signed int | Auto reset K1 | -1 = on | -2 = off | | | | | x | x | x | x |
| 0x0234 | signed int | Auto reset K2 | -1 = on | -2 = off | | | | | x | x | x | x |
| 0x0235 | signed int | Auto reset K3 | -1 = on | -2 = off | | | | | x | x | x | x |
| 0x0236 | signed int | Function input Y1 | -13=Aout-U 100%, -12=Aout-U 0%, -11=Aout-I 100%, -10=Aout-I 0%, -9=K3 off, -8=K2 off, -7=K1 off, -6=K3 on, -5=K2 on, -4=K1 on, -3=K1-3 on, -2=K1-3 off, -1=off | | x | x | x | x | | | | |
| 0x0237 | signed int | Function input Y2 | | | x | x | x | x | | | | |
| 0x0238 | signed int | Function input Y3 | | | x | x | x | x | | | | |
| 0x0239 | signed int | Function input Y4 | | | x | x | x | x | | | | |
| 0x023A | signed int | Analog output I, Function | -9= load-L3, -8=load-L2, -7=load-L1, -6=load-L123, -5=kW-L3, -4=kW L2, -3=kW-L1, -2=kW-L123, -1=off | | x | x | x | x | x | x | x | x |
| 0x023B | signed int | Analog output I, 0-20mA / 4-20 mA / Individually | -3=I _{nd} , -2=4-20 mA, -1=0-20 mA | | x | x | x | x | x | x | x | x |
| 0x023C | signed int | Analog output I, individual zero point [0,01 mA] | 0 ... | 1000 | x | x | x | x | x | x | x | x |
| 0x023D 0x023E | signed long <i>low</i> <i>high</i> | Analog output I, Zero point (step 10 W) [W] | -999990... | 999990 | x | x | x | x | x | x | x | x |
| 0x023F 0x0240 | signed long <i>low</i> <i>high</i> | Analog output I, Full scale (step 10 W) [W] | -999990... | 999990 | x | x | x | x | x | x | x | x |
| 0x0241 0x0242 | signed long <i>low</i> <i>high</i> | Analog output I, Setpoint (step 10 W) [W] | -999990... | 999990 | x | x | x | x | x | x | x | x |
| 0x0243 0x0244 | signed long <i>low</i> <i>high</i> | Analog output I, max. power (step 10 W) [W] | 0... | 500000 | x | x | x | x | x | x | x | x |
| 0x0245 | signed int | Analog output I, Regulation speed [%] | 20... | 90 | x | x | x | x | x | x | x | x |
| 0x0246 | signed int | Analog output I, Regulation interval [0,1 s] | 5... | 600 | x | x | x | x | x | x | x | x |
| 0x0247 | signed int | Analog output I, Regulation tolerance [%] | 5... | 50 | x | x | x | x | x | x | | |
| 0x0248 | signed int | Analog output U, Function | -9=load-L3, -8=load-L2, -7=load-L1, -6=load-L123, -5=kW-L3, -4=kW L2, -3=kW-L1, -2=kW-L123, -1=off | | x | x | x | x | x | x | x | x |
| 0x0249 | signed int | Analog output U, 0-10V / 2-10V / Individually | -3=I _{nd} , -2=2-10 V, -1=0-10V | | x | x | x | x | x | x | x | x |
| 0x024A | signed int | Analog output U, individual zero point [0,01 V] | 0 ... | 500 | x | x | x | x | x | x | x | x |
| 0x024B 0x024C | signed long <i>low</i> <i>high</i> | Analog output U, Zero point (step 10 W) [W] | -999990... | 999990 | x | x | x | x | x | x | x | x |
| 0x024D 0x024E | signed long <i>low</i> <i>high</i> | Analog output U, Full scale (step 10 W) [W] | -999990... | 999990 | x | x | x | x | x | x | x | x |
| 0x024F 0x0250 | signed long <i>low</i> <i>high</i> | Analog output U, Setpoint (step 10 W) [W] | -999990... | 999990 | x | x | x | x | x | x | x | x |

| Adr. hex | Data type | Register | Range of values | | Prog.-Nr. | | | | | | | |
|------------------|------------------------------------|---|--|--------|-----------|---|---|---|---|---|---|---|
| | | | Min. | Max. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0x0251 0x0252 | signed long <i>low high</i> | Analog output U, max. power (step 10 W) [W] | 0... | 500000 | x | x | x | x | x | x | x | x |
| 0x0253 | signed int | Analog output U, Regulation speed [%] | 20... | 90 | x | x | x | x | x | x | x | x |
| 0x0254 | signed int | Analog output U, Regulation interval [0,1 s] | 5... | 600 | x | x | x | x | x | x | x | x |
| 0x0255 | signed int | Analog output U, Regulation tolerance [%] | 5... | 50 | x | x | x | x | x | x | x | x |
| 0x0256 | signed int | Language | -2=English, -1=German | | x | x | x | x | x | x | x | x |
| 0x0257 | signed int | TFT brightness [%] | 20... | 100 | x | x | x | x | x | x | x | x |
| 0x0258 | signed int | TFT, time to dim ... [s] | 10... | 3600 | x | x | x | x | x | x | x | x |
| 0x0259 | signed int | Display interval [0,1 s] | 1... | 20 | x | x | x | x | x | x | x | x |
| 0x025A | signed int | Timer function K1 | 0=auto, 1=on for, 2=off for, 3=manually on, 4=manually off | | x | x | x | x | | | | |
| 0x025B | signed int | Timer function K2 | | | x | x | x | x | | | | |
| 0x025C | signed int | Timer function K3 | | | x | x | x | x | | | | |
| 0x025D | signed int | Timer function Out I | | | x | x | x | x | | | | |
| 0x025E | signed int | Timer function Out U | | | x | x | x | x | | | | |
| 0x025F | signed int | Timer function K1, Time of "on for / off for" [min.] | 1... | 1440 | x | x | x | x | | | | |
| 0x0260 | signed int | Timer function K2, Time of "on for / off for" [min.] | 1... | 1440 | x | x | x | x | | | | |
| 0x0261 | signed int | Timer function K3, Time of "on for / off for" [min.] | 1... | 1440 | x | x | x | x | | | | |
| 0x0262 | signed int | Timer function I, Time of "on for / off for" [min.] | 1... | 1440 | x | x | x | x | | | | |
| 0x0263 | signed int | Timer function U, Time of "on for / off for" [min.] | 1... | 1440 | x | x | x | x | | | | |
| 0x0264 | signed int | Timer function, Load at Out I [%] | 0... | 100 | x | x | x | x | | | | |
| 0x0265 | signed int | Timer function, Load at Out U [%] | 0... | 100 | x | x | x | x | | | | |

6.4 Trigger reset function

- Modbus function code 0x10 (Write Multiple Registers)

| Adr. hex | Data type | Register | Value | Prog.-Nr. | | | | | | | |
|-------------|------------|--------------------|--|-----------|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0x0100 | signed int | Reset min/max U | <i>write 1 -> reset all U</i> | x | x | x | x | x | x | x | x |
| 0x0101 | signed int | Reset min/max I | <i>write 1 -> reset all I</i> | x | x | x | x | x | x | x | x |
| 0x0102 | signed int | Reset min/max P | <i>write 1 -> reset all P</i> | x | x | x | x | x | x | x | x |
| 0x0103 | signed int | On time K1...K3 | <i>write 1 -> reset all times</i> | x | x | x | x | x | x | x | x |
| 0x0104 | signed int | Error memory | <i>write 1 -> reset all errors</i> | x | x | x | x | x | x | x | x |
| 0x0105 | signed int | Locked relays | <i>write 1 -> reset locked relays</i> | | | | | x | x | x | x |
| 0x0106 | signed int | Reset energy meter | <i>write 1 -> reset</i> | x | x | x | x | x | x | x | x |