

Power Analyser UMG 801 and modules

Modbus-address list and Formulary

From UMG 801 firmware 1.5.0



Example illustration!

Content

Modbus	4
Modbus functions (master)	4
Modbus Functions (Slave)	4
Transfer parameters	5
Byte sequence	5
Update rate	5
Measured values	5
Number formats	5
Symbols and definitions	5
Explanations of the measured values	6
Modbus addresses UMG 801 (basic device)	12
Voltage measurement channels	12
Measuring channels 1 - 4 (Measuring group 1)	12
Drag pointer - I1 - I4 (Measuring group 1)	13
Measuring channels 5 - 8 (Measuring group 2)	16
Drag pointer - I5 - I8 (Measuring group 2)	17
Multifunctional channels (Measuring group 3)	19
Digital inputs (DI)	21
Multifunctional channels (Temperature measurement)	21
Multifunctional channels - Residual current (RCM)-Thresholds	21
Modbus addresses - Current measurement modules	22
Current measurement module 1 (Measuring group 1)	22
Current measurement module 1 (Measuring group 2)	23
Current measurement module 2 (Measuring group 1)	24
Current measurement module 2 (Measuring group 2)	25
Current measurement module 3 (Measuring group 1)	27
Current measurement module 3 (Measuring group 2)	28
Current measurement module 4 (Measuring group 1)	29
Current measurement module 4 (Measuring group 2)	31
Current measurement module 5 (Measuring group 1)	32
Current measurement module 5 (Measuring group 2)	33
Current measurement module 6 (Measuring group 1)	35
Current measurement module 6 (Measuring group 2)	36
Current measurement module 7 (Measuring group 1)	37
Current measurement module 7 (Measuring group 2)	38
Current measurement module 8 (Measuring group 1)	40
Current measurement module 8 (Measuring group 2)	41
Current measurement module 9 (Measuring group 1)	42
Current measurement module 9 (Measuring group 2)	44
Current measurement module 10 (Measuring group 1)	45
Current measurement module 10 (Measuring group 2)	46

Modbus addresses - Digital input modules	49
Digital input module 1	49
Digital input module 2	49
Digital input module 3	49
Digital input module 4	50
Digital input module 5	50
Digital input module 6	50
Digital input module 7	51
Digital input module 8	51
Digital input module 9	51
Digital input module 10	52

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The contents of this manual have been compiled with the utmost care and correspond to our current state of information. Nevertheless, we would like to point out that the updating of this manual cannot always be carried out at the same time as the technical further development of our products. Information and specifications can be changed at any time! Please check for the latest version at www.janitza.de.

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Janitza electronics GmbH does not accept any responsibility for errors or faults within this handbook and does not accept any obligation to keep the contents of this handbook updated.

Comments on the handbook

We welcome your comments. If anything appears to be unclear in this handbook, please let us know and send us an E-MAIL to: info@janitza.de.

Modbus

Modbus functions (master)

As a master, the UMG 801 supports the following modbus functions:

01 Read Coil Status

Reads the ON/OFF status of discrete outputs (0X references, coils) in the slave. Broadcast is not supported.

02 Read Input Status

Reads the ON/OFF status of discrete inputs (0X references) in the slave. Broadcast is not supported.

03 Read Holding Registers

Reads the binary contents of holding registers (4X references) in the slave.

04 Read Input Registers

Reads the binary contents of input registers (3X references) in the slave.

05 Force Single Coil

Forces a single coil (0X references) to either ON or OFF. When broadcast, the function forces the same coil reference in all attached slaves.

06 Preset Single Register

Presets a value into a single holding register (4X reference). When broadcast, the function presets the same register reference in all attached slaves.

15 (0F Hex) Force Multiple Coils

Forces each coil (0X references) in a sequence of coils to either ON or OFF. When broadcast, the function forces the same coil reference in all attached slaves.

16 (10Hex) Preset Multiple Registers

Presets values into a sequence of holding registers (4X references). When broadcast, the function presets the same register references in all attached slaves.

23 (17Hex) Read/Write 4X Registers

Performs a combination of one read and one write operation in a single Modbus transaction. The function can write new contents to a group of 4XXXX registers, and then return the contents of another group of 4XXXX registers. Broadcast is not supported.

Modbus Functions (Slave)

As a slave, the UMG 801 supports the following modbus functions:

03 Read Holding Registers

Reads the binary contents of holding registers (4X references) in the slave.

04 Read Input Registers

Reads the binary contents of input registers (3X references) in the slave.

06 Preset Single Register

Presets a value into a single holding register (4X reference). When broadcast, the function presets the same register reference in all attached slaves.

16 (10Hex) Preset Multiple Registers

Presets values into a sequence of holding registers (4X references). When broadcast, the function presets the same register references in all attached slaves.

23 (17Hex) Read/Write 4X Registers

Performs a combination of one read and one write operation in a single Modbus transaction. The function can write new contents to a group of 4XXXX registers, and then return the contents of another group of 4XXXX registers. Broadcast is not supported.

Transfer parameters

The UMG 801 supports the following transfer parameters:

Baudrate	: 9600, 19200, 38400, 57600 and 115200 baud
Data bits	: 8
Parity	: none
Stop bits (UMG 801)	: 2
Stop bits external	: 1 or 2

Byte sequence

The data in the Modbus address list can be retrieved in big-endian format (high byte before low byte).

The addresses described in this address list return the data in big-endian format.

Update rate

The modbus register addresses are updated every 200ms.

Measured values

- Measured values in the **short** format do not take into account the set transformer ratio, i.e. these measured values have to be multiplied by the corresponding transformer factor!
- Measured values in **float or integer format** take into account the corresponding transformer factors!

Number formats

Type	Size	Minimum	Maximum
char	8 bit	0	255
byte	8 bit	-128	127
short	16 bit	-2^{15}	$2^{15}-1$
int	32 bit	-2^{31}	$2^{31}-1$
uint	32 bit	0	$2^{32}-1$
long64	64 bit	-2^{63}	$2^{63}-1$
float	32 bit	IEEE 754	IEEE 754
double	64 bit	IEEE 754	IEEE 754

Symbols and definitions

N	Total number of sample points per period (For example, in a period of 20 ms)
k	Sample value or number of samples per period ($0 \leq k < N$)
p	Number or identification of the phase conductor ($p = 1, 2 \text{ oder } 3$)
ipk	Sample value k of the current of the phase conductor p
UpNk	Sample value k of the neutral voltage of the phase conductor p
Pp	Active power of the phase conductor p

Explanations of the measured values

Measured value

- A measured value (in the UMG) is an effective value which is formed over a period (measuring window) of 200ms.
- A measuring window is 10 periods in the 50Hz network and 12 periods in the 60Hz network.
- A measuring window has a start time and an end time.
- The resolution between the start time and end time is approximately 2ns.
- The accuracy of the start time and end time depends on the accuracy of the internal clock.
- In order to improve the accuracy of the internal clock, it is recommended that the clock in the device is compared with a time service and reset.

Mean value of measured value

- For each measured value, a sliding mean value is calculated over the selected averaging time.
- The mean value is calculated every 200ms.
- You can take the possible averaging times from the table.

n	Mean time / seconds
0	5
1	10
2	15
3	30
4	60
5	300
6	480
7	600
8	900

Maximum value of measured value

- The *max. value of the measured value* is the largest measured value which has occurred since the last deletion.

Minimum value of measured value

- The *min. value of the measured value* is the lowest measured value which has occurred since the last deletion.

Maximum value of mean value

- The *max. value of the mean value* is the largest mean value which has occurred since the last deletion.

Nominal current, voltage, frequency

- The limit values for events and transients are set by the nominal value in percentage.

Nominal current I_{rated}

- The I_{rated} is the nominal current of the transformers and is required for calculation of the K-factor.

Peak value negative

- Highest negative sampling value from the last 200ms measuring window..

Peak value positive

- Highest positive sampling value from the last 200ms measuring window.

Crest factor

- The crest factor describes the relation between the peak value and effective value of a periodic quantity. It serves as a characteristic value for general description of the curve form of a periodic quantity. The distortion factor is another example of a quantity for characterization of the difference from the pure sinusoidal form.
- Example
A sinusoidal change voltage with an effective value of 230 V has a peak value of approx. 325 V.
The crest factor is then $325 \text{ V} / 230 \text{ V} = 1.414$.

Effective value of the current for phase conductor p

$$I_p = \sqrt{\frac{1}{N} \cdot \sum_{k=0}^{N-1} i_{p_k}^2}$$

Effective value of neutral conductor current

$$I_N = \sqrt{\frac{1}{N} \cdot \sum_{k=0}^{N-1} (i_{1_k} + i_{2_k} + i_{3_k})^2}$$

Effective voltage L-N

$$U_{pN} = \sqrt{\frac{1}{N} \cdot \sum_{k=0}^{N-1} u_{pN_k}^2}$$

Effective voltage L-L

$$U_{pg} = \sqrt{\frac{1}{N} \cdot \sum_{k=0}^{N-1} (u_{gN_k} - u_{pN_k})^2}$$

Star connection voltage (vectorial)

$$U_{\text{Star connection voltage}} = U_{1_{ms}} + U_{2_{ms}} + U_{3_{ms}}$$

Active power for phase conductor

$$P_p = \frac{1}{N} \cdot \sum_{k=0}^{N-1} (u_{pN_k} \times i_{p_k})$$

Apparent power for phase conductor

- Unsigned

$$S_p = U_{pN} \cdot I_p$$

Total apparent power (arithmetic) Sa

- Unsigned

$$S_A = S_1 + S_2 + S_3$$

Order number of harmonics

xxx[0] = mains frequency (50 Hz/60 Hz)
 xxx[1] = 2nd harmonic (100 Hz/120 Hz)
 xxx[2] = 3rd harmonic (150 Hz/180 Hz)
 etc.

THD

- THD (Total Harmonic Distortion) is the distortion factor and provides the relation of the harmonic parts of an oscillation to the mains frequency.

Distortion factor THD (U) for the voltage

- M = 40 (UMG 604, UMG 508, UMG 96RM)
- M = 50 (UMG 605, UMG 509, UMG 511, UMG 512, UMG801)
- fund corresponds to n=1

$$THD_U = \frac{1}{|U_{fund}|} \sqrt{\sum_{n=2}^M |U_{n.Harm}|^2}$$

Distortion factor THD (I) for the current

- M = 40 (UMG 604, UMG 508, UMG 96RM)
- M = 50 (UMG 605, UMG 509, UMG 511, UMG 512, UMG801)
- fund corresponds to n=1

$$THD_I = \frac{1}{|I_{fund}|} \sqrt{\sum_{n=2}^M |I_{n.Harm}|^2}$$

ZHD

- THD for the interharmonics.
- Is calculated in the product series and UMG 511, UMG 512, UMG 605.

Interharmonics

- Sinusoidal oscillations, which frequencies are not a multiple integer of the main frequency.
- Are calculated in the product series and UMG 511, UMG 512, UMG 605.
- Calculation and measurement methods in accordance with the IEC 61000-4-30.
- The order number of interharmonics corresponds to the order number of the next smaller harmonic. For example, between the 3rd and 4th harmonic of the 3rd inter harmonics.

TDD (I)

- TDD Total demand distortion, harmonic current distortion in % of maximum demand load current
- IL = IL= Maximum demand load current
- M = 40 (UMG 604, UMG 508, UMG 509, UMG 96RM)
- M = 50 (UMG 605, UMG 511, UMG 512)

$$TDD = \frac{1}{I_L} \sqrt{\sum_{n=2}^M I_n^2} \times 100\%$$

Ripple control signal U (EN61000-4-30)

The ripple control signal U is a voltage (200 ms measured value) which is measured at a carrier frequency specified by the user. Only frequencies beneath 3 kHz are observed.

Ripple control signal I

The ripple control signal I is a current (200 ms measured value) which is measured at a carrier frequency specified by the user. Only frequencies beneath 3 kHz are observed.

Positive sequence-negative sequence-zero sequence

- The extent of a voltage or current imbalance in a three-phase system is identified using the positive sequence, negative sequence and zero sequence components.
- The balance of the rotation current system strived for in normal operation is disturbed by the unsymmetrical loads, errors and equipment.
- A three-phase system is called symmetric, when the three phase conductor voltages and currents are the same size and are displaced against each other by 120° . If one or both conditions are not fulfilled, the system is described as unsymmetrical. By calculating the symmetrical components consisting of the positive sequence, negative sequence and zero sequence, the simplified analysis of an imbalanced error is possible in a rotary current system..
- Imbalance is a feature of the network quality for the limits specified in international norms (EN 50160 for example).

Positive sequence

$$U_{pos} = \frac{1}{3} \left| U_{L1,fund} + U_{L2,fund} \cdot e^{j\frac{2\pi}{3}} + U_{L3,fund} \cdot e^{j\frac{4\pi}{3}} \right|$$

Negative sequence

$$U_{neg} = \frac{1}{3} \left| U_{L1,fund} + U_{L2,fund} \cdot e^{-j\frac{2\pi}{3}} + U_{L3,fund} \cdot e^{-j\frac{4\pi}{3}} \right|$$

Zero sequence

$$U_{zero} = \frac{1}{3} |U_{L1,fund} + U_{L2,fund} + U_{L3,fund}|$$

A zero component can only occur if a sum current can flow back through the main conductor.

Voltage imbalance

$$\text{Voltage imbalance} = \frac{U_{Geg}}{U_{Mit}}$$

Under difference U (EN 61000-4-30)

$$U_{under} = \frac{U_{din} - \sqrt{\frac{\sum_{i=1}^n U_{rms-under,i}^2}{n}}}{U_{din}} [\%]$$

Under difference I

$$I_{under} = \frac{I_{Nominal\ current} - \sqrt{\frac{\sum_{i=1}^n I_{rms-under,i}^2}{n}}}{I_{Nominal\ current}} |$$

K-factor

- The K-factor describes the increase of the eddy current losses when loaded with harmonics. For a sinusoidal load on the transformer, the K-factor =1. The larger the K-factor, the heavier a transformer can be loaded with harmonics without overheating.

Power Factor (vectorial) - Lambda

- The power factor is unsigned.

$$PF_x = \frac{|P_x|}{S_x}$$

$x = L1, L2, L3, L4$

Cos(φ) - Fundamental Power Factor

- Only the mains frequency part is used for calculation of the Cos(φ).
- Cos(φ) sign:
 - = for the supply of real power
 - + = for obtaining real power

$$PF_1 = \cos(\varphi) = \frac{P_1}{S_1}$$

Cos(φ) total

- Cos(φ) sign:
 - = for the supply of real power
 - + = for obtaining real power

$$\cos(\varphi)_{Sum_3} = \frac{P_{1_fund} + P_{2_fund} + P_{3_fund}}{\sqrt{(P_{1_fund} + P_{2_fund} + P_{3_fund})^2 + (Q_{1_fund} + Q_{2_fund} + Q_{3_fund})^2}}$$

$$\cos(\varphi)_{Sum_4} = \frac{P_{1_fund} + P_{2_fund} + P_{3_fund} + P_{4_fund}}{\sqrt{(P_{1_fund} + P_{2_fund} + P_{3_fund} + P_{4_fund})^2 + (Q_{1_fund} + Q_{2_fund} + Q_{3_fund} + Q_{4_fund})^2}}$$

Phase Angle φ

- The phase angle between current and voltage of the external conductor p is calculated according to DIN EN 61557-12 and displayed.
- The sign of the phase angle corresponding to the sign of the reactive power.

Mains frequency power factor

The mains frequency power factor is the power factor of the mains frequency and is calculated using the fourier analysis (FFT). The voltage and current must not be sinusoidal. All in the device calculated reactive power are resulting of fundamental reactive power.

Power factor sign

- Sign $Q = +1$ for φ in the range $0^\circ \dots 180^\circ$ (inductive)
- Sign $Q = -1$ for φ in the range $180^\circ \dots 360^\circ$ (capacitive)

$$\text{Sign } Q(\varphi_p) = +1 \text{ if } \varphi_p \in [0^\circ - 180^\circ]$$

$$\text{Sign } Q(\varphi_p) = -1 \text{ if } \varphi_p \in [180^\circ - 360^\circ]$$

Reactive power for phase conductor p

- Reactive power of the mains frequency.

$$Q_{fundp} = \text{Sign } Q(\varphi_p) \cdot \sqrt{S_{fundp}^2 - P_{fundp}^2}$$

Total reactive power

- Reactive power of the mains frequency.

$$Q_V = Q_1 + Q_2 + Q_3$$

Distortion power factor

- The distortion power factor is the power factor of all mains frequencies and is calculated using the fourier analysis (FFT).
- The apparent power „S” contains all fundamental harmonics and all harmonic rates up to the M-th harmonic.
- The effective power „P” contains all fundamental harmonics and all harmonic rates up to the M-th harmonic.

$$D = \sqrt{S^2 - P^2 - Q_{fund}^2}$$

Reactive energy per phase

$$E_{r_{L1}} = \int Q_{L1}(t) \cdot \Delta t$$

Reactive energy per phase, inductive

$$E_{r(ind)_{L1}} = \int Q_{L1}(t) \cdot \Delta t \quad \text{for } Q_{L1}(t) > 0$$

Reactive energy per phase, capacitive

$$E_{r(cap)_{L1}} = \int Q_{L1}(t) \cdot \Delta t \quad \text{for } Q_{L1}(t) < 0$$

Reactive energy, sum L1-L3

$$E_{r_{L1,L2,L3}} = \int (Q_{L1}(t) + Q_{L2}(t) + Q_{L3}(t)) \cdot \Delta t$$

Reactive energy, sum L1-L3, inductive

$$E_{r(ind)_{L1,L2,L3}} = \int (Q_{L1}(t) + Q_{L2}(t) + Q_{L3}(t)) \cdot \Delta t \\ \text{for } (Q_{L1}(t) + Q_{L2}(t) + Q_{L3}(t)) > 0$$

Reactive energy, sum L1-L3, capacitive

$$E_{r(cap)_{L1,L2,L3}} = \int (Q_{L1}(t) + Q_{L2}(t) + Q_{L3}(t)) \cdot \Delta t \\ \text{for } (Q_{L1}(t) + Q_{L2}(t) + Q_{L3}(t)) < 0$$

Modbus addresses UMG 801 (basic device)

Frequently required readings

Address	Format	RD/WR	Unit	Note
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Voltage measurement channels

19000	float	RD	V	Voltage L1-N
19002	float	RD	V	Voltage L2-N
19004	float	RD	V	Voltage L3-N
19006	float	RD	V	Voltage L1-L2
19008	float	RD	V	Voltage L2-L3
19010	float	RD	V	Voltage L3-L1

Measuring channels 1 - 4 (Measuring group 1)

19012	float	RD	A	Current, I1
19014	float	RD	A	Current, I2
19016	float	RD	A	Current, I3
19018	float	RD	A	Current, I4
19020	float	RD	W	Active power P1
19022	float	RD	W	Active power P2
19024	float	RD	W	Active power P3
19026	float	RD	W	Sum; Psum3=P1+P2+P3
19028	float	RD	VA	Apparent power S1
19030	float	RD	VA	Apparent power S2
19032	float	RD	VA	Apparent power S3
19034	float	RD	VA	Sum; Ssum3=S1+S2+S3
19036	float	RD	var	Reactive power (mains frequ.) Q1
19038	float	RD	var	Reactive power (mains frequ.) Q2
19040	float	RD	var	Reactive power (mains frequ.) Q3
19042	float	RD	var	Sum; Qsum3=Q1+Q2+Q3
19044	float	RD		Fund.power factor, Cos(ϕ); UL1 IL1
19046	float	RD		Fund.power factor, Cos(ϕ); UL2 IL2
19048	float	RD		Fund.power factor, Cos(ϕ); UL3 IL3
19050	float	RD	Hz	Measured frequency
19052	float	RD		Rotation field; 1=right, 0=none, -1=left
19054	float	RD	Wh	Active energy W1
19056	float	RD	Wh	Active energy W2
19058	float	RD	Wh	Active energy W3
19060	float	RD	Wh	Active energy W1..W3
19062	float	RD	Wh	Active energy W1, consumed
19064	float	RD	Wh	Active energy W2, consumed
19066	float	RD	Wh	Active energy W3, consumed
19068	float	RD	Wh	Active energy W1..W3, consumed, Tariff 1
19070	float	RD	Wh	Active energy W1, delivered
19072	float	RD	Wh	Active energy W2, delivered
19074	float	RD	Wh	Active energy W3, delivered
19076	float	RD	Wh	Active energy W1..W3, delivered
19078	float	RD	VAh	Apparent energy WS1
19080	float	RD	VAh	Apparent energy WS2
19082	float	RD	VAh	Apparent energy WS3
19084	float	RD	VAh	Apparent energy WS1..WS3

Address	Format	RD/WR	Unit	Note
19086	float	RD	varh	Reactive energy WQ1
19088	float	RD	varh	Reactive energy WQ2
19090	float	RD	varh	Reactive energy WQ3
19092	float	RD	varh	Reactive energy WQ1..WQ3
19094	float	RD	varh	Reactive energy WQ1, inductive
19096	float	RD	varh	Reactive energy WQ2, inductive
19098	float	RD	varh	Reactive energy WQ3, inductive
19100	float	RD	varh	Reactive energy WQ1..WQ3, inductive
19102	float	RD	varh	Reactive energy WQ1, capacitive
19104	float	RD	varh	Reactive energy WQ2, capacitive
19106	float	RD	varh	Reactive energy WQ3, capacitive
19108	float	RD	varh	Reactive energy WQ1..WQ3, capacitive
19110	float	RD	%	Harmonic, THD,U L1-N
19112	float	RD	%	Harmonic, THD,U L2-N
19114	float	RD	%	Harmonic, THD,U L3-N
19116	float	RD	%	Harmonic, THD, I1
19118	float	RD	%	Harmonic, THD, I2
19120	float	RD	%	Harmonic, THD, I3
21500	float	RD	W	Active power P4
21502	float	RD	VA	Apparent power S4
21504	float	RD	var	Reactive power (mains frequ.) Q4
21506	float	RD		Fund.power factor, Cos(ϕ); UL4 IL4
21508	float	RD	Wh	Active energy W4
21510	float	RD	Wh	Active energy W4, consumed
21512	float	RD	Wh	Active energy W4, delivered
21514	float	RD	VAh	Apparent energy WS4
21516	float	RD	varh	Reactive energy WQ4
21518	float	RD	varh	Reactive energy WQ4, inductive
21520	float	RD	varh	Reactive energy WQ4, capacitive
21522	float	RD	%	Harmonic, THD, I4

Drag pointer - I1 - I4 (Measuring group 1)

Address	Format	RD/WR	Value rank	Note
27000	float	RD	Highest	I1(L1) - max. Current average value
27002	float	RD	Highest	I2(L2) - max. Current average value
27004	float	RD	Highest	I3(L3) - max. Current average value
27006	float	RD	Highest	I4(L4) - max. Current average value
27008	uint32	RD	Highest	I1(L1) - Date/Time, max. Current average value
27010	uint32	RD	Highest	I2(L2) - Date/Time, max. Current average value
27012	uint32	RD	Highest	I3(L3) - Date/Time, max. Current average value
27014	uint32	RD	Highest	I4(L4) - Date/Time, max. Current average value
27016	float	RD	Highest	I1(L1)/S - max. Apparent power average value
27018	float	RD	Highest	I2(L2)/S - max. Apparent power average value
27020	float	RD	Highest	I3(L3)/S - max. Apparent power average value
27022	float	RD	Highest	I4(L4)/S - max. Apparent power average value
27024	uint32	RD	Highest	I1(L1)/S - Date/Time, max. Apparent power average value
27026	uint32	RD	Highest	I2(L2)/S - Date/Time, max. Apparent power average value
27028	uint32	RD	Highest	I3(L3)/S - Date/Time, max. Apparent power average value
27030	uint32	RD	Highest	I4(L4)/S - Date/Time, max. Apparent power average value

Address	Format	RD/WR	Value rank	Note
27032	float	RD	Highest	I1(L1)/P - max. Active power average value
27034	float	RD	Highest	I2(L2)/P - max. Active power average value
27036	float	RD	Highest	I3(L3)/P - max. Active power average value
27038	float	RD	Highest	I4(L4)/P - max. Active power average value
27040	uint32	RD	Highest	I1(L1)/P - Date/Time, max. Active power average value
27042	uint32	RD	Highest	I2(L2)/P - Date/Time, max. Active power average value
27044	uint32	RD	Highest	I3(L3)/P - Date/Time, max. Active power average value
27046	uint32	RD	Highest	I4(L4)/P - Date/Time, max. Active power average value
27048	float	RD	Highest	I1(L1)/P - min. Active power average value
27050	float	RD	Highest	I2(L2)/P - min. Active power average value
27052	float	RD	Highest	I3(L3)/P - min. Active power average value
27054	float	RD	Highest	I4(L4)/P - min. Active power average value
27056	uint32	RD	Highest	I1(L1)/P - Date/Time, min. Active power average value
27058	uint32	RD	Highest	I2(L2)/P - Date/Time, min. Active power average value
27060	uint32	RD	Highest	I3(L3)/P - Date/Time, min. Active power average value
27062	uint32	RD	Highest	I4(L4)/P - Date/Time, min. Active power average value
27064	float	RD	2nd highest	I1(L1) - max. Current average value
27066	float	RD	2nd highest	I2(L2) - max. Current average value
27068	float	RD	2nd highest	I3(L3) - max. Current average value
27070	float	RD	2nd highest	I4(L4) - max. Current average value
27072	uint32	RD	2nd highest	I1(L1) - Date/Time, max. Current average value
27074	uint32	RD	2nd highest	I2(L2) - Date/Time, max. Current average value
27076	uint32	RD	2nd highest	I3(L3) - Date/Time, max. Current average value
27078	uint32	RD	2nd highest	I4(L4) - Date/Time, max. Current average value
27080	float	RD	2nd highest	I1(L1)/S - max. Apparent power average value
27082	float	RD	2nd highest	I2(L2)/S - max. Apparent power average value
27084	float	RD	2nd highest	I3(L3)/S - max. Apparent power average value
27086	float	RD	2nd highest	I4(L4)/S - max. Apparent power average value
27088	uint32	RD	2nd highest	I1(L1)/S - Date/Time, max. Apparent power average value
27090	uint32	RD	2nd highest	I2(L2)/S - Date/Time, max. Apparent power average value
27092	uint32	RD	2nd highest	I3(L3)/S - Date/Time, max. Apparent power average value
27094	uint32	RD	2nd highest	I4(L4)/S - Date/Time, max. Apparent power average value
27096	float	RD	2nd highest	I1(L1)/P - max. Active power average value
27098	float	RD	2nd highest	I2(L2)/P - max. Active power average value
27100	float	RD	2nd highest	I3(L3)/P - max. Active power average value
27102	float	RD	2nd highest	I4(L4)/P - max. Active power average value
27104	uint32	RD	2nd highest	I1(L1)/P - Date/Time, max. Active power average value
27106	uint32	RD	2nd highest	I2(L2)/P - Date/Time, max. Active power average value
27108	uint32	RD	2nd highest	I3(L3)/P - Date/Time, max. Active power average value
27110	uint32	RD	2nd highest	I4(L4)/P - Date/Time, max. Active power average value
27112	float	RD	2nd highest	I1(L1)/P - min. Active power average value
27114	float	RD	2nd highest	I2(L2)/P - min. Active power average value
27116	float	RD	2nd highest	I3(L3)/P - min. Active power average value
27118	float	RD	2nd highest	I4(L4)/P - min. Active power average value
27120	uint32	RD	2nd highest	I1(L1)/P - Date/Time, min. Active power average value
27122	uint32	RD	2nd highest	I2(L2)/P - Date/Time, min. Active power average value
27124	uint32	RD	2nd highest	I3(L3)/P - Date/Time, min. Active power average value
27126	uint32	RD	2nd highest	I4(L4)/P - Date/Time, min. Active power average value
27128	float	RD	3rd highest	I1(L1) - max. Current average value
27130	float	RD	3rd highest	I2(L2) - max. Current average value
27132	float	RD	3rd highest	I3(L3) - max. Current average value
27134	float	RD	3rd highest	I4(L4) - max. Current average value

Address	Format	RD/WR	Value rank	Note
27136	uint32	RD	3rd highest	I1(L1) - Date/Time, max. Current average value
27138	uint32	RD	3rd highest	I2(L2) - Date/Time, max. Current average value
27140	uint32	RD	3rd highest	I3(L3) - Date/Time, max. Current average value
27142	uint32	RD	3rd highest	I4(L4) - Date/Time, max. Current average value
27144	float	RD	3rd highest	I1(L1)/S - max. Apparent power average value
27146	float	RD	3rd highest	I2(L2)/S - max. Apparent power average value
27148	float	RD	3rd highest	I3(L3)/S - max. Apparent power average value
27150	float	RD	3rd highest	I4(L4)/S - max. Apparent power average value
27152	uint32	RD	3rd highest	I1(L1)/S - Date/Time, max. Apparent power average value
27154	uint32	RD	3rd highest	I2(L2)/S - Date/Time, max. Apparent power average value
27156	uint32	RD	3rd highest	I3(L3)/S - Date/Time, max. Apparent power average value
27158	uint32	RD	3rd highest	I4(L4)/S - Date/Time, max. Apparent power average value
27160	float	RD	3rd highest	I1(L1)/P - max. Active power average value
27162	float	RD	3rd highest	I2(L2)/P - max. Active power average value
27164	float	RD	3rd highest	I3(L3)/P - max. Active power average value
27166	float	RD	3rd highest	I4(L4)/P - max. Active power average value
27168	uint32	RD	3rd highest	I1(L1)/P - Date/Time, max. Active power average value
27170	uint32	RD	3rd highest	I2(L2)/P - Date/Time, max. Active power average value
27172	uint32	RD	3rd highest	I3(L3)/P - Date/Time, max. Active power average value
27174	uint32	RD	3rd highest	I4(L4)/P - Date/Time, max. Active power average value
27176	float	RD	3rd highest	I1(L1)/P- - min. Active power average value
27178	float	RD	3rd highest	I2(L2)/P- - min. Active power average value
27180	float	RD	3rd highest	I3(L3)/P- - min. Active power average value
27182	float	RD	3rd highest	I4(L4)/P- - min. Active power average value
27184	uint32	RD	3rd highest	I1(L1)/P- - Date/Time, min. Active power average value
27186	uint32	RD	3rd highest	I2(L2)/P- - Date/Time, min. Active power average value
27188	uint32	RD	3rd highest	I3(L3)/P- - Date/Time, min. Active power average value
27190	uint32	RD	3rd highest	I4(L4)/P- - Date/Time, min. Active power average value
27192	float	RD	Highest	Sum. I1(L1)-I4(L4) der max. Current average value
27194	uint32	RD	Highest	Sum. I1(L1)-I4(L4) - Date/Time, max. Current average value
27196	float	RD	Highest	Sum. I1(L1)-I4(L4)/S der max. Apparent power average value
27198	uint32	RD	Highest	Sum. I1(L1)-I4(L4)/S - Date/Time, max. Apparent power average value
27200	float	RD	Highest	Sum. I1(L1)-I4(L4)/P der max. Active power average value
27202	uint32	RD	Highest	Sum. I1(L1)-I4(L4)/P - Date/Time, max. Active power average value
27204	float	RD	Highest	Sum. I1(L1)-I4(L4)/P- der min. Active power average value
27206	uint32	RD	Highest	Sum. I1(L1)-I4(L4)/P- - Date/Time, min. Active power average value
27208	float	RD	2nd highest	Sum. I1(L1)-I4(L4) der max. Current average value
27210	float	RD	2nd highest	Sum. I1(L1)-I4(L4) - Date/Time, max. Current average value
27212	float	RD	2nd highest	Sum. I1(L1)-I4(L4)/S der max. Apparent power average value
27214	float	RD	2nd highest	Sum. I1(L1)-I4(L4)/S - Date/Time, max. Apparent power average value
27216	float	RD	2nd highest	Sum. I1(L1)-I4(L4)/P der max. Active power average value
27218	float	RD	2nd highest	Sum. I1(L1)-I4(L4)/P - Date/Time, max. Active power average value
27220	float	RD	2nd highest	Sum. I1(L1)-I4(L4)/P- der min. Active power average value
27222	float	RD	2nd highest	Sum. I1(L1)-I4(L4)/P- - Date/Time, min. Active power average value
27224	float	RD	3rd highest	Sum. I1(L1)-I4(L4) der max. Current average value
27226	float	RD	3rd highest	Sum. I1(L1)-I4(L4) - Date/Time, max. Current average value
27228	float	RD	3rd highest	Sum. I1(L1)-I4(L4)/S der max. Apparent power average value
27230	float	RD	3rd highest	Sum. I1(L1)-I4(L4)/S - Date/Time, max. Apparent power average value
27232	float	RD	3rd highest	Sum. I1(L1)-I4(L4)/P der max. Active power average value
27234	float	RD	3rd highest	Sum. I1(L1)-I4(L4)/P - Date/Time, max. Active power average value
27236	float	RD	3rd highest	Sum. I1(L1)-I4(L4)/P- der min. Active power average value
27238	float	RD	3rd highest	Sum. I1(L1)-I4(L4)/P- - Date/Time, min. Active power average value

Address	Format	RD/WR	Unit	Note
Measuring channels 5 - 8 (Measuring group 2)				
19200	float	RD	A	Current, I5
19202	float	RD	A	Current, I6
19204	float	RD	A	Current, I7
19206	float	RD	A	Current, I8
19208	float	RD	W	Active power P5
19210	float	RD	W	Active power P6
19212	float	RD	W	Active power P7
19214	float	RD	W	Sum; Psum3=P5+P6+P7
19216	float	RD	VA	Apparent power S5
19218	float	RD	VA	Apparent power S6
19220	float	RD	VA	Apparent power S7
19222	float	RD	VA	Sum; Ssum3=S5+S6+S7
19224	float	RD	var	Reactive power (mains frequ.) Q5
19226	float	RD	var	Reactive power (mains frequ.) Q6
19228	float	RD	var	Reactive power (mains frequ.) Q7
19230	float	RD	var	Sum; Qsum3=Q5+Q6+Q7
19232	float	RD		Fund.power factor, Cos(ϕ); UL1 IL5
19234	float	RD		Fund.power factor, Cos(ϕ); UL2 IL6
19236	float	RD		Fund.power factor, Cos(ϕ); UL3 IL7
19238	float	RD	Wh	Active energy W5
19240	float	RD	Wh	Active energy W6
19242	float	RD	Wh	Active energy W7
19244	float	RD	Wh	Active energy W5..W7
19246	float	RD	Wh	Active energy W5, consumed
19248	float	RD	Wh	Active energy W6, consumed
19250	float	RD	Wh	Active energy W7, consumed
19252	float	RD	Wh	Active energy W5..W7, consumed, Tariff 1
19254	float	RD	Wh	Active energy W5, delivered
19256	float	RD	Wh	Active energy W6, delivered
19258	float	RD	Wh	Active energy W7, delivered
19260	float	RD	Wh	Active energy W5..W7, delivered
19262	float	RD	VAh	Apparent energy WS5
19264	float	RD	VAh	Apparent energy WS6
19266	float	RD	VAh	Apparent energy WS7
19268	float	RD	VAh	Apparent energy WS5..WS7
19270	float	RD	varh	Reactive energy WQ5
19272	float	RD	varh	Reactive energy WQ6
19274	float	RD	varh	Reactive energy WQ7
19276	float	RD	varh	Reactive energy WQ5..WQ7
19278	float	RD	varh	Reactive energy WQ5, inductive
19280	float	RD	varh	Reactive energy WQ6, inductive
19282	float	RD	varh	Reactive energy WQ7, inductive
19284	float	RD	varh	Reactive energy WQ5..WQ7, inductive
19286	float	RD	varh	Reactive energy WQ5, capacitive
19288	float	RD	varh	Reactive energy WQ6, capacitive
19290	float	RD	varh	Reactive energy WQ7, capacitive
19292	float	RD	varh	Reactive energy WQ5..WQ7, capacitive

Address	Format	RD/WR	Unit	Note
19294	float	RD	%	Harmonic, THD, I5
19296	float	RD	%	Harmonic, THD, I6
19298	float	RD	%	Harmonic, THD, I7
21524	float	RD	W	Active power P8
21526	float	RD	VA	Apparent power S8
21528	float	RD	var	Reactive power (mains frequ.) Q8
21530	float	RD		Fund.power factor, Cos(ϕ); UL8 IL8
21532	float	RD	Wh	Active energy W8
21534	float	RD	Wh	Active energy W8, consumed
21536	float	RD	Wh	Active energy W8, delivered
21538	float	RD	VAh	Apparent energy WS8
21540	float	RD	varh	Reactive energy WQ8
21542	float	RD	varh	Reactive energy WQ8, inductive
21544	float	RD	varh	Reactive energy WQ8, capacitive
21546	float	RD	%	Harmonic, THD, I8

Drag pointer - I5 - I8 (Measuring group 2)

Address	Format	RD/WR	Value rank	Note
27240	float	RD	Highest	I5(L5) - max. Current average value
27242	float	RD	Highest	I6(L6) - max. Current average value
27244	float	RD	Highest	I7(L7) - max. Current average value
27246	float	RD	Highest	I8(L8) - max. Current average value
27248	uint32	RD	Highest	I5(L5) - Date/Time, max. Current average value
27250	uint32	RD	Highest	I6(L6) - Date/Time, max. Current average value
27252	uint32	RD	Highest	I7(L7) - Date/Time, max. Current average value
27254	uint32	RD	Highest	I8(L8) - Date/Time, max. Current average value
27256	float	RD	Highest	I5(L5)/S - max. Apparent power average value
27258	float	RD	Highest	I6(L6)/S - max. Apparent power average value
27260	float	RD	Highest	I7(L7)/S - max. Apparent power average value
27262	float	RD	Highest	I8(L8)/S - max. Apparent power average value
27264	uint32	RD	Highest	I5(L5)/S - Date/Time, max. Apparent power average value
27266	uint32	RD	Highest	I6(L6)/S - Date/Time, max. Apparent power average value
27268	uint32	RD	Highest	I7(L7)/S - Date/Time, max. Apparent power average value
27270	uint32	RD	Highest	I8(L8)/S - Date/Time, max. Apparent power average value
27272	float	RD	Highest	I5(L5)/P - max. Active power average value
27274	float	RD	Highest	I6(L6)/P - max. Active power average value
27276	float	RD	Highest	I7(L7)/P - max. Active power average value
27278	float	RD	Highest	I8(L8)/P - max. Active power average value
27280	uint32	RD	Highest	I5(L5)/P - Date/Time, max. Active power average value
27282	uint32	RD	Highest	I6(L6)/P - Date/Time, max. Active power average value
27284	uint32	RD	Highest	I7(L7)/P - Date/Time, max. Active power average value
27286	uint32	RD	Highest	I8(L8)/P - Date/Time, max. Active power average value
27288	float	RD	Highest	I5(L5)/P- - min. Active power average value
27290	float	RD	Highest	I6(L6)/P- - min. Active power average value
27292	float	RD	Highest	I7(L7)/P- - min. Active power average value
27294	float	RD	Highest	I8(L8)/P- - min. Active power average value
27296	uint32	RD	Highest	I5(L5)/P- - Date/Time, min. Active power average value
27298	uint32	RD	Highest	I6(L6)/P- - Date/Time, min. Active power average value
27300	uint32	RD	Highest	I7(L7)/P- - Date/Time, min. Active power average value
27302	uint32	RD	Highest	I8(L8)/P- - Date/Time, min. Active power average value
27304	float	RD	2nd highest	I5(L5) - max. Current average value
27306	float	RD	2nd highest	I6(L6) - max. Current average value

Address	Format	RD/WR	Value rank	Note
27308	float	RD	2nd highest	I7(L7) - max. Current average value
27310	float	RD	2nd highest	I8(L8) - max. Current average value
27312	uint32	RD	2nd highest	I5(L5) - Date/Time, max. Current average value
27314	uint32	RD	2nd highest	I6(L6) - Date/Time, max. Current average value
27316	uint32	RD	2nd highest	I7(L7) - Date/Time, max. Current average value
27318	uint32	RD	2nd highest	I8(L8) - Date/Time, max. Current average value
27320	float	RD	2nd highest	I5(L5)/S - max. Apparent power average value
27322	float	RD	2nd highest	I6(L6)/S - max. Apparent power average value
27324	float	RD	2nd highest	I7(L7)/S - max. Apparent power average value
27326	float	RD	2nd highest	I8(L8)/S - max. Apparent power average value
27328	uint32	RD	2nd highest	I5(L5)/S - Date/Time, max. Apparent power average value
27330	uint32	RD	2nd highest	I6(L6)/S - Date/Time, max. Apparent power average value
27332	uint32	RD	2nd highest	I7(L7)/S - Date/Time, max. Apparent power average value
27334	uint32	RD	2nd highest	I8(L8)/S - Date/Time, max. Apparent power average value
27336	float	RD	2nd highest	I5(L5)/P - max. Active power average value
27338	float	RD	2nd highest	I6(L6)/P - max. Active power average value
27340	float	RD	2nd highest	I7(L7)/P - max. Active power average value
27342	float	RD	2nd highest	I8(L8)/P - max. Active power average value
27344	uint32	RD	2nd highest	I5(L5)/P - Date/Time, max. Active power average value
27346	uint32	RD	2nd highest	I6(L6)/P - Date/Time, max. Active power average value
27348	uint32	RD	2nd highest	I7(L7)/P - Date/Time, max. Active power average value
27350	uint32	RD	2nd highest	I8(L8)/P - Date/Time, max. Active power average value
27352	float	RD	2nd highest	I5(L5)/P- - min. Active power average value
27354	float	RD	2nd highest	I6(L6)/P- - min. Active power average value
27356	float	RD	2nd highest	I7(L7)/P- - min. Active power average value
27358	float	RD	2nd highest	I8(L8)/P- - min. Active power average value
27360	uint32	RD	2nd highest	I5(L5)/P- - Date/Time, min. Active power average value
27362	uint32	RD	2nd highest	I6(L6)/P- - Date/Time, min. Active power average value
27364	uint32	RD	2nd highest	I7(L7)/P- - Date/Time, min. Active power average value
27366	uint32	RD	2nd highest	I8(L8)/P- - Date/Time, min. Active power average value
27368	float	RD	3rd highest	I5(L5) - max. Current average value
27370	float	RD	3rd highest	I6(L6) - max. Current average value
27372	float	RD	3rd highest	I7(L7) - max. Current average value
27374	float	RD	3rd highest	I8(L8) - max. Current average value
27376	uint32	RD	3rd highest	I5(L5) - Date/Time, max. Current average value
27378	uint32	RD	3rd highest	I6(L6) - Date/Time, max. Current average value
27380	uint32	RD	3rd highest	I7(L7) - Date/Time, max. Current average value
27382	uint32	RD	3rd highest	I8(L8) - Date/Time, max. Current average value
27384	float	RD	3rd highest	I5(L5)/S - max. Apparent power average value
27386	float	RD	3rd highest	I6(L6)/S - max. Apparent power average value
27388	float	RD	3rd highest	I7(L7)/S - max. Apparent power average value
27390	float	RD	3rd highest	I8(L8)/S - max. Apparent power average value
27392	uint32	RD	3rd highest	I5(L5)/S - Date/Time, max. Apparent power average value
27394	uint32	RD	3rd highest	I6(L6)/S - Date/Time, max. Apparent power average value
27396	uint32	RD	3rd highest	I7(L7)/S - Date/Time, max. Apparent power average value
27398	uint32	RD	3rd highest	I8(L8)/S - Date/Time, max. Apparent power average value
27400	float	RD	3rd highest	I5(L5)/P - max. Active power average value
27402	float	RD	3rd highest	I6(L6)/P - max. Active power average value
27404	float	RD	3rd highest	I7(L7)/P - max. Active power average value
27406	float	RD	3rd highest	I8(L8)/P - max. Active power average value
27408	uint32	RD	3rd highest	I5(L5)/P - Date/Time, max. Active power average value
27410	uint32	RD	3rd highest	I6(L6)/P - Date/Time, max. Active power average value
27412	uint32	RD	3rd highest	I7(L7)/P - Date/Time, max. Active power average value
27414	uint32	RD	3rd highest	I8(L8)/P - Date/Time, max. Active power average value

Address	Format	RD/WR	Value rank	Note
27416	float	RD	3rd highest	I5(L5)/P- - min. Active power average value
27418	float	RD	3rd highest	I6(L6)/P- - min. Active power average value
27420	float	RD	3rd highest	I7(L7)/P- - min. Active power average value
27422	float	RD	3rd highest	I8(L8)/P- - min. Active power average value
27424	uint32	RD	3rd highest	I5(L5)/P- - Date/Time, min. Active power average value
27426	uint32	RD	3rd highest	I6(L6)/P- - Date/Time, min. Active power average value
27428	uint32	RD	3rd highest	I7(L7)/P- - Date/Time, min. Active power average value
27430	uint32	RD	3rd highest	I8(L8)/P- - Date/Time, min. Active power average value
27432	float	RD	Highest	Sum. I5(L5)-I8(L8) der max. Current average value
27434	uint32	RD	Highest	Sum. I5(L5)-I8(L8) - Date/Time, max. Current average value
27436	float	RD	Highest	Sum. I5(L5)-I8(L8)/S der max. Apparent power average value
27438	uint32	RD	Highest	Sum. I5(L5)-I8(L8)/S - Date/Time, max. Apparent power average value
27440	float	RD	Highest	Sum. I5(L5)-I8(L8)/P der max. Active power average value
27442	uint32	RD	Highest	Sum. I5(L5)-I8(L8)/P - Date/Time, max. Active power average value
27444	float	RD	Highest	Sum. I5(L5)-I8(L8)/P- der min. Active power average value
27446	uint32	RD	Highest	Sum. I5(L5)-I8(L8)/P- - Date/Time, min. Active power average value
27448	float	RD	2nd highest	Sum. I5(L5)-I8(L8) der max. Current average value
27450	float	RD	2nd highest	Sum. I5(L5)-I8(L8) - Date/Time, max. Current average value
27452	float	RD	2nd highest	Sum. I5(L5)-I8(L8)/S der max. Apparent power average value
27454	float	RD	2nd highest	Sum. I5(L5)-I8(L8)/S - Date/Time, max. Apparent power average value
value				
27456	float	RD	2nd highest	Sum. I5(L5)-I8(L8)/P der max. Active power average value
27458	float	RD	2nd highest	Sum. I5(L5)-I8(L8)/P - Date/Time, max. Active power average value
27460	float	RD	2nd highest	Sum. I5(L5)-I8(L8)/P- der min. Active power average value
27462	float	RD	2nd highest	Sum. I5(L5)-I8(L8)/P- - Date/Time, min. Active power average value
27464	float	RD	3rd highest	Sum. I5(L5)-I8(L8) der max. Current average value
27466	float	RD	3rd highest	Sum. I5(L5)-I8(L8) - Date/Time, max. Current average value
27468	float	RD	3rd highest	Sum. I5(L5)-I8(L8)/S der max. Apparent power average value
27470	float	RD	3rd highest	Sum. I5(L5)-I8(L8)/S - Date/Time, max. Apparent power average value
27472	float	RD	3rd highest	Sum. I5(L5)-I8(L8)/P der max. Active power average value
27474	float	RD	3rd highest	Sum. I5(L5)-I8(L8)/P - Date/Time, max. Active power average value
27476	float	RD	3rd highest	Sum. I5(L5)-I8(L8)/P- der min. Active power average value
27478	float	RD	3rd highest	Sum. I5(L5)-I8(L8)/P- - Date/Time, min. Active power average value

Multifunctional channels (Measuring group 3)

Please note: The residual current (RCM) thresholds for the multifunctional channels are configured via Modbus addresses 21427 to 21442! See „Base device - multifunctional channels - residual current (RCM) thresholds“ on p. 19.

19300	float	RD	A	Current, I9
19302	float	RD	A	Current, I10
19304	float	RD	A	Current, I11
19306	float	RD	A	Current, I12
19308	float	RD	W	Active power P9
19310	float	RD	W	Active power P10
19312	float	RD	W	Active power P11
19314	float	RD	W	Sum; Psum3=P9+P10+P11
19316	float	RD	VA	Apparent power S9
19318	float	RD	VA	Apparent power S10
19320	float	RD	VA	Apparent power S11
19322	float	RD	VA	Sum; Ssum3=S9+S10+S11

Address	Format	RD/WR	Unit	Note
19324	float	RD	var	Reactive power (mains frequ.) Q9
19326	float	RD	var	Reactive power (mains frequ.) Q10
19328	float	RD	var	Reactive power (mains frequ.) Q11
19330	float	RD	var	Sum; Qsum3=Q9+Q10+Q11
19332	float	RD		Fund.power factor, $\text{Cos}(\phi)$; UL1 IL9
19334	float	RD		Fund.power factor, $\text{Cos}(\phi)$; UL2 IL10
19336	float	RD		Fund.power factor, $\text{Cos}(\phi)$; UL3 IL11
19338	float	RD	Wh	Active energy W9
19340	float	RD	Wh	Active energy W10
19342	float	RD	Wh	Active energy W11
19344	float	RD	Wh	Active energy W9..W11
19346	float	RD	Wh	Active energy W9, consumed
19348	float	RD	Wh	Active energy W10, consumed
19350	float	RD	Wh	Active energy W11, consumed
19352	float	RD	Wh	Active energy W9..W11, consumed, Tariff 1
19354	float	RD	Wh	Active energy W9, delivered
19356	float	RD	Wh	Active energy W10, delivered
19358	float	RD	Wh	Active energy W11, delivered
19360	float	RD	Wh	Active energy W9..W11, delivered
19362	float	RD	VAh	Apparent energy WS9
19364	float	RD	VAh	Apparent energy WS10
19366	float	RD	VAh	Apparent energy WS11
19368	float	RD	VAh	Apparent energy WS9..WS11
19370	float	RD	varh	Reactive energy WQ9
19372	float	RD	varh	Reactive energy WQ10
19374	float	RD	varh	Reactive energy WQ11
19376	float	RD	varh	Reactive energy WQ9..WQ11
19378	float	RD	varh	Reactive energy WQ9, inductive
19380	float	RD	varh	Reactive energy WQ10, inductive
19382	float	RD	varh	Reactive energy WQ11, inductive
19384	float	RD	varh	Reactive energy WQ9..WQ11, inductive
19386	float	RD	varh	Reactive energy WQ9, capacitive
19388	float	RD	varh	Reactive energy WQ10, capacitive
19390	float	RD	varh	Reactive energy WQ11, capacitive
19392	float	RD	varh	Reactive energy WQ9..WQ11, capacitive
19394	float	RD	%	Harmonic, THD, I9
19396	float	RD	%	Harmonic, THD, I10
19398	float	RD	%	Harmonic, THD, I11
21548	float	RD	W	Active power P12
21550	float	RD	VA	Apparent power S12
21552	float	RD	var	Reactive power (mains frequ.) Q12
21554	float	RD		Fund.power factor, $\text{Cos}(\phi)$; UL12 IL12
21556	float	RD	Wh	Active energy W12
21558	float	RD	Wh	Active energy W12, consumed
21560	float	RD	Wh	Active energy W12, delivered
21562	float	RD	VAh	Apparent energy WS12
21564	float	RD	varh	Reactive energy WQ12
21566	float	RD	varh	Reactive energy WQ12, inductive
21568	float	RD	varh	Reactive energy WQ12, capacitive
21570	float	RD	%	Harmonic, THD, I12

Address	Format	RD/WR	Unit	Note
Digital inputs (DI)				
21400	short	RD		Digital-in1, State
21401	short	RD		Digital-in2, State
21402	short	RD		Digital-in3, State
21403	short	RD		Digital-in4, State
21404	float	RD		Digital-in1, S0 counter state
21406	float	RD		Digital-in2, S0 counter state
21408	float	RD		Digital-in3, S0 counter state
21410	float	RD		Digital-in4, S0 counter state
21412	uint	RD		Digital-in1, Pulse counter state
21414	uint	RD		Digital-in2, Pulse counter state
21416	uint	RD		Digital-in3, Pulse counter state
21418	uint	RD		Digital-in4, Pulse counter state

Multifunctional channels (Temperature measurement)

21420	float	RD	°C	Temperature multifunction channel 1
21422	float	RD	°C	Temperature multifunction channel 2
21424	float	RD	°C	Temperature multifunction channel 3
21426	float	RD	°C	Temperature multifunction channel 4

Multifunctional channels - Residual current (RCM)-Thresholds

Please note: The residual current values (RCM values) are configured via the Modbus addresses 19300 to 19306 (Current I9 to I12 - Multifunctional channels)! See „Basic device - Multifunctional channels (current measurement)“ on p. 19.

21427	short	RD	-	RCM Threshold warning I1
21428	short	RD	-	RCM Threshold warning I2
21429	short	RD	-	RCM Threshold warning I3
21430	short	RD	-	RCM Threshold warning I4
21431	short	RD	-	RCM Threshold value exceeding I1
21432	short	RD	-	RCM Threshold value exceeding I2
21433	short	RD	-	RCM Threshold value exceeding I3
21434	short	RD	-	RCM Threshold value exceeding I4
21435	short	RD	-	Alarm bit, Threshold value exceeding I1, manually resettable
21436	short	RD	-	Alarm bit, Threshold value exceeding I2, manually resettable
21437	short	RD	-	Alarm bit, Threshold value exceeding I3, manually resettable
21438	short	RD	-	Alarm bit, Threshold value exceeding I4, manually resettable
21439	short	RD	-	Wire break detection I1
21440	short	RD	-	Wire break detection I2
21441	short	RD	-	Wire break detection I3
21442	short	RD	-	Wire break detection I4

Modbus addresses - Current measurement modules

Address	Format	RD/WR	Unit	Note
Current measurement module 1 (Measuring group 1)				
19400	float	RD	A	Current, I1
19402	float	RD	A	Current, I2
19404	float	RD	A	Current, I3
19406	float	RD	A	Current, I4
19408	float	RD	W	Active power P1
19410	float	RD	W	Active power P2
19412	float	RD	W	Active power P3
19414	float	RD	W	Sum; Psum3=P1+P2+P3
19416	float	RD	VA	Apparent power S1
19418	float	RD	VA	Apparent power S2
19420	float	RD	VA	Apparent power S3
19422	float	RD	VA	Sum; Ssum3=S1+S2+S3
19424	float	RD	var	Reactive power (mains frequ.) Q1
19426	float	RD	var	Reactive power (mains frequ.) Q2
19428	float	RD	var	Reactive power (mains frequ.) Q3
19430	float	RD	var	Sum; Qsum3=Q1+Q2+Q3
19432	float	RD		Fund.power factor, Cos(ϕ); UL1 IL1
19434	float	RD		Fund.power factor, Cos(ϕ); UL2 IL2
19436	float	RD		Fund.power factor, Cos(ϕ); UL3 IL3
19438	float	RD	Wh	Active energy W1
19440	float	RD	Wh	Active energy W2
19442	float	RD	Wh	Active energy W3
19444	float	RD	Wh	Active energy W1..W3
19446	float	RD	Wh	Active energy W1, consumed
19448	float	RD	Wh	Active energy W2, consumed
19450	float	RD	Wh	Active energy W3, consumed
19452	float	RD	Wh	Active energy W1..W3, consumed, Tariff 1
19454	float	RD	Wh	Active energy W1, delivered
19456	float	RD	Wh	Active energy W2, delivered
19458	float	RD	Wh	Active energy W3, delivered
19460	float	RD	Wh	Active energy W1..W3, delivered
19462	float	RD	VAh	Apparent energy WS1
19464	float	RD	VAh	Apparent energy WS2
19466	float	RD	VAh	Apparent energy WS3
19468	float	RD	VAh	Apparent energy WS1..WS3
19470	float	RD	varh	Reactive energy WQ1
19472	float	RD	varh	Reactive energy WQ2
19474	float	RD	varh	Reactive energy WQ3
19476	float	RD	varh	Reactive energy WQ1..WQ3
19478	float	RD	varh	Reactive energy WQ1, inductive
19480	float	RD	varh	Reactive energy WQ2, inductive
19482	float	RD	varh	Reactive energy WQ3, inductive
19484	float	RD	varh	Reactive energy WQ1..WQ3, inductive
19486	float	RD	varh	Reactive energy WQ1, capacitive
19488	float	RD	varh	Reactive energy WQ2, capacitive
19490	float	RD	varh	Reactive energy WQ3, capacitive
19492	float	RD	varh	Reactive energy WQ1..WQ3, capacitive

Address	Format	RD/WR	Unit	Note
19494	float	RD	%	Harmonic, THD, I1
19496	float	RD	%	Harmonic, THD, I2
19498	float	RD	%	Harmonic, THD, I3
21572	float	RD	W	Active power P4
21574	float	RD	VA	Apparent power S4
21576	float	RD	var	Reactive power (mains frequ.) Q4
21578	float	RD		Fund.power factor, Cos(ϕ); UL4 IL4
21580	float	RD	Wh	Active energy W4
21582	float	RD	Wh	Active energy W4, consumed
21584	float	RD	Wh	Active energy W4, delivered
21586	float	RD	VAh	Apparent energy WS4
21588	float	RD	varh	Reactive energy WQ4
21590	float	RD	varh	Reactive energy WQ4, inductive
21592	float	RD	varh	Reactive energy WQ4, capacitive
21594	float	RD	%	Harmonic, THD, I4

Current measurement module 1 (Measuring group 2)

19500	float	RD	A	Current, I5
19502	float	RD	A	Current, I6
19504	float	RD	A	Current, I7
19506	float	RD	A	Current, I8
19508	float	RD	W	Active power P5
19510	float	RD	W	Active power P6
19512	float	RD	W	Active power P7
19514	float	RD	W	Sum; Psum3=P5+P6+P7
19516	float	RD	VA	Apparent power S5
19518	float	RD	VA	Apparent power S6
19520	float	RD	VA	Apparent power S7
19522	float	RD	VA	Sum; Ssum3=S5+S6+S7
19524	float	RD	var	Reactive power (mains frequ.) Q5
19526	float	RD	var	Reactive power (mains frequ.) Q6
19528	float	RD	var	Reactive power (mains frequ.) Q7
19530	float	RD	var	Sum; Qsum3=Q5+Q6+Q7
19532	float	RD		Fund.power factor, Cos(ϕ); UL1 IL5
19534	float	RD		Fund.power factor, Cos(ϕ); UL2 IL6
19536	float	RD		Fund.power factor, Cos(ϕ); UL3 IL7
19538	float	RD	Wh	Active energy W5
19540	float	RD	Wh	Active energy W6
19542	float	RD	Wh	Active energy W7
19544	float	RD	Wh	Active energy W5..W7
19546	float	RD	Wh	Active energy W5, consumed
19548	float	RD	Wh	Active energy W6, consumed
19550	float	RD	Wh	Active energy W7, consumed
19552	float	RD	Wh	Active energy W5..W7, consumed, Tariff 1
19554	float	RD	Wh	Active energy W5, delivered
19556	float	RD	Wh	Active energy W6, delivered
19558	float	RD	Wh	Active energy W7, delivered
19560	float	RD	Wh	Active energy W5..W7, delivered
19562	float	RD	VAh	Apparent energy WS5
19564	float	RD	VAh	Apparent energy WS6

Address	Format	RD/WR	Unit	Note
19566	float	RD	VAh	Apparent energy WS7
19568	float	RD	VAh	Apparent energy WS5..WS7
19570	float	RD	varh	Reactive energy WQ5
19572	float	RD	varh	Reactive energy WQ6
19574	float	RD	varh	Reactive energy WQ7
19576	float	RD	varh	Reactive energy WQ5..WQ7
19578	float	RD	varh	Reactive energy WQ5, inductive
19580	float	RD	varh	Reactive energy WQ6, inductive
19582	float	RD	varh	Reactive energy WQ7, inductive
19584	float	RD	varh	Reactive energy WQ5..WQ7, inductive
19586	float	RD	varh	Reactive energy WQ5, capacitive
19588	float	RD	varh	Reactive energy WQ6, capacitive
19590	float	RD	varh	Reactive energy WQ7, capacitive
19592	float	RD	varh	Reactive energy WQ5..WQ7, capacitive
19594	float	RD	%	Harmonic, THD, I5
19596	float	RD	%	Harmonic, THD, I6
19598	float	RD	%	Harmonic, THD, I7
21596	float	RD	W	Active power P8
21598	float	RD	VA	Apparent power S8
21600	float	RD	var	Reactive power (mains frequ.) Q8
21602	float	RD		Fund.power factor, Cos(ϕ); UL8 IL8
21604	float	RD	Wh	Active energy W8
21606	float	RD	Wh	Active energy W8, consumed
21608	float	RD	Wh	Active energy W8, delivered
21610	float	RD	VAh	Apparent energy WS8
21612	float	RD	varh	Reactive energy WQ8
21614	float	RD	varh	Reactive energy WQ8, inductive
21616	float	RD	varh	Reactive energy WQ8, capacitive
21618	float	RD	%	Harmonic, THD, I8

Current measurement module 2 (Measuring group 1)

19600	float	RD	A	Current, I1
19602	float	RD	A	Current, I2
19604	float	RD	A	Current, I3
19606	float	RD	A	Current, I4
19608	float	RD	W	Active power P1
19610	float	RD	W	Active power P2
19612	float	RD	W	Active power P3
19614	float	RD	W	Sum; Psum3=P1+P2+P3
19616	float	RD	VA	Apparent power S1
19618	float	RD	VA	Apparent power S2
19620	float	RD	VA	Apparent power S3
19622	float	RD	VA	Sum; Ssum3=S1+S2+S3
19624	float	RD	var	Reactive power (mains frequ.) Q1
19626	float	RD	var	Reactive power (mains frequ.) Q2
19628	float	RD	var	Reactive power (mains frequ.) Q3
19630	float	RD	var	Sum; Qsum3=Q1+Q2+Q3
19632	float	RD		Fund.power factor, Cos(ϕ); UL1 IL1
19634	float	RD		Fund.power factor, Cos(ϕ); UL2 IL2
19636	float	RD		Fund.power factor, Cos(ϕ); UL3 IL3

Address	Format	RD/WR	Unit	Note
19638	float	RD	Wh	Active energy W1
19640	float	RD	Wh	Active energy W2
19642	float	RD	Wh	Active energy W3
19644	float	RD	Wh	Active energy W1..W3
19646	float	RD	Wh	Active energy W1, consumed
19648	float	RD	Wh	Active energy W2, consumed
19650	float	RD	Wh	Active energy W3, consumed
19652	float	RD	Wh	Active energy W1..W3, consumed, Tariff 1
19654	float	RD	Wh	Active energy W1, delivered
19656	float	RD	Wh	Active energy W2, delivered
19658	float	RD	Wh	Active energy W3, delivered
19660	float	RD	Wh	Active energy W1..W3, delivered
19662	float	RD	VAh	Apparent energy WS1
19664	float	RD	VAh	Apparent energy WS2
19666	float	RD	VAh	Apparent energy WS3
19668	float	RD	VAh	Apparent energy WS1..WS3
19670	float	RD	varh	Reactive energy WQ1
19672	float	RD	varh	Reactive energy WQ2
19674	float	RD	varh	Reactive energy WQ3
19676	float	RD	varh	Reactive energy WQ1..WQ3
19678	float	RD	varh	Reactive energy WQ1, inductive
19680	float	RD	varh	Reactive energy WQ2, inductive
19682	float	RD	varh	Reactive energy WQ3, inductive
19684	float	RD	varh	Reactive energy WQ1..WQ3, inductive
19686	float	RD	varh	Reactive energy WQ1, capacitive
19688	float	RD	varh	Reactive energy WQ2, capacitive
19690	float	RD	varh	Reactive energy WQ3, capacitive
19692	float	RD	varh	Reactive energy WQ1..WQ3, capacitive
19694	float	RD	%	Harmonic, THD, I1
19696	float	RD	%	Harmonic, THD, I2
19698	float	RD	%	Harmonic, THD, I3
21620	float	RD	W	Active power P4
21622	float	RD	VA	Apparent power S4
21624	float	RD	var	Reactive power (mains frequ.) Q4
21626	float	RD		Fund.power factor, Cos(ϕ); UL4 IL4
21628	float	RD	Wh	Active energy W4
21630	float	RD	Wh	Active energy W4, consumed
21632	float	RD	Wh	Active energy W4, delivered
21634	float	RD	VAh	Apparent energy WS4
21636	float	RD	varh	Reactive energy WQ4
21638	float	RD	varh	Reactive energy WQ4, inductive
21640	float	RD	varh	Reactive energy WQ4, capacitive
21642	float	RD	%	Harmonic, THD, I4

Current measurement module 2 (Measuring group 2)

19700	float	RD	A	Current, I5
19702	float	RD	A	Current, I6
19704	float	RD	A	Current, I7
19706	float	RD	A	Current, I8

Address	Format	RD/WR	Unit	Note
19708	float	RD	W	Active power P5
19710	float	RD	W	Active power P6
19712	float	RD	W	Active power P7
19714	float	RD	W	Sum; Psum3=P5+P6+P7
19716	float	RD	VA	Apparent power S5
19718	float	RD	VA	Apparent power S6
19720	float	RD	VA	Apparent power S7
19722	float	RD	VA	Sum; Ssum3=S5+S6+S7
19724	float	RD	var	Reactive power (mains frequ.) Q5
19726	float	RD	var	Reactive power (mains frequ.) Q6
19728	float	RD	var	Reactive power (mains frequ.) Q7
19730	float	RD	var	Sum; Qsum3=Q5+Q6+Q7
19732	float	RD		Fund.power factor, Cos(ϕ); UL1 IL5
19734	float	RD		Fund.power factor, Cos(ϕ); UL2 IL6
19736	float	RD		Fund.power factor, Cos(ϕ); UL3 IL7
19738	float	RD	Wh	Active energy W5
19740	float	RD	Wh	Active energy W6
19742	float	RD	Wh	Active energy W7
19744	float	RD	Wh	Active energy W5..W7
19746	float	RD	Wh	Active energy W5, consumed
19748	float	RD	Wh	Active energy W6, consumed
19750	float	RD	Wh	Active energy W7, consumed
19752	float	RD	Wh	Active energy W5..W7, consumed, Tariff 1
19754	float	RD	Wh	Active energy W5, delivered
19756	float	RD	Wh	Active energy W6, delivered
19758	float	RD	Wh	Active energy W7, delivered
19760	float	RD	Wh	Active energy W5..W7, delivered
19762	float	RD	VAh	Apparent energy WS5
19764	float	RD	VAh	Apparent energy WS6
19766	float	RD	VAh	Apparent energy WS7
19768	float	RD	VAh	Apparent energy WS5..WS7
19770	float	RD	varh	Reactive energy WQ5
19772	float	RD	varh	Reactive energy WQ6
19774	float	RD	varh	Reactive energy WQ7
19776	float	RD	varh	Reactive energy WQ5..WQ7
19778	float	RD	varh	Reactive energy WQ5, inductive
19780	float	RD	varh	Reactive energy WQ6, inductive
19782	float	RD	varh	Reactive energy WQ7, inductive
19784	float	RD	varh	Reactive energy WQ5..WQ7, inductive
19786	float	RD	varh	Reactive energy WQ5, capacitive
19788	float	RD	varh	Reactive energy WQ6, capacitive
19790	float	RD	varh	Reactive energy WQ7, capacitive
19792	float	RD	varh	Reactive energy WQ5..WQ7, capacitive
19794	float	RD	%	Harmonic, THD, I5
19796	float	RD	%	Harmonic, THD, I6
19798	float	RD	%	Harmonic, THD, I7
21644	float	RD	W	Active power P8
21646	float	RD	VA	Apparent power S8

Address	Format	RD/WR	Unit	Note
21648	float	RD	var	Reactive power (mains frequ.) Q8
21650	float	RD		Fund.power factor, Cos(ϕ); UL8 IL8
21652	float	RD	Wh	Active energy W8
21654	float	RD	Wh	Active energy W8, consumed
21656	float	RD	Wh	Active energy W8, delivered
21658	float	RD	VAh	Apparent energy WS8
21660	float	RD	varh	Reactive energy WQ8
21662	float	RD	varh	Reactive energy WQ8, inductive
21664	float	RD	varh	Reactive energy WQ8, capacitive
21666	float	RD	%	Harmonic, THD, I8

Current measurement module 3 (Measuring group 1)

19800	float	RD	A	Current, I1
19802	float	RD	A	Current, I2
19804	float	RD	A	Current, I3
19806	float	RD	A	Current, I4
19808	float	RD	W	Active power P1
19810	float	RD	W	Active power P2
19812	float	RD	W	Active power P3
19814	float	RD	W	Sum; Psum3=P1+P2+P3
19816	float	RD	VA	Apparent power S1
19818	float	RD	VA	Apparent power S2
19820	float	RD	VA	Apparent power S3
19822	float	RD	VA	Sum; Ssum3=S1+S2+S3
19824	float	RD	var	Reactive power (mains frequ.) Q1
19826	float	RD	var	Reactive power (mains frequ.) Q2
19828	float	RD	var	Reactive power (mains frequ.) Q3
19830	float	RD	var	Sum; Qsum3=Q1+Q2+Q3
19832	float	RD		Fund.power factor, Cos(ϕ); UL1 IL1
19834	float	RD		Fund.power factor, Cos(ϕ); UL2 IL2
19836	float	RD		Fund.power factor, Cos(ϕ); UL3 IL3
19838	float	RD	Wh	Active energy W1
19840	float	RD	Wh	Active energy W2
19842	float	RD	Wh	Active energy W3
19844	float	RD	Wh	Active energy W1..W3
19846	float	RD	Wh	Active energy W1, consumed
19848	float	RD	Wh	Active energy W2, consumed
19850	float	RD	Wh	Active energy W3, consumed
19852	float	RD	Wh	Active energy W1..W3, consumed, Tariff 1
19854	float	RD	Wh	Active energy W1, delivered
19856	float	RD	Wh	Active energy W2, delivered
19858	float	RD	Wh	Active energy W3, delivered
19860	float	RD	Wh	Active energy W1..W3, delivered
19862	float	RD	VAh	Apparent energy WS1
19864	float	RD	VAh	Apparent energy WS2
19866	float	RD	VAh	Apparent energy WS3
19868	float	RD	VAh	Apparent energy WS1..WS3
19870	float	RD	varh	Reactive energy WQ1
19872	float	RD	varh	Reactive energy WQ2

Address	Format	RD/WR	Unit	Note
19874	float	RD	varh	Reactive energy WQ3
19876	float	RD	varh	Reactive energy WQ1..WQ3
19878	float	RD	varh	Reactive energy WQ1, inductive
19880	float	RD	varh	Reactive energy WQ2, inductive
19882	float	RD	varh	Reactive energy WQ3, inductive
19884	float	RD	varh	Reactive energy WQ1..WQ3, inductive
19886	float	RD	varh	Reactive energy WQ1, capacitive
19888	float	RD	varh	Reactive energy WQ2, capacitive
19890	float	RD	varh	Reactive energy WQ3, capacitive
19892	float	RD	varh	Reactive energy WQ1..WQ3, capacitive
19894	float	RD	%	Harmonic, THD, I1
19896	float	RD	%	Harmonic, THD, I2
19898	float	RD	%	Harmonic, THD, I3
21668	float	RD	W	Active power P4
21670	float	RD	VA	Apparent power S4
21672	float	RD	var	Reactive power (mains frequ.) Q4
21674	float	RD		Fund.power factor, Cos(ϕ); UL4 IL4
21676	float	RD	Wh	Active energy W4
21678	float	RD	Wh	Active energy W4, consumed
21680	float	RD	Wh	Active energy W4, delivered
21682	float	RD	VAh	Apparent energy WS4
21684	float	RD	varh	Reactive energy WQ4
21686	float	RD	varh	Reactive energy WQ4, inductive
21688	float	RD	varh	Reactive energy WQ4, capacitive
21690	float	RD	%	Harmonic, THD, I4

Current measurement module 3 (Measuring group 2)

19900	float	RD	A	Current, I5
19902	float	RD	A	Current, I6
19904	float	RD	A	Current, I7
19906	float	RD	A	Current, I8
19908	float	RD	W	Active power P5
19910	float	RD	W	Active power P6
19912	float	RD	W	Active power P7
19914	float	RD	W	Sum; Psum3=P5+P6+P7
19916	float	RD	VA	Apparent power S5
19918	float	RD	VA	Apparent power S6
19920	float	RD	VA	Apparent power S7
19922	float	RD	VA	Sum; Ssum3=S5+S6+S7
19924	float	RD	var	Reactive power (mains frequ.) Q5
19926	float	RD	var	Reactive power (mains frequ.) Q6
19928	float	RD	var	Reactive power (mains frequ.) Q7
19930	float	RD	var	Sum; Qsum3=Q5+Q6+Q7
19932	float	RD		Fund.power factor, Cos(ϕ); UL1 IL5
19934	float	RD		Fund.power factor, Cos(ϕ); UL2 IL6
19936	float	RD		Fund.power factor, Cos(ϕ); UL3 IL7
19938	float	RD	Wh	Active energy W5
19940	float	RD	Wh	Active energy W6
19942	float	RD	Wh	Active energy W7
19944	float	RD	Wh	Active energy W5..W7

Address	Format	RD/WR	Unit	Note
19946	float	RD	Wh	Active energy W5, consumed
19948	float	RD	Wh	Active energy W6, consumed
19950	float	RD	Wh	Active energy W7, consumed
19952	float	RD	Wh	Active energy W5..W7, consumed, Tariff 1
19954	float	RD	Wh	Active energy W5, delivered
19956	float	RD	Wh	Active energy W6, delivered
19958	float	RD	Wh	Active energy W7, delivered
19960	float	RD	Wh	Active energy W5..W7, delivered
19962	float	RD	VAh	Apparent energy WS5
19964	float	RD	VAh	Apparent energy WS6
19966	float	RD	VAh	Apparent energy WS7
19968	float	RD	VAh	Apparent energy WS5..WS7
19970	float	RD	varh	Reactive energy WQ5
19972	float	RD	varh	Reactive energy WQ6
19974	float	RD	varh	Reactive energy WQ7
19976	float	RD	varh	Reactive energy WQ5..WQ7
19978	float	RD	varh	Reactive energy WQ5, inductive
19980	float	RD	varh	Reactive energy WQ6, inductive
19982	float	RD	varh	Reactive energy WQ7, inductive
19984	float	RD	varh	Reactive energy WQ5..WQ7, inductive
19986	float	RD	varh	Reactive energy WQ5, capacitive
19988	float	RD	varh	Reactive energy WQ6, capacitive
19990	float	RD	varh	Reactive energy WQ7, capacitive
19992	float	RD	varh	Reactive energy WQ5..WQ7, capacitive
19994	float	RD	%	Harmonic, THD, I5
19996	float	RD	%	Harmonic, THD, I6
19998	float	RD	%	Harmonic, THD, I7
21692	float	RD	W	Active power P8
21694	float	RD	VA	Apparent power S8
21696	float	RD	var	Reactive power (mains frequ.) Q8
21698	float	RD		Fund.power factor, Cos(φ); UL8 IL8
21700	float	RD	Wh	Active energy W8
21702	float	RD	Wh	Active energy W8, consumed
21704	float	RD	Wh	Active energy W8, delivered
21706	float	RD	VAh	Apparent energy WS8
21708	float	RD	varh	Reactive energy WQ8
21710	float	RD	varh	Reactive energy WQ8, inductive
21712	float	RD	varh	Reactive energy WQ8, capacitive
21714	float	RD	%	Harmonic, THD, I8

Current measurement module 4 (Measuring group 1)

20000	float	RD	A	Current, I1
20002	float	RD	A	Current, I2
20004	float	RD	A	Current, I3
20006	float	RD	A	Current, I4
20008	float	RD	W	Active power P1
20010	float	RD	W	Active power P2
20012	float	RD	W	Active power P3
20014	float	RD	W	Sum; Psum3=P1+P2+P3

Address	Format	RD/WR	Unit	Note
20016	float	RD	VA	Apparent power S1
20018	float	RD	VA	Apparent power S2
20020	float	RD	VA	Apparent power S3
20022	float	RD	VA	Sum; Ssum3=S1+S2+S3
20024	float	RD	var	Reactive power (mains frequ.) Q1
20026	float	RD	var	Reactive power (mains frequ.) Q2
20028	float	RD	var	Reactive power (mains frequ.) Q3
20030	float	RD	var	Sum; Qsum3=Q1+Q2+Q3
20032	float	RD		Fund.power factor, Cos(ϕ); UL1 IL1
20034	float	RD		Fund.power factor, Cos(ϕ); UL2 IL2
20036	float	RD		Fund.power factor, Cos(ϕ); UL3 IL3
20038	float	RD	Wh	Active energy W1
20040	float	RD	Wh	Active energy W2
20042	float	RD	Wh	Active energy W3
20044	float	RD	Wh	Active energy W1..W3
20046	float	RD	Wh	Active energy W1, consumed
20048	float	RD	Wh	Active energy W2, consumed
20050	float	RD	Wh	Active energy W3, consumed
20052	float	RD	Wh	Active energy W1..W3, consumed, Tariff 1
20054	float	RD	Wh	Active energy W1, delivered
20056	float	RD	Wh	Active energy W2, delivered
20058	float	RD	Wh	Active energy W3, delivered
20060	float	RD	Wh	Active energy W1..W3, delivered
20062	float	RD	VAh	Apparent energy WS1
20064	float	RD	VAh	Apparent energy WS2
20066	float	RD	VAh	Apparent energy WS3
20068	float	RD	VAh	Apparent energy WS1..WS3
20070	float	RD	varh	Reactive energy WQ1
20072	float	RD	varh	Reactive energy WQ2
20074	float	RD	varh	Reactive energy WQ3
20076	float	RD	varh	Reactive energy WQ1..WQ3
20078	float	RD	varh	Reactive energy WQ1, inductive
20080	float	RD	varh	Reactive energy WQ2, inductive
20082	float	RD	varh	Reactive energy WQ3, inductive
20084	float	RD	varh	Reactive energy WQ1..WQ3, inductive
20086	float	RD	varh	Reactive energy WQ1, capacitive
20088	float	RD	varh	Reactive energy WQ2, capacitive
20090	float	RD	varh	Reactive energy WQ3, capacitive
20092	float	RD	varh	Reactive energy WQ1..WQ3, capacitive
20094	float	RD	%	Harmonic, THD, I1
20096	float	RD	%	Harmonic, THD, I2
20098	float	RD	%	Harmonic, THD, I3
21716	float	RD	W	Active power P4
21718	float	RD	VA	Apparent power S4
21720	float	RD	var	Reactive power (mains frequ.) Q4
21722	float	RD		Fund.power factor, Cos(ϕ); UL4 IL4
21724	float	RD	Wh	Active energy W4
21726	float	RD	Wh	Active energy W4, consumed
21728	float	RD	Wh	Active energy W4, delivered

Address	Format	RD/WR	Unit	Note
21730	float	RD	VAh	Apparent energy WS4
21732	float	RD	varh	Reactive energy WQ4
21734	float	RD	varh	Reactive energy WQ4, inductive
21736	float	RD	varh	Reactive energy WQ4, capacitive
21738	float	RD	%	Harmonic, THD, I4

Current measurement module 4 (Measuring group 2)

20100	float	RD	A	Current, I5
20102	float	RD	A	Current, I6
20104	float	RD	A	Current, I7
20106	float	RD	A	Current, I8
20108	float	RD	W	Active power P5
20110	float	RD	W	Active power P6
20112	float	RD	W	Active power P7
20114	float	RD	W	Sum; Psum3=P5+P6+P7
20116	float	RD	VA	Apparent power S5
20118	float	RD	VA	Apparent power S6
20120	float	RD	VA	Apparent power S7
20122	float	RD	VA	Sum; Ssum3=S5+S6+S7
20124	float	RD	var	Reactive power (mains frequ.) Q5
20126	float	RD	var	Reactive power (mains frequ.) Q6
20128	float	RD	var	Reactive power (mains frequ.) Q7
20130	float	RD	var	Sum; Qsum3=Q5+Q6+Q7
20132	float	RD		Fund.power factor, Cos(ϕ); UL1 IL5
20134	float	RD		Fund.power factor, Cos(ϕ); UL2 IL6
20136	float	RD		Fund.power factor, Cos(ϕ); UL3 IL7
20138	float	RD	Wh	Active energy W5
20140	float	RD	Wh	Active energy W6
20142	float	RD	Wh	Active energy W7
20144	float	RD	Wh	Active energy W5..W7
20146	float	RD	Wh	Active energy W5, consumed
20148	float	RD	Wh	Active energy W6, consumed
20150	float	RD	Wh	Active energy W7, consumed
20152	float	RD	Wh	Active energy W5..W7, consumed, Tariff 1
20154	float	RD	Wh	Active energy W5, delivered
20156	float	RD	Wh	Active energy W6, delivered
20158	float	RD	Wh	Active energy W7, delivered
20160	float	RD	Wh	Active energy W5..W7, delivered
20162	float	RD	VAh	Apparent energy WS5
20164	float	RD	VAh	Apparent energy WS6
20166	float	RD	VAh	Apparent energy WS7
20168	float	RD	VAh	Apparent energy WS5..WS7
20170	float	RD	varh	Reactive energy WQ5
20172	float	RD	varh	Reactive energy WQ6
20174	float	RD	varh	Reactive energy WQ7
20176	float	RD	varh	Reactive energy WQ5..WQ7
20178	float	RD	varh	Reactive energy WQ5, inductive
20180	float	RD	varh	Reactive energy WQ6, inductive

Address	Format	RD/WR	Unit	Note
20182	float	RD	varh	Reactive energy WQ7, inductive
20184	float	RD	varh	Reactive energy WQ5..WQ7, inductive
20186	float	RD	varh	Reactive energy WQ5, capacitive
20188	float	RD	varh	Reactive energy WQ6, capacitive
20190	float	RD	varh	Reactive energy WQ7, capacitive
20192	float	RD	varh	Reactive energy WQ5..WQ7, capacitive
20194	float	RD	%	Harmonic, THD, I5
20196	float	RD	%	Harmonic, THD, I6
20198	float	RD	%	Harmonic, THD, I7
21740	float	RD	W	Active power P8
21742	float	RD	VA	Apparent power S8
21744	float	RD	var	Reactive power (mains frequ.) Q8
21746	float	RD		Fund.power factor, Cos(ϕ); UL8 IL8
21748	float	RD	Wh	Active energy W8
21750	float	RD	Wh	Active energy W8, consumed
21752	float	RD	Wh	Active energy W8, delivered
21754	float	RD	VAh	Apparent energy WS8
21756	float	RD	varh	Reactive energy WQ8
21758	float	RD	varh	Reactive energy WQ8, inductive
21760	float	RD	varh	Reactive energy WQ8, capacitive
21762	float	RD	%	Harmonic, THD, I8

Current measurement module 5 (Measuring group 1)

20200	float	RD	A	Current, I1
20202	float	RD	A	Current, I2
20204	float	RD	A	Current, I3
20206	float	RD	A	Current, I4
20208	float	RD	W	Active power P1
20210	float	RD	W	Active power P2
20212	float	RD	W	Active power P3
20214	float	RD	W	Sum; Psum3=P1+P2+P3
20216	float	RD	VA	Apparent power S1
20218	float	RD	VA	Apparent power S2
20220	float	RD	VA	Apparent power S3
20222	float	RD	VA	Sum; Ssum3=S1+S2+S3
20224	float	RD	var	Reactive power (mains frequ.) Q1
20226	float	RD	var	Reactive power (mains frequ.) Q2
20228	float	RD	var	Reactive power (mains frequ.) Q3
20230	float	RD	var	Sum; Qsum3=Q1+Q2+Q3
20232	float	RD		Fund.power factor, Cos(ϕ); UL1 IL1
20234	float	RD		Fund.power factor, Cos(ϕ); UL2 IL2
20236	float	RD		Fund.power factor, Cos(ϕ); UL3 IL3
20238	float	RD	Wh	Active energy W1
20240	float	RD	Wh	Active energy W2
20242	float	RD	Wh	Active energy W3
20244	float	RD	Wh	Active energy W1..W3
20246	float	RD	Wh	Active energy W1, consumed
20248	float	RD	Wh	Active energy W2, consumed
20250	float	RD	Wh	Active energy W3, consumed
20252	float	RD	Wh	Active energy W1..W3, consumed, Tariff 1

Address	Format	RD/WR	Unit	Note
20254	float	RD	Wh	Active energy W1, delivered
20256	float	RD	Wh	Active energy W2, delivered
20258	float	RD	Wh	Active energy W3, delivered
20260	float	RD	Wh	Active energy W1..W3, delivered
20262	float	RD	VAh	Apparent energy WS1
20264	float	RD	VAh	Apparent energy WS2
20266	float	RD	VAh	Apparent energy WS3
20268	float	RD	VAh	Apparent energy WS1..WS3
20270	float	RD	varh	Reactive energy WQ1
20272	float	RD	varh	Reactive energy WQ2
20274	float	RD	varh	Reactive energy WQ3
20276	float	RD	varh	Reactive energy WQ1..WQ3
20278	float	RD	varh	Reactive energy WQ1, inductive
20280	float	RD	varh	Reactive energy WQ2, inductive
20282	float	RD	varh	Reactive energy WQ3, inductive
20284	float	RD	varh	Reactive energy WQ1..WQ3, inductive
20286	float	RD	varh	Reactive energy WQ1, capacitive
20288	float	RD	varh	Reactive energy WQ2, capacitive
20290	float	RD	varh	Reactive energy WQ3, capacitive
20292	float	RD	varh	Reactive energy WQ1..WQ3, capacitive
20294	float	RD	%	Harmonic, THD, I1
20296	float	RD	%	Harmonic, THD, I2
20298	float	RD	%	Harmonic, THD, I3
21764	float	RD	W	Active power P4
21766	float	RD	VA	Apparent power S4
21768	float	RD	var	Reactive power (mains frequ.) Q4
21770	float	RD		Fund.power factor, Cos(ϕ); UL4 IL4
21772	float	RD	Wh	Active energy W4
21774	float	RD	Wh	Active energy W4, consumed
21776	float	RD	Wh	Active energy W4, delivered
21778	float	RD	VAh	Apparent energy WS4
21780	float	RD	varh	Reactive energy WQ4
21782	float	RD	varh	Reactive energy WQ4, inductive
21784	float	RD	varh	Reactive energy WQ4, capacitive
21786	float	RD	%	Harmonic, THD, I4

Current measurement module 5 (Measuring group 2)

20300	float	RD	A	Current, I5
20302	float	RD	A	Current, I6
20304	float	RD	A	Current, I7
20306	float	RD	A	Current, I8
20308	float	RD	W	Active power P5
20310	float	RD	W	Active power P6
20312	float	RD	W	Active power P7
20314	float	RD	W	Sum; Psum3=P5+P6+P7
20316	float	RD	VA	Apparent power S5
20318	float	RD	VA	Apparent power S6
20320	float	RD	VA	Apparent power S7
20322	float	RD	VA	Sum; Ssum3=S5+S6+S7

Address	Format	RD/WR	Unit	Note
20324	float	RD	var	Reactive power (mains frequ.) Q5
20326	float	RD	var	Reactive power (mains frequ.) Q6
20328	float	RD	var	Reactive power (mains frequ.) Q7
20330	float	RD	var	Sum; Qsum3=Q5+Q6+Q7
20332	float	RD		Fund.power factor, Cos(ϕ); UL1 IL5
20334	float	RD		Fund.power factor, Cos(ϕ); UL2 IL6
20336	float	RD		Fund.power factor, Cos(ϕ); UL3 IL7
20338	float	RD	Wh	Active energy W5
20340	float	RD	Wh	Active energy W6
20342	float	RD	Wh	Active energy W7
20344	float	RD	Wh	Active energy W5..W7
20346	float	RD	Wh	Active energy W5, consumed
20348	float	RD	Wh	Active energy W6, consumed
20350	float	RD	Wh	Active energy W7, consumed
20352	float	RD	Wh	Active energy W5..W7, consumed, Tariff 1
20354	float	RD	Wh	Active energy W5, delivered
20356	float	RD	Wh	Active energy W6, delivered
20358	float	RD	Wh	Active energy W7, delivered
20360	float	RD	Wh	Active energy W5..W7, delivered
20362	float	RD	VAh	Apparent energy WS5
20364	float	RD	VAh	Apparent energy WS6
20366	float	RD	VAh	Apparent energy WS7
20368	float	RD	VAh	Apparent energy WS5..WS7
20370	float	RD	varh	Reactive energy WQ5
20372	float	RD	varh	Reactive energy WQ6
20374	float	RD	varh	Reactive energy WQ7
20376	float	RD	varh	Reactive energy WQ5..WQ7
20378	float	RD	varh	Reactive energy WQ5, inductive
20380	float	RD	varh	Reactive energy WQ6, inductive
20382	float	RD	varh	Reactive energy WQ7, inductive
20384	float	RD	varh	Reactive energy WQ5..WQ7, inductive
20386	float	RD	varh	Reactive energy WQ5, capacitive
20388	float	RD	varh	Reactive energy WQ6, capacitive
20390	float	RD	varh	Reactive energy WQ7, capacitive
20392	float	RD	varh	Reactive energy WQ5..WQ7, capacitive
20394	float	RD	%	Harmonic, THD, I5
20396	float	RD	%	Harmonic, THD, I6
20398	float	RD	%	Harmonic, THD, I7
21788	float	RD	W	Active power P8
21790	float	RD	VA	Apparent power S8
21792	float	RD	var	Reactive power (mains frequ.) Q8
21794	float	RD		Fund.power factor, Cos(ϕ); UL8 IL8
21796	float	RD	Wh	Active energy W8
21798	float	RD	Wh	Active energy W8, consumed
21800	float	RD	Wh	Active energy W8, delivered
21802	float	RD	VAh	Apparent energy WS8
21804	float	RD	varh	Reactive energy WQ8
21806	float	RD	varh	Reactive energy WQ8, inductive
21808	float	RD	varh	Reactive energy WQ8, capacitive
21810	float	RD	%	Harmonic, THD, I8

Address	Format	RD/WR	Unit	Note
Current measurement module 6 (Measuring group 1)				
20400	float	RD	A	Current, I1
20402	float	RD	A	Current, I2
20404	float	RD	A	Current, I3
20406	float	RD	A	Current, I4
20408	float	RD	W	Active power P1
20410	float	RD	W	Active power P2
20412	float	RD	W	Active power P3
20414	float	RD	W	Sum; Psum3=P1+P2+P3
20416	float	RD	VA	Apparent power S1
20418	float	RD	VA	Apparent power S2
20420	float	RD	VA	Apparent power S3
20422	float	RD	VA	Sum; Ssum3=S1+S2+S3
20424	float	RD	var	Reactive power (mains frequ.) Q1
20426	float	RD	var	Reactive power (mains frequ.) Q2
20428	float	RD	var	Reactive power (mains frequ.) Q3
20430	float	RD	var	Sum; Qsum3=Q1+Q2+Q3
20432	float	RD		Fund.power factor, Cos(ϕ); UL1 IL1
20434	float	RD		Fund.power factor, Cos(ϕ); UL2 IL2
20436	float	RD		Fund.power factor, Cos(ϕ); UL3 IL3
20438	float	RD	Wh	Active energy W1
20440	float	RD	Wh	Active energy W2
20442	float	RD	Wh	Active energy W3
20444	float	RD	Wh	Active energy W1..W3
20446	float	RD	Wh	Active energy W1, consumed
20448	float	RD	Wh	Active energy W2, consumed
20450	float	RD	Wh	Active energy W3, consumed
20452	float	RD	Wh	Active energy W1..W3, consumed, Tariff 1
20454	float	RD	Wh	Active energy W1, delivered
20456	float	RD	Wh	Active energy W2, delivered
20458	float	RD	Wh	Active energy W3, delivered
20460	float	RD	Wh	Active energy W1..W3, delivered
20462	float	RD	VAh	Apparent energy WS1
20464	float	RD	VAh	Apparent energy WS2
20466	float	RD	VAh	Apparent energy WS3
20468	float	RD	VAh	Apparent energy WS1..WS3
20470	float	RD	varh	Reactive energy WQ1
20472	float	RD	varh	Reactive energy WQ2
20474	float	RD	varh	Reactive energy WQ3
20476	float	RD	varh	Reactive energy WQ1..WQ3
20478	float	RD	varh	Reactive energy WQ1, inductive
20480	float	RD	varh	Reactive energy WQ2, inductive
20482	float	RD	varh	Reactive energy WQ3, inductive
20484	float	RD	varh	Reactive energy WQ1..WQ3, inductive
20486	float	RD	varh	Reactive energy WQ1, capacitive
20488	float	RD	varh	Reactive energy WQ2, capacitive
20490	float	RD	varh	Reactive energy WQ3, capacitive
20492	float	RD	varh	Reactive energy WQ1..WQ3, capacitive

Address	Format	RD/WR	Unit	Note
20494	float	RD	%	Harmonic, THD, I1
20496	float	RD	%	Harmonic, THD, I2
20498	float	RD	%	Harmonic, THD, I3
21812	float	RD	W	Active power P4
21814	float	RD	VA	Apparent power S4
21816	float	RD	var	Reactive power (mains frequ.) Q4
21818	float	RD		Fund.power factor, Cos(ϕ); UL4 IL4
21820	float	RD	Wh	Active energy W4
21822	float	RD	Wh	Active energy W4, consumed
21824	float	RD	Wh	Active energy W4, delivered
21826	float	RD	VAh	Apparent energy WS4
21828	float	RD	varh	Reactive energy WQ4
21830	float	RD	varh	Reactive energy WQ4, inductive
21832	float	RD	varh	Reactive energy WQ4, capacitive
21834	float	RD	%	Harmonic, THD, I4

Current measurement module 6 (Measuring group 2)

20500	float	RD	A	Current, I5
20502	float	RD	A	Current, I6
20504	float	RD	A	Current, I7
20506	float	RD	A	Current, I8
20508	float	RD	W	Active power P5
20510	float	RD	W	Active power P6
20512	float	RD	W	Active power P7
20514	float	RD	W	Sum; Psum3=P5+P6+P7
20516	float	RD	VA	Apparent power S5
20518	float	RD	VA	Apparent power S6
20520	float	RD	VA	Apparent power S7
20522	float	RD	VA	Sum; Ssum3=S5+S6+S7
20524	float	RD	var	Reactive power (mains frequ.) Q5
20526	float	RD	var	Reactive power (mains frequ.) Q6
20528	float	RD	var	Reactive power (mains frequ.) Q7
20530	float	RD	var	Sum; Qsum3=Q5+Q6+Q7
20532	float	RD		Fund.power factor, Cos(ϕ); UL1 IL5
20534	float	RD		Fund.power factor, Cos(ϕ); UL2 IL6
20536	float	RD		Fund.power factor, Cos(ϕ); UL3 IL7
20538	float	RD	Wh	Active energy W5
20540	float	RD	Wh	Active energy W6
20542	float	RD	Wh	Active energy W7
20544	float	RD	Wh	Active energy W5..W7
20546	float	RD	Wh	Active energy W5, consumed
20548	float	RD	Wh	Active energy W6, consumed
20550	float	RD	Wh	Active energy W7, consumed
20552	float	RD	Wh	Active energy W5..W7, consumed, Tariff 1
20554	float	RD	Wh	Active energy W5, delivered
20556	float	RD	Wh	Active energy W6, delivered
20558	float	RD	Wh	Active energy W7, delivered
20560	float	RD	Wh	Active energy W5..W7, delivered
20562	float	RD	VAh	Apparent energy WS5
20564	float	RD	VAh	Apparent energy WS6

Address	Format	RD/WR	Unit	Note
20566	float	RD	VAh	Apparent energy WS7
20568	float	RD	VAh	Apparent energy WS5..WS7
20570	float	RD	varh	Reactive energy WQ5
20572	float	RD	varh	Reactive energy WQ6
20574	float	RD	varh	Reactive energy WQ7
20576	float	RD	varh	Reactive energy WQ5..WQ7
20578	float	RD	varh	Reactive energy WQ5, inductive
20580	float	RD	varh	Reactive energy WQ6, inductive
20582	float	RD	varh	Reactive energy WQ7, inductive
20584	float	RD	varh	Reactive energy WQ5..WQ7, inductive
20586	float	RD	varh	Reactive energy WQ5, capacitive
20588	float	RD	varh	Reactive energy WQ6, capacitive
20590	float	RD	varh	Reactive energy WQ7, capacitive
20592	float	RD	varh	Reactive energy WQ5..WQ7, capacitive
20594	float	RD	%	Harmonic, THD, I5
20596	float	RD	%	Harmonic, THD, I6
20598	float	RD	%	Harmonic, THD, I7
21836	float	RD	W	Active power P8
21838	float	RD	VA	Apparent power S8
21840	float	RD	var	Reactive power (mains frequ.) Q8
21842	float	RD		Fund.power factor, Cos(ϕ); UL8 IL8
21844	float	RD	Wh	Active energy W8
21846	float	RD	Wh	Active energy W8, consumed
21848	float	RD	Wh	Active energy W8, delivered
21850	float	RD	VAh	Apparent energy WS8
21852	float	RD	varh	Reactive energy WQ8
21854	float	RD	varh	Reactive energy WQ8, inductive
21856	float	RD	varh	Reactive energy WQ8, capacitive
21858	float	RD	%	Harmonic, THD, I8

Current measurement module 7 (Measuring group 1)

20600	float	RD	A	Current, I1
20602	float	RD	A	Current, I2
20604	float	RD	A	Current, I3
20606	float	RD	A	Current, I4
20608	float	RD	W	Active power P1
20610	float	RD	W	Active power P2
20612	float	RD	W	Active power P3
20614	float	RD	W	Sum; Psum3=P1+P2+P3
20616	float	RD	VA	Apparent power S1
20618	float	RD	VA	Apparent power S2
20620	float	RD	VA	Apparent power S3
20622	float	RD	VA	Sum; Ssum3=S1+S2+S3
20624	float	RD	var	Reactive power (mains frequ.) Q1
20626	float	RD	var	Reactive power (mains frequ.) Q2
20628	float	RD	var	Reactive power (mains frequ.) Q3
20630	float	RD	var	Sum; Qsum3=Q1+Q2+Q3
20632	float	RD		Fund.power factor, Cos(ϕ); UL1 IL1
20634	float	RD		Fund.power factor, Cos(ϕ); UL2 IL2
20636	float	RD		Fund.power factor, Cos(ϕ); UL3 IL3

Address	Format	RD/WR	Unit	Note
20638	float	RD	Wh	Active energy W1
20640	float	RD	Wh	Active energy W2
20642	float	RD	Wh	Active energy W3
20644	float	RD	Wh	Active energy W1..W3
20646	float	RD	Wh	Active energy W1, consumed
20648	float	RD	Wh	Active energy W2, consumed
20650	float	RD	Wh	Active energy W3, consumed
20652	float	RD	Wh	Active energy W1..W3, consumed, Tariff 1
20654	float	RD	Wh	Active energy W1, delivered
20656	float	RD	Wh	Active energy W2, delivered
20658	float	RD	Wh	Active energy W3, delivered
20660	float	RD	Wh	Active energy W1..W3, delivered
20662	float	RD	VAh	Apparent energy WS1
20664	float	RD	VAh	Apparent energy WS2
20666	float	RD	VAh	Apparent energy WS3
20668	float	RD	VAh	Apparent energy WS1..WS3
20670	float	RD	varh	Reactive energy WQ1
20672	float	RD	varh	Reactive energy WQ2
20674	float	RD	varh	Reactive energy WQ3
20676	float	RD	varh	Reactive energy WQ1..WQ3
20678	float	RD	varh	Reactive energy WQ1, inductive
20680	float	RD	varh	Reactive energy WQ2, inductive
20682	float	RD	varh	Reactive energy WQ3, inductive
20684	float	RD	varh	Reactive energy WQ1..WQ3, inductive
20686	float	RD	varh	Reactive energy WQ1, capacitive
20688	float	RD	varh	Reactive energy WQ2, capacitive
20690	float	RD	varh	Reactive energy WQ3, capacitive
20692	float	RD	varh	Reactive energy WQ1..WQ3, capacitive
20694	float	RD	%	Harmonic, THD, I1
20696	float	RD	%	Harmonic, THD, I2
20698	float	RD	%	Harmonic, THD, I3
21860	float	RD	W	Active power P4
21862	float	RD	VA	Apparent power S4
21864	float	RD	var	Reactive power (mains frequ.) Q4
21866	float	RD		Fund.power factor, Cos(ϕ); UL4 IL4
21868	float	RD	Wh	Active energy W4
21870	float	RD	Wh	Active energy W4, consumed
21872	float	RD	Wh	Active energy W4, delivered
21874	float	RD	VAh	Apparent energy WS4
21876	float	RD	varh	Reactive energy WQ4
21878	float	RD	varh	Reactive energy WQ4, inductive
21880	float	RD	varh	Reactive energy WQ4, capacitive
21882	float	RD	%	Harmonic, THD, I4

Current measurement module 7 (Measuring group 2)

20700	float	RD	A	Current, I5
20702	float	RD	A	Current, I6
20704	float	RD	A	Current, I7
20706	float	RD	A	Current, I8

Address	Format	RD/WR	Unit	Note
20708	float	RD	W	Active power P5
20710	float	RD	W	Active power P6
20712	float	RD	W	Active power P7
20714	float	RD	W	Sum; Psum3=P5+P6+P7
20716	float	RD	VA	Apparent power S5
20718	float	RD	VA	Apparent power S6
20720	float	RD	VA	Apparent power S7
20722	float	RD	VA	Sum; Ssum3=S5+S6+S7
20724	float	RD	var	Reactive power (mains frequ.) Q5
20726	float	RD	var	Reactive power (mains frequ.) Q6
20728	float	RD	var	Reactive power (mains frequ.) Q7
20730	float	RD	var	Sum; Qsum3=Q5+Q6+Q7
20732	float	RD		Fund.power factor, Cos(ϕ); UL1 IL5
20734	float	RD		Fund.power factor, Cos(ϕ); UL2 IL6
20736	float	RD		Fund.power factor, Cos(ϕ); UL3 IL7
20738	float	RD	Wh	Active energy W5
20740	float	RD	Wh	Active energy W6
20742	float	RD	Wh	Active energy W7
20744	float	RD	Wh	Active energy W5..W7
20746	float	RD	Wh	Active energy W5, consumed
20748	float	RD	Wh	Active energy W6, consumed
20750	float	RD	Wh	Active energy W7, consumed
20752	float	RD	Wh	Active energy W5..W7, consumed, Tariff 1
20754	float	RD	Wh	Active energy W5, delivered
20756	float	RD	Wh	Active energy W6, delivered
20758	float	RD	Wh	Active energy W7, delivered
20760	float	RD	Wh	Active energy W5..W7, delivered
20762	float	RD	VAh	Apparent energy WS5
20764	float	RD	VAh	Apparent energy WS6
20766	float	RD	VAh	Apparent energy WS7
20768	float	RD	VAh	Apparent energy WS5..WS7
20770	float	RD	varh	Reactive energy WQ5
20772	float	RD	varh	Reactive energy WQ6
20774	float	RD	varh	Reactive energy WQ7
20776	float	RD	varh	Reactive energy WQ5..WQ7
20778	float	RD	varh	Reactive energy WQ5, inductive
20780	float	RD	varh	Reactive energy WQ6, inductive
20782	float	RD	varh	Reactive energy WQ7, inductive
20784	float	RD	varh	Reactive energy WQ5..WQ7, inductive
20786	float	RD	varh	Reactive energy WQ5, capacitive
20788	float	RD	varh	Reactive energy WQ6, capacitive
20790	float	RD	varh	Reactive energy WQ7, capacitive
20792	float	RD	varh	Reactive energy WQ5..WQ7, capacitive
20794	float	RD	%	Harmonic, THD, I5
20796	float	RD	%	Harmonic, THD, I6
20798	float	RD	%	Harmonic, THD, I7
21884	float	RD	W	Active power P8
21886	float	RD	VA	Apparent power S8

Address	Format	RD/WR	Unit	Note
21888	float	RD	var	Reactive power (mains frequ.) Q8
21890	float	RD		Fund.power factor, Cos(φ); UL8 IL8
21892	float	RD	Wh	Active energy W8
21894	float	RD	Wh	Active energy W8, consumed
21896	float	RD	Wh	Active energy W8, delivered
21898	float	RD	VAh	Apparent energy WS8
21900	float	RD	varh	Reactive energy WQ8
21902	float	RD	varh	Reactive energy WQ8, inductive
21904	float	RD	varh	Reactive energy WQ8, capacitive
21906	float	RD	%	Harmonic, THD, I8

Current measurement module 8 (Measuring group 1)

20800	float	RD	A	Current, I1
20802	float	RD	A	Current, I2
20804	float	RD	A	Current, I3
20806	float	RD	A	Current, I4
20808	float	RD	W	Active power P1
20810	float	RD	W	Active power P2
20812	float	RD	W	Active power P3
20814	float	RD	W	Sum; Psum3=P1+P2+P3
20816	float	RD	VA	Apparent power S1
20818	float	RD	VA	Apparent power S2
20820	float	RD	VA	Apparent power S3
20822	float	RD	VA	Sum; Ssum3=S1+S2+S3
20824	float	RD	var	Reactive power (mains frequ.) Q1
20826	float	RD	var	Reactive power (mains frequ.) Q2
20828	float	RD	var	Reactive power (mains frequ.) Q3
20830	float	RD	var	Sum; Qsum3=Q1+Q2+Q3
20832	float	RD		Fund.power factor, Cos(φ); UL1 IL1
20834	float	RD		Fund.power factor, Cos(φ); UL2 IL2
20836	float	RD		Fund.power factor, Cos(φ); UL3 IL3
20838	float	RD	Wh	Active energy W1
20840	float	RD	Wh	Active energy W2
20842	float	RD	Wh	Active energy W3
20844	float	RD	Wh	Active energy W1..W3
20846	float	RD	Wh	Active energy W1, consumed
20848	float	RD	Wh	Active energy W2, consumed
20850	float	RD	Wh	Active energy W3, consumed
20852	float	RD	Wh	Active energy W1..W3, consumed, Tariff 1
20854	float	RD	Wh	Active energy W1, delivered
20856	float	RD	Wh	Active energy W2, delivered
20858	float	RD	Wh	Active energy W3, delivered
20860	float	RD	Wh	Active energy W1..W3, delivered
20862	float	RD	VAh	Apparent energy WS1
20864	float	RD	VAh	Apparent energy WS2
20866	float	RD	VAh	Apparent energy WS3
20868	float	RD	VAh	Apparent energy WS1..WS3
20870	float	RD	varh	Reactive energy WQ1
20872	float	RD	varh	Reactive energy WQ2

Address	Format	RD/WR	Unit	Note
20874	float	RD	varh	Reactive energy WQ3
20876	float	RD	varh	Reactive energy WQ1..WQ3
20878	float	RD	varh	Reactive energy WQ1, inductive
20880	float	RD	varh	Reactive energy WQ2, inductive
20882	float	RD	varh	Reactive energy WQ3, inductive
20884	float	RD	varh	Reactive energy WQ1..WQ3, inductive
20886	float	RD	varh	Reactive energy WQ1, capacitive
20888	float	RD	varh	Reactive energy WQ2, capacitive
20890	float	RD	varh	Reactive energy WQ3, capacitive
20892	float	RD	varh	Reactive energy WQ1..WQ3, capacitive
20894	float	RD	%	Harmonic, THD, I1
20896	float	RD	%	Harmonic, THD, I2
20898	float	RD	%	Harmonic, THD, I3
21908	float	RD	W	Active power P4
21910	float	RD	VA	Apparent power S4
21912	float	RD	var	Reactive power (mains frequ.) Q4
21914	float	RD		Fund.power factor, Cos(ϕ); UL4 IL4
21916	float	RD	Wh	Active energy W4
21918	float	RD	Wh	Active energy W4, consumed
21920	float	RD	Wh	Active energy W4, delivered
21922	float	RD	VAh	Apparent energy WS4
21924	float	RD	varh	Reactive energy WQ4
21926	float	RD	varh	Reactive energy WQ4, inductive
21928	float	RD	varh	Reactive energy WQ4, capacitive
21930	float	RD	%	Harmonic, THD, I4

Current measurement module 8 (Measuring group 2)

20900	float	RD	A	Current, I5
20902	float	RD	A	Current, I6
20904	float	RD	A	Current, I7
20906	float	RD	A	Current, I8
20908	float	RD	W	Active power P5
20910	float	RD	W	Active power P6
20912	float	RD	W	Active power P7
20914	float	RD	W	Sum; Psum3=P5+P6+P7
20916	float	RD	VA	Apparent power S5
20918	float	RD	VA	Apparent power S6
20920	float	RD	VA	Apparent power S7
20922	float	RD	VA	Sum; Ssum3=S5+S6+S7
20924	float	RD	var	Reactive power (mains frequ.) Q5
20926	float	RD	var	Reactive power (mains frequ.) Q6
20928	float	RD	var	Reactive power (mains frequ.) Q7
20930	float	RD	var	Sum; Qsum3=Q5+Q6+Q7
20932	float	RD		Fund.power factor, Cos(ϕ); UL1 IL5
20934	float	RD		Fund.power factor, Cos(ϕ); UL2 IL6
20936	float	RD		Fund.power factor, Cos(ϕ); UL3 IL7
20938	float	RD	Wh	Active energy W5
20940	float	RD	Wh	Active energy W6

Address	Format	RD/WR	Unit	Note
20942	float	RD	Wh	Active energy W7
20944	float	RD	Wh	Active energy W5..W7
20946	float	RD	Wh	Active energy W5, consumed
20948	float	RD	Wh	Active energy W6, consumed
20950	float	RD	Wh	Active energy W7, consumed
20952	float	RD	Wh	Active energy W5..W7, consumed, Tariff 1
20954	float	RD	Wh	Active energy W5, delivered
20956	float	RD	Wh	Active energy W6, delivered
20958	float	RD	Wh	Active energy W7, delivered
20960	float	RD	Wh	Active energy W5..W7, delivered
20962	float	RD	VAh	Apparent energy WS5
20964	float	RD	VAh	Apparent energy WS6
20966	float	RD	VAh	Apparent energy WS7
20968	float	RD	VAh	Apparent energy WS5..WS7
20970	float	RD	varh	Reactive energy WQ5
20972	float	RD	varh	Reactive energy WQ6
20974	float	RD	varh	Reactive energy WQ7
20976	float	RD	varh	Reactive energy WQ5..WQ7
20978	float	RD	varh	Reactive energy WQ5, inductive
20980	float	RD	varh	Reactive energy WQ6, inductive
20982	float	RD	varh	Reactive energy WQ7, inductive
20984	float	RD	varh	Reactive energy WQ5..WQ7, inductive
20986	float	RD	varh	Reactive energy WQ5, capacitive
20988	float	RD	varh	Reactive energy WQ6, capacitive
20990	float	RD	varh	Reactive energy WQ7, capacitive
20992	float	RD	varh	Reactive energy WQ5..WQ7, capacitive
20994	float	RD	%	Harmonic, THD,I5
20996	float	RD	%	Harmonic, THD,I6
20998	float	RD	%	Harmonic, THD,I7
21932	float	RD	W	Active power P8
21934	float	RD	VA	Apparent power S8
21936	float	RD	var	Reactive power (mains frequ.) Q8
21938	float	RD		Fund.power factor, Cos(ϕ); UL8 IL8
21940	float	RD	Wh	Active energy W8
21942	float	RD	Wh	Active energy W8, consumed
21944	float	RD	Wh	Active energy W8, delivered
21946	float	RD	VAh	Apparent energy WS8
21948	float	RD	varh	Reactive energy WQ8
21950	float	RD	varh	Reactive energy WQ8, inductive
21952	float	RD	varh	Reactive energy WQ8, capacitive
21954	float	RD	%	Harmonic, THD, I8

Current measurement module 9 (Measuring group 1)

21000	float	RD	A	Current, I1
21002	float	RD	A	Current, I2
21004	float	RD	A	Current, I3
21006	float	RD	A	Current, I4

Address	Format	RD/WR	Unit	Note
21008	float	RD	W	Active power P1
21010	float	RD	W	Active power P2
21012	float	RD	W	Active power P3
21014	float	RD	W	Sum; Psum3=P1+P2+P3
21016	float	RD	VA	Apparent power S1
21018	float	RD	VA	Apparent power S2
21020	float	RD	VA	Apparent power S3
21022	float	RD	VA	Sum; Ssum3=S1+S2+S3
21024	float	RD	var	Reactive power (mains frequ.) Q1
21026	float	RD	var	Reactive power (mains frequ.) Q2
21028	float	RD	var	Reactive power (mains frequ.) Q3
21030	float	RD	var	Sum; Qsum3=Q1+Q2+Q3
21032	float	RD		Fund.power factor, Cos(ϕ); UL1 IL1
21034	float	RD		Fund.power factor, Cos(ϕ); UL2 IL2
21036	float	RD		Fund.power factor, Cos(ϕ); UL3 IL3
21038	float	RD	Wh	Active energy W1
21040	float	RD	Wh	Active energy W2
21042	float	RD	Wh	Active energy W3
21044	float	RD	Wh	Active energy W1..W3
21046	float	RD	Wh	Active energy W1, consumed
21048	float	RD	Wh	Active energy W2, consumed
21050	float	RD	Wh	Active energy W3, consumed
21052	float	RD	Wh	Active energy W1..W3, consumed, Tariff 1
21054	float	RD	Wh	Active energy W1, delivered
21056	float	RD	Wh	Active energy W2, delivered
21058	float	RD	Wh	Active energy W3, delivered
21060	float	RD	Wh	Active energy W1..W3, delivered
21062	float	RD	VAh	Apparent energy WS1
21064	float	RD	VAh	Apparent energy WS2
21066	float	RD	VAh	Apparent energy WS3
21068	float	RD	VAh	Apparent energy WS1..WS3
21070	float	RD	varh	Reactive energy WQ1
21072	float	RD	varh	Reactive energy WQ2
21074	float	RD	varh	Reactive energy WQ3
21076	float	RD	varh	Reactive energy WQ1..WQ3
21078	float	RD	varh	Reactive energy WQ1, inductive
21080	float	RD	varh	Reactive energy WQ2, inductive
21082	float	RD	varh	Reactive energy WQ3, inductive
21084	float	RD	varh	Reactive energy WQ1..WQ3, inductive
21086	float	RD	varh	Reactive energy WQ1, capacitive
21088	float	RD	varh	Reactive energy WQ2, capacitive
21090	float	RD	varh	Reactive energy WQ3, capacitive
21092	float	RD	varh	Reactive energy WQ1..WQ3, capacitive
21094	float	RD	%	Harmonic, THD, I1
21096	float	RD	%	Harmonic, THD, I2
21098	float	RD	%	Harmonic, THD, I3

Address	Format	RD/WR	Unit	Note
21956	float	RD	W	Active power P4
21958	float	RD	VA	Apparent power S4
21960	float	RD	var	Reactive power (mains frequ.) Q4
21962	float	RD		Fund.power factor, $\text{Cos}(\phi)$; UL4 IL4
21964	float	RD	Wh	Active energy W4
21966	float	RD	Wh	Active energy W4, consumed
21968	float	RD	Wh	Active energy W4, delivered
21970	float	RD	VAh	Apparent energy WS4
21972	float	RD	varh	Reactive energy WQ4
21974	float	RD	varh	Reactive energy WQ4, inductive
21976	float	RD	varh	Reactive energy WQ4, capacitive
21978	float	RD	%	Harmonic, THD, I4

Current measurement module 9 (Measuring group 2)

21100	float	RD	A	Current, I5
21102	float	RD	A	Current, I6
21104	float	RD	A	Current, I7
21106	float	RD	A	Current, I8
21108	float	RD	W	Active power P5
21110	float	RD	W	Active power P6
21112	float	RD	W	Active power P7
21114	float	RD	W	Sum; $P_{sum3}=P5+P6+P7$
21116	float	RD	VA	Apparent power S5
21118	float	RD	VA	Apparent power S6
21120	float	RD	VA	Apparent power S7
21122	float	RD	VA	Sum; $S_{sum3}=S5+S6+S7$
21124	float	RD	var	Reactive power (mains frequ.) Q5
21126	float	RD	var	Reactive power (mains frequ.) Q6
21128	float	RD	var	Reactive power (mains frequ.) Q7
21130	float	RD	var	Sum; $Q_{sum3}=Q5+Q6+Q7$
21132	float	RD		Fund.power factor, $\text{Cos}(\phi)$; UL1 IL5
21134	float	RD		Fund.power factor, $\text{Cos}(\phi)$; UL2 IL6
21136	float	RD		Fund.power factor, $\text{Cos}(\phi)$; UL3 IL7
21138	float	RD	Wh	Active energy W5
21140	float	RD	Wh	Active energy W6
21142	float	RD	Wh	Active energy W7
21144	float	RD	Wh	Active energy W5..W7
21146	float	RD	Wh	Active energy W5, consumed
21148	float	RD	Wh	Active energy W6, consumed
21150	float	RD	Wh	Active energy W7, consumed
21152	float	RD	Wh	Active energy W5..W7, consumed, Tariff 1
21154	float	RD	Wh	Active energy W5, delivered
21156	float	RD	Wh	Active energy W6, delivered
21158	float	RD	Wh	Active energy W7, delivered
21160	float	RD	Wh	Active energy W5..W7, delivered
21162	float	RD	VAh	Apparent energy WS5
21164	float	RD	VAh	Apparent energy WS6
21166	float	RD	VAh	Apparent energy WS7
21168	float	RD	VAh	Apparent energy WS5..WS7

Address	Format	RD/WR	Unit	Note
21170	float	RD	varh	Reactive energy WQ5
21172	float	RD	varh	Reactive energy WQ6
21174	float	RD	varh	Reactive energy WQ7
21176	float	RD	varh	Reactive energy WQ5..WQ7
21178	float	RD	varh	Reactive energy WQ5, inductive
21180	float	RD	varh	Reactive energy WQ6, inductive
21182	float	RD	varh	Reactive energy WQ7, inductive
21184	float	RD	varh	Reactive energy WQ5..WQ7, inductive
21186	float	RD	varh	Reactive energy WQ5, capacitive
21188	float	RD	varh	Reactive energy WQ6, capacitive
21190	float	RD	varh	Reactive energy WQ7, capacitive
21192	float	RD	varh	Reactive energy WQ5..WQ7, capacitive
21194	float	RD	%	Harmonic, THD, I5
21196	float	RD	%	Harmonic, THD, I6
21198	float	RD	%	Harmonic, THD, I7
21980	float	RD	W	Active power P8
21982	float	RD	VA	Apparent power S8
21984	float	RD	var	Reactive power (mains frequ.) Q8
21986	float	RD		Fund.power factor, Cos(ϕ); UL8 IL8
21988	float	RD	Wh	Active energy W8
21990	float	RD	Wh	Active energy W8, consumed
21992	float	RD	Wh	Active energy W8, delivered
21994	float	RD	VAh	Apparent energy WS8
21996	float	RD	varh	Reactive energy WQ8
21998	float	RD	varh	Reactive energy WQ8, inductive
22000	float	RD	varh	Reactive energy WQ8, capacitive
22002	float	RD	%	Harmonic, THD, I8

Current measurement module 10 (Measuring group 1)

21200	float	RD	A	Current, I1
21202	float	RD	A	Current, I2
21204	float	RD	A	Current, I3
21206	float	RD	A	Current, I4
21208	float	RD	W	Active power P1
21210	float	RD	W	Active power P2
21212	float	RD	W	Active power P3
21214	float	RD	W	Sum; Psum3=P1+P2+P3
21216	float	RD	VA	Apparent power S1
21218	float	RD	VA	Apparent power S2
21220	float	RD	VA	Apparent power S3
21222	float	RD	VA	Sum; Ssum3=S1+S2+S3
21224	float	RD	var	Reactive power (mains frequ.) Q1
21226	float	RD	var	Reactive power (mains frequ.) Q2
21228	float	RD	var	Reactive power (mains frequ.) Q3
21230	float	RD	var	Sum; Qsum3=Q1+Q2+Q3
21232	float	RD		Fund.power factor, Cos(ϕ); UL1 IL1
21234	float	RD		Fund.power factor, Cos(ϕ); UL2 IL2
21236	float	RD		Fund.power factor, Cos(ϕ); UL3 IL3

Address	Format	RD/WR	Unit	Note
21238	float	RD	Wh	Active energy W1
21240	float	RD	Wh	Active energy W2
21242	float	RD	Wh	Active energy W3
21244	float	RD	Wh	Active energy W1..W3
21246	float	RD	Wh	Active energy W1, consumed
21248	float	RD	Wh	Active energy W2, consumed
21250	float	RD	Wh	Active energy W3, consumed
21252	float	RD	Wh	Active energy W1..W3, consumed, Tariff 1
21254	float	RD	Wh	Active energy W1, delivered
21256	float	RD	Wh	Active energy W2, delivered
21258	float	RD	Wh	Active energy W3, delivered
21260	float	RD	Wh	Active energy W1..W3, delivered
21262	float	RD	VAh	Apparent energy WS1
21264	float	RD	VAh	Apparent energy WS2
21266	float	RD	VAh	Apparent energy WS3
21268	float	RD	VAh	Apparent energy WS1..WS3
21270	float	RD	varh	Reactive energy WQ1
21272	float	RD	varh	Reactive energy WQ2
21274	float	RD	varh	Reactive energy WQ3
21276	float	RD	varh	Reactive energy WQ1..WQ3
21278	float	RD	varh	Reactive energy WQ1, inductive
21280	float	RD	varh	Reactive energy WQ2, inductive
21282	float	RD	varh	Reactive energy WQ3, inductive
21284	float	RD	varh	Reactive energy WQ1..WQ3, inductive
21286	float	RD	varh	Reactive energy WQ1, capacitive
21288	float	RD	varh	Reactive energy WQ2, capacitive
21290	float	RD	varh	Reactive energy WQ3, capacitive
21292	float	RD	varh	Reactive energy WQ1..WQ3, capacitive
21294	float	RD	%	Harmonic, THD, I1
21296	float	RD	%	Harmonic, THD, I2
21298	float	RD	%	Harmonic, THD, I3
22004	float	RD	W	Active power P4
22006	float	RD	VA	Apparent power S4
22008	float	RD	var	Reactive power (mains frequ.) Q4
22010	float	RD		Fund.power factor, Cos(ϕ); UL4 IL4
22012	float	RD	Wh	Active energy W4
22014	float	RD	Wh	Active energy W4, consumed
22016	float	RD	Wh	Active energy W4, delivered
22018	float	RD	VAh	Apparent energy WS4
22020	float	RD	varh	Reactive energy WQ4
22022	float	RD	varh	Reactive energy WQ4, inductive
22024	float	RD	varh	Reactive energy WQ4, capacitive
22026	float	RD	%	Harmonic, THD, I4

Current measurement module 10 (Measuring group 2)

21300	float	RD	A	Current, I5
21302	float	RD	A	Current, I6
21304	float	RD	A	Current, I7
21306	float	RD	A	Current, I8

Address	Format	RD/WR	Unit	Note
21308	float	RD	W	Active power P5
21310	float	RD	W	Active power P6
21312	float	RD	W	Active power P7
21314	float	RD	W	Sum; Psum3=P5+P6+P7
21316	float	RD	VA	Apparent power S5
21318	float	RD	VA	Apparent power S6
21320	float	RD	VA	Apparent power S7
21322	float	RD	VA	Sum; Ssum3=S5+S6+S7
21324	float	RD	var	Reactive power (mains frequ.) Q5
21326	float	RD	var	Reactive power (mains frequ.) Q6
21328	float	RD	var	Reactive power (mains frequ.) Q7
21330	float	RD	var	Sum; Qsum3=Q5+Q6+Q7
21332	float	RD		Fund.power factor, Cos(ϕ); UL1 IL5
21334	float	RD		Fund.power factor, Cos(ϕ); UL2 IL6
21336	float	RD		Fund.power factor, Cos(ϕ); UL3 IL7
21338	float	RD	Wh	Active energy W5
21340	float	RD	Wh	Active energy W6
21342	float	RD	Wh	Active energy W7
21344	float	RD	Wh	Active energy W5..W7
21346	float	RD	Wh	Active energy W5, consumed
21348	float	RD	Wh	Active energy W6, consumed
21350	float	RD	Wh	Active energy W7, consumed
21352	float	RD	Wh	Active energy W5..W7, consumed, Tariff 1
21354	float	RD	Wh	Active energy W5, delivered
21356	float	RD	Wh	Active energy W6, delivered
21358	float	RD	Wh	Active energy W7, delivered
21360	float	RD	Wh	Active energy W5..W7, delivered
21362	float	RD	VAh	Apparent energy WS5
21364	float	RD	VAh	Apparent energy WS6
21366	float	RD	VAh	Apparent energy WS7
21368	float	RD	VAh	Apparent energy WS5..WS7
21370	float	RD	varh	Reactive energy WQ5
21372	float	RD	varh	Reactive energy WQ6
21374	float	RD	varh	Reactive energy WQ7
21376	float	RD	varh	Reactive energy WQ5..WQ7
21378	float	RD	varh	Reactive energy WQ5, inductive
21380	float	RD	varh	Reactive energy WQ6, inductive
21382	float	RD	varh	Reactive energy WQ7, inductive
21384	float	RD	varh	Reactive energy WQ5..WQ7, inductive
21386	float	RD	varh	Reactive energy WQ5, capacitive
21388	float	RD	varh	Reactive energy WQ6, capacitive
21390	float	RD	varh	Reactive energy WQ7, capacitive
21392	float	RD	varh	Reactive energy WQ5..WQ7, capacitive
21394	float	RD	%	Harmonic, THD, I5
21396	float	RD	%	Harmonic, THD, I6
21398	float	RD	%	Harmonic, THD, I7

Address	Format	RD/WR	Unit	Note
22028	float	RD	W	Active power P8
22030	float	RD	VA	Apparent power S8
22032	float	RD	var	Reactive power (mains frequ.) Q8
22034	float	RD		Fund.power factor, $\text{Cos}(\phi)$; UL8 IL8
22036	float	RD	Wh	Active energy W8
22038	float	RD	Wh	Active energy W8, consumed
22040	float	RD	Wh	Active energy W8, delivered
22042	float	RD	VAh	Apparent energy WS8
22044	float	RD	varh	Reactive energy WQ8
22046	float	RD	varh	Reactive energy WQ8, inductive
22048	float	RD	varh	Reactive energy WQ8, capacitive
22050	float	RD	%	Harmonic, THD, I8

Modbus addresses - Digital input modules

Address	Format	RD/WR	Unit	Note
Digital input module 1				
37000	Boolean	RD		Digital-in1, State
37001	Boolean	RD		Digital-in2, State
37002	Boolean	RD		Digital-in3, State
37003	Boolean	RD		Digital-in4, State
37004	Boolean	RD		Digital-in5, State
37005	Boolean	RD		Digital-in6, State
37006	Boolean	RD		Digital-in7, State
37007	Boolean	RD		Digital-in8, State
37008	Boolean	RD		Digital-in9, State
37009	Boolean	RD		Digital-in10, State
37010	Boolean	RD		Digital-in11, State
37011	Boolean	RD		Digital-in12, State
37012	Boolean	RD		Digital-in13, State
37013	Boolean	RD		Digital-in14, State
37014	UInt16	RD		Bit field of the digital inputs
Digital input module 2				
37071	Boolean	RD		Digital-in1, State
37072	Boolean	RD		Digital-in2, State
37073	Boolean	RD		Digital-in3, State
37074	Boolean	RD		Digital-in4, State
37075	Boolean	RD		Digital-in5, State
37076	Boolean	RD		Digital-in6, State
37077	Boolean	RD		Digital-in7, State
37078	Boolean	RD		Digital-in8, State
37079	Boolean	RD		Digital-in9, State
37080	Boolean	RD		Digital-in10, State
37081	Boolean	RD		Digital-in11, State
37082	Boolean	RD		Digital-in12, State
37083	Boolean	RD		Digital-in13, State
37084	Boolean	RD		Digital-in14, State
37085	UInt16	RD		Bit field of the digital inputs
Digital input module 3				
37142	Boolean	RD		Digital-in1, State
37143	Boolean	RD		Digital-in2, State
37144	Boolean	RD		Digital-in3, State
37145	Boolean	RD		Digital-in4, State
37146	Boolean	RD		Digital-in5, State
37147	Boolean	RD		Digital-in6, State
37148	Boolean	RD		Digital-in7, State
37149	Boolean	RD		Digital-in8, State
37150	Boolean	RD		Digital-in9, State
37151	Boolean	RD		Digital-in10, State
37152	Boolean	RD		Digital-in11, State
37153	Boolean	RD		Digital-in12, State

Address	Format	RD/WR	Unit	Note
37154	Boolean	RD		Digital-in13, State
37155	Boolean	RD		Digital-in14, State
37156	UInt16	RD		Bit field of the digital inputs

Digital input module 4

37213	Boolean	RD		Digital-in1, State
37214	Boolean	RD		Digital-in2, State
37215	Boolean	RD		Digital-in3, State
37216	Boolean	RD		Digital-in4, State
37217	Boolean	RD		Digital-in5, State
37218	Boolean	RD		Digital-in6, State
37219	Boolean	RD		Digital-in7, State
37220	Boolean	RD		Digital-in8, State
37221	Boolean	RD		Digital-in9, State
37222	Boolean	RD		Digital-in10, State
37223	Boolean	RD		Digital-in11, State
37224	Boolean	RD		Digital-in12, State
37225	Boolean	RD		Digital-in13, State
37226	Boolean	RD		Digital-in14, State
37227	UInt16	RD		Bit field of the digital inputs

Digital input module 5

37284	Boolean	RD		Digital-in1, State
37285	Boolean	RD		Digital-in2, State
37286	Boolean	RD		Digital-in3, State
37287	Boolean	RD		Digital-in4, State
37288	Boolean	RD		Digital-in5, State
37289	Boolean	RD		Digital-in6, State
37290	Boolean	RD		Digital-in7, State
37291	Boolean	RD		Digital-in8, State
37292	Boolean	RD		Digital-in9, State
37293	Boolean	RD		Digital-in10, State
37294	Boolean	RD		Digital-in11, State
37295	Boolean	RD		Digital-in12, State
37296	Boolean	RD		Digital-in13, State
37297	Boolean	RD		Digital-in14, State
37298	UInt16	RD		Bit field of the digital inputs

Digital input module 6

37355	Boolean	RD		Digital-in1, State
37356	Boolean	RD		Digital-in2, State
37357	Boolean	RD		Digital-in3, State
37358	Boolean	RD		Digital-in4, State
37359	Boolean	RD		Digital-in5, State
37360	Boolean	RD		Digital-in6, State
37361	Boolean	RD		Digital-in7, State
37362	Boolean	RD		Digital-in8, State

Address	Format	RD/WR	Unit	Note
37363	Boolean	RD		Digital-in9, State
37364	Boolean	RD		Digital-in10, State
37365	Boolean	RD		Digital-in11, State
37366	Boolean	RD		Digital-in12, State
37367	Boolean	RD		Digital-in13, State
37368	Boolean	RD		Digital-in14, State
37369	UInt16	RD		Bit field of the digital inputs

Digital input module 7

37426	Boolean	RD		Digital-in1, State
37427	Boolean	RD		Digital-in2, State
37428	Boolean	RD		Digital-in3, State
37429	Boolean	RD		Digital-in4, State
37430	Boolean	RD		Digital-in5, State
37431	Boolean	RD		Digital-in6, State
37432	Boolean	RD		Digital-in7, State
37433	Boolean	RD		Digital-in8, State
37434	Boolean	RD		Digital-in9, State
37435	Boolean	RD		Digital-in10, State
37436	Boolean	RD		Digital-in11, State
37437	Boolean	RD		Digital-in12, State
37438	Boolean	RD		Digital-in13, State
37439	Boolean	RD		Digital-in14, State
37440	UInt16	RD		Bit field of the digital inputs

Digital input module 8

37497	Boolean	RD		Digital-in1, State
37498	Boolean	RD		Digital-in2, State
37499	Boolean	RD		Digital-in3, State
37500	Boolean	RD		Digital-in4, State
37501	Boolean	RD		Digital-in5, State
37502	Boolean	RD		Digital-in6, State
37503	Boolean	RD		Digital-in7, State
37504	Boolean	RD		Digital-in8, State
37505	Boolean	RD		Digital-in9, State
37506	Boolean	RD		Digital-in10, State
37507	Boolean	RD		Digital-in11, State
37508	Boolean	RD		Digital-in12, State
37509	Boolean	RD		Digital-in13, State
37510	Boolean	RD		Digital-in14, State
37511	UInt16	RD		Bit field of the digital inputs

Digital input module 9

37568	Boolean	RD		Digital-in1, State
37569	Boolean	RD		Digital-in2, State
37570	Boolean	RD		Digital-in3, State
37571	Boolean	RD		Digital-in4, State

Address	Format	RD/WR	Unit	Note
37572	Boolean	RD		Digital-in5, State
37573	Boolean	RD		Digital-in6, State
37574	Boolean	RD		Digital-in7, State
37575	Boolean	RD		Digital-in8, State
37576	Boolean	RD		Digital-in9, State
37577	Boolean	RD		Digital-in10, State
37578	Boolean	RD		Digital-in11, State
37579	Boolean	RD		Digital-in12, State
37580	Boolean	RD		Digital-in13, State
37581	Boolean	RD		Digital-in14, State
37582	UInt16	RD		Bit field of the digital inputs

Digital input module 10

37639	Boolean	RD		Digital-in1, State
37640	Boolean	RD		Digital-in2, State
37641	Boolean	RD		Digital-in3, State
37642	Boolean	RD		Digital-in4, State
37643	Boolean	RD		Digital-in5, State
37644	Boolean	RD		Digital-in6, State
37645	Boolean	RD		Digital-in7, State
37646	Boolean	RD		Digital-in8, State
37647	Boolean	RD		Digital-in9, State
37648	Boolean	RD		Digital-in10, State
37649	Boolean	RD		Digital-in11, State
37650	Boolean	RD		Digital-in12, State
37651	Boolean	RD		Digital-in13, State
37652	Boolean	RD		Digital-in14, State
37653	UInt16	RD		Bit field of the digital inputs