

VARkombi-18-PC

REGISTER TABLE

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
0000	U16	Country Code (869)	R				
0001	U16	company code (7436)	R				
0002							
0003	U32	Product Code (88111)	R				
0004	U16	Barcode check (6)	R				
0005	U16	program communication Version (0x400)	R				
0006	U16	User define number H	R/W			0xFFFF	0X0000
0007	U16	User define number L	R/W			0xFFFF	0X0000

Read Parameters Table (32-16bit signed/unsigned integer table)

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
1000	U16	Current Transformer Ratio (1-2000) (CTRF)	R/W	-----	-----	2000	1
1001	U16	<p>Device working information bits</p> <p>if bit0=1 ; manual mode, if 0 ; automatic mode if bit1=0 ; learning mode , if 1 ; were learned all steps if bit2=0 ; normal working mode, if 1 ; fast working mode if bit3=1 ; step protection was enabled. If 0 ; step protection was disabled. if bit4=0 ; there is no signal at generator input, if 1 ; there is a signal at generator input If bit5=0 ; tanFi used, if 1; tanFi was enabled If bit6=0 ; phase L1 is capacitive, if 1; inductive If bit7=0 ; phase L2 is capacitive, if 1; inductive If bit8=0 ; phase L3 is capacitive, if 1; inductive If bit9=0 ; total system is capacitive, if 1; inductive If bit10=0 ; current transformer of L1 phase is right connection, if 1 ; opposite connection If bit11=0 ; current transformer of L2 phase is right connection, if 1 ; opposite connection If bit12=0 ; current transformer of L3 phase is right connection, if 1 ; opposite connection If bit13=1 ; direction of current transformer of L1 phase was learned,, if 0 ; was not learned If bit14=1 ; direction of current transformer of L2 phase was learned,, if 0 ; was not learned If bit15=1 ; direction of current transformer of L3 phase was learned,, if 0 ; was not learned</p>	R	-----	-----		
1002	U16	Input Voltage Phase1 (100mV)	R	0.1	Volt		
1003	U16	Input Voltage Phase2 (100mV)	R	0.1	Volt		
1004	U16	Input Voltage Phase3 (100mV)	R	0.1	Volt		
1005	U16	Input Current Phase1 (mA)	R	CTRFx0.001	Amp		
1006	U16	Input Current Phase2 (mA)	R	CTRFx0.001	Amp		
1007	U16	Input Current Phase3 (mA)	R	CTRFx0.001	Amp		
1008	U16	Input Active Power Phase1 (watt)	R	CTRF	watt		
1009	U16	Input Active Power Phase2 (watt)	R	CTRF	watt		
100A	U16	Input Active Power Phase3 (watt)	R	CTRF	watt		

100B	S16	Input Reactive Power Phase1 (Var)	R	CTRF	Var		
100C	S16	Input Reactive Power Phase2 (Var)	R	CTRF	Var		
100D	S16	Input Reactive Power Phase3 (Var)	R	CTRF	Var		
100E	U16	Input Apparent Power Phase1 (VA)	R	CTRF	VA		
100F	U16	Input Apparent Power Phase2 (VA)	R	CTRF	VA		
1010	U16	Input Apparent Power Phase3 (VA)	R	CTRF	VA		
1011	S16	Cos Φ Phase1 (cos Φ 1 x 1000)	R	-----	0.001		
1012	S16	Cos Φ Phase2 (cos Φ 2 x 1000)	R	-----	0.001		
1013	S16	Cos Φ Phase3 (cos Φ 3 x 1000)	R	-----	0.001		
1014	S16	SUM cos Φ (cos Φ x 1000) vectorial	R	-----	0.001		
1015	S16	Tan Φ 1 Phase1 (%)	R	-----	0.01		
1016	S16	Tan Φ 2 Phase2 (%)	R	-----	0.01		
1017	S16	Tan Φ 3 Phase3 (%)	R	-----	0.01		
1018	S16	SUM tan Φ (%) vectorial	R	-----	0.01		
1019	U16	Total Active Power (watt)	R	CTRF	watt		
101A	U16	Total Inductive Power (var)	R	CTRF	Var		
101B	U16	Total Capacitive Power (var)	R	CTRF	Var		
101C	S16	SUM reactive Power(var) (Σ Qind. - Σ qcap.)	R	CTRF	Var		
101D	U16	SUM Apparent Power (VA)	R	CTRF	VA		
101E	U16	frequency (100mHz)	R	0.1	Hz		
101F	S16	Temperature	R	-----	C°		
1020	U16	Phase Alarms Output Bits for Phase1	R	-----	-----	overVoltage Bit0 underVoltage Bit1 overCurrent Bit2 overCompensation Bit3 UnderCompensationBit4	
1021	U16	Phase Alarms Output Bits for Phase2	R	-----	-----	missingPhase Bit5 overTHDV Bit6 overHDV Bit7 overTHDC Bit8 overHDC Bit9	
1022	U16	Phase Alarms Output Bits for Phase3	R	-----	-----		
1023	U16	Global Alarms Output Bits: missingConnector1 Bit0 missingConnector2 Bit1 missingConnector3 Bit2 overCompansation Bit3 underCompansation Bit4 systemError Bit5 overHeatBit Bit6 phaseVoltageConnectionError Bit7 Changed of step value Bit8 warning; Zero of step value Bit9 ProtectedModbusEnteranceError Bit10	R	-----	-----		

1024	U16	Step protection types: BIT0 : Temperature protection BIT1 : over and under voltage protection BIT2 : protection for THD-V BIT3 : protection for wrong voltage connection BIT4 : protection for if current value is zero on all phases BIT5 : protection for factory settings	R	-----	-----		
1025	U16	Warnings for voltage and no current If bit0=1 ; there is a current of L1 phase, if bit0=0 ; There is no current in phase L1 If bit1=1 ; there is a current of L2 phase, if bit0=0 ; There is no current in phase L2 If bit2=1 ; there is a current of L3 phase, if bit0=0 ; There is no current in phase L3 If bit3=1 ; there is a voltage in phase L1, if bit1=0 no volatge in phase L1 If bit4=1 ; there is a voltage in phase L2, if bit1=0 no volatge in phase L2 If bit5=1 ; there is a voltage in phase L3, if bit1=0 no volatge in phase L3 If bit6=1 ; one of phases exist, if bit6=0 ; there are all phases If bit7=1 ; phase sequence error, if bit7=0 ;there is no phase sequence error If bit8=1 ; there is a short circuit at between L1 and L2 phases. If bit9=1 ; there is a short circuit at between L2 and L3 phases. If bit10=1 ; there is a short circuit at between L1 and L3 phases. If bit11=1 ; Phase with neutral connection error	R	-----	-----		
1026	U16	voltage1 ZeroCrossOverAngle (referance)(everytime 0)	R	-----	Degree		
1027	U16	current1 ZeroCrossOverAngle (referance between angle)(0-359)	R	-----	Degree		
1028	U16	voltage2 ZeroCrossOverAngle (referance between angle)(0-359)	R	-----	Degree		
1029	U16	current2 ZeroCrossOverAngle (referance between angle)(0-359)	R	-----	Degree		
102A	U16	voltage3 ZeroCrossOverAngle (referance between angle)(0-359)	R	-----	Degree		
102B	U16	current3 ZeroCrossOverAngle (referance between angle)(0-359)	R	-----	Degree		
102C		The steps that are running					
102D	U32	17-0 steps, 31 Alarm , 30 Fan	R	-----	-----		
102E		The steps that are learned					
102F	U32	//17-0 steps, 31 The used all steps was learned	R	-----	-----		
1030		Inductors at L1 phase					
1031	U32	//17-0 steps	R	-----	-----		
1032		Inductors at L2 phase					
1033	U32	//17-0 steps	R	-----	-----		
1034		Inductors at L3 phase					
1035	U32	//17-0 steps	R	-----	-----		
1036		capacitors at L1 phase					
1037	U32	//17-0 steps	R	-----	-----		
1038		capacitors at L2 phase					
1039	U32	//17-0 steps	R	-----	-----		
103A		capacitors at L3 phase					
103B	U32	//17-0 steps	R	-----	-----		
103C		Steps that are ready					
103D	U32	//17-0 steps	R	-----	-----		
103E	U16	recent time Phase1 inductive/Active energy Ratio(%)	R	0.01	-----		
103F	U16	recent time Phase1 capacitive/Active energy Ratio(%)	R	0.01	-----		
1040	U16	recent time Phase2 inductive/Active energy Ratio(%)	R	0.01	-----		

1041	U16	recent time Phase2 capacitive/Active energy Ratio(%)	R	0.01	-----		
1042	U16	recent time Phase3 inductive/Active energy Ratio(%)	R	0.01	-----		
1043	U16	recent time Phase3 capacitive/Active energy Ratio(%)	R	0.01	-----		
1044	U16	recent time Phases SUM inductive/Active energy Ratio(%)	R	0.01	-----		
1045	U16	recent time Phases SUM capacitive/Active energy Ratio(%)	R	0.01	-----		
1046	S16	Slided inductive ratio bound Value phase1 (%)	R	0.01	-----		
1047	S16	Slided capacitive ratio bound Value phase1 (%)	R	0.01	-----		
1048	S16	Slided inductive ratio bound Value phase2 (%)	R	0.01	-----		
1049	S16	Slided capacitive ratio bound Value phase2 (%)	R	0.01	-----		
104A	S16	Slided inductive ratio bound Value phase3 (%)	R	0.01	-----		
104B	S16	Slided capacitive ratio bound Value phase3 (%)	R	0.01	-----		
104C	S16	Slided inductive ratio real Value phase1 (%)	R	0.01	-----		
104D	S16	Slided capacitive ratio real Value phase1 (%)	R	0.01	-----		
104E	S16	Slided inductive ratio real Value phase2 (%)	R	0.01	-----		
104F	S16	Slided capacitive ratio real Value phase2 (%)	R	0.01	-----		
1050	S16	Slided inductive ratio real Value phase3 (%)	R	0.01	-----		
1051	S16	Slided capacitive ratio real Value phase3 (%)	R	0.01	-----		
1052	U16	step out On time phase 1 (200 msec unit)	R	0.2	second		
1053	U16	step out Off time phase1 (200 msec unit)	R	0.2	second		
1054	U16	step out On time phase 2 (200 msec unit)	R	0.2	second		
1055	U16	step our Off time phase2 (200 msec unit)	R	0.2	second		
1056	U16	step out On time phase 3 (200 msec unit)	R	0.2	second		
1057	U16	step our Off time phase3 (200 msec unit)	R	0.2	second		
1058	U16	step out On time threephases steps (200 msec unit)	R	0.2	second		
1059	U16	step our Off time threephases steps (200 msec unit)	R	0.2	second		

Read Parameters Table (32 bit float / 32-16bit signed/unsigned integer mixed table)

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
1100	U16	Current Transformer Ratio (1-2000) (CTRF)	R/W	-----	-----	2000	1

1101	U16	<p>Device working information bits</p> <p>if bit0=1 ; manual mode, if 0 ; automatic mode if bit1=0 ; learning mode , if 1 ; were learned all steps if bit2=0 ; normal working mode, if 1 ; fast working mode if bit3=1 ; step protection was enabled. If 0 ; step protection was disabled. if bit4=0 ; there is no signal at generator input, if 1 ; there is a signal at generator input If bit5=0 ; tanFi used, if 1; tanFi was enabled If bit6=0 ; phase L1 is capacitive, if 1; inductive If bit7=0 ; phase L2 is capacitive, if 1; inductive If bit8=0 ; phase L3 is capacitive, if 1; inductive If bit9=0 ; total system is capacitive, if 1; inductive If bit10=0 ; current transformer of L1 phase is right connection, if 1 ; opposite connection If bit11=0 ; current transformer of L2 phase is right connection, if 1 ; opposite connection If bit12=0 ; current transformer of L3 phase is right connection, if 1 ; opposite connection If bit13=1 ; direction of current transformer of L1 phase was learned,, if 0 ; was not learned If bit14=1 ; direction of current transformer of L2 phase was learned,, if 0 ; was not learned If bit15=1 ; direction of current transformer of L3 phase was learned,, if 0 ; was not learned</p>	R	-----	-----		
1102							
1103	Float (32bit)	Input Voltage Phase1(Volt)	R	-----	Volt		
1104							
1105	Float (32bit)	Input Voltage Phase2(Volt)	R	-----	Volt		
1106							
1107	Float (32bit)	Input Voltage Phase3(Volt)	R	-----	Volt		
1108							
1109	Float (32bit)	Input Current Phase1 (A)	R	CTRF	Amp		
110A							
110B	Float (32bit)	Input Current Phase2 (A)	R	CTRF	Amp		
110C							
110D	Float (32bit)	Input Current Phase3 (A)	R	CTRF	Amp		
110E							
110F	Float (32bit)	Input Active Power Phase1 (watt)	R	CTRF	watt		
1110							
1111	Float (32bit)	Input Active Power Phase2 (watt)	R	CTRF	watt		
1112							
1113	Float (32bit)	Input Active Power Phase3 (watt)	R	CTRF	watt		
1114							
1115	Float (32bit)	Input Reactive Power Phase1 (Var)	R	CTRF	Var		
1116							
1117	Float (32bit)	Input Reactive Power Phase2 (Var)	R	CTRF	Var		
1118							
1119	Float (32bit)	Input Reactive Power Phase3 (Var)	R	CTRF	Var		
111A							
111B	Float (32bit)	Input Apparent Power Phase1 (VA)	R	CTRF	VA		
111C							
111D	Float (32bit)	Input Apparent Power Phase2 (VA)	R	CTRF	VA		
111E							
111F	Float (32bit)	Input Apparent Power Phase3 (VA)	R	CTRF	VA		
1120							

1121	Float (32bit)	Cos Φ 1 Phase1	R	-----	Cosfi		
1122							
1123	Float (32bit)	Cos Φ 2 Phase2	R	-----	Cosfi		
1124							
1125	Float (32bit)	Cos Φ 3 Phase3	R	-----	Cosfi		
1126							
1127	Float (32bit)	SUM cos Φ vectorial	R	-----	Cosfi		
1128							
1129	Float (32bit)	Tan Φ 1 Phase1	R	-----	tanfi		
112A							
112B	Float (32bit)	Tan Φ 2 Phase2	R	-----	tanfi		
112C							
112D	Float (32bit)	Tan Φ 3 Phase3	R	-----	tanfi		
112E							
112F	Float (32bit)	SUM Tan Φ vectorial	R	-----	tanfi		
1130							
1131	Float (32bit)	Total Active Power (watt)	R	CTRF	watt		
1132							
1133	Float (32bit)	Total Inductive Power (var)	R	CTRF	Var		
1134							
1135	Float (32bit)	Total Capacitive Power (var)	R	CTRF	Var		
1136							
1137	Float (32bit)	SUM reactive Power(var)	R	CTRF	Var		
1138							
1139	Float (32bit)	Total Appeared Power(VA)	R	CTRF	VA		
113A							
113B	Float (32bit)	Frequency	R	-----	Hz		
113C	S16	Temperature	R	-----	C°		
113D	U16	Phase Alarms Output Bits for Phase1	R	-----	-----	overVoltage Bit0 underVoltage Bit1 overCurrent Bit2 overCompensation Bit3	
113E	U16	Phase Alarms Output Bits for Phase2	R	-----	-----	UnderCompensationBit4 missingPhase Bit5 overTHDV Bit6	
113F	U16	Phase Alarms Output Bits for Phase3	R	-----	-----	overHDV Bit7 overTHDC Bit8 overHDC Bit9	

1140	U16	Global Alarms Output Bits: missingConnector1 Bit0 missingConnector2 Bit1 missingConnector3 Bit2 overCompansation Bit3 underCompansation Bit4 systemError Bit5 overHeatBit Bit6 phaseVoltageConnectionError Bit7 Changed of step value Bit8 warning; Zero of step value Bit9 ProtectedModbusEnteranceError Bit10	R	-----	-----		
1141	U16	Step protection types: BIT0 : Temperature protection BIT1 : over and under voltage protection BIT2 : protection for THD-V BIT3 : protection for wrong voltage connection BIT4 : protection for if current value is zero on all phases BIT5 : protection for factory settings	R	-----	-----		
1142	U16	Warnings for voltage and no current If bit0=1 ; there is a current of L1 phase, if bit0=0 ; There is no current in phase L1 If bit1=1 ; there is a current of L2 phase, if bit0=0 ; There is no current in phase L2 If bit2=1 ; there is a current of L3 phase, if bit0=0 ; There is no current in phase L3 If bit3=1 ; there is a voltage in phase L1, if bit1=0 no volatge in phase L1 If bit4=1 ; there is a voltage in phase L2, if bit1=0 no volatge in phase L2 If bit5=1 ; there is a voltage in phase L3, if bit1=0 no volatge in phase L3 If bit6=1 ; one of phases exist, if bit6=0 ; there are all phases If bit7=1 ; phase sequence error, if bit7=0 ;there is no phase sequence error If bit8=1 ; there is a short circuit at between L1 and L2 phases. If bit9=1 ; there is a short circuit at between L2 and L3 phases. If bit10=1 ; there is a short circuit at between L1 and L3 phases. If bit11=1 ; Phase with neutral connection error	R	-----	-----		
1143	U16	voltage1 ZeroCrossOverAngle (referance)(everytime 0)	R	-----	Degree		
1144	U16	current1 ZeroCrossOverAngle (referance between angle)(0-359)	R	-----	Degree		
1145	U16	voltage2 ZeroCrossOverAngle (referance between angle)(0-359)	R	-----	Degree		
1146	U16	current2 ZeroCrossOverAngle (referance between angle)(0-359)	R	-----	Degree		
1147	U16	voltage3 ZeroCrossOverAngle (referance between angle)(0-359)	R	-----	Degree		
1148	U16	current3 ZeroCrossOverAngle (referance between angle)(0-359)	R	-----	Degree		
1149		The steps that are running					
114A	U32	17-0 steps, 31 Alarm , 30 Fan	R	-----	-----		
114B		The steps that are learned					
114C	U32	//17-0 steps, 31 The used all steps was learned	R	-----	-----		
114D		Inductors at L1 phase					
114E	U32	//17-0 steps	R	-----	-----		

114F		Inductors at L2 phase					
1150	U32	//17-0 steps	R	-----	-----		
1151		Inductors at L3 phase					
1152	U32	//17-0 steps	R	-----	-----		
1153		capacitors at L1 phase					
1154	U32	//17-0 steps	R	-----	-----		
1155		capacitors at L2 phase					
1156	U32	//17-0 steps	R	-----	-----		
1157		capacitors at L3 phase					
1158	U32	//17-0 steps	R	-----	-----		
1159		Steps that are ready					
115A	U32	//17-0 steps	R	-----	-----		
115B	U16	recent time Phase1 inductive/Active energy Ratio(%)	R	0.01	-----		
115C	U16	recent time Phase1 capacitive/Active energy Ratio(%)	R	0.01	-----		
115D	U16	recent time Phase2 inductive/Active energy Ratio(%)	R	0.01	-----		
115E	U16	recent time Phase2 capacitive/Active energy Ratio(%)	R	0.01	-----		
115F	U16	recent time Phase3 inductive/Active energy Ratio(%)	R	0.01	-----		
1160	U16	recent time Phase3 capacitive/Active energy Ratio(%)	R	0.01	-----		
1161	U16	recent time Phases SUM inductive/Active energy Ratio(%)	R	0.01	-----		
1162	U16	recent time Phases SUM capacitive/Active energy Ratio(%)	R	0.01	-----		
1163	S16	Slided inductive ratio bound Value phase1 (%)	R	0.01	-----		
1164	S16	Slided capacitive ratio bound Value phase1 (%)	R	0.01	-----		
1165	S16	Slided inductive ratio bound Value phase2 (%)	R	0.01	-----		
1166	S16	Slided capacitive ratio bound Value phase2 (%)	R	0.01	-----		
1167	S16	Slided inductive ratio bound Value phase3 (%)	R	0.01	-----		
1168	S16	Slided capacitive ratio bound Value phase3 (%)	R	0.01	-----		
1169	S16	Slided inductive ratio real Value phase1 (%)	R	0.01	-----		
116A	S16	Slided capacitive ratio real Value phase1 (%)	R	0.01	-----		
116B	S16	Slided inductive ratio real Value phase2 (%)	R	0.01	-----		
116C	S16	Slided capacitive ratio real Value phase2 (%)	R	0.01	-----		
116D	S16	Slided inductive ratio real Value phase3 (%)	R	0.01	-----		
116E	S16	Slided capacitive ratio real Value phase3 (%)	R	0.01	-----		
116F	U16	step out On time phase 1 (200 msec unit)	R	5	second		
1170	U16	step our Off time phase1 (200 msec unit)	R	5	second		
1171	U16	step out On time phase 2 (200 msec unit)	R	5	second		
1172	U16	step our Off time phase2 (200 msec unit)	R	5	second		
1173	U16	step out On time phase 3 (200 msec unit)	R	5	second		
1174	U16	step our Off time phase3 (200 msec unit)	R	5	second		
1175	U16	step out On time threephases steps (200 msec unit)	R	5	second		
1176	U16	step our Off time threephases steps (200 msec unit)	R	5	second		

Read 48 bit integer energy table seconder value

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
2000							

2001	U32	Energy table working time (second)	R	-----	second		
2002	U16	WattSec total Positive Active Energy Xhi	R	CTRF			
2003	U16	WattSec total Positive Active Energy Hi	R	CTRF			
2004	U16	WattSec total Positive Active Energy Low	R	CTRF	watt/sec		
2005	U16	VarSec total Inductive Reactive Energy Xhi	R	CTRF			
2006	U16	VarSec total Inductive Reactive Energy Hi	R	CTRF			
2007	U16	VarSec total Inductive Reactive Energy Low	R	CTRF	var/sec		
2008	U16	VarSec total Capacitive Reactive Energy Xhi	R	CTRF			
2009	U16	VarSec total Capacitive Reactive Energy Hi	R	CTRF			
200A	U16	VarSec total Capacitive Reactive Energy Low	R	CTRF	var/sec		
200B	U16	VASec total Appeared Energy Xhi	R	CTRF			
200C	U16	VASec total Appeared Energy Hi	R	CTRF			
200D	U16	VASec total Appeared Energy Low	R	CTRF	VA/sec		
200E	U16	WattSec Phase1 Positive Active Energy Xhi	R	CTRF			
200F	U16	WattSec Phase1 Positive Active Energy Hi	R	CTRF			
2010	U16	WattSec Phase1 Positive Active Energy Low	R	CTRF	watt/sec		
2011	U16	WattSec Phase2 Positive Active Energy Xhi	R	CTRF			
2012	U16	WattSec Phase2 Positive Active Energy Hi	R	CTRF			
2013	U16	WattSec Phase2 Positive Active Energy Low	R	CTRF	watt/sec		
2014	U16	WattSec Phase3 Positive Active Energy Xhi	R	CTRF			
2015	U16	WattSec Phase3 Positive Active Energy Hi	R	CTRF			
2016	U16	WattSec Phase3 Positive Active Energy Low	R	CTRF	watt/sec		
2017	U16	VarSec Phase1 Inductive Reactive Energy Xhi	R	CTRF			
2018	U16	VarSec Phase1 Inductive Reactive Energy Hi	R	CTRF			
2019	U16	VarSec Phase1 Inductive Reactive Energy Low	R	CTRF	var/sec		
201A	U16	VarSec Phase2 Inductive Reactive Energy Xhi	R	CTRF			
201B	U16	VarSec Phase2 Inductive Reactive Energy Hi	R	CTRF			
201C	U16	VarSec Phase2 Inductive Reactive Energy Low	R	CTRF	var/sec		
201D	U16	VarSec Phase3 Inductive Reactive Energy Xhi	R	CTRF			
201E	U16	VarSec Phase3 Inductive Reactive Energy Hi	R	CTRF			
201F	U16	VarSec Phase3 Inductive Reactive Energy Low	R	CTRF	var/sec		
2020	U16	VarSec Phase1 Capacitive Reactive Energy Xhi	R	CTRF			
2021	U16	VarSec Phase1 Capacitive Reactive Energy Hi	R	CTRF			
2022	U16	VarSec Phase1 Capacitive Reactive Energy Low	R	CTRF	var/sec		
2023	U16	VarSec Phase2 Capacitive Reactive Energy Xhi	R	CTRF			
2024	U16	VarSec Phase2 Capacitive Reactive Energy Hi	R	CTRF			
2025	U16	VarSec Phase2 Capacitive Reactive Energy Low	R	CTRF	var/sec		
2026	U16	VarSec Phase3 Capacitive Reactive Energy Xhi	R	CTRF			
2027	U16	VarSec Phase3 Capacitive Reactive Energy Hi	R	CTRF			
2028	U16	VarSec Phase3 Capacitive Reactive Energy Low	R	CTRF	var/sec		
2029	U16	VASec Phase1 Appeared Energy Xhi	R	CTRF			
202A	U16	VASec Phase1 Appeared Energy Hi	R	CTRF			
202B	U16	VASec Phase1 Appeared Energy Low	R	CTRF	VA/sec		
202C	U16	VASec Phase2 Appeared Energy Xhi	R	CTRF			
202D	U16	VASec Phase2 Appeared Energy Hi	R	CTRF			
202E	U16	VASec Phase2 Appeared Energy Low	R	CTRF	VA/sec		
202F	U16	VASec Phase3 Appeared Energy Xhi	R	CTRF			
2030	U16	VASec Phase3 Appeared Energy Hi	R	CTRF			

2031	U16	VASec Phase3 Appeared Energy Low	R	CTRF	VA/sec		
2032	U16	Index WattSec total Positive Active Energy Xhi	R/W	CTRF		0X07FF	0X0000
2033	U16	Index WattSec total Positive Active Energy Hi	R/W	CTRF		0xFFFF	0X0000
2034	U16	Index WattSec total Positive Active Energy Low	R/W	CTRF	watt/sec	0xFFFF	0X0000
2035	U16	Index VarSec total Inductive Reactive Energy Xhi	R/W	CTRF		0X07FF	0X0000
2036	U16	Index VarSec total Inductive Reactive Energy Hi	R/W	CTRF		0xFFFF	0X0000
2037	U16	Index VarSec total Inductive Reactive Energy Low	R/W	CTRF	var/sec	0xFFFF	0X0000
2038	U16	Index VarSec total Capacitive Reactive Energy Xhi	R/W	CTRF		0X07FF	0X0000
2039	U16	Index VarSec total Capacitive Reactive Energy Hi	R/W	CTRF		0xFFFF	0X0000
203A	U16	Index VarSec total Capacitive Reactive Energy Low	R/W	CTRF	var/sec	0xFFFF	0X0000

Read 32 bit energy table Watt/h

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
2100	U32	Energy table working time (second)	R	-----	second		
2101							
2102	U32	WattHour total Positive Active Energy	R	CTRF	Watt / Hour		
2103							
2104	U32	VarHour total Inductive Reactive Energy	R	CTRF	Var/Hour		
2105							
2106	U32	VarHour total Capacitive Reactive Energy	R	CTRF	Var/Hour		
2107							
2108	U32	VAHour total Appeared Energy	R	CTRF	VA/Hour		
2109							
210A	U32	WattHour Phase1 Positive Active Energy	R	CTRF	Watt / Hour		
210B							
210C	U32	WattHour Phase2 Positive Active Energy	R	CTRF	Watt / Hour		
210D							
210E	U32	WattHour Phase3 Positive Active Energy	R	CTRF	Watt / Hour		
210F							
2110	U32	VarHour Phase1 Inductive Reactive Energy	R	CTRF	Var/Hour		
2111							
2112	U32	VarHour Phase2 Inductive Reactive Energy	R	CTRF	Var/Hour		
2113							
2114	U32	VarHour Phase3 Inductive Reactive Energy	R	CTRF	Var/Hour		
2115							
2116	U32	VarHour Phase1 Capacitive Reactive Energy	R	CTRF	Var/Hour		
2117							
2118	U32	VarHour Phase2 Capacitive Reactive Energy	R	CTRF	Var/Hour		
2119							
211A	U32	VarHour Phase3 Capacitive Reactive Energy	R	CTRF	Var/Hour		
211B							
211C	U32	VAHour Phase1 Appeared Energy	R	CTRF	VA/Hour		
211D							
211E	U32	VAHour Phase2 Appeared Energy	R	CTRF	VA/Hour		

211F							
2120	U32	VAHour Phase3 Appeared Energy	R	CTRF	VA/Hour		
2121							
2122	U32	Index WattHour total Positive Active Energy	R/W	CTRF	Watt / Hour	0x91A2B3C4	0X0000001
2123							
2124	U32	Index VarHour total Inductive Reactive Energy	R/W	CTRF	Var/Hour	0x91A2B3C4	0X0000001
2125							
2126	U32	Index VarSec total Capacitive Reactive Energy	R/W	CTRF	Var/Hour	0x91A2B3C4	0X0000001
2127							

Read 64 bit energy table Kwatt/h

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
2200	U32	Energy table working time (second)	R	-----	second		
2201							
2202	DOUBLE(64 bit)	KwattHour total Positive Active Energy	R	-----	Kwatt/h		
2203							
2204							
2205							
2206	DOUBLE(64 bit)	KvarHour total Inductive Reactive Energy	R	-----	Kvar/h		
2207							
2208							
2209							
220A	DOUBLE(64 bit)	KvarHour total Capacitive Reactive Energy	R	-----	Kvar/h		
220B							
220C							
220D							
220E	DOUBLE(64 bit)	VAHour total Appeared Energy	R	-----	KVA/H		
220F							
2210							
2211							
2212	DOUBLE(64 bit)	KwattHour Phase1 Positive Active Energy	R	-----	Kwatt/h		
2213							
2214							
2215							
2216	DOUBLE(64 bit)	KwattHour Phase2 Positive Active Energy	R	-----	Kwatt/h		
2217							
2218							
2219							
221A	DOUBLE(64 bit)	KwattHour Phase3 Positive Active Energy	R	-----	Kwatt/h		
221B							
221C							
221D							
221E	DOUBLE(64 bit)	KvarHour Phase1 Inductive Reactive Energy	R	-----	Kvar/h		
221F							

2220							
2221							
2222	DOUBLE(64 bit)	KvarHour Phase2 Inductive Reactive Energy	R	-----	Kvar/h		
2223							
2224							
2225							
2226	DOUBLE(64 bit)	KvarHour Phase3 Inductive Reactive Energy	R	-----	Kvar/h		
2227							
2228							
2229							
222A	DOUBLE(64 bit)	KvarHour Phase1 Capacitive Reactive Energy	R	-----	Kvar/h		
222B							
222C							
222D							
222E	DOUBLE(64 bit)	KvarHour Phase2 Capacitive Reactive Energy	R	-----	Kvar/h		
222F							
2230							
2231							
2232	DOUBLE(64 bit)	KvarHour Phase3 Capacitive Reactive Energy	R	-----	Kvar/h		
2233							
2234							
2235							
2236	DOUBLE(64 bit)	KVAHour Phase1 Appeared Energy	R	-----	Kvar/h		
2237							
2238							
2239							
223A	DOUBLE(64 bit)	KVAHour Phase2 Appeared Energy	R	-----	Kvar/h		
223B							
223C							
223D							
223E	DOUBLE(64 bit)	KVAHour Phase3 Appeared Energy	R	-----	Kvar/h		
223F							
2240							
2241							
2242	DOUBLE(64 bit)	INDEX KwattHour total Positive Active Energy	R	-----	Kwatt/h	CTRF x 2443359,172	1
2243							
2244							
2245							
2246	DOUBLE(64 bit)	INDEX KvarHour total Inductive Reactive Energy	R	-----	Kvar/h	CTRF x 2443359,172	1
2247							
2248							
2249							
224A	DOUBLE(64 bit)	INDEX KvarHour total Capacitive Reactive Energy	R	-----	Kvar/h	CTRF x 2443359,172	1
224B							
224C							
224D							

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
3000	S16	Phase1 Value of Cap that will enter by order (seconder value x 10)	R/W	CTRF x 0.1	Var	3500	-3500
3001	S16	Phase2 Value of Cap that will enter by order (seconder value x 10)	R/W	CTRF x 0.1	Var	3500	-3500
3002	S16	Phase3 Value of Cap that will enter by order (seconder value x 10)	R/W	CTRF x 0.1	Var	3500	-3500
3003	U16	step Order that cap value will record on.	R/W	-----	-----	used step number	1
3004	U16	step value reset order 1-18 for clear single step 0 for clear all steps values	R/W	-----	-----	used step number	0
3005	U16	manual mode register 1-manual 0-auto	R/W	-----	-----	1	0
3006	U16	steps toogle order register 1-18 for step toogle (if step not avail, command not accept)	R/W	-----	-----	used step number	1
3007	U16	device user define step order (3-device max step number)	R/W	-----	-----	device max step number	3
3008	U16	header of first learned Values of Step1	R	-----	-----		
3009	S16	Phase1 values of first learned Values of Step1	R	CTRF*0.1	Var		
300A	S16	Phase2 values of first learned Values of Step1	R	CTRF*0.1	Var		
300B	S16	Phase3 values of first learned Values of Step1	R	CTRF*0.1	Var		
300C	U16	header of first learned Values of Step2	R	-----	-----		
300D	S16	Phase1 values of first learned Values of Step2	R	CTRF*0.1	Var		
300E	S16	Phase2 values of first learned Values of Step2	R	CTRF*0.1	Var		
300F	S16	Phase3 values of first learned Values of Step2	R	CTRF*0.1	Var		
3010	U16	header of first learned Values of Step3	R	-----	-----		
3011	S16	Phase1 values of first learned Values of Step3	R	CTRF*0.1	Var		
3012	S16	Phase2 values of first learned Values of Step3	R	CTRF*0.1	Var		
3013	S16	Phase3 values of first learned Values of Step3	R	CTRF*0.1	Var		
3014	U16	header of first learned Values of Step4	R	-----	-----		
3015	S16	Phase1 values of first learned Values of Step4	R	CTRF*0.1	Var		
3016	S16	Phase2 values of first learned Values of Step4	R	CTRF*0.1	Var		
3017	S16	Phase3 values of first learned Values of Step4	R	CTRF*0.1	Var		
3018	U16	header of first learned Values of Step5	R	-----	-----		
3019	S16	Phase1 values of first learned Values of Step5	R	CTRF*0.1	Var		
301A	S16	Phase2 values of first learned Values of Step5	R	CTRF*0.1	Var		
301B	S16	Phase3 values of first learned Values of Step5	R	CTRF*0.1	Var		
301C	U16	header of first learned Values of Step6	R	-----	-----		
301D	S16	Phase1 values of first learned Values of Step6	R	CTRF*0.1	Var		
301E	S16	Phase2 values of first learned Values of Step6	R	CTRF*0.1	Var		
301F	S16	Phase3 values of first learned Values of Step6	R	CTRF*0.1	Var		
3020	U16	header of first learned Values of Step7	R	-----	-----		
3021	S16	Phase1 values of first learned Values of Step7	R	CTRF*0.1	Var		
3022	S16	Phase2 values of first learned Values of Step7	R	CTRF*0.1	Var		
3023	S16	Phase3 values of first learned Values of Step7	R	CTRF*0.1	Var		
3024	U16	header of first learned Values of Step8	R	-----	-----		
3025	S16	Phase1 values of first learned Values of Step8	R	CTRF*0.1	Var		

3026	S16	Phase2 values of first learned Values of Step8	R	CTRF*0.1	Var		
3027	S16	Phase3 values of first learned Values of Step8	R	CTRF*0.1	Var		
3028	U16	header of first learned Values of Step9	R	-----	-----		
3029	S16	Phase1 values of first learned Values of Step9	R	CTRF*0.1	Var		
302A	S16	Phase2 values of first learned Values of Step9	R	CTRF*0.1	Var		
302B	S16	Phase3 values of first learned Values of Step9	R	CTRF*0.1	Var		
302C	U16	header of first learned Values of Step10	R	-----	-----		
302D	S16	Phase1 values of first learned Values of Step10	R	CTRF*0.1	Var		
302E	S16	Phase2 values of first learned Values of Step10	R	CTRF*0.1	Var		
302F	S16	Phase3 values of first learned Values of Step10	R	CTRF*0.1	Var		
3030	U16	header of first learned Values of Step11	R	-----	-----		
3031	S16	Phase1 values of first learned Values of Step11	R	CTRF*0.1	Var		
3032	S16	Phase2 values of first learned Values of Step11	R	CTRF*0.1	Var		
3033	S16	Phase3 values of first learned Values of Step11	R	CTRF*0.1	Var		
3034	U16	header of first learned Values of Step12	R	-----	-----		
3035	S16	Phase1 values of first learned Values of Step12	R	CTRF*0.1	Var		
3036	S16	Phase2 values of first learned Values of Step12	R	CTRF*0.1	Var		
3037	S16	Phase3 values of first learned Values of Step12	R	CTRF*0.1	Var		
3038	U16	header of first learned Values of Step13	R	-----	-----		
3039	S16	Phase1 values of first learned Values of Step13	R	CTRF*0.1	Var		
303A	S16	Phase2 values of first learned Values of Step13	R	CTRF*0.1	Var		
303B	S16	Phase3 values of first learned Values of Step13	R	CTRF*0.1	Var		
303C	U16	header of first learned Values of Step14	R	-----	-----		
303D	S16	Phase1 values of first learned Values of Step14	R	CTRF*0.1	Var		
303E	S16	Phase2 values of first learned Values of Step14	R	CTRF*0.1	Var		
303F	S16	Phase3 values of first learned Values of Step14	R	CTRF*0.1	Var		
3040	U16	header of first learned Values of Step15	R	-----	-----		
3041	S16	Phase1 values of first learned Values of Step15	R	CTRF*0.1	Var		
3042	S16	Phase2 values of first learned Values of Step15	R	CTRF*0.1	Var		
3043	S16	Phase3 values of first learned Values of Step15	R	CTRF*0.1	Var		
3044	U16	header of first learned Values of Step16	R	-----	-----		
3045	S16	Phase1 values of first learned Values of Step16	R	CTRF*0.1	Var		
3046	S16	Phase2 values of first learned Values of Step16	R	CTRF*0.1	Var		
3047	S16	Phase3 values of first learned Values of Step16	R	CTRF*0.1	Var		
3048	U16	header of first learned Values of Step17	R	-----	-----		
3049	S16	Phase1 values of first learned Values of Step17	R	CTRF*0.1	Var		
304A	S16	Phase2 values of first learned Values of Step17	R	CTRF*0.1	Var		
304B	S16	Phase3 values of first learned Values of Step17	R	CTRF*0.1	Var		
304C	U16	header of first learned Values of Step18	R	-----	-----		
304D	S16	Phase1 values of first learned Values of Step18	R	CTRF*0.1	Var		
304E	S16	Phase2 values of first learned Values of Step18	R	CTRF*0.1	Var		
304F	S16	Phase3 values of first learned Values of Step18	R	CTRF*0.1	Var		

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value

3102	U16	return to old value step order	R/W	-----	-----	used step number	0
3103	U16	update the new value step order	R/W	-----	-----	used step number	0
3104	U32	changed steps	R	-----	-----		
3105							
3106	U32	zero steps	R	-----	-----		
3107							
3108	U16	header of continious learned Values of Step1	R	-----	-----		
3109	S16	Phase1 values of continious learned Values of Step1	R	CTRF*0.1	Var		
310A	S16	Phase2 values of continious learned Values of Step1	R	CTRF*0.1	Var		
310B	S16	Phase3 values of continious learned Values of Step1	R	CTRF*0.1	Var		
310C	U16	header of continious learned Values of Step2	R	-----	-----		
310D	S16	Phase1 values of continious learned Values of Step2	R	CTRF*0.1	Var		
310E	S16	Phase2 values of continious learned Values of Step2	R	CTRF*0.1	Var		
310F	S16	Phase3 values of continious learned Values of Step2	R	CTRF*0.1	Var		
3110	U16	header of continious learned Values of Step3	R	-----	-----		
3111	S16	Phase1 values of continious learned Values of Step3	R	CTRF*0.1	Var		
3112	S16	Phase2 values of continious learned Values of Step3	R	CTRF*0.1	Var		
3113	S16	Phase3 values of continious learned Values of Step3	R	CTRF*0.1	Var		
3114	U16	header of continious learned Values of Step4	R	-----	-----		
3115	S16	Phase1 values of continious learned Values of Step4	R	CTRF*0.1	Var		
3116	S16	Phase2 values of continious learned Values of Step4	R	CTRF*0.1	Var		
3117	S16	Phase3 values of continious learned Values of Step4	R	CTRF*0.1	Var		
3118	U16	header of continious learned Values of Step5	R	-----	-----		
3119	S16	Phase1 values of continious learned Values of Step5	R	CTRF*0.1	Var		
311A	S16	Phase2 values of continious learned Values of Step5	R	CTRF*0.1	Var		
311B	S16	Phase3 values of continious learned Values of Step5	R	CTRF*0.1	Var		
311C	U16	header of continious learned Values of Step6	R	-----	-----		
311D	S16	Phase1 values of continious learned Values of Step6	R	CTRF*0.1	Var		
311E	S16	Phase2 values of continious learned Values of Step6	R	CTRF*0.1	Var		
311F	S16	Phase3 values of continious learned Values of Step6	R	CTRF*0.1	Var		
3120	U16	header of continious learned Values of Step7	R	-----	-----		
3121	S16	Phase1 values of continious learned Values of Step7	R	CTRF*0.1	Var		
3122	S16	Phase2 values of continious learned Values of Step7	R	CTRF*0.1	Var		
3123	S16	Phase3 values of continious learned Values of Step7	R	CTRF*0.1	Var		
3124	U16	header of continious learned Values of Step8	R	-----	-----		
3125	S16	Phase1 values of continious learned Values of Step8	R	CTRF*0.1	Var		
3126	S16	Phase2 values of continious learned Values of Step8	R	CTRF*0.1	Var		
3127	S16	Phase3 values of continious learned Values of Step8	R	CTRF*0.1	Var		
3128	U16	header of continious learned Values of Step9	R	-----	-----		
3129	S16	Phase1 values of continious learned Values of Step9	R	CTRF*0.1	Var		
312A	S16	Phase2 values of continious learned Values of Step9	R	CTRF*0.1	Var		
312B	S16	Phase3 values of continious learned Values of Step9	R	CTRF*0.1	Var		
312C	U16	header of continious learned Values of Step10	R	-----	-----		
312D	S16	Phase1 values of continious learned Values of Step10	R	CTRF*0.1	Var		
312E	S16	Phase2 values of continious learned Values of Step10	R	CTRF*0.1	Var		
312F	S16	Phase3 values of continious learned Values of Step10	R	CTRF*0.1	Var		
3130	U16	header of continious learned Values of Step11	R	-----	-----		
3131	S16	Phase1 values of continious learned Values of Step11	R	CTRF*0.1	Var		

3132	S16	Phase2 values of continious learned Values of Step11	R	CTRF*0.1	Var		
3133	S16	Phase3 values of continious learned Values of Step11	R	CTRF*0.1	Var		
3134	U16	header of continious learned Values of Step12	R	-----	-----		
3135	S16	Phase1 values of continious learned Values of Step12	R	CTRF*0.1	Var		
3136	S16	Phase2 values of continious learned Values of Step12	R	CTRF*0.1	Var		
3137	S16	Phase3 values of continious learned Values of Step12	R	CTRF*0.1	Var		
3138	U16	header of continious learned Values of Step13	R	-----	-----		
3139	S16	Phase1 values of continious learned Values of Step13	R	CTRF*0.1	Var		
313A	S16	Phase2 values of continious learned Values of Step13	R	CTRF*0.1	Var		
313B	S16	Phase3 values of continious learned Values of Step13	R	CTRF*0.1	Var		
313C	U16	header of continious learned Values of Step14	R	-----	-----		
313D	S16	Phase1 values of continious learned Values of Step14	R	CTRF*0.1	Var		
313E	S16	Phase2 values of continious learned Values of Step14	R	CTRF*0.1	Var		
313F	S16	Phase3 values of continious learned Values of Step14	R	CTRF*0.1	Var		
3140	U16	header of continious learned Values of Step15	R	-----	-----		
3141	S16	Phase1 values of continious learned Values of Step15	R	CTRF*0.1	Var		
3142	S16	Phase2 values of continious learned Values of Step15	R	CTRF*0.1	Var		
3143	S16	Phase3 values of continious learned Values of Step15	R	CTRF*0.1	Var		
3144	U16	header of continious learned Values of Step16	R	-----	-----		
3145	S16	Phase1 values of continious learned Values of Step16	R	CTRF*0.1	Var		
3146	S16	Phase2 values of continious learned Values of Step16	R	CTRF*0.1	Var		
3147	S16	Phase3 values of continious learned Values of Step16	R	CTRF*0.1	Var		
3148	U16	header of continious learned Values of Step17	R	-----	-----		
3149	S16	Phase1 values of continious learned Values of Step17	R	CTRF*0.1	Var		
314A	S16	Phase2 values of continious learned Values of Step17	R	CTRF*0.1	Var		
314B	S16	Phase3 values of continious learned Values of Step17	R	CTRF*0.1	Var		
314C	U16	header of continious learned Values of Step18	R	-----	-----		
314D	S16	Phase1 values of continious learned Values of Step18	R	CTRF*0.1	Var		
314E	S16	Phase2 values of continious learned Values of Step18	R	CTRF*0.1	Var		
314F	S16	Phase3 values of continious learned Values of Step18	R	CTRF*0.1	Var		

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
3200	Float (32bit)	Phase1 Value of Cap that will enter by order	R/W	CTRF	Var	350.0	-350.0
3201							
3202	Float (32bit)	Phase2 Value of Cap that will enter by order	R/W	CTRF	Var	350.0	-350.0
3203							
3204	Float (32bit)	Phase3 Value of Cap that will enter by order	R/W	CTRF	Var	350.0	-350.0
3205							
3206	U16	step Order that cap value will record on.	R/W	-----	-----	used step number	1
3207	U16	step value reset order 1-18 for clear single step 0 for clear all steps values	R/W	-----	-----	used step number	0
3208	U16	manuel mode register 1-manuel 0-otomatic	R/W	-----	-----	1	0

3209	U16	steps toggle order register 1-18 for step toggle (if step not avail, command not accept)	R/W	-----	-----	used step number	1
320A	U16	device user define step order (3-device max step number)	R/W	-----	-----	device max step number	3
320B	U16	header of first learned Values of Step1	R	-----	-----		
320C	Float (32bit)	Phase1 values of first learned Values of Step1	R	CTRF	Var		
320D							
320E	Float (32bit)	Phase2 values of first learned Values of Step1	R	CTRF	Var		
320F							
3210	Float (32bit)	Phase3 values of first learned Values of Step1	R	CTRF	Var		
3211							
3212	U16	header of first learned Values of Step2	R	-----	-----		
3213	Float (32bit)	Phase1 values of first learned Values of Step2	R	CTRF	Var		
3214							
3215	Float (32bit)	Phase2 values of first learned Values of Step2	R	CTRF	Var		
3216							
3217	Float (32bit)	Phase3 values of first learned Values of Step2	R	CTRF	Var		
3218							
3219	U16	header of first learned Values of step3	R	-----	-----		
321A	Float (32bit)	Phase1 values of first learned Values of step3	R	CTRF	Var		
321B							
321C	Float (32bit)	Phase2 values of first learned Values of step3	R	CTRF	Var		
321D							
321E	Float (32bit)	Phase3 values of first learned Values of step3	R	CTRF	Var		
321F							
3220	U16	header of first learned Values of Step4	R	-----	-----		
3221	Float (32bit)	Phase1 values of first learned Values of Step4	R	CTRF	Var		
3222							
3223	Float (32bit)	Phase2 values of first learned Values of Step4	R	CTRF	Var		
3224							
3225	Float (32bit)	Phase3 values of first learned Values of Step4	R	CTRF	Var		
3226							
3227	U16	header of first learned Values of Step5	R	-----	-----		
3228	Float (32bit)	Phase1 values of first learned Values of Step5	R	CTRF	Var		
3229							
322A	Float (32bit)	Phase2 values of first learned Values of Step5	R	CTRF	Var		
322B							
322C	Float (32bit)	Phase3 values of first learned Values of Step5	R	CTRF	Var		
322D							
322E	U16	header of first learned Values of Step6	R	-----	-----		
322F	Float (32bit)	Phase1 values of first learned Values of Step6	R	CTRF	Var		
3230							
3231	Float (32bit)	Phase2 values of first learned Values of Step6	R	CTRF	Var		
3232							
3233	Float (32bit)	Phase3 values of first learned Values of Step6	R	CTRF	Var		
3234							
3235	U16	header of first learned Values of Step7	R	-----	-----		
3236	Float (32bit)	Phase1 values of first learned Values of Step7	R	CTRF	Var		
3237							

3238	Float (32bit)	Phase2 values of first learned Values of Step7	R	CTRF	Var		
3239							
323A	Float (32bit)	Phase3 values of first learned Values of Step7	R	CTRF	Var		
323B							
323C	U16	header of first learned Values of Step8	R	-----	-----		
323D	Float (32bit)	Phase1 values of first learned Values of Step8	R	CTRF	Var		
323E							
323F	Float (32bit)	Phase2 values of first learned Values of Step8	R	CTRF	Var		
3240							
3241	Float (32bit)	Phase3 values of first learned Values of Step8	R	CTRF	Var		
3242							
3243	U16	header of first learned Values of Step9	R	-----	-----		
3244	Float (32bit)	Phase1 values of first learned Values of Step9	R	CTRF	Var		
3245							
3246	Float (32bit)	Phase2 values of first learned Values of Step9	R	CTRF	Var		
3247							
3248	Float (32bit)	Phase3 values of first learned Values of Step9	R	CTRF	Var		
3249							
324A	U16	header of first learned Values of Step10	R	-----	-----		
324B	Float (32bit)	Phase1 values of first learned Values of Step10	R	CTRF	Var		
324C							
324D	Float (32bit)	Phase2 values of first learned Values of Step10	R	CTRF	Var		
324E							
324F	Float (32bit)	Phase3 values of first learned Values of Step10	R	CTRF	Var		
3250							
3251	U16	header of first learned Values of Step11	R	-----	-----		
3252	Float (32bit)	Phase1 values of first learned Values of Step11	R	CTRF	Var		
3253							
3254	Float (32bit)	Phase2 values of first learned Values of Step11	R	CTRF	Var		
3255							
3256	Float (32bit)	Phase3 values of first learned Values of Step11	R	CTRF	Var		
3257							
3258	U16	header of first learned Values of Step12	R	-----	-----		
3259	Float (32bit)	Phase1 values of first learned Values of Step12	R	CTRF	Var		
325A							
325B	Float (32bit)	Phase2 values of first learned Values of Step12	R	CTRF	Var		
325C							
325D	Float (32bit)	Phase3 values of first learned Values of Step12	R	CTRF	Var		
325E							
325F	U16	header of first learned Values of Step13	R	-----	-----		
3260	Float (32bit)	Phase1 values of first learned Values of Step13	R	CTRF	Var		
3261							
3262	Float (32bit)	Phase2 values of first learned Values of Step13	R	CTRF	Var		
3263							
3264	Float (32bit)	Phase3 values of first learned Values of Step13	R	CTRF	Var		
3265							
3266	U16	header of first learned Values of Step14	R	-----	-----		
3267	Float (32bit)	Phase1 values of first learned Values of Step14	R	CTRF	Var		

3268							
3269	Float (32bit)	Phase2 values of first learned Values of Step14	R	CTRF	Var		
326A							
326B	Float (32bit)	Phase3 values of first learned Values of Step14	R	CTRF	Var		
326C							
326D	U16	header of first learned Values of Step15	R	-----	-----		
326E	Float (32bit)	Phase1 values of first learned Values of Step15	R	CTRF	Var		
326F							
3270	Float (32bit)	Phase2 values of first learned Values of Step15	R	CTRF	Var		
3271							
3272	Float (32bit)	Phase3 values of first learned Values of Step15	R	CTRF	Var		
3273							
3274	U16	header of first learned Values of Step16	R	-----	-----		
3275	Float (32bit)	Phase1 values of first learned Values of Step16	R	CTRF	Var		
3276							

3277	Float (32bit)	Phase2 values of first learned Values of Step16	R	CTRF	Var		
3278							
3279	Float (32bit)	Phase3 values of first learned Values of Step16	R	CTRF	Var		
327A							
327B	U16	header of first learned Values of Step17	R	-----	-----		
327C	Float (32bit)	Phase1 values of first learned Values of Step17	R	CTRF	Var		
327D							
327E	Float (32bit)	Phase2 values of first learned Values of Step17	R	CTRF	Var		
327F							
3280	Float (32bit)	Phase3 values of first learned Values of Step17	R	CTRF	Var		
3281							
3282	U16	header of first learned Values of Step18	R	-----	-----		
3283	Float (32bit)	Phase1 values of first learned Values of Step18	R	CTRF	Var		
3284							
3285	Float (32bit)	Phase2 values of first learned Values of Step18	R	CTRF	Var		
3286							
3287	Float (32bit)	Phase3 values of first learned Values of Step18	R	CTRF	Var		
3288							

							Max. Value	Min. Value
Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit			
3305	U16	return to old value step order	R/W	-----	-----	used step number	0	
3306	U16	update the new value step order	R/W	-----	-----	used step number	0	
3307	U32	changed steps	R	-----	-----			
3308								
3309	U32	zero steps	R	-----	-----			
330A								
330B	U16	header of continious learned Values of Step1	R	-----	-----			
330C	Float (32bit)	Phase1 values of continious learned Values of Step1	R	CTRF	Var			

330D							
330E	Float (33bit)	Phase2 values of continious learned Values of Step1	R	CTRF	Var		
330F							
3310	Float (32bit)	Phase3 values of continious learned Values of Step1	R	CTRF	Var		
3311							
3312	U16	header of continious learned Values of Step2	R	-----	-----		
3313	Float (32bit)	Phase1 values of continious learned Values of Step2	R	CTRF	Var		
3314							
3315	Float (32bit)	Phase2 values of continious learned Values of Step2	R	CTRF	Var		
3316							
3317	Float (32bit)	Phase3 values of continious learned Values of Step2	R	CTRF	Var		
3318							
3319	U16	header of continious learned Values of step3	R	-----	-----		
331A	Float (32bit)	Phase1 values of continious learned Values of step3	R	CTRF	Var		
331B							
331C	Float (32bit)	Phase2 values of continious learned Values of step3	R	CTRF	Var		
331D							
331E	Float (32bit)	Phase3 values of continious learned Values of step3	R	CTRF	Var		
331F							
3320	U16	header of continious learned Values of Step4	R	-----	-----		
3321	Float (32bit)	Phase1 values of continious learned Values of Step4	R	CTRF	Var		
3322							
3323	Float (32bit)	Phase2 values of continious learned Values of Step4	R	CTRF	Var		
3324							
3325	Float (32bit)	Phase3 values of continious learned Values of Step4	R	CTRF	Var		
3326							
3327	U16	header of continious learned Values of Step5	R	-----	-----		
3328	Float (32bit)	Phase1 values of continious learned Values of Step5	R	CTRF	Var		
3329							
332A	Float (32bit)	Phase2 values of continious learned Values of Step5	R	CTRF	Var		
332B							
332C	Float (32bit)	Phase3 values of continious learned Values of Step5	R	CTRF	Var		
332D							
332E	U16	header of continious learned Values of Step6	R	-----	-----		
332F	Float (32bit)	Phase1 values of continious learned Values of Step6	R	CTRF	Var		
3330							
3331	Float (32bit)	Phase2 values of continious learned Values of Step6	R	CTRF	Var		
3332							
3333	Float (32bit)	Phase3 values of continious learned Values of Step6	R	CTRF	Var		
3334							
3335	U16	header of continious learned Values of Step7	R	-----	-----		
3336	Float (32bit)	Phase1 values of continious learned Values of Step7	R	CTRF	Var		
3337							
3338	Float (32bit)	Phase2 values of continious learned Values of Step7	R	CTRF	Var		
3339							
333A	Float (32bit)	Phase3 values of continious learned Values of Step7	R	CTRF	Var		
333B							
333C	U16	header of continious learned Values of Step8	R	-----	-----		

333D	Float (32bit)	Phase1 values of continious learned Values of Step8	R	CTRF	Var		
333E							
333F	Float (32bit)	Phase2 values of continious learned Values of Step8	R	CTRF	Var		
3340							
3341	Float (32bit)	Phase3 values of continious learned Values of Step8	R	CTRF	Var		
3342							
3343	U16	header of continious learned Values of Step9	R	-----	-----		
3344	Float (32bit)	Phase1 values of continious learned Values of Step9	R	CTRF	Var		
3345							
3346	Float (32bit)	Phase2 values of continious learned Values of Step9	R	CTRF	Var		
3347							
3348	Float (32bit)	Phase3 values of continious learned Values of Step9	R	CTRF	Var		
3349							
334A	U16	header of continious learned Values of Step10	R	-----	-----		
334B	Float (32bit)	Phase1 values of continious learned Values of Step10	R	CTRF	Var		
334C							
334D	Float (32bit)	Phase2 values of continious learned Values of Step10	R	CTRF	Var		
334E							
334F	Float (32bit)	Phase3 values of continious learned Values of Step10	R	CTRF	Var		
3350							
3351	U16	header of continious learned Values of Step11	R	-----	-----		
3352	Float (32bit)	Phase1 values of continious learned Values of Step11	R	CTRF	Var		
3353							
3354	Float (32bit)	Phase2 values of continious learned Values of Step11	R	CTRF	Var		
3355							
3356	Float (32bit)	Phase3 values of continious learned Values of Step11	R	CTRF	Var		
3357							
3358	U16	header of continious learned Values of Step12	R	-----	-----		
3359	Float (32bit)	Phase1 values of continious learned Values of Step12	R	CTRF	Var		
335A							
335B	Float (32bit)	Phase2 values of continious learned Values of Step12	R	CTRF	Var		
335C							
335D	Float (32bit)	Phase3 values of continious learned Values of Step12	R	CTRF	Var		
335E							
335F	U16	header of continious learned Values of Step13	R	-----	-----		
3360	Float (32bit)	Phase1 values of continious learned Values of Step13	R	CTRF	Var		
3361							
3362	Float (32bit)	Phase2 values of continious learned Values of Step13	R	CTRF	Var		
3363							
3364	Float (32bit)	Phase3 values of continious learned Values of Step13	R	CTRF	Var		
3365							
3366	U16	header of continious learned Values of Step14	R	-----	-----		
3367	Float (32bit)	Phase1 values of continious learned Values of Step14	R	CTRF	Var		
3368							
3369	Float (32bit)	Phase2 values of continious learned Values of Step14	R	CTRF	Var		
336A							
336B	Float (32bit)	Phase3 values of continious learned Values of Step14	R	CTRF	Var		
336C							

336D	U16	header of continious learned Values of Step15	R	-----	-----		
336E	Float (32bit)	Phase1 values of continious learned Values of Step15	R	CTRF	Var		
336F							
3370	Float (32bit)	Phase2 values of continious learned Values of Step15	R	CTRF	Var		
3371							
3372	Float (32bit)	Phase3 values of continious learned Values of Step15	R	CTRF	Var		
3373							
3374	U16	header of continious learned Values of Step16	R	-----	-----		
3375	Float (32bit)	Phase1 values of continious learned Values of Step16	R	CTRF	Var		
3376							
3377	Float (32bit)	Phase2 values of continious learned Values of Step16	R	CTRF	Var		
3378							
3379	Float (32bit)	Phase3 values of continious learned Values of Step16	R	CTRF	Var		
337A							
337B	U16	header of continious learned Values of Step17	R	-----	-----		
337C	Float (32bit)	Phase1 values of continious learned Values of Step17	R	CTRF	Var		
337D							
337E	Float (32bit)	Phase2 values of continious learned Values of Step17	R	CTRF	Var		
337F							
3380	Float (32bit)	Phase3 values of continious learned Values of Step17	R	CTRF	Var		
3381							
3382	U16	header of continious learned Values of Step18	R	-----	-----		
3383	Float (32bit)	Phase1 values of continious learned Values of Step18	R	CTRF	Var		
3384							
3385	Float (32bit)	Phase2 values of continious learned Values of Step18	R	CTRF	Var		
3386							
3387	Float (32bit)	Phase3 values of continious learned Values of Step18	R	CTRF	Var		
3388							

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
3400	U16	step usage timer reset	R/W	-----	-----	used step number	0
3401	U16	step switch-on number reset	R/W	-----	-----	used step number	0
3402	U16	step1 usage timer second	R	-----	second		
3403	U16	step1 usage timer minute	R	-----	minute		
3404	U16	step1 usage timer hour	R	-----	hour		
3405	U32	step1 switch-on number	R	-----	-----		
3406							
3407	U16	step2 usage timer second	R	-----	second		
3408	U16	step2 usage timer minute	R	-----	minute		
3409	U16	step2 usage timer hour	R	-----	hour		
340A	U32	step2 switch-on number	R	-----	-----		
340B							
340C	U16	step3 usage timer second	R	-----	second		

340D	U16	step3 usage timer minute	R	-----	minute		
340E	U16	step3 usage timer hour	R	-----	hour		
340F	U32	step3 switch-on number	R	-----	-----		
3410							
3411	U16	step4 usage timer second	R	-----	second		
3412	U16	step4 usage timer minute	R	-----	minute		
3413	U16	step4 usage timer hour	R	-----	hour		
3414	U32	step4 switch-on number	R	-----	-----		
3415							
3416	U16	step5 usage timer second	R	-----	second		
3417	U16	step5 usage timer minute	R	-----	minute		
3418	U16	step5 usage timer hour	R	-----	hour		
3419	U32	step5 switch-on number	R	-----	-----		
341A							
341B	U16	step6 usage timer second	R	-----	second		
341C	U16	step6 usage timer minute	R	-----	minute		
341D	U16	step6 usage timer hour	R	-----	hour		
341E	U32	step6 switch-on number	R	-----	-----		
341F							
3420	U16	step7 usage timer second	R	-----	second		
3421	U16	step7 usage timer minute	R	-----	minute		
3422	U16	step7 usage timer hour	R	-----	hour		
3423	U32	step7 switch-on number	R	-----	-----		
3424							
3425	U16	step8 usage timer second	R	-----	second		
3426	U16	step8 usage timer minute	R	-----	minute		
3427	U16	step8 usage timer hour	R	-----	hour		
3428	U32	step8 switch-on number	R	-----	-----		
3429							
342A	U16	step9 usage timer second	R	-----	second		
342B	U16	step9 usage timer minute	R	-----	minute		
342C	U16	step9 usage timer hour	R	-----	hour		
342D	U32	step9 switch-on number	R	-----	-----		
342E							
342F	U16	step10 usage timer second	R	-----	second		
3430	U16	step10 usage timer minute	R	-----	minute		
3431	U16	step10 usage timer hour	R	-----	hour		
3432	U32	step10 switch-on number	R	-----	-----		
3433							
3434	U16	step11 usage timer second	R	-----	second		
3435	U16	step11 usage timer minute	R	-----	minute		
3436	U16	step11 usage timer hour	R	-----	hour		
3437	U32	step11 switch-on number	R	-----	-----		
3438							
3439	U16	step12 usage timer second	R	-----	second		
343A	U16	step12 usage timer minute	R	-----	minute		
343B	U16	step12 usage timer hour	R	-----	hour		
343C	U32	step12 switch-on number	R	-----	-----		

343D							
343E	U16	step13 usage timer second	R	-----	second		
343F	U16	step13 usage timer minute	R	-----	minute		
3440	U16	step13 usage timer hour	R	-----	hour		
3441	U32	step13 switch-on number	R	-----	-----		
3442							
3443	U16	step14 usage timer second	R	-----	second		
3444	U16	step14 usage timer minute	R	-----	minute		
3445	U16	step14 usage timer hour	R	-----	hour		
3446	U32	step14 switch-on number	R	-----	-----		
3447							
3448	U16	step15 usage timer second	R	-----	second		
3449	U16	step15 usage timer minute	R	-----	minute		
344A	U16	step15 usage timer hour	R	-----	hour		
344B	U32	step15 switch-on number	R	-----	-----		
344C							
344D	U16	step16 usage timer second	R	-----	second		
344E	U16	step16 usage timer minute	R	-----	minute		
344F	U16	step16 usage timer hour	R	-----	hour		
3450	U32	step16 switch-on number	R	-----	-----		
3451							
3452	U16	step17 usage timer second	R	-----	second		
3453	U16	step17 usage timer minute	R	-----	minute		
3454	U16	step17 usage timer hour	R	-----	hour		
3455	U32	step17 switch-on number	R	-----	-----		
3456							
3457	U16	step18 usage timer second	R	-----	second		
3458	U16	step18 usage timer minute	R	-----	minute		
3459	U16	step18 usage timer hour	R	-----	hour		
345A	U32	step18 switch-on number	R	-----	-----		
345B							

Parameters

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
4000	S16	tanΦ1	R/W			75	-75
4001	S16	tanΦ2	R/W			75	-75
4002	U16	tanΦ2 enable	R/W			1	0
4003	U16	maximum inductive bound value(3-50)	R/W			50	3
4004	U16	maximum capacitive bound value (3-50)	R/W			50	3
4005	U16	t on time	R/W		second	600	1
4006	U16	t off time	R/W		second	600	1
4007	U16	t min time	R/W		second	600	1
4008	U16	delta t on time	R/W		second	3600	0
4009	U16	delta t off time	R/W		second	3600	0
400A	U16	continuously learning values use on power correction process	R/W			1	0

400B	U16	current transformer learning continuously	R/W			1	0
400C	U16	phase alarm control register: overVoltage Bit0 underVoltage Bit1 overCurrent Bit2 overCompensation Bit3 UnderCompensationBit4 missingPhase Bit5 overTHDV Bit6 overHDV Bit7 overTHDC Bit8 overHDC Bit9	R/W			0x3FF	0
400D	U16	generalpurpose alarm control register missingConnector1 Bit0 missingConnector2 Bit1 missingConnector3 Bit2 overCompansation Bit3 underCompansation Bit4 systemError Bit5 overHeatBit Bit6 phaseVoltageConnectionError Bit7 Changed of step value Bit8 warning; Zero of step value Bit9 ProtectedModbusEnteranceError Bit10	R/W			0x7FF	0
400E	U16	over voltage boundary	R/W			270	230
400F	U16	under voltage boundary	R/W			210	170
4010	U16	over thdv boundary	R/W			100	1
4011	U16	Over hdv boundary	R/W			100	1
4012	U16	over thdc boundary	R/W			100	1
4013	U16	Over hdc boundary	R/W			100	1
4014	U16	heat boundary for alarm	R/W			85	5
4015	U16	heat boundary for fan	R/W			85	5
4016	U16	Step out device save bits //1. bit sıcaklık koruma , bit0 //2. bit aşırı düşük voltajdan koruma, bit1 //3. bit aşırı voltaj harmoniginden dolayı koruma bit2	R/W			7	0
4017	U16	fan enable	R/W			1	0
4018	U16	constant step out enable	R/W			1	0
4019	U16	fast mode enable	R/W			1	0
401A	U16	modbus device number 1-255	R/W			255	1

401B	U16	modbus working speed //0-2400 bit/sec //1-4800 bit/sec //2-9600 bit/sec //3-19200 bit/sec //4-28800 bit/sec //5-38400 bit/sec //6-57600 bit/sec //7-115200 bit/sec	R/W			7	0
401C	U16	modbus communication parity //0- no parity //1- odd parity //2- even parity	R/W			2	0
401D	U16	modbus communication stop bits //0 - 1 stop bit is transmitted at the end of frame //1 - 0.5 stop bit is transmitted at the end of frame //2 - 2 stop bit is transmitted at the end of frame //3 - 1.5 stop bit is transmitted at the end of frame	R/W			3	0
401E	U16	modbus write protect	R/W			1	0
401F	U16	modbus read protect	R/W			1	0
4020	U16	modbus write code	R/W			9999	0
4021	U16	modbus read code	R/W			9999	0

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
5000	S16	Base harmonic (50hz) voltage (100mV) phase1	R	0.1	Volt		
5001	S16	3 rd harmonic voltage (100mV) phase1	R	0.1	Volt		
5002	S16	5 th harmonic voltage (100mV) phase1	R	0.1	Volt		
5003	S16	7 th harmonic voltage (100mV) phase1	R	0.1	Volt		
5004	S16	9 th harmonic voltage (100mV) phase1	R	0.1	Volt		
5005	S16	11 th harmonic voltage (100mV) phase1	R	0.1	Volt		
5006	S16	13 th harmonic voltage (100mV) phase1	R	0.1	Volt		
5007	S16	15 th harmonic voltage (100mV) phase1	R	0.1	Volt		
5008	S16	17 th harmonic voltage (100mV) phase1	R	0.1	Volt		
5009	S16	19 th harmonic voltage (100mV) phase1	R	0.1	Volt		
500A	S16	21 th harmonic voltage (100mV) phase1	R	0.1	Volt		
500B	S16	23 th harmonic voltage (100mV) phase1	R	0.1	Volt		
500C	S16	25 th harmonic voltage (100mV) phase1	R	0.1	Volt		
500D	S16	27 th harmonic voltage (100mV) phase1	R	0.1	Volt		
500E	S16	29 th harmonic voltage (100mV) phase1	R	0.1	Volt		
500F	S16	31 th harmonic voltage (100mV) phase1	R	0.1	Volt		
5010	S16	Base harmonic (50hz) voltage (100mV) phase2	R	0.1	Volt		

5011	S16	3rd harmonic voltage (100mV) phase2	R	0.1	Volt		
5012	S16	5th harmonic voltage (100mV) phase2	R	0.1	Volt		
5013	S16	7th harmonic voltage (100mV) phase2	R	0.1	Volt		
5014	S16	9th harmonic voltage (100mV) phase2	R	0.1	Volt		
5015	S16	11th harmonic voltage (100mV) phase2	R	0.1	Volt		
5016	S16	13th harmonic voltage (100mV) phase2	R	0.1	Volt		
5017	S16	15th harmonic voltage (100mV) phase2	R	0.1	Volt		
5018	S16	17th harmonic voltage (100mV) phase2	R	0.1	Volt		
5019	S16	19th harmonic voltage (100mV) phase2	R	0.1	Volt		
501A	S16	21th harmonic voltage (100mV) phase2	R	0.1	Volt		
501B	S16	23th harmonic voltage (100mV) phase2	R	0.1	Volt		
501C	S16	25th harmonic voltage (100mV) phase2	R	0.1	Volt		
501D	S16	27h harmonic voltage (100mV) phase2	R	0.1	Volt		
501E	S16	29th harmonic voltage (100mV) phase2	R	0.1	Volt		
501F	S16	31th harmonic voltage (100mV) phase2	R	0.1	Volt		
5020	S16	Base harmonic (50hz) voltage (100mV) phase3	R	0.1	Volt		
5021	S16	3rd harmonic voltage (100mV) phase3	R	0.1	Volt		
5022	S16	5th harmonic voltage (100mV) phase3	R	0.1	Volt		
5023	S16	7th harmonic voltage (100mV) phase3	R	0.1	Volt		
5024	S16	9th harmonic voltage (100mV) phase3	R	0.1	Volt		
5025	S16	11th harmonic voltage (100mV) phase3	R	0.1	Volt		
5026	S16	13th harmonic voltage (100mV) phase3	R	0.1	Volt		
5027	S16	15th harmonic voltage (100mV) phase3	R	0.1	Volt		
5028	S16	17th harmonic voltage (100mV) phase3	R	0.1	Volt		
5029	S16	19th harmonic voltage (100mV) phase3	R	0.1	Volt		
502A	S16	21th harmonic voltage (100mV) phase3	R	0.1	Volt		
502B	S16	23th harmonic voltage (100mV) phase3	R	0.1	Volt		
502C	S16	25th harmonic voltage (100mV) phase3	R	0.1	Volt		
502D	S16	27h harmonic voltage (100mV) phase3	R	0.1	Volt		
502E	S16	29th harmonic voltage (100mV) phase3	R	0.1	Volt		
502F	S16	31th harmonic voltage (100mV) phase3	R	0.1	Volt		
5030	S16	Base harmonic (50hz) current (mA) phase1	R	CTRF*0.001	Amp		
5031	S16	3rd harmonic current (mA) phase1	R	CTRF*0.001	Amp		
5032	S16	5th harmonic current (mA) phase1	R	CTRF*0.001	Amp		
5033	S16	7th harmonic current (mA) phase1	R	CTRF*0.001	Amp		
5034	S16	9th harmonic current (mA) phase1	R	CTRF*0.001	Amp		
5035	S16	11th harmonic current (mA) phase1	R	CTRF*0.001	Amp		
5036	S16	13th harmonic current (mA) phase1	R	CTRF*0.001	Amp		
5037	S16	15th harmonic current (mA) phase1	R	CTRF*0.001	Amp		
5038	S16	17th harmonic current (mA) phase1	R	CTRF*0.001	Amp		
5039	S16	19th harmonic current (mA) phase1	R	CTRF*0.001	Amp		
503A	S16	21th harmonic current (mA) phase1	R	CTRF*0.001	Amp		
503B	S16	23th harmonic current (mA) phase1	R	CTRF*0.001	Amp		
503C	S16	25th harmonic current (mA) phase1	R	CTRF*0.001	Amp		
503D	S16	27h harmonic current (mA) phase1	R	CTRF*0.001	Amp		
503E	S16	29th harmonic current (mA) phase1	R	CTRF*0.001	Amp		
503F	S16	31th harmonic current (mA) phase1	R	CTRF*0.001	Amp		
5040	S16	Base harmonic (50hz) current (mA) phase2	R	CTRF*0.001	Amp		

5041	S16	3rd harmonic current (mA) phase2	R	CTRF*0.001	Amp		
5042	S16	5th harmonic current (mA) phase2	R	CTRF*0.001	Amp		
5043	S16	7th harmonic current (mA) phase2	R	CTRF*0.001	Amp		
5044	S16	9th harmonic current (mA) phase2	R	CTRF*0.001	Amp		
5045	S16	11th harmonic current (mA) phase2	R	CTRF*0.001	Amp		
5046	S16	13th harmonic current (mA) phase2	R	CTRF*0.001	Amp		
5047	S16	15th harmonic current (mA) phase2	R	CTRF*0.001	Amp		
5048	S16	17th harmonic current (mA) phase2	R	CTRF*0.001	Amp		
5049	S16	19th harmonic current (mA) phase2	R	CTRF*0.001	Amp		
504A	S16	21th harmonic current (mA) phase2	R	CTRF*0.001	Amp		
504B	S16	23th harmonic current (mA) phase2	R	CTRF*0.001	Amp		
504C	S16	25th harmonic current (mA) phase2	R	CTRF*0.001	Amp		
504D	S16	27th harmonic current (mA) phase2	R	CTRF*0.001	Amp		
504E	S16	29th harmonic current (mA) phase2	R	CTRF*0.001	Amp		
504F	S16	31th harmonic current (mA) phase2	R	CTRF*0.001	Amp		
5050	S16	Base harmonic (50hz) current (mA) phase3	R	CTRF*0.001	Amp		
5051	S16	3rd harmonic current (mA) phase3	R	CTRF*0.001	Amp		
5052	S16	5th harmonic current (mA) phase3	R	CTRF*0.001	Amp		
5053	S16	7th harmonic current (mA) phase3	R	CTRF*0.001	Amp		
5054	S16	9th harmonic current (mA) phase3	R	CTRF*0.001	Amp		
5055	S16	11th harmonic current (mA) phase3	R	CTRF*0.001	Amp		
5056	S16	13th harmonic current (mA) phase3	R	CTRF*0.001	Amp		
5057	S16	15th harmonic current (mA) phase3	R	CTRF*0.001	Amp		
5058	S16	17th harmonic current (mA) phase3	R	CTRF*0.001	Amp		
5059	S16	19th harmonic current (mA) phase3	R	CTRF*0.001	Amp		
505A	S16	21th harmonic current (mA) phase3	R	CTRF*0.001	Amp		
505B	S16	23th harmonic current (mA) phase3	R	CTRF*0.001	Amp		
505C	S16	25th harmonic current (mA) phase3	R	CTRF*0.001	Amp		
505D	S16	27th harmonic current (mA) phase3	R	CTRF*0.001	Amp		
505E	S16	29th harmonic current (mA) phase3	R	CTRF*0.001	Amp		
505F	S16	31th harmonic current (mA) phase3	R	CTRF*0.001	Amp		
5060	S16	Total Voltage Harmonic Distorsiyon (100mV) (THDV) phase1	R	0.1	Volt		
5061	S16	Total Voltage Harmonic Distorsiyon (100mV) (THDV) phase2	R	0.1	Volt		
5062	S16	Total Voltage Harmonic Distorsiyon (100mV) (THDV) phase3	R	0.1	Volt		
5063	S16	Total Current Harmonic Distorsiyon (mA) (THDC) phase1	R	CTRF*0.001	Amp		
5064	S16	Total Current Harmonic Distorsiyon (mA) (THDC) phase2	R	CTRF*0.001	Amp		
5065	S16	Total Current Harmonic Distorsiyon (mA) (THDC) phase3	R	CTRF*0.001	Amp		

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
5100	Float (32bit)	Base harmonic (50hz) voltage phase1	R	-----	Volt		
5101							
5102	Float (32bit)	3 rd harmonic voltage phase1	R	-----	Volt		
5103							
5104	Float (32bit)	5 rd harmonic voltage phase1	R	-----	Volt		

5105							
5106	Float (32bit)	7 rd harmonic voltage phase1	R	-----	Volt		
5107							
5108	Float (32bit)	9 rd harmonic voltage phase1	R	-----	Volt		
5109							
510A	Float (32bit)	11 rd harmonic voltage phase1	R	-----	Volt		
510B							
510C	Float (32bit)	13 rd harmonic voltage phase1	R	-----	Volt		
510D							
510E	Float (32bit)	15 rd harmonic voltage phase1	R	-----	Volt		
510F							
5110	Float (32bit)	17 rd harmonic voltage phase1	R	-----	Volt		
5111							
5112	Float (32bit)	19 rd harmonic voltage phase1	R	-----	Volt		
5113							
5114	Float (32bit)	21 rd harmonic voltage phase1	R	-----	Volt		
5115							
5116	Float (32bit)	23 rd harmonic voltage phase1	R	-----	Volt		
5117							
5118	Float (32bit)	25 rd harmonic voltage phase1	R	-----	Volt		
5119							
511A	Float (32bit)	27 rd harmonic voltage phase1	R	-----	Volt		
511B							
511C	Float (32bit)	29 rd harmonic voltage phase1	R	-----	Volt		
511D							
511E	Float (32bit)	31 rd harmonic voltage phase1	R	-----	Volt		
511F							
5120	Float (32bit)	Base harmonic (50hz) voltage phase2	R	-----	Volt		
5121							
5122	Float (32bit)	3rd harmonic voltage phase2	R	-----	Volt		
5123							
5124	Float (32bit)	5rd harmonic voltage phase2	R	-----	Volt		
5125							
5126	Float (32bit)	7rd harmonic voltage phase2	R	-----	Volt		
5127							

5128	Float (32bit)	9rd harmonic voltage phase2	R	-----	Volt		
5129							
512A	Float (32bit)	11rd harmonic voltage phase2	R	-----	Volt		
512B							
512C	Float (32bit)	13rd harmonic voltage phase2	R	-----	Volt		
512D							
512E	Float (32bit)	15rd harmonic voltage phase2	R	-----	Volt		
512F							
5130	Float (32bit)	17rd harmonic voltage phase2	R	-----	Volt		
5131							
5132	Float (32bit)	19rd harmonic voltage phase2	R	-----	Volt		
5133							

5134	Float (32bit)	21rd harmonic voltage phase2	R	-----	Volt		
5135							
5136	Float (32bit)	23rd harmonic voltage phase2	R	-----	Volt		
5137							
5138	Float (32bit)	25rd harmonic voltage phase2	R	-----	Volt		
5139							
513A	Float (32bit)	27rd harmonic voltage phase2	R	-----	Volt		
513B							
513C	Float (32bit)	29rd harmonic voltage phase2	R	-----	Volt		
513D							
513E	Float (32bit)	31rd harmonic voltage phase2	R	-----	Volt		
513F							
5140	Float (32bit)	Base harmonic (50hz) voltage phase3	R	-----	Volt		
5141							
5142	Float (32bit)	3rd harmonic voltage phase3	R	-----	Volt		
5143							
5144	Float (32bit)	5rd harmonic voltage phase3	R	-----	Volt		
5145							
5146	Float (32bit)	7rd harmonic voltage phase3	R	-----	Volt		
5147							
5148	Float (32bit)	9rd harmonic voltage phase3	R	-----	Volt		
5149							
514A	Float (32bit)	11rd harmonic voltage phase3	R	-----	Volt		
514B							
514C	Float (32bit)	13rd harmonic voltage phase3	R	-----	Volt		
514D							
514E	Float (32bit)	15rd harmonic voltage phase3	R	-----	Volt		
514F							
5150	Float (32bit)	17rd harmonic voltage phase3	R	-----	Volt		
5151							
5152	Float (32bit)	19rd harmonic voltage phase3	R	-----	Volt		
5153							
5154	Float (32bit)	21rd harmonic voltage phase3	R	-----	Volt		
5155							
5156	Float (32bit)	23rd harmonic voltage phase3	R	-----	Volt		
5157							
5158	Float (32bit)	25rd harmonic voltage phase3	R	-----	Volt		
5159							
515A	Float (32bit)	27rd harmonic voltage phase3	R	-----	Volt		
515B							
515C	Float (32bit)	29rd harmonic voltage phase3	R	-----	Volt		
515D							
515E	Float (32bit)	31rd harmonic voltage phase3	R	-----	Volt		
515F							
5160	Float (32bit)	Base harmonic (50hz) current phase1	R	CTRF	Amp		
5161							
5162	Float (32bit)	3rd harmonic current phase1	R	CTRF	Amp		
5163							

5164	Float (32bit)	5rd harmonic current phase1	R	CTRF	Amp		
5165							
5166	Float (32bit)	7rd harmonic current phase1	R	CTRF	Amp		
5167							
5168	Float (32bit)	9rd harmonic current phase1	R	CTRF	Amp		
5169							
516A	Float (32bit)	11rd harmonic current phase1	R	CTRF	Amp		
516B							
516C	Float (32bit)	13rd harmonic current phase1	R	CTRF	Amp		
516D							
516E	Float (32bit)	15rd harmonic current phase1	R	CTRF	Amp		
516F							
5170	Float (32bit)	17rd harmonic current phase1	R	CTRF	Amp		
5171							
5172	Float (32bit)	19rd harmonic current phase1	R	CTRF	Amp		
5173							
5174	Float (32bit)	21rd harmonic current phase1	R	CTRF	Amp		
5175							
5176	Float (32bit)	23rd harmonic current phase1	R	CTRF	Amp		
5177							
5178	Float (32bit)	25rd harmonic current phase1	R	CTRF	Amp		
5179							
517A	Float (32bit)	27rd harmonic current phase1	R	CTRF	Amp		
517B							
517C	Float (32bit)	29rd harmonic current phase1	R	CTRF	Amp		
517D							
517E	Float (32bit)	31rd harmonic current phase1	R	CTRF	Amp		
517F							
5180	Float (32bit)	Base harmonic (50hz) current phase2	R	CTRF	Amp		
5181							
5182	Float (32bit)	3rd harmonic current phase2	R	CTRF	Amp		
5183							
5184	Float (32bit)	5rd harmonic current phase2	R	CTRF	Amp		
5185							
5186	Float (32bit)	7rd harmonic current phase2	R	CTRF	Amp		
5187							
5188	Float (32bit)	9rd harmonic current phase2	R	CTRF	Amp		
5189							
518A	Float (32bit)	11rd harmonic current phase2	R	CTRF	Amp		
518B							
518C	Float (32bit)	13rd harmonic current phase2	R	CTRF	Amp		
518D							
518E	Float (32bit)	15rd harmonic current phase2	R	CTRF	Amp		
518F							
5190	Float (32bit)	17rd harmonic current phase2	R	CTRF	Amp		
5191							
5192	Float (32bit)	19rd harmonic current phase2	R	CTRF	Amp		
5193							

5194	Float (32bit)	21rd harmonic current phase2	R	CTRF	Amp		
5195							
5196	Float (32bit)	23rd harmonic current phase2	R	CTRF	Amp		
5197							
5198	Float (32bit)	25rd harmonic current phase2	R	CTRF	Amp		
5199							
519A	Float (32bit)	27rd harmonic current phase2	R	CTRF	Amp		
519B							
519C	Float (32bit)	29rd harmonic current phase2	R	CTRF	Amp		
519D							
519E	Float (32bit)	31rd harmonic current phase2	R	CTRF	Amp		
519F							
51A0	Float (32bit)	Base harmonic (50hz) current phase3	R	CTRF	Amp		
51A1							
51A2	Float (32bit)	3rd harmonic current phase3	R	CTRF	Amp		
51A3							
51A4	Float (32bit)	5rd harmonic current phase3	R	CTRF	Amp		
51A5							
51A6	Float (32bit)	7rd harmonic current phase3	R	CTRF	Amp		
51A7							
51A8	Float (32bit)	9rd harmonic current phase3	R	CTRF	Amp		
51A9							
51AA	Float (32bit)	11rd harmonic current phase3	R	CTRF	Amp		
51AB							
51AC	Float (32bit)	13rd harmonic current phase3	R	CTRF	Amp		
51AD							
51AE	Float (32bit)	15rd harmonic current phase3	R	CTRF	Amp		
51AF							
51B0	Float (32bit)	17rd harmonic current phase3	R	CTRF	Amp		
51B1							
51B2	Float (32bit)	19rd harmonic current phase3	R	CTRF	Amp		
51B3							
51B4	Float (32bit)	21rd harmonic current phase3	R	CTRF	Amp		
51B5							
51B6	Float (32bit)	23rd harmonic current phase3	R	CTRF	Amp		
51B7							
51B8	Float (32bit)	25rd harmonic current phase3	R	CTRF	Amp		
51B9							
51BA	Float (32bit)	27rd harmonic current phase3	R	CTRF	Amp		
51BB							
51BC	Float (32bit)	29rd harmonic current phase3	R	CTRF	Amp		
51BD							
51BE	Float (32bit)	31rd harmonic current phase3	R	CTRF	Amp		
51BF							
51C0	Float (32bit)	Total Voltage Harmonic Distorsiyon (THDV) phase1	R	-----	Volt		
51C1							
51C2	Float (32bit)	Total Voltage Harmonic Distorsiyon (THDV) phase2	R	-----	Volt		
51C3							

51C4	Float (32bit)	Total Voltage Harmonic Distorsiyon (THDV) phase3	R	-----	Volt		
51C5							
51C6	Float (32bit)	Total Current Harmonic Distorsiyon (A) (THDC) phase1	R	CTRF	Amp		
51C7							
51C8	Float (32bit)	Total Current Harmonic Distorsiyon (A) (THDC) phase2	R	CTRF	Amp		
51C9							
51CA	Float (32bit)	Total Current Harmonic Distorsiyon (A) (THDC) phase3	R	CTRF	Amp		
51CB							

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
5200	S16	(total harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
5201	S16	(3 rd harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
5202	S16	(5 th harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
5203	S16	(7 th harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
5204	S16	(9 th harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
5205	S16	(11 th harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
5206	S16	(13 th harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
5207	S16	(15 th harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
5208	S16	(17 th harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
5209	S16	(19 th harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
520A	S16	(21 th harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
520B	S16	(23 th harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
520C	S16	(25 th harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
520D	S16	(27 ^h harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
520E	S16	(29 th harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
520F	S16	(31 th harmonic voltage / base voltage)*1000 phase1	R	0.1	Harmonic% rate		
5210	S16	(total harmonic voltage / base voltage)*1000 phase2	R	0.1	Harmonic% rate		
5211	S16	(3rd harmonic voltage / base voltage)*1000 phase2	R	0.1	Harmonic% rate		
5212	S16	(5th harmonic voltage/ base voltage)*1000 phase2	R	0.1	Harmonic% rate		
5213	S16	(7th harmonic voltage / base voltage)*1000 phase2	R	0.1	Harmonic% rate		
5214	S16	(9th harmonic voltage / base voltage)*1000 phase2	R	0.1	Harmonic% rate		
5215	S16	(11th harmonic voltage / base voltage)*1000 phase2	R	0.1	Harmonic% rate		
5216	S16	(13th harmonic voltage / base voltage)*1000 phase2	R	0.1	Harmonic% rate		
5217	S16	(15th harmonic voltage / base voltage)*1000 phase2	R	0.1	Harmonic% rate		
5218	S16	(17th harmonic voltage / base voltage)*1000 phase2	R	0.1	Harmonic% rate		
5219	S16	(19th harmonic voltage / base voltage)*1000 phase2	R	0.1	Harmonic% rate		
521A	S16	(21th harmonic voltage / base voltage)*1000 phase2	R	0.1	Harmonic% rate		
521B	S16	(23th harmonic voltage / base voltage)*1000 phase2	R	0.1	Harmonic% rate		
521C	S16	(25th harmonic voltage / base voltage)*1000 phase2	R	0.1	Harmonic% rate		
521D	S16	(27h harmonic voltage / base voltage)*1000 phase2	R	0.1	Harmonic% rate		
521E	S16	(29th harmonic voltage / base voltage)*1000 phase2	R	0.1	Harmonic% rate		
521F	S16	(31th harmonic voltage / base voltage)*1000 phase2	R	0.1	Harmonic% rate		
5220	S16	(total harmonic voltage / base voltage)*1000 phase3	R	0.1	Harmonic% rate		

5251	S16	(3rd harmonic current / base current)*1000 phase3	R	0.1	Harmonic% rate		
5252	S16	(5th harmonic current/ base current)*1000 phase3	R	0.1	Harmonic% rate		
5253	S16	(7th harmonic current / base current)*1000 phase3	R	0.1	Harmonic% rate		
5254	S16	(9th harmonic current / base current)*1000 phase3	R	0.1	Harmonic% rate		
5255	S16	(11th harmonic current / base current)*1000 phase3	R	0.1	Harmonic% rate		
5256	S16	(13th harmonic current / base current)*1000 phase3	R	0.1	Harmonic% rate		
5257	S16	(15th harmonic current / base current)*1000 phase3	R	0.1	Harmonic% rate		
5258	S16	(17th harmonic current / base current)*1000 phase3	R	0.1	Harmonic% rate		
5259	S16	(19th harmonic current / base current)*1000 phase3	R	0.1	Harmonic% rate		
525A	S16	(21th harmonic current / base current)*1000 phase3	R	0.1	Harmonic% rate		
525B	S16	(23th harmonic current / base current)*1000 phase3	R	0.1	Harmonic% rate		
525C	S16	(25th harmonic current / base current)*1000 phase3	R	0.1	Harmonic% rate		
525D	S16	(27h harmonic current / base current)*1000 phase3	R	0.1	Harmonic% rate		
525E	S16	(29th harmonic current / base current)*1000 phase3	R	0.1	Harmonic% rate		
525F	S16	(31th harmonic current / base current)*1000 phase3	R	0.1	Harmonic% rate		

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
9000	S16	Phase1 voltage sinus signal Values 1	R	0.1	Volt		
9001	S16	Phase1 voltage sinus signal Values 2	R	0.1	Volt		
9002	S16	Phase1 voltage sinus signal Values 3	R	0.1	Volt		
9003	S16	Phase1 voltage sinus signal Values 4	R	0.1	Volt		
9004	S16	Phase1 voltage sinus signal Values 5	R	0.1	Volt		
9005	S16	Phase1 voltage sinus signal Values 6	R	0.1	Volt		
9006	S16	Phase1 voltage sinus signal Values 7	R	0.1	Volt		
9007	S16	Phase1 voltage sinus signal Values 8	R	0.1	Volt		
9008	S16	Phase1 voltage sinus signal Values 9	R	0.1	Volt		
9009	S16	Phase1 voltage sinus signal Values 10	R	0.1	Volt		
900A	S16	Phase1 voltage sinus signal Values 11	R	0.1	Volt		
900B	S16	Phase1 voltage sinus signal Values 12	R	0.1	Volt		
900C	S16	Phase1 voltage sinus signal Values 13	R	0.1	Volt		
900D	S16	Phase1 voltage sinus signal Values 14	R	0.1	Volt		
900E	S16	Phase1 voltage sinus signal Values 15	R	0.1	Volt		
900F	S16	Phase1 voltage sinus signal Values 16	R	0.1	Volt		
9010	S16	Phase1 voltage sinus signal Values 17	R	0.1	Volt		
9011	S16	Phase1 voltage sinus signal Values 18	R	0.1	Volt		
9012	S16	Phase1 voltage sinus signal Values 19	R	0.1	Volt		
9013	S16	Phase1 voltage sinus signal Values 20	R	0.1	Volt		
9014	S16	Phase1 voltage sinus signal Values 21	R	0.1	Volt		
9015	S16	Phase1 voltage sinus signal Values 22	R	0.1	Volt		

9016	S16	Phase1 voltage sinus signal Values 23	R	0.1	Volt		
9017	S16	Phase1 voltage sinus signal Values 24	R	0.1	Volt		
9018	S16	Phase1 voltage sinus signal Values 25	R	0.1	Volt		
9019	S16	Phase1 voltage sinus signal Values 26	R	0.1	Volt		
901A	S16	Phase1 voltage sinus signal Values 27	R	0.1	Volt		
901B	S16	Phase1 voltage sinus signal Values 28	R	0.1	Volt		
901C	S16	Phase1 voltage sinus signal Values 29	R	0.1	Volt		
901D	S16	Phase1 voltage sinus signal Values 30	R	0.1	Volt		
901E	S16	Phase1 voltage sinus signal Values 31	R	0.1	Volt		
901F	S16	Phase1 voltage sinus signal Values 32	R	0.1	Volt		
9020	S16	Phase1 voltage sinus signal Values 33	R	0.1	Volt		
9021	S16	Phase1 voltage sinus signal Values 34	R	0.1	Volt		
9022	S16	Phase1 voltage sinus signal Values 35	R	0.1	Volt		
9023	S16	Phase1 voltage sinus signal Values 36	R	0.1	Volt		
9024	S16	Phase1 voltage sinus signal Values 37	R	0.1	Volt		
9025	S16	Phase1 voltage sinus signal Values 38	R	0.1	Volt		
9026	S16	Phase1 voltage sinus signal Values 39	R	0.1	Volt		
9027	S16	Phase1 voltage sinus signal Values 40	R	0.1	Volt		
9028	S16	Phase1 voltage sinus signal Values 41	R	0.1	Volt		
9029	S16	Phase1 voltage sinus signal Values 42	R	0.1	Volt		
902A	S16	Phase1 voltage sinus signal Values 43	R	0.1	Volt		
902B	S16	Phase1 voltage sinus signal Values 44	R	0.1	Volt		
902C	S16	Phase1 voltage sinus signal Values 45	R	0.1	Volt		
902D	S16	Phase1 voltage sinus signal Values 46	R	0.1	Volt		
902E	S16	Phase1 voltage sinus signal Values 47	R	0.1	Volt		
902F	S16	Phase1 voltage sinus signal Values 48	R	0.1	Volt		
9030	S16	Phase1 voltage sinus signal Values 49	R	0.1	Volt		
9031	S16	Phase1 voltage sinus signal Values 50	R	0.1	Volt		
9032	S16	Phase1 voltage sinus signal Values 51	R	0.1	Volt		
9033	S16	Phase1 voltage sinus signal Values 52	R	0.1	Volt		
9034	S16	Phase1 voltage sinus signal Values 53	R	0.1	Volt		
9035	S16	Phase1 voltage sinus signal Values 54	R	0.1	Volt		
9036	S16	Phase1 voltage sinus signal Values 55	R	0.1	Volt		
9037	S16	Phase1 voltage sinus signal Values 56	R	0.1	Volt		
9038	S16	Phase1 voltage sinus signal Values 57	R	0.1	Volt		
9039	S16	Phase1 voltage sinus signal Values 58	R	0.1	Volt		
903A	S16	Phase1 voltage sinus signal Values 59	R	0.1	Volt		
903B	S16	Phase1 voltage sinus signal Values 60	R	0.1	Volt		
903C	S16	Phase2 voltage sinus signal Values 1	R	0.1	Volt		
903D	S16	Phase2 voltage sinus signal Values 2	R	0.1	Volt		
903E	S16	Phase2 voltage sinus signal Values 3	R	0.1	Volt		
903F	S16	Phase2 voltage sinus signal Values 4	R	0.1	Volt		
9040	S16	Phase2 voltage sinus signal Values 5	R	0.1	Volt		
9041	S16	Phase2 voltage sinus signal Values 6	R	0.1	Volt		
9042	S16	Phase2 voltage sinus signal Values 7	R	0.1	Volt		
9043	S16	Phase2 voltage sinus signal Values 8	R	0.1	Volt		
9044	S16	Phase2 voltage sinus signal Values 9	R	0.1	Volt		
9045	S16	Phase2 voltage sinus signal Values 10	R	0.1	Volt		

9076	S16	Phase2 voltage sinus signal Values 59	R	0.1	Volt		
9077	S16	Phase2 voltage sinus signal Values 60	R	0.1	Volt		
9078	S16	Phase3 voltage sinus signal Values 1	R	0.1	Volt		
9079	S16	Phase3 voltage sinus signal Values 2	R	0.1	Volt		
907A	S16	Phase3 voltage sinus signal Values 3	R	0.1	Volt		
907B	S16	Phase3 voltage sinus signal Values 4	R	0.1	Volt		
907C	S16	Phase3 voltage sinus signal Values 5	R	0.1	Volt		
907D	S16	Phase3 voltage sinus signal Values 6	R	0.1	Volt		
907E	S16	Phase3 voltage sinus signal Values 7	R	0.1	Volt		
907F	S16	Phase3 voltage sinus signal Values 8	R	0.1	Volt		
9080	S16	Phase3 voltage sinus signal Values 9	R	0.1	Volt		
9081	S16	Phase3 voltage sinus signal Values 10	R	0.1	Volt		
9082	S16	Phase3 voltage sinus signal Values 11	R	0.1	Volt		
9083	S16	Phase3 voltage sinus signal Values 12	R	0.1	Volt		
9084	S16	Phase3 voltage sinus signal Values 13	R	0.1	Volt		
9085	S16	Phase3 voltage sinus signal Values 14	R	0.1	Volt		
9086	S16	Phase3 voltage sinus signal Values 15	R	0.1	Volt		
9087	S16	Phase3 voltage sinus signal Values 16	R	0.1	Volt		
9088	S16	Phase3 voltage sinus signal Values 17	R	0.1	Volt		
9089	S16	Phase3 voltage sinus signal Values 18	R	0.1	Volt		
908A	S16	Phase3 voltage sinus signal Values 19	R	0.1	Volt		
908B	S16	Phase3 voltage sinus signal Values 20	R	0.1	Volt		
908C	S16	Phase3 voltage sinus signal Values 21	R	0.1	Volt		
908D	S16	Phase3 voltage sinus signal Values 22	R	0.1	Volt		
908E	S16	Phase3 voltage sinus signal Values 23	R	0.1	Volt		
908F	S16	Phase3 voltage sinus signal Values 24	R	0.1	Volt		
9090	S16	Phase3 voltage sinus signal Values 25	R	0.1	Volt		
9091	S16	Phase3 voltage sinus signal Values 26	R	0.1	Volt		
9092	S16	Phase3 voltage sinus signal Values 27	R	0.1	Volt		
9093	S16	Phase3 voltage sinus signal Values 28	R	0.1	Volt		
9094	S16	Phase3 voltage sinus signal Values 29	R	0.1	Volt		
9095	S16	Phase3 voltage sinus signal Values 30	R	0.1	Volt		
9096	S16	Phase3 voltage sinus signal Values 31	R	0.1	Volt		
9097	S16	Phase3 voltage sinus signal Values 32	R	0.1	Volt		
9098	S16	Phase3 voltage sinus signal Values 33	R	0.1	Volt		
9099	S16	Phase3 voltage sinus signal Values 34	R	0.1	Volt		
909A	S16	Phase3 voltage sinus signal Values 35	R	0.1	Volt		
909B	S16	Phase3 voltage sinus signal Values 36	R	0.1	Volt		
909C	S16	Phase3 voltage sinus signal Values 37	R	0.1	Volt		
909D	S16	Phase3 voltage sinus signal Values 38	R	0.1	Volt		
909E	S16	Phase3 voltage sinus signal Values 39	R	0.1	Volt		
909F	S16	Phase3 voltage sinus signal Values 40	R	0.1	Volt		
90A0	S16	Phase3 voltage sinus signal Values 41	R	0.1	Volt		
90A1	S16	Phase3 voltage sinus signal Values 42	R	0.1	Volt		
90A2	S16	Phase3 voltage sinus signal Values 43	R	0.1	Volt		
90A3	S16	Phase3 voltage sinus signal Values 44	R	0.1	Volt		
90A4	S16	Phase3 voltage sinus signal Values 45	R	0.1	Volt		
90A5	S16	Phase3 voltage sinus signal Values 46	R	0.1	Volt		

90A6	S16	Phase3 voltage sinus signal Values 47	R	0.1	Volt		
90A7	S16	Phase3 voltage sinus signal Values 48	R	0.1	Volt		
90A8	S16	Phase3 voltage sinus signal Values 49	R	0.1	Volt		
90A9	S16	Phase3 voltage sinus signal Values 50	R	0.1	Volt		
90AA	S16	Phase3 voltage sinus signal Values 51	R	0.1	Volt		
90AB	S16	Phase3 voltage sinus signal Values 52	R	0.1	Volt		
90AC	S16	Phase3 voltage sinus signal Values 53	R	0.1	Volt		
90AD	S16	Phase3 voltage sinus signal Values 54	R	0.1	Volt		
90AE	S16	Phase3 voltage sinus signal Values 55	R	0.1	Volt		
90AF	S16	Phase3 voltage sinus signal Values 56	R	0.1	Volt		
90B0	S16	Phase3 voltage sinus signal Values 57	R	0.1	Volt		
90B1	S16	Phase3 voltage sinus signal Values 58	R	0.1	Volt		
90B2	S16	Phase3 voltage sinus signal Values 59	R	0.1	Volt		
90B3	S16	Phase3 voltage sinus signal Values 60	R	0.1	Volt		

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
9100	S16	Phase1 current sinus signal Values 1	R	CTRF*0.001	Amp		
9101	S16	Phase1 current sinus signal Values 2	R	CTRF*0.001	Amp		
9102	S16	Phase1 current sinus signal Values 3	R	CTRF*0.001	Amp		
9103	S16	Phase1 current sinus signal Values 4	R	CTRF*0.001	Amp		
9104	S16	Phase1 current sinus signal Values 5	R	CTRF*0.001	Amp		
9105	S16	Phase1 current sinus signal Values 6	R	CTRF*0.001	Amp		
9106	S16	Phase1 current sinus signal Values 7	R	CTRF*0.001	Amp		
9107	S16	Phase1 current sinus signal Values 8	R	CTRF*0.001	Amp		
9108	S16	Phase1 current sinus signal Values 9	R	CTRF*0.001	Amp		
9109	S16	Phase1 current sinus signal Values 10	R	CTRF*0.001	Amp		
910A	S16	Phase1 current sinus signal Values 11	R	CTRF*0.001	Amp		
910B	S16	Phase1 current sinus signal Values 12	R	CTRF*0.001	Amp		
910C	S16	Phase1 current sinus signal Values 13	R	CTRF*0.001	Amp		
910D	S16	Phase1 current sinus signal Values 14	R	CTRF*0.001	Amp		
910E	S16	Phase1 current sinus signal Values 15	R	CTRF*0.001	Amp		
910F	S16	Phase1 current sinus signal Values 16	R	CTRF*0.001	Amp		
9110	S16	Phase1 current sinus signal Values 17	R	CTRF*0.001	Amp		
9111	S16	Phase1 current sinus signal Values 18	R	CTRF*0.001	Amp		
9112	S16	Phase1 current sinus signal Values 19	R	CTRF*0.001	Amp		
9113	S16	Phase1 current sinus signal Values 20	R	CTRF*0.001	Amp		
9114	S16	Phase1 current sinus signal Values 21	R	CTRF*0.001	Amp		
9115	S16	Phase1 current sinus signal Values 22	R	CTRF*0.001	Amp		
9116	S16	Phase1 current sinus signal Values 23	R	CTRF*0.001	Amp		
9117	S16	Phase1 current sinus signal Values 24	R	CTRF*0.001	Amp		
9118	S16	Phase1 current sinus signal Values 25	R	CTRF*0.001	Amp		
9119	S16	Phase1 current sinus signal Values 26	R	CTRF*0.001	Amp		
911A	S16	Phase1 current sinus signal Values 27	R	CTRF*0.001	Amp		
911B	S16	Phase1 current sinus signal Values 28	R	CTRF*0.001	Amp		

91AC	S16	Phase3 current sinus signal Values 53	R	CTRF*0.001	Amp		
91AD	S16	Phase3 current sinus signal Values 54	R	CTRF*0.001	Amp		
91AE	S16	Phase3 current sinus signal Values 55	R	CTRF*0.001	Amp		
91AF	S16	Phase3 current sinus signal Values 56	R	CTRF*0.001	Amp		
91B0	S16	Phase3 current sinus signal Values 57	R	CTRF*0.001	Amp		
91B1	S16	Phase3 current sinus signal Values 58	R	CTRF*0.001	Amp		
91B2	S16	Phase3 current sinus signal Values 59	R	CTRF*0.001	Amp		
91B3	S16	Phase3 current sinus signal Values 60	R	CTRF*0.001	Amp		

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
9FFF	U16	Sinus Sinyal Sample Control Register 0:no process 1:Process start 2:taking signal sample and calculating 3:signal values are ready.	R/W	-----	-----	1	1

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
FF00	U16	phase1 over voltage alarm counter	R	-----	quantity		
FF01	U16	phase1 under voltage alarm counter	R	-----	quantity		
FF02	U16	phase1 over current alarm counter	R	-----	quantity		
FF03	U16	phase1 over compensansation alarm counter	R	-----	quantity		
FF04	U16	phase1 under compensansation alarm counter	R	-----	quantity		
FF05	U16	phase1 missing phase alarm counter	R	-----	quantity		
FF06	U16	phase1 over thdv counter	R	-----	quantity		
FF07	U16	phase1 over hdv counter	R	-----	quantity		
FF08	U16	phase1 over thdc counter	R	-----	quantity		
FF09	U16	phase1 over hdc counter	R	-----	quantity		
FF0A	U16	phase2 over voltage alarm counter	R	-----	quantity		
FF0B	U16	phase2 under voltage alarm counter	R	-----	quantity		
FF0C	U16	phase2 over current alarm counter	R	-----	quantity		
FF0D	U16	phase2 over compensansation alarm counter	R	-----	quantity		
FF0E	U16	phase2 under compensansation alarm counter	R	-----	quantity		
FF0F	U16	phase2 missing phase alarm counter	R	-----	quantity		
FF10	U16	phase2 over thdv counter	R	-----	quantity		
FF11	U16	phase2 over hdv counter	R	-----	quantity		
FF12	U16	phase2 over thdc counter	R	-----	quantity		
FF13	U16	phase2 over hdc counter	R	-----	quantity		

FF14	U16	phase3 over voltage alarm counter	R	-----	quantity		
FF15	U16	phase3 under voltage alarm counter	R	-----	quantity		
FF16	U16	phase3 over current alarm counter	R	-----	quantity		
FF17	U16	phase3 over compansation alarm counter	R	-----	quantity		
FF18	U16	phase3 under compansation alarm counter	R	-----	quantity		
FF19	U16	phase3 missing phase alarm counter	R	-----	quantity		
FF1A	U16	phase3 over thdv counter	R	-----	quantity		
FF1B	U16	phase3 over hdv counter	R	-----	quantity		
FF1C	U16	phase3 over thdc counter	R	-----	quantity		
FF1D	U16	phase3 over hdc counter	R	-----	quantity		
FF1E	U16	General purpose over compensation alarm counter	R	-----	quantity		
FF1F	U16	General purpose under compensation alarm counter	R	-----	quantity		
FF20	U16	Over Heat Occured Counter.	R	-----	quantity		
FF21	U16	alarm counter reset command register	W	-----	-----	0x55AA	0x55AA

Modbus Address (HEX)	modbus data type	Data Name	Read Write	Multiplier	Unit	Max. Value	Min. Value
FFFC	U16	RESET DEVICE ENERGY	W	-----	-----	0x55AA	0x55AA
FFFD	U16	RESET INDEXED ENERGY!	W	-----	-----	0x55AA	0x55AA
FFFE	U16	RESET DEFAULT! (RETURN TO FACTORY DEFAULT)	W	-----	-----	0x55AA	0x55AA
FFFF	U16	MODBUS RESET COMMAND!	W	-----	-----	0x55AA	0x55AA