

MODBUS TABLE ORGANIZATION

Starting Address of the Group Registers (Dec)	Starting Address of the Group Registers (Hex)	System Version (Release)	System Version (Build)	Group Name (Text)	Group Code (Hex)	Group Complexity (Hex)	Group Version (Hex)
768	300			Device identifier			
4096	1000			Measures			
4608	1200			Settings			
5376	1500			Max. & Min.			
5424	1530			Average Measured values - Scaled			
5504	1580			Crest Factor			
5888	1700			Max. & Min.			
8192	2000			Standard Setup parameters (read & write 16 byte at once)			
8704	2200			Output option Setup parameters (read & write 24 byte at once)			
28672	7000			Harmonics			

MODBUS PROTOCOL DETAILS

Function Code (Dec)	Exception Codes (Dec)	Data Encoding
3	1, 2, 3	"Big Endian" (most significant byte first)
16	1, 2, 3	

MODBUS OVER SERIAL DETAILS

Physical Layer	Trasmission Modes	Device Addressing	Baud Rates (bit/s)	Data Bits	Data bits trasmission sequence	Parity	Stop Bits
standard EIA/TIA 485 (RS-485) two-wire configuration	RTU	1÷247	programmable	8	Least significant bit first	programmable	1

MASTER/SLAVE COMMUNICATION TIMING

Timer Descrtiption	Timer Value (msec)
Inter-character time-out	Max. 20
Response delay (from master request)	20÷300
Delay Time (between two master trasmissions)	< 20

REFER ALSO TO: www.modbus.org - MODBUS over serial line specification and implementation guide V1.02
- MODBUS APPLICATION PROTOCOL SPECIFICATION V1.1b

NOTE: File and printed copies of this document are not subject to document change control.



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [bit]	Description	Note	Read Function Codes (Dec)	Data Storing (2)
				(no DISCRETE INPUTS availables)			



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [bit]	Description	Note	Read Function Codes (Dec)	Write Function Codes (Dec)	Data Storing (2)
				(no COILS availables)				



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
769	768	300	1		Device identifier							
769	768	300	1		Device identifier	unsigned integer	1	-		The device returns 0x1104	3	
4097	4096	1000	124		Measures							
4097	4096	1000	2		Phase 1 : phase voltage	unsigned integer	1	mV			3	
4099	4098	1002	2		Phase 2 : phase voltage	unsigned integer	1	mV			3	
4101	4100	1004	2		Phase 3 : phase voltage	unsigned integer	1	mV			3	
4103	4102	1006	2		Phase 1 : current	unsigned integer	1	mA			3	
4105	4104	1008	2		Phase 2 : current	unsigned integer	1	mA			3	
4107	4106	100A	2		Phase 3 : current	unsigned integer	1	mA			3	
4109	4108	100C	2		Neutral current	unsigned integer	1	mA			3	
4111	4110	100E	2		Chained voltage : L1-L2	unsigned integer	1	mV			3	
4113	4112	1010	2		Chained voltage : L2-L3	unsigned integer	1	mV			3	
4115	4114	1012	2		Chained voltage : L3-L1	unsigned integer	1	mV			3	
4117	4116	1014	2		3-phase : active power	unsigned integer	1, 0.01	W		See Note 1	3	
4119	4118	1016	2		3-phase : reactive power	unsigned integer	1, 0.01	var		See Note 1	3	
4121	4120	1018	2		3-phase : apparent power	unsigned integer	1, 0.01	VA		See Note 1	3	
4123	4122	101A	1		3-phase : sign of active power	unsigned integer	1	-	0, 1	0=positive, 1=negative	3	
4124	4123	101B	1		3-phase : sign of reactive power	unsigned integer	1	-	0, 1	0=positive, 1=negative	3	
4125	4124	101C	2		3-phase : positive active energy	unsigned integer	1, 10, 100, 1.000, 10.000, 100.000	Wh		See Note 2	3	
4127	4126	101E	2		3-phase : positive reactive energy	unsigned integer	1, 10, 100, 1.000, 10.000, 100.000	varh		See Note 2	3	
4129	4128	1020	2		3-phase : negative active energy	unsigned integer	1, 10, 100, 1.000, 10.000, 100.000	Wh		See Note 2	3	
4131	4130	1022	2		3-phase : negative reactive energy	unsigned integer	1, 10, 100, 1.000, 10.000, 100.000	varh		See Note 2	3	
4133	4132	1024	1		3-phase : power factor	signed integer	0.01	-			3	
4134	4133	1025	1		3-phase : sector of power factor (cap or ind)	unsigned integer	1	-	0, 1, 2	0="PF=1", 1="ind" (L), 2="cap" (C)	3	
4135	4134	1026	1		Frequency	unsigned integer	0.1	Hz			3	
4136	4135	1027	2		3-phase : average power	unsigned integer	1, 0.01	W		See Note 1	3	
4138	4137	1029	2		3-phase : peak maximum demand	unsigned integer	1, 0.01	W		See Note 1	3	
4140	4139	102B	1		Time counter for average power	unsigned integer	1	min			3	
4141	4140	102C	2		Phase 1 : active power	unsigned integer	1, 0.01	W		See Note 1	3	
4143	4142	102E	2		Phase 2 : active power	unsigned integer	1, 0.01	W		See Note 1	3	
4145	4144	1030	2		Phase 3 : active power	unsigned integer	1, 0.01	W		See Note 1	3	
4147	4146	1032	1		Phase 1 : sign of active power	unsigned integer		-	0, 1	0=positive, 1=negative	3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
4148	4147	1033	1		Phase 2 : sign of active power	unsigned integer		-	0, 1	0=positive, 1=negative	3	
4149	4148	1034	1		Phase 3 : sign of active power	unsigned integer		-	0, 1	0=positive, 1=negative	3	
4150	4149	1035	2		Phase 1 : reactive power	unsigned integer	1, 0.01	var		See Note 1	3	
4152	4151	1037	2		Phase 2 : reactive power	unsigned integer	1, 0.01	var		See Note 1	3	
4154	4153	1039	2		Phase 3 : reactive power	unsigned integer	1, 0.01	var		See Note 1	3	
4156	4155	103B	1		Phase 1 : sign of reactive power	unsigned integer		-	0, 1	0=positive, 1=negative	3	
4157	4156	103C	1		Phase 2 : sign of reactive power	unsigned integer		-	0, 1	0=positive, 1=negative	3	
4158	4157	103D	1		Phase 3 : sign of reactive power	unsigned integer		-	0, 1	0=positive, 1=negative	3	
4159	4158	103E	2		Phase 1 : apparent power	unsigned integer	1, 0.01	VA		See Note 1	3	
4161	4160	1040	2		Phase 2 : apparent power	unsigned integer	1, 0.01	VA		See Note 1	3	
4163	4162	1042	2		Phase 3 : apparent power	unsigned integer	1, 0.01	VA		See Note 1	3	
4165	4164	1044	1		Phase 1 : power factor	signed integer	0.01	-			3	
4166	4165	1045	1		Phase 2 : power factor	signed integer	0.01	-			3	
4167	4166	1046	1		Phase 3 : power factor	signed integer	0.01	-			3	
4168	4167	1047	1		Phase 1 : sector of power factor (cap or ind)	unsigned integer	1	-	0, 1, 2	0="PF=1", 1="ind" (L), 2="cap" (C)	3	
4169	4168	1048	1		Phase 2 : sector of power factor (cap or ind)	unsigned integer	1	-	0, 1, 2	0="PF=1", 1="ind" (L), 2="cap" (C)	3	
4170	4169	1049	1		Phase 3 : sector of power factor (cap or ind)	unsigned integer	1	-	0, 1, 2	0="PF=1", 1="ind" (L), 2="cap" (C)	3	
4171	4170	104A	1		Phase 1 : THD V1	unsigned integer	0.1	%		See Note 3	3	
4172	4171	104B	1		Phase 2 : THD V2	unsigned integer	0.1	%		See Note 3	3	
4173	4172	104C	1		Phase 3 : THD V3	unsigned integer	0.1	%		See Note 3	3	
4174	4173	104D	1		Phase 1 : THD I1	unsigned integer	0.1	%			3	
4175	4174	104E	1		Phase 2 : THD I2	unsigned integer	0.1	%			3	
4176	4175	104F	1		Phase 3 : THD I3	unsigned integer	0.1	%			3	
4177	4176	1050	2		Phase 1 : I1 average	unsigned integer	1	mA			3	
4179	4178	1052	2		Phase 2 : I2 average	unsigned integer	1	mA			3	
4181	4180	1054	2		Phase 3 : I3 average	unsigned integer	1	mA			3	
4183	4182	1056	2		Phase 1 : I1 peak Max.	unsigned integer	1	mA			3	
4185	4184	1058	2		Phase 2 : I2 peak Max.	unsigned integer	1	mA			3	
4187	4186	105A	2		Phase 3 : I3 peak Max.	unsigned integer	1	mA			3	
4189	4188	105C	2		3-phase : I average	unsigned integer	1	mA		(I1+I2+I3)/3	3	
4191	4190	105E	2		Phase 1 : V1 min.	unsigned integer	1	mV		See Note 3	3	
4193	4192	1060	2		Phase 2 : V2 min.	unsigned integer	1	mV		See Note 3	3	
4195	4194	1062	2		Phase 3 : V3 min.	unsigned integer	1	mV		See Note 3	3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
4197	4196	1064	2		Phase 1 : V1 Max.	unsigned integer	1	mV		See Note 3	3	
4199	4198	1066	2		Phase 2 : V2 Max.	unsigned integer	1	mV		See Note 3	3	
4201	4200	1068	2		Phase 3 : V3 Max.	unsigned integer	1	mV		See Note 3	3	
4203	4202	106A	2		3-phase : partial active energy	unsigned integer	1, 10, 100, 1000, 10.000, 100.000	Wh		See Note 2	3	
4205	4204	106C	2		3-phase : partial reactive energy	unsigned integer	1, 10, 100, 1000, 10.000, 100.000	varh		See Note 2	3	
4207	4206	106E	1		Operating timer counter	unsigned integer	1	h			3	
4208	4207	106F	1		Alarm status	unsigned integer	-	-	0, 1	0: No active Alarm, 1: Alarm active	3	
4209	4208	1070	2		3-phase : average active power	unsigned integer	1, 0.01	W		See Note 1	3	
4211	4210	1072	2		3-phase : average reactive power	unsigned integer	1, 0.01	var		See Note 1	3	
4213	4212	1074	2		3-phase : average apparent power	unsigned integer	1, 0.01	VA		See Note 1	3	
4215	4214	1076	2		3-phase : active PMD power	unsigned integer	1, 0.01	W		See Note 1	3	
4217	4216	1078	2		3-phase : reactive PMD power	unsigned integer	1, 0.01	var		See Note 1	3	
4219	4218	107A	2		3-phase : apparent PMD power	unsigned integer	1, 0.01	VA		See Note 1	3	
4609	4608	1200	6		Settings							
4609	4608	1200	1		Current transformer ratio (CT)	unsigned integer	1	-			3	
4610	4609	1201	1		Voltage transformer ratio (VT)	unsigned integer	0.1	-			3	
4611	4610	1202	2		RESERVED (returns 2D62 412Dh)						3	
4613	4612	1204	1		Device identifier	unsigned integer	1	-		The device returns 1101h	3	
4614	4613	1205	1		Voltages sequence diagnostic	unsigned integer	1	-	0, 1, 2	0: if single phase insertion 1: Ok 2: Error	3	
5377	5376	1500	48		Max. & Min.							
5377	5376	1500	2		Low Positive Active Energy	unsigned integer	1	Wh			3	
5379	5378	1502	2		High Positive Active Energy	unsigned integer	1	MWh			3	
5381	5380	1504	2		Low Positive Reactive Energy	unsigned integer	1	varh			3	
5383	5382	1506	2		High Positive Reactive Energy	unsigned integer	1	Mvarh			3	
5385	5384	1508	2		Low Negative Active Energy	unsigned integer	1	Wh			3	
5387	5386	150A	2		High Negative Active Energy	unsigned integer	1	MWh			3	
5389	5388	150C	2		Low Negative Reactive Energy	unsigned integer	1	varh			3	
5391	5390	150E	2		High Negative Reactive Energy	unsigned integer	1	Mvarh			3	
5393	5392	1510	2		Low Partial Active Energy	unsigned integer	1	Wh			3	
5395	5394	1512	2		High Partial Active Energy	unsigned integer	1	MWh			3	
5397	5396	1514	2		Low Partial Reactive Energy	unsigned integer	1	varh			3	
5399	5398	1516	2		High Partial Reactive Energy	unsigned integer	1	Mvarh			3	
5401	5400	1518	2		Signed Total active power	signed integer	1	W			3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
5403	5402	151A	2		Signed Total reactive power	signed integer	1	var			3	
5405	5404	151C	2		Signed phase1 active power	signed integer	1	W			3	
5407	5406	151E	2		Signed phase2 active power	signed integer	1	W			3	
5409	5408	1520	2		Signed phase3 active power	signed integer	1	W			3	
5411	5410	1522	2		Signed phase1 reactive power	signed integer	1	Var			3	
5413	5412	1524	2		Signed phase2 reactive power	signed integer	1	Var			3	
5415	5414	1526	2		Signed phase3 reactive power	signed integer	1	var			3	
5417	5416	1528	2		Signed total Power Factor	signed integer	0.001	-			3	
5419	5418	152A	2		Signed phase1 Power Factor	signed integer	0.001	-			3	
5421	5420	152C	2		Signed phase2 Power Factor	signed integer	0.001	-			3	
5423	5422	152E	2		Signed phase3 Power Factor	signed integer	0.001	-			3	
5425	5424	1530	14		Average Measured values - Scaled							
5425	5424	1530	2		Total Apparent power	unsigned integer	1	VA			3	
5427	5426	1532	2		3-phase : average active power	unsigned integer	0.01	W			3	
5429	5428	1534	2		3-phase : average reactive power	unsigned integer	0.01	var			3	
5431	5430	1536	2		3-phase : average apparent power	unsigned integer	0.01	VA			3	
5433	5432	1538	2		3-phase : max active power	unsigned integer	0.01	W			3	
5435	5434	153A	2		3-phase : max reactive power	unsigned integer	0.01	var			3	
5437	5436	153C	2		3-phase : max apparent power	unsigned integer	0.01	VA			3	
28673	28672	7000	200		Harmonics							
28673	28672	7000	1		Current phase 1 - fundamental	unsigned integer	0.1	%			3	
28674	28673	7001	1		Current phase 1 - 2nd harmonic percentage	unsigned integer	0.1	%			3	
28675	28674	7002	1		Current phase 1 - 3rd harmonic percentage	unsigned integer	0.1	%			3	
28676	28675	7003	1		Current phase 1 - 4th harmonic percentage	unsigned integer	0.1	%			3	
28677	28676	7004	1		Current phase 1 - 5th harmonic percentage	unsigned integer	0.1	%			3	
28678	28677	7005	1		Current phase 1 - 6th harmonic percentage	unsigned integer	0.1	%			3	
28679	28678	7006	1		Current phase 1 - 7th harmonic percentage	unsigned integer	0.1	%			3	
28680	28679	7007	1		Current phase 1 - 8th harmonic percentage	unsigned integer	0.1	%			3	
28681	28680	7008	1		Current phase 1 - 9th harmonic percentage	unsigned integer	0.1	%			3	
28682	28681	7009	1		Current phase 1 - 10th harmonic percentage	unsigned integer	0.1	%			3	
28683	28682	700A	1		Current phase 1 - 11th harmonic percentage	unsigned integer	0.1	%			3	
28684	28683	700B	1		Current phase 1 - 12th harmonic percentage	unsigned integer	0.1	%			3	
28685	28684	700C	1		Current phase 1 - 13th harmonic percentage	unsigned integer	0.1	%			3	
28686	28685	700D	1		Current phase 1 - 14th harmonic percentage	unsigned integer	0.1	%			3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
28687	28686	700E	1		Current phase 1 - 15th harmonic percentage	unsigned integer	0.1	%			3	
28688	28687	700F	1		Current phase 1 - 16th harmonic percentage	unsigned integer	0.1	%			3	
28689	28688	7010	1		Current phase 1 - 17th harmonic percentage	unsigned integer	0.1	%			3	
28690	28689	7011	1		Current phase 1 - 18th harmonic percentage	unsigned integer	0.1	%			3	
28691	28690	7012	1		Current phase 1 - 19th harmonic percentage	unsigned integer	0.1	%			3	
28692	28691	7013	1		Current phase 1 - 20th harmonic percentage	unsigned integer	0.1	%			3	
28693	28692	7014	1		Current phase 1 - 21st harmonic percentage	unsigned integer	0.1	%			3	
28694	28693	7015	1		Current phase 1 - 22nd harmonic percentage	unsigned integer	0.1	%			3	
28695	28694	7016	1		Current phase 1 - 23rd harmonic percentage	unsigned integer	0.1	%			3	
28696	28695	7017	1		Current phase 1 - 24th harmonic percentage	unsigned integer	0.1	%			3	
28697	28696	7018	1		Current phase 1 - 25th harmonic percentage	unsigned integer	0.1	%			3	
28698	28697	7019	1		RESERVED (returns 0000h)						3	
28699	28698	701A	1		RESERVED (returns 0000h)						3	
28700	28699	701B	1		RESERVED (returns 0000h)						3	
28701	28700	701C	1		RESERVED (returns 0000h)						3	
28702	28701	701D	1		RESERVED (returns 0000h)						3	
28703	28702	701E	1		RESERVED (returns 0000h)						3	
28704	28703	701F	1		RESERVED (returns 0000h)						3	
28705	28704	7020	1		RESERVED (returns 0000h)						3	
28706	28705	7021	1		RESERVED (returns 0000h)						3	
28707	28706	7022	1		RESERVED (returns 0000h)						3	
28708	28707	7023	1		RESERVED (returns 0000h)						3	
28709	28708	7024	1		RESERVED (returns 0000h)						3	
28710	28709	7025	1		RESERVED (returns 0000h)						3	
28711	28710	7026	1		RESERVED (returns 0000h)						3	
28712	28711	7027	1		RESERVED (returns 0000h)						3	
28713	28712	7028	1		RESERVED (returns 0000h)						3	
28714	28713	7029	1		RESERVED (returns 0000h)						3	
28715	28714	702A	1		RESERVED (returns 0000h)						3	
28716	28715	702B	1		RESERVED (returns 0000h)						3	
28717	28716	702C	1		RESERVED (returns 0000h)						3	
28718	28717	702D	1		RESERVED (returns 0000h)						3	
28719	28718	702E	1		RESERVED (returns 0000h)						3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
28720	28719	702F	1		RESERVED (returns 0000h)						3	
28721	28720	7030	1		RESERVED (returns 0000h)						3	
28722	28721	7031	1		RESERVED (returns 0000h)						3	
28737	28736	7040	1		Current phase 2 - fundamental	unsigned integer	0.1	%			3	
28738	28737	7041	1		Current phase 2 - 2nd harmonic percentage	unsigned integer	0.1	%			3	
28739	28738	7042	1		Current phase 2 - 3rd harmonic percentage	unsigned integer	0.1	%			3	
28740	28739	7043	1		Current phase 2 - 4th harmonic percentage	unsigned integer	0.1	%			3	
28741	28740	7044	1		Current phase 2 - 5th harmonic percentage	unsigned integer	0.1	%			3	
28742	28741	7045	1		Current phase 2 - 6th harmonic percentage	unsigned integer	0.1	%			3	
28743	28742	7046	1		Current phase 2 - 7th harmonic percentage	unsigned integer	0.1	%			3	
28744	28743	7047	1		Current phase 2 - 8th harmonic percentage	unsigned integer	0.1	%			3	
28745	28744	7048	1		Current phase 2 - 9th harmonic percentage	unsigned integer	0.1	%			3	
28746	28745	7049	1		Current phase 2 - 10th harmonic percentage	unsigned integer	0.1	%			3	
28747	28746	704A	1		Current phase 2 - 11th harmonic percentage	unsigned integer	0.1	%			3	
28748	28747	704B	1		Current phase 2 - 12th harmonic percentage	unsigned integer	0.1	%			3	
28749	28748	704C	1		Current phase 2 - 13th harmonic percentage	unsigned integer	0.1	%			3	
28750	28749	704D	1		Current phase 2 - 14th harmonic percentage	unsigned integer	0.1	%			3	
28751	28750	704E	1		Current phase 2 - 15th harmonic percentage	unsigned integer	0.1	%			3	
28752	28751	704F	1		Current phase 2 - 16th harmonic percentage	unsigned integer	0.1	%			3	
28753	28752	7050	1		Current phase 2 - 17th harmonic percentage	unsigned integer	0.1	%			3	
28754	28753	7051	1		Current phase 2 - 18th harmonic percentage	unsigned integer	0.1	%			3	
28755	28754	7052	1		Current phase 2 - 19th harmonic percentage	unsigned integer	0.1	%			3	
28756	28755	7053	1		Current phase 2 - 20th harmonic percentage	unsigned integer	0.1	%			3	
28757	28756	7054	1		Current phase 2 - 21st harmonic percentage	unsigned integer	0.1	%			3	
28758	28757	7055	1		Current phase 2 - 22nd harmonic percentage	unsigned integer	0.1	%			3	
28759	28758	7056	1		Current phase 2 - 23rd harmonic percentage	unsigned integer	0.1	%			3	
28760	28759	7057	1		Current phase 2 - 24th harmonic percentage	unsigned integer	0.1	%			3	
28761	28760	7058	1		Current phase 2 - 25th harmonic percentage	unsigned integer	0.1	%			3	
28762	28761	7059	1		RESERVED (returns 0000h)						3	
28763	28762	705A	1		RESERVED (returns 0000h)						3	
28764	28763	705B	1		RESERVED (returns 0000h)						3	
28765	28764	705C	1		RESERVED (returns 0000h)						3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
28766	28765	705D	1		RESERVED (returns 0000h)						3	
28767	28766	705E	1		RESERVED (returns 0000h)						3	
28768	28767	705F	1		RESERVED (returns 0000h)						3	
28769	28768	7060	1		RESERVED (returns 0000h)						3	
28770	28769	7061	1		RESERVED (returns 0000h)						3	
28771	28770	7062	1		RESERVED (returns 0000h)						3	
28772	28771	7063	1		RESERVED (returns 0000h)						3	
28773	28772	7064	1		RESERVED (returns 0000h)						3	
28774	28773	7065	1		RESERVED (returns 0000h)						3	
28775	28774	7066	1		RESERVED (returns 0000h)						3	
28776	28775	7067	1		RESERVED (returns 0000h)						3	
28777	28776	7068	1		RESERVED (returns 0000h)						3	
28778	28777	7069	1		RESERVED (returns 0000h)						3	
28779	28778	706A	1		RESERVED (returns 0000h)						3	
28780	28779	706B	1		RESERVED (returns 0000h)						3	
28781	28780	706C	1		RESERVED (returns 0000h)						3	
28782	28781	706D	1		RESERVED (returns 0000h)						3	
28783	28782	706E	1		RESERVED (returns 0000h)						3	
28784	28783	706F	1		RESERVED (returns 0000h)						3	
28785	28784	7070	1		RESERVED (returns 0000h)						3	
28786	28785	7071	1		RESERVED (returns 0000h)						3	
28801	28800	7080	1		Current phase 3 - fundamental	unsigned integer	0.1	%			3	
28802	28801	7081	1		Current phase 3 - 2nd harmonic percentage	unsigned integer	0.1	%			3	
28803	28802	7082	1		Current phase 3 - 3rd harmonic percentage	unsigned integer	0.1	%			3	
28804	28803	7083	1		Current phase 3 - 4th harmonic percentage	unsigned integer	0.1	%			3	
28805	28804	7084	1		Current phase 3 - 5th harmonic percentage	unsigned integer	0.1	%			3	
28806	28805	7085	1		Current phase 3 - 6th harmonic percentage	unsigned integer	0.1	%			3	
28807	28806	7086	1		Current phase 3 - 7th harmonic percentage	unsigned integer	0.1	%			3	
28808	28807	7087	1		Current phase 3 - 8th harmonic percentage	unsigned integer	0.1	%			3	
28809	28808	7088	1		Current phase 3 - 9th harmonic percentage	unsigned integer	0.1	%			3	
28810	28809	7089	1		Current phase 3 - 10th harmonic percentage	unsigned integer	0.1	%			3	
28811	28810	708A	1		Current phase 3 - 11th harmonic percentage	unsigned integer	0.1	%			3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
28812	28811	708B	1		Current phase 3 - 12th harmonic percentage	unsigned integer	0.1	%			3	
28813	28812	708C	1		Current phase 3 - 13th harmonic percentage	unsigned integer	0.1	%			3	
28814	28813	708D	1		Current phase 3 - 14th harmonic percentage	unsigned integer	0.1	%			3	
28815	28814	708E	1		Current phase 3 - 15th harmonic percentage	unsigned integer	0.1	%			3	
28816	28815	708F	1		Current phase 3 - 16th harmonic percentage	unsigned integer	0.1	%			3	
28817	28816	7090	1		Current phase 3 - 17th harmonic percentage	unsigned integer	0.1	%			3	
28818	28817	7091	1		Current phase 3 - 18th harmonic percentage	unsigned integer	0.1	%			3	
28819	28818	7092	1		Current phase 3 - 19th harmonic percentage	unsigned integer	0.1	%			3	
28820	28819	7093	1		Current phase 3 - 20th harmonic percentage	unsigned integer	0.1	%			3	
28821	28820	7094	1		Current phase 3 - 21st harmonic percentage	unsigned integer	0.1	%			3	
28822	28821	7095	1		Current phase 3 - 22nd harmonic percentage	unsigned integer	0.1	%			3	
28823	28822	7096	1		Current phase 3 - 23rd harmonic percentage	unsigned integer	0.1	%			3	
28824	28823	7097	1		Current phase 3 - 24th harmonic percentage	unsigned integer	0.1	%			3	
28825	28824	7098	1		Current phase 3 - 25th harmonic percentage	unsigned integer	0.1	%			3	
28826	28825	7099	1		RESERVED (returns 0000h)						3	
28827	28826	709A	1		RESERVED (returns 0000h)						3	
28828	28827	709B	1		RESERVED (returns 0000h)						3	
28829	28828	709C	1		RESERVED (returns 0000h)						3	
28830	28829	709D	1		RESERVED (returns 0000h)						3	
28831	28830	709E	1		RESERVED (returns 0000h)						3	
28832	28831	709F	1		RESERVED (returns 0000h)						3	
28833	28832	70A0	1		RESERVED (returns 0000h)						3	
28834	28833	70A1	1		RESERVED (returns 0000h)						3	
28835	28834	70A2	1		RESERVED (returns 0000h)						3	
28836	28835	70A3	1		RESERVED (returns 0000h)						3	
28837	28836	70A4	1		RESERVED (returns 0000h)						3	
28838	28837	70A5	1		RESERVED (returns 0000h)						3	
28839	28838	70A6	1		RESERVED (returns 0000h)						3	
28840	28839	70A7	1		RESERVED (returns 0000h)						3	
28841	28840	70A8	1		RESERVED (returns 0000h)						3	
28842	28841	70A9	1		RESERVED (returns 0000h)						3	
28843	28842	70AA	1		RESERVED (returns 0000h)						3	
28844	28843	70AB	1		RESERVED (returns 0000h)						3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
28845	28844	70AC	1		RESERVED (returns 0000h)						3	
28846	28845	70AD	1		RESERVED (returns 0000h)						3	
28847	28846	70AE	1		RESERVED (returns 0000h)						3	
28848	28847	70AF	1		RESERVED (returns 0000h)						3	
28849	28848	70B0	1		RESERVED (returns 0000h)						3	
28850	28849	70B1	1		RESERVED (returns 0000h)						3	
28865	28864	70C0	1		Voltage phase 1 - fundamental	unsigned integer	0.1	%		See Note 3	3	
28866	28865	70C1	1		Voltage phase 1 - 2nd harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28867	28866	70C2	1		Voltage phase 1 - 3rd harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28868	28867	70C3	1		Voltage phase 1 - 4th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28869	28868	70C4	1		Voltage phase 1 - 5th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28870	28869	70C5	1		Voltage phase 1 - 6th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28871	28870	70C6	1		Voltage phase 1 - 7th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28872	28871	70C7	1		Voltage phase 1 - 8th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28873	28872	70C8	1		Voltage phase 1 - 9th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28874	28873	70C9	1		Voltage phase 1 - 10th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28875	28874	70CA	1		Voltage phase 1 - 11th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28876	28875	70CB	1		Voltage phase 1 - 12th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28877	28876	70CC	1		Voltage phase 1 - 13th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28878	28877	70CD	1		Voltage phase 1 - 14th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28879	28878	70CE	1		Voltage phase 1 - 15th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28880	28879	70CF	1		Voltage phase 1 - 16th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28881	28880	70D0	1		Voltage phase 1 - 17th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28882	28881	70D1	1		Voltage phase 1 - 18th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28883	28882	70D2	1		Voltage phase 1 - 19th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28884	28883	70D3	1		Voltage phase 1 - 20th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28885	28884	70D4	1		Voltage phase 1 - 21st harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28886	28885	70D5	1		Voltage phase 1 - 22nd harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28887	28886	70D6	1		Voltage phase 1 - 23rd harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28888	28887	70D7	1		Voltage phase 1 - 24th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28889	28888	70D8	1		Voltage phase 1 - 25th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28890	28889	70D9	1		RESERVED (returns 0000h)						3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
28891	28890	70DA	1		RESERVED (returns 0000h)						3	
28892	28891	70DB	1		RESERVED (returns 0000h)						3	
28893	28892	70DC	1		RESERVED (returns 0000h)						3	
28894	28893	70DD	1		RESERVED (returns 0000h)						3	
28895	28894	70DE	1		RESERVED (returns 0000h)						3	
28896	28895	70DF	1		RESERVED (returns 0000h)						3	
28897	28896	70E0	1		RESERVED (returns 0000h)						3	
28898	28897	70E1	1		RESERVED (returns 0000h)						3	
28899	28898	70E2	1		RESERVED (returns 0000h)						3	
28900	28899	70E3	1		RESERVED (returns 0000h)						3	
28901	28900	70E4	1		RESERVED (returns 0000h)						3	
28902	28901	70E5	1		RESERVED (returns 0000h)						3	
28903	28902	70E6	1		RESERVED (returns 0000h)						3	
28904	28903	70E7	1		RESERVED (returns 0000h)						3	
28905	28904	70E8	1		RESERVED (returns 0000h)						3	
28906	28905	70E9	1		RESERVED (returns 0000h)						3	
28907	28906	70EA	1		RESERVED (returns 0000h)						3	
28908	28907	70EB	1		RESERVED (returns 0000h)						3	
28909	28908	70EC	1		RESERVED (returns 0000h)						3	
28910	28909	70ED	1		RESERVED (returns 0000h)						3	
28911	28910	70EE	1		RESERVED (returns 0000h)						3	
28912	28911	70EF	1		RESERVED (returns 0000h)						3	
28913	28912	70F0	1		RESERVED (returns 0000h)						3	
28914	28913	70F1	1		RESERVED (returns 0000h)						3	
28929	28928	7100	100									
28929	28928	7100	1		Voltage phase 2 - fundamental	unsigned integer	0.1	%		See Note 3	3	
28930	28929	7101	1		Voltage phase 2 - 2nd harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28931	28930	7102	1		Voltage phase 2 - 3rd harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28932	28931	7103	1		Voltage phase 2 - 4th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28933	28932	7104	1		Voltage phase 2 - 5th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28934	28933	7105	1		Voltage phase 2 - 6th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28935	28934	7106	1		Voltage phase 2 - 7th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28936	28935	7107	1		Voltage phase 2 - 8th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
28937	28936	7108	1		Voltage phase 2 - 9th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28938	28937	7109	1		Voltage phase 2 - 10th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28939	28938	710A	1		Voltage phase 2 - 11th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28940	28939	710B	1		Voltage phase 2 - 12th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28941	28940	710C	1		Voltage phase 2 - 13th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28942	28941	710D	1		Voltage phase 2 - 14th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28943	28942	710E	1		Voltage phase 2 - 15th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28944	28943	710F	1		Voltage phase 2 - 16th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28945	28944	7110	1		Voltage phase 2 - 17th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28946	28945	7111	1		Voltage phase 2 - 18th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28947	28946	7112	1		Voltage phase 2 - 19th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28948	28947	7113	1		Voltage phase 2 - 20th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28949	28948	7114	1		Voltage phase 2 - 21st harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28950	28949	7115	1		Voltage phase 2 - 22nd harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28951	28950	7116	1		Voltage phase 2 - 23rd harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28952	28951	7117	1		Voltage phase 2 - 24th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28953	28952	7118	1		Voltage phase 2 - 25th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28954	28953	7119	1		RESERVED (returns 0000h)						3	
28955	28954	711A	1		RESERVED (returns 0000h)						3	
28956	28955	711B	1		RESERVED (returns 0000h)						3	
28957	28956	711C	1		RESERVED (returns 0000h)						3	
28958	28957	711D	1		RESERVED (returns 0000h)						3	
28959	28958	711E	1		RESERVED (returns 0000h)						3	
28960	28959	711F	1		RESERVED (returns 0000h)						3	
28961	28960	7120	1		RESERVED (returns 0000h)						3	
28962	28961	7121	1		RESERVED (returns 0000h)						3	
28963	28962	7122	1		RESERVED (returns 0000h)						3	
28964	28963	7123	1		RESERVED (returns 0000h)						3	
28965	28964	7124	1		RESERVED (returns 0000h)						3	
28966	28965	7125	1		RESERVED (returns 0000h)						3	
28967	28966	7126	1		RESERVED (returns 0000h)						3	
28968	28967	7127	1		RESERVED (returns 0000h)						3	
28969	28968	7128	1		RESERVED (returns 0000h)						3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
28970	28969	7129	1		RESERVED (returns 0000h)						3	
28971	28970	712A	1		RESERVED (returns 0000h)						3	
28972	28971	712B	1		RESERVED (returns 0000h)						3	
28973	28972	712C	1		RESERVED (returns 0000h)						3	
28974	28973	712D	1		RESERVED (returns 0000h)						3	
28975	28974	712E	1		RESERVED (returns 0000h)						3	
28976	28975	712F	1		RESERVED (returns 0000h)						3	
28977	28976	7130	1		RESERVED (returns 0000h)						3	
28978	28977	7131	1		RESERVED (returns 0000h)						3	
28993	28992	7140	1		Voltage phase 3 - fundamental	unsigned integer	0.1	%		See Note 3	3	
28994	28993	7141	1		Voltage phase 3 - 2nd harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28995	28994	7142	1		Voltage phase 3 - 3rd harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28996	28995	7143	1		Voltage phase 3 - 4th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28997	28996	7144	1		Voltage phase 3 - 5th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28998	28997	7145	1		Voltage phase 3 - 6th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
28999	28998	7146	1		Voltage phase 3 - 7th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29000	28999	7147	1		Voltage phase 3 - 8th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29001	29000	7148	1		Voltage phase 3 - 9th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29002	29001	7149	1		Voltage phase 3 - 10th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29003	29002	714A	1		Voltage phase 3 - 11th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29004	29003	714B	1		Voltage phase 3 - 12th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29005	29004	714C	1		Voltage phase 3 - 13th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29006	29005	714D	1		Voltage phase 3 - 14th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29007	29006	714E	1		Voltage phase 3 - 15th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29008	29007	714F	1		Voltage phase 3 - 16th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29009	29008	7150	1		Voltage phase 3 - 17th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29010	29009	7151	1		Voltage phase 3 - 18th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29011	29010	7152	1		Voltage phase 3 - 19th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29012	29011	7153	1		Voltage phase 3 - 20th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29013	29012	7154	1		Voltage phase 3 - 21st harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29014	29013	7155	1		Voltage phase 3 - 22nd harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29015	29014	7156	1		Voltage phase 3 - 23rd harmonic percentage	unsigned integer	0.1	%		See Note 3	3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
29016	29015	7157	1		Voltage phase 3 - 24th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29017	29016	7158	1		Voltage phase 3 - 25th harmonic percentage	unsigned integer	0.1	%		See Note 3	3	
29018	29017	7159	1		RESERVED (returns 0000h)						3	
29019	29018	715A	1		RESERVED (returns 0000h)						3	
29020	29019	715B	1		RESERVED (returns 0000h)						3	
29021	29020	715C	1		RESERVED (returns 0000h)						3	
29022	29021	715D	1		RESERVED (returns 0000h)						3	
29023	29022	715E	1		RESERVED (returns 0000h)						3	
29024	29023	715F	1		RESERVED (returns 0000h)						3	
29025	29024	7160	1		RESERVED (returns 0000h)						3	
29026	29025	7161	1		RESERVED (returns 0000h)						3	
29027	29026	7162	1		RESERVED (returns 0000h)						3	
29028	29027	7163	1		RESERVED (returns 0000h)						3	
29029	29028	7164	1		RESERVED (returns 0000h)						3	
29030	29029	7165	1		RESERVED (returns 0000h)						3	
29031	29030	7166	1		RESERVED (returns 0000h)						3	
29032	29031	7167	1		RESERVED (returns 0000h)						3	
29033	29032	7168	1		RESERVED (returns 0000h)						3	
29034	29033	7169	1		RESERVED (returns 0000h)						3	
29035	29034	716A	1		RESERVED (returns 0000h)						3	
29036	29035	716B	1		RESERVED (returns 0000h)						3	
29037	29036	716C	1		RESERVED (returns 0000h)						3	
29038	29037	716D	1		RESERVED (returns 0000h)						3	
29039	29038	716E	1		RESERVED (returns 0000h)						3	
29040	29039	716F	1		RESERVED (returns 0000h)						3	
29041	29040	7170	1		RESERVED (returns 0000h)						3	
29042	29041	7171	1		RESERVED (returns 0000h)						3	
29185	29184	7200	200									
29185	29184	7200	2		Current phase 1 - 1st harmonic (rms)	unsigned integer	1	mA			3	
29187	29186	7202	2		Current phase 1 - 2nd harmonic (rms)	unsigned integer	1	mA			3	
29189	29188	7204	2		Current phase 1 - 3rd harmonic (rms)	unsigned integer	1	mA			3	
29191	29190	7206	2		Current phase 1 - 4th harmonic (rms)	unsigned integer	1	mA			3	
29193	29192	7208	2		Current phase 1 - 5th harmonic (rms)	unsigned integer	1	mA			3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
29195	29194	720A	2		Current phase 1 - 6th harmonic (rms)	unsigned integer	1	mA			3	
29197	29196	720C	2		Current phase 1 - 7th harmonic (rms)	unsigned integer	1	mA			3	
29199	29198	720E	2		Current phase 1 - 8th harmonic (rms)	unsigned integer	1	mA			3	
29201	29200	7210	2		Current phase 1 - 9th harmonic (rms)	unsigned integer	1	mA			3	
29203	29202	7212	2		Current phase 1 - 10th harmonic (rms)	unsigned integer	1	mA			3	
29205	29204	7214	2		Current phase 1 - 11th harmonic (rms)	unsigned integer	1	mA			3	
29207	29206	7216	2		Current phase 1 - 12th harmonic (rms)	unsigned integer	1	mA			3	
29209	29208	7218	2		Current phase 1 - 13th harmonic (rms)	unsigned integer	1	mA			3	
29211	29210	721A	2		Current phase 1 - 14th harmonic (rms)	unsigned integer	1	mA			3	
29213	29212	721C	2		Current phase 1 - 15th harmonic (rms)	unsigned integer	1	mA			3	
29215	29214	721E	2		Current phase 1 - 16th harmonic (rms)	unsigned integer	1	mA			3	
29217	29216	7220	2		Current phase 1 - 17th harmonic (rms)	unsigned integer	1	mA			3	
29219	29218	7222	2		Current phase 1 - 18th harmonic (rms)	unsigned integer	1	mA			3	
29221	29220	7224	2		Current phase 1 - 19th harmonic (rms)	unsigned integer	1	mA			3	
29223	29222	7226	2		Current phase 1 - 20th harmonic (rms)	unsigned integer	1	mA			3	
29225	29224	7228	2		Current phase 1 - 21st harmonic (rms)	unsigned integer	1	mA			3	
29227	29226	722A	2		Current phase 1 - 22nd harmonic (rms)	unsigned integer	1	mA			3	
29229	29228	722C	2		Current phase 1 - 23rd harmonic (rms)	unsigned integer	1	mA			3	
29231	29230	722E	2		Current phase 1 - 24th harmonic (rms)	unsigned integer	1	mA			3	
29233	29232	7230	2		Current phase 1 - 25th harmonic (rms)	unsigned integer	1	mA			3	
29235	29234	7232	2		RESERVED (returns 0000 0000h)						3	
29237	29236	7234	2		RESERVED (returns 0000 0000h)						3	
29239	29238	7236	2		RESERVED (returns 0000 0000h)						3	
29241	29240	7238	2		RESERVED (returns 0000 0000h)						3	
29243	29242	723A	2		RESERVED (returns 0000 0000h)						3	
29245	29244	723C	2		RESERVED (returns 0000 0000h)						3	
29247	29246	723E	2		RESERVED (returns 0000 0000h)						3	
29249	29248	7240	2		RESERVED (returns 0000 0000h)						3	
29251	29250	7242	2		RESERVED (returns 0000 0000h)						3	
29253	29252	7244	2		RESERVED (returns 0000 0000h)						3	
29255	29254	7246	2		RESERVED (returns 0000 0000h)						3	
29257	29256	7248	2		RESERVED (returns 0000 0000h)						3	
29259	29258	724A	2		RESERVED (returns 0000 0000h)						3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
29261	29260	724C	2		RESERVED (returns 0000 0000h)						3	
29263	29262	724E	2		RESERVED (returns 0000 0000h)						3	
29265	29264	7250	2		RESERVED (returns 0000 0000h)						3	
29267	29266	7252	2		RESERVED (returns 0000 0000h)						3	
29269	29268	7254	2		RESERVED (returns 0000 0000h)						3	
29271	29270	7256	2		RESERVED (returns 0000 0000h)						3	
29273	29272	7258	2		RESERVED (returns 0000 0000h)						3	
29275	29274	725A	2		RESERVED (returns 0000 0000h)						3	
29277	29276	725C	2		RESERVED (returns 0000 0000h)						3	
29279	29278	725E	2		RESERVED (returns 0000 0000h)						3	
29281	29280	7260	2		RESERVED (returns 0000 0000h)						3	
29283	29282	7262	2		RESERVED (returns 0000 0000h)						3	
29313	29312	7280	2		Current phase 2 - 1st harmonic (rms)	unsigned integer	1	mA			3	
29315	29314	7282	2		Current phase 2 - 2nd harmonic (rms)	unsigned integer	1	mA			3	
29317	29316	7284	2		Current phase 2 - 3rd harmonic (rms)	unsigned integer	1	mA			3	
29319	29318	7286	2		Current phase 2 - 4th harmonic (rms)	unsigned integer	1	mA			3	
29321	29320	7288	2		Current phase 2 - 5th harmonic (rms)	unsigned integer	1	mA			3	
29323	29322	728A	2		Current phase 2 - 6th harmonic (rms)	unsigned integer	1	mA			3	
29325	29324	728C	2		Current phase 2 - 7th harmonic (rms)	unsigned integer	1	mA			3	
29327	29326	728E	2		Current phase 2 - 8th harmonic (rms)	unsigned integer	1	mA			3	
29329	29328	7290	2		Current phase 2 - 9th harmonic (rms)	unsigned integer	1	mA			3	
29331	29330	7292	2		Current phase 2 - 10th harmonic (rms)	unsigned integer	1	mA			3	
29333	29332	7294	2		Current phase 2 - 11th harmonic (rms)	unsigned integer	1	mA			3	
29335	29334	7296	2		Current phase 2 - 12th harmonic (rms)	unsigned integer	1	mA			3	
29337	29336	7298	2		Current phase 2 - 13th harmonic (rms)	unsigned integer	1	mA			3	
29339	29338	729A	2		Current phase 2 - 14th harmonic (rms)	unsigned integer	1	mA			3	
29341	29340	729C	2		Current phase 2 - 15th harmonic (rms)	unsigned integer	1	mA			3	
29343	29342	729E	2		Current phase 2 - 16th harmonic (rms)	unsigned integer	1	mA			3	
29345	29344	72A0	2		Current phase 2 - 17th harmonic (rms)	unsigned integer	1	mA			3	
29347	29346	72A2	2		Current phase 2 - 18th harmonic (rms)	unsigned integer	1	mA			3	
29349	29348	72A4	2		Current phase 2 - 19th harmonic (rms)	unsigned integer	1	mA			3	
29351	29350	72A6	2		Current phase 2 - 20th harmonic (rms)	unsigned integer	1	mA			3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
29353	29352	72A8	2		Current phase 2 - 21st harmonic (rms)	unsigned integer	1	mA			3	
29355	29354	72AA	2		Current phase 2 - 22nd harmonic (rms)	unsigned integer	1	mA			3	
29357	29356	72AC	2		Current phase 2 - 23rd harmonic (rms)	unsigned integer	1	mA			3	
29359	29358	72AE	2		Current phase 2 - 24th harmonic (rms)	unsigned integer	1	mA			3	
29361	29360	72B0	2		Current phase 2 - 25th harmonic (rms)	unsigned integer	1	mA			3	
29363	29362	72B2	2		RESERVED (returns 0000 0000h)						3	
29365	29364	72B4	2		RESERVED (returns 0000 0000h)						3	
29367	29366	72B6	2		RESERVED (returns 0000 0000h)						3	
29369	29368	72B8	2		RESERVED (returns 0000 0000h)						3	
29371	29370	72BA	2		RESERVED (returns 0000 0000h)						3	
29373	29372	72BC	2		RESERVED (returns 0000 0000h)						3	
29375	29374	72BE	2		RESERVED (returns 0000 0000h)						3	
29377	29376	72C0	2		RESERVED (returns 0000 0000h)						3	
29379	29378	72C2	2		RESERVED (returns 0000 0000h)						3	
29381	29380	72C4	2		RESERVED (returns 0000 0000h)						3	
29383	29382	72C6	2		RESERVED (returns 0000 0000h)						3	
29385	29384	72C8	2		RESERVED (returns 0000 0000h)						3	
29387	29386	72CA	2		RESERVED (returns 0000 0000h)						3	
29389	29388	72CC	2		RESERVED (returns 0000 0000h)						3	
29391	29390	72CE	2		RESERVED (returns 0000 0000h)						3	
29393	29392	72D0	2		RESERVED (returns 0000 0000h)						3	
29395	29394	72D2	2		RESERVED (returns 0000 0000h)						3	
29397	29396	72D4	2		RESERVED (returns 0000 0000h)						3	
29399	29398	72D6	2		RESERVED (returns 0000 0000h)						3	
29401	29400	72D8	2		RESERVED (returns 0000 0000h)						3	
29403	29402	72DA	2		RESERVED (returns 0000 0000h)						3	
29405	29404	72DC	2		RESERVED (returns 0000 0000h)						3	
29407	29406	72DE	2		RESERVED (returns 0000 0000h)						3	
29409	29408	72E0	2		RESERVED (returns 0000 0000h)						3	
29411	29410	72E2	2		RESERVED (returns 0000 0000h)						3	
29441	29440	7300	200									
29441	29440	7300	2		Current phase 3 - 1st harmonic (rms)	unsigned integer	1	mA			3	
29443	29442	7302	2		Current phase 3 - 2nd harmonic (rms)	unsigned integer	1	mA			3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
29445	29444	7304	2		Current phase 3 - 3rd harmonic (rms)	unsigned integer	1	mA			3	
29447	29446	7306	2		Current phase 3 - 4th harmonic (rms)	unsigned integer	1	mA			3	
29449	29448	7308	2		Current phase 3 - 5th harmonic (rms)	unsigned integer	1	mA			3	
29451	29450	730A	2		Current phase 3 - 6th harmonic (rms)	unsigned integer	1	mA			3	
29453	29452	730C	2		Current phase 3 - 7th harmonic (rms)	unsigned integer	1	mA			3	
29455	29454	730E	2		Current phase 3 - 8th harmonic (rms)	unsigned integer	1	mA			3	
29457	29456	7310	2		Current phase 3 - 9th harmonic (rms)	unsigned integer	1	mA			3	
29459	29458	7312	2		Current phase 3 - 10th harmonic (rms)	unsigned integer	1	mA			3	
29461	29460	7314	2		Current phase 3 - 11th harmonic (rms)	unsigned integer	1	mA			3	
29463	29462	7316	2		Current phase 3 - 12th harmonic (rms)	unsigned integer	1	mA			3	
29465	29464	7318	2		Current phase 3 - 13th harmonic (rms)	unsigned integer	1	mA			3	
29467	29466	731A	2		Current phase 3 - 14th harmonic (rms)	unsigned integer	1	mA			3	
29469	29468	731C	2		Current phase 3 - 15th harmonic (rms)	unsigned integer	1	mA			3	
29471	29470	731E	2		Current phase 3 - 16th harmonic (rms)	unsigned integer	1	mA			3	
29473	29472	7320	2		Current phase 3 - 17th harmonic (rms)	unsigned integer	1	mA			3	
29475	29474	7322	2		Current phase 3 - 18th harmonic (rms)	unsigned integer	1	mA			3	
29477	29476	7324	2		Current phase 3 - 19th harmonic (rms)	unsigned integer	1	mA			3	
29479	29478	7326	2		Current phase 3 - 20th harmonic (rms)	unsigned integer	1	mA			3	
29481	29480	7328	2		Current phase 3 - 21st harmonic (rms)	unsigned integer	1	mA			3	
29483	29482	732A	2		Current phase 3 - 22nd harmonic (rms)	unsigned integer	1	mA			3	
29485	29484	732C	2		Current phase 3 - 23rd harmonic (rms)	unsigned integer	1	mA			3	
29487	29486	732E	2		Current phase 3 - 24th harmonic (rms)	unsigned integer	1	mA			3	
29489	29488	7330	2		Current phase 3 - 25th harmonic (rms)	unsigned integer	1	mA			3	
29491	29490	7332	2		RESERVED (returns 0000 0000h)						3	
29493	29492	7334	2		RESERVED (returns 0000 0000h)						3	
29495	29494	7336	2		RESERVED (returns 0000 0000h)						3	
29497	29496	7338	2		RESERVED (returns 0000 0000h)						3	
29499	29498	733A	2		RESERVED (returns 0000 0000h)						3	
29501	29500	733C	2		RESERVED (returns 0000 0000h)						3	
29503	29502	733E	2		RESERVED (returns 0000 0000h)						3	
29505	29504	7340	2		RESERVED (returns 0000 0000h)						3	
29507	29506	7342	2		RESERVED (returns 0000 0000h)						3	
29509	29508	7344	2		RESERVED (returns 0000 0000h)						3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
29511	29510	7346	2		RESERVED (returns 0000 0000h)						3	
29513	29512	7348	2		RESERVED (returns 0000 0000h)						3	
29515	29514	734A	2		RESERVED (returns 0000 0000h)						3	
29517	29516	734C	2		RESERVED (returns 0000 0000h)						3	
29519	29518	734E	2		RESERVED (returns 0000 0000h)						3	
29521	29520	7350	2		RESERVED (returns 0000 0000h)						3	
29523	29522	7352	2		RESERVED (returns 0000 0000h)						3	
29525	29524	7354	2		RESERVED (returns 0000 0000h)						3	
29527	29526	7356	2		RESERVED (returns 0000 0000h)						3	
29529	29528	7358	2		RESERVED (returns 0000 0000h)						3	
29531	29530	735A	2		RESERVED (returns 0000 0000h)						3	
29533	29532	735C	2		RESERVED (returns 0000 0000h)						3	
29535	29534	735E	2		RESERVED (returns 0000 0000h)						3	
29537	29536	7360	2		RESERVED (returns 0000 0000h)						3	
29539	29538	7362	2		RESERVED (returns 0000 0000h)						3	
29569	29568	7380	2		Voltage phase 1 - 1st harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29571	29570	7382	2		Voltage phase 1 - 2nd harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29573	29572	7384	2		Voltage phase 1 - 3rd harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29575	29574	7386	2		Voltage phase 1 - 4th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29577	29576	7388	2		Voltage phase 1 - 5th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29579	29578	738A	2		Voltage phase 1 - 6th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29581	29580	738C	2		Voltage phase 1 - 7th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29583	29582	738E	2		Voltage phase 1 - 8th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29585	29584	7390	2		Voltage phase 1 - 9th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29587	29586	7392	2		Voltage phase 1 - 10th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29589	29588	7394	2		Voltage phase 1 - 11th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29591	29590	7396	2		Voltage phase 1 - 12th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29593	29592	7398	2		Voltage phase 1 - 13th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29595	29594	739A	2		Voltage phase 1 - 14th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29597	29596	739C	2		Voltage phase 1 - 15th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29599	29598	739E	2		Voltage phase 1 - 16th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29601	29600	73A0	2		Voltage phase 1 - 17th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
29603	29602	73A2	2		Voltage phase 1 - 18th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29605	29604	73A4	2		Voltage phase 1 - 19th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29607	29606	73A6	2		Voltage phase 1 - 20th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29609	29608	73A8	2		Voltage phase 1 - 21st harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29611	29610	73AA	2		Voltage phase 1 - 22nd harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29613	29612	73AC	2		Voltage phase 1 - 23rd harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29615	29614	73AE	2		Voltage phase 1 - 24th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29617	29616	73B0	2		Voltage phase 1 - 25th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29619	29618	73B2	2		RESERVED (returns 0000 0000h)						3	
29621	29620	73B4	2		RESERVED (returns 0000 0000h)						3	
29623	29622	73B6	2		RESERVED (returns 0000 0000h)						3	
29625	29624	73B8	2		RESERVED (returns 0000 0000h)						3	
29627	29626	73BA	2		RESERVED (returns 0000 0000h)						3	
29629	29628	73BC	2		RESERVED (returns 0000 0000h)						3	
29631	29630	73BE	2		RESERVED (returns 0000 0000h)						3	
29633	29632	73C0	2		RESERVED (returns 0000 0000h)						3	
29635	29634	73C2	2		RESERVED (returns 0000 0000h)						3	
29637	29636	73C4	2		RESERVED (returns 0000 0000h)						3	
29639	29638	73C6	2		RESERVED (returns 0000 0000h)						3	
29641	29640	73C8	2		RESERVED (returns 0000 0000h)						3	
29643	29642	73CA	2		RESERVED (returns 0000 0000h)						3	
29645	29644	73CC	2		RESERVED (returns 0000 0000h)						3	
29647	29646	73CE	2		RESERVED (returns 0000 0000h)						3	
29649	29648	73D0	2		RESERVED (returns 0000 0000h)						3	
29651	29650	73D2	2		RESERVED (returns 0000 0000h)						3	
29653	29652	73D4	2		RESERVED (returns 0000 0000h)						3	
29655	29654	73D6	2		RESERVED (returns 0000 0000h)						3	
29657	29656	73D8	2		RESERVED (returns 0000 0000h)						3	
29659	29658	73DA	2		RESERVED (returns 0000 0000h)						3	
29661	29660	73DC	2		RESERVED (returns 0000 0000h)						3	
29663	29662	73DE	2		RESERVED (returns 0000 0000h)						3	
29665	29664	73E0	2		RESERVED (returns 0000 0000h)						3	
29667	29666	73E2	2		RESERVED (returns 0000 0000h)						3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
29697	29696	7400	200									
29697	29696	7400	2		Voltage phase 2 - 1st harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29699	29698	7402	2		Voltage phase 2 - 2nd harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29701	29700	7404	2		Voltage phase 2 - 3rd harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29703	29702	7406	2		Voltage phase 2 - 4th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29705	29704	7408	2		Voltage phase 2 - 5th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29707	29706	740A	2		Voltage phase 2 - 6th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29709	29708	740C	2		Voltage phase 2 - 7th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29711	29710	740E	2		Voltage phase 2 - 8th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29713	29712	7410	2		Voltage phase 2 - 9th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29715	29714	7412	2		Voltage phase 2 - 10th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29717	29716	7414	2		Voltage phase 2 - 11th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29719	29718	7416	2		Voltage phase 2 - 12th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29721	29720	7418	2		Voltage phase 2 - 13th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29723	29722	741A	2		Voltage phase 2 - 14th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29725	29724	741C	2		Voltage phase 2 - 15th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29727	29726	741E	2		Voltage phase 2 - 16th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29729	29728	7420	2		Voltage phase 2 - 17th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29731	29730	7422	2		Voltage phase 2 - 18th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29733	29732	7424	2		Voltage phase 2 - 19th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29735	29734	7426	2		Voltage phase 2 - 20th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29737	29736	7428	2		Voltage phase 2 - 21st harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29739	29738	742A	2		Voltage phase 2 - 22nd harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29741	29740	742C	2		Voltage phase 2 - 23rd harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29743	29742	742E	2		Voltage phase 2 - 24th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29745	29744	7430	2		Voltage phase 2 - 25th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29747	29746	7432	2		RESERVED (returns 0000 0000h)						3	
29749	29748	7434	2		RESERVED (returns 0000 0000h)						3	
29751	29750	7436	2		RESERVED (returns 0000 0000h)						3	
29753	29752	7438	2		RESERVED (returns 0000 0000h)						3	
29755	29754	743A	2		RESERVED (returns 0000 0000h)						3	
29757	29756	743C	2		RESERVED (returns 0000 0000h)						3	
29759	29758	743E	2		RESERVED (returns 0000 0000h)						3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
29761	29760	7440	2		RESERVED (returns 0000 0000h)						3	
29763	29762	7442	2		RESERVED (returns 0000 0000h)						3	
29765	29764	7444	2		RESERVED (returns 0000 0000h)						3	
29767	29766	7446	2		RESERVED (returns 0000 0000h)						3	
29769	29768	7448	2		RESERVED (returns 0000 0000h)						3	
29771	29770	744A	2		RESERVED (returns 0000 0000h)						3	
29773	29772	744C	2		RESERVED (returns 0000 0000h)						3	
29775	29774	744E	2		RESERVED (returns 0000 0000h)						3	
29777	29776	7450	2		RESERVED (returns 0000 0000h)						3	
29779	29778	7452	2		RESERVED (returns 0000 0000h)						3	
29781	29780	7454	2		RESERVED (returns 0000 0000h)						3	
29783	29782	7456	2		RESERVED (returns 0000 0000h)						3	
29785	29784	7458	2		RESERVED (returns 0000 0000h)						3	
29787	29786	745A	2		RESERVED (returns 0000 0000h)						3	
29789	29788	745C	2		RESERVED (returns 0000 0000h)						3	
29791	29790	745E	2		RESERVED (returns 0000 0000h)						3	
29793	29792	7460	2		RESERVED (returns 0000 0000h)						3	
29795	29794	7462	2		RESERVED (returns 0000 0000h)						3	
29825	29824	7480	2		Voltage phase 3 - 1st harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29827	29826	7482	2		Voltage phase 3 - 2nd harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29829	29828	7484	2		Voltage phase 3 - 3rd harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29831	29830	7486	2		Voltage phase 3 - 4th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29833	29832	7488	2		Voltage phase 3 - 5th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29835	29834	748A	2		Voltage phase 3 - 6th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29837	29836	748C	2		Voltage phase 3 - 7th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29839	29838	748E	2		Voltage phase 3 - 8th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29841	29840	7490	2		Voltage phase 3 - 9th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29843	29842	7492	2		Voltage phase 3 - 10th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29845	29844	7494	2		Voltage phase 3 - 11th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29847	29846	7496	2		Voltage phase 3 - 12th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29849	29848	7498	2		Voltage phase 3 - 13th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29851	29850	749A	2		Voltage phase 3 - 14th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
29853	29852	749C	2		Voltage phase 3 - 15th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29855	29854	749E	2		Voltage phase 3 - 16th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29857	29856	74A0	2		Voltage phase 3 - 17th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29859	29858	74A2	2		Voltage phase 3 - 18th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29861	29860	74A4	2		Voltage phase 3 - 19th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29863	29862	74A6	2		Voltage phase 3 - 20th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29865	29864	74A8	2		Voltage phase 3 - 21st harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29867	29866	74AA	2		Voltage phase 3 - 22nd harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29869	29868	74AC	2		Voltage phase 3 - 23rd harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29871	29870	74AE	2		Voltage phase 3 - 24th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29873	29872	74B0	2		Voltage phase 3 - 25th harmonic (rms)	unsigned integer	1	mV		See Note 3	3	
29875	29874	74B2	2		RESERVED (returns 0000 0000h)						3	
29877	29876	74B4	2		RESERVED (returns 0000 0000h)						3	
29879	29878	74B6	2		RESERVED (returns 0000 0000h)						3	
29881	29880	74B8	2		RESERVED (returns 0000 0000h)						3	
29883	29882	74BA	2		RESERVED (returns 0000 0000h)						3	
29885	29884	74BC	2		RESERVED (returns 0000 0000h)						3	
29887	29886	74BE	2		RESERVED (returns 0000 0000h)						3	
29889	29888	74C0	2		RESERVED (returns 0000 0000h)						3	
29891	29890	74C2	2		RESERVED (returns 0000 0000h)						3	
29893	29892	74C4	2		RESERVED (returns 0000 0000h)						3	
29895	29894	74C6	2		RESERVED (returns 0000 0000h)						3	
29897	29896	74C8	2		RESERVED (returns 0000 0000h)						3	
29899	29898	74CA	2		RESERVED (returns 0000 0000h)						3	
29901	29900	74CC	2		RESERVED (returns 0000 0000h)						3	
29903	29902	74CE	2		RESERVED (returns 0000 0000h)						3	
29905	29904	74D0	2		RESERVED (returns 0000 0000h)						3	
29907	29906	74D2	2		RESERVED (returns 0000 0000h)						3	
29909	29908	74D4	2		RESERVED (returns 0000 0000h)						3	
29911	29910	74D6	2		RESERVED (returns 0000 0000h)						3	
29913	29912	74D8	2		RESERVED (returns 0000 0000h)						3	
29915	29914	74DA	2		RESERVED (returns 0000 0000h)						3	
29917	29916	74DC	2		RESERVED (returns 0000 0000h)						3	



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Code (Dec)	Data Storing (2)
29919	29918	74DE	2		RESERVED (returns 0000 0000h)						3	
29921	29920	74E0	2		RESERVED (returns 0000 0000h)						3	
29923	29922	74E2	2		RESERVED (returns 0000 0000h)						3	

DETAILS					
Note 1	Type	Scale	Unit	Range	Condition
		0.01	W, var, VA		CTxVT<5.000
		1	W, var, VA		CTxVT ≥ 5.000
Note 2	Type	Scale	Unit	Range	Condition
		1.000.000	Wh, varh		100.000 ≤ CTxVT < 1.000.000
		100.000	Wh, varh		10.000 ≤ CTxVT < 100.000
		10.000	Wh, varh		1.000 ≤ CTxVT < 10.000
		1.000	Wh, varh		100 ≤ CTxVT < 1.000
		100	Wh, varh		10 ≤ CTxVT < 100
		10	Wh, varh		1 ≤ CTxVT < 10

VOLTAGE THD, HARMONICS AND STATISTICS		
Note 3	Network Type	
	With Neutral	data related to phase voltages
	Without Neutral	data related to chained voltages

Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Codes (Dec)	Write Function Codes (Hex)	Data Storing (2)
257	256	100	2		Current & Voltage Transf. Ratio								
257	256	100	1		Write Current transformer ratio - CT	unsigned integer	1	-	1 ÷ 9999	CT = I prim / I sec ex: 500 A / 5 A → CT = 100	3	10	
259	258	102	1		Write Voltage transformer ratio - VT	unsigned integer	0.1	-	10 ÷ 100	VT = V prim / V sec ex: 600 V /100 V VT = 6.00 → WRITE 60 --- If tranformer not present VT = 1.00 → WRITE 10	3	10	
4097	4096	1000	89		Measures								
4208	4207	106F	1		Output Remote Command	unsigned integer	-	-	0, 1,	0: Deactivate 1: Activate	3	10	
8193	8192	2000	16		Standard Setup parameters (read & write 16 byte at once)								
8193	8192	2000	16		Standard Setup Parameters	unsigned integer	-	-	-	See Note 1			
8705	8704	2200	24		Outout option Setup parameters (read & write 24 bvte at once)								
8705	8704	2200	24		Programming parameters of Pulse output	unsigned integer	-	-	-	See Note 2			
9217	9216	2400	1		Reset parameters								
9217	9216	2400	1		Reset Hour Meter, Maximum Powers, Maximum Voltages, Maximum Currents, Minimum Voltages, Active Partial Energy, Reactive Partial Energy	unsigned integer	-	-	-	See Note 1			
9729	9728	2600	1		Saving parameters								
9729	9728	2600	1		Saving in EEPROM parameters changed by Remote commands	unsigned integer	-	-	-	See Note 3	3	10	
9985	9984	2700	1		Enable writing								
9985	9984	2700	1		Enable Remote Writing Operation	unsigned integer	-	-	-	See Note 3 & Note 4	3	10	
10241	10240	2800	1		Restore default parameters								
10241	10240	2800	1		Restore default parameters	unsigned integer	-	-	-	See Note 4	3	10	

Note 1 - Standard Setup Parameters		
Readable / Writable in a 16 WORDS format :		
TX: FF 03 20 00 00 10 RX: FF 03 20 00 00 00 05 00 00 00 03 00 0A 00 00 00 00 00 00 00 01 00 01 00 00 00 00 00 03 00 02 00 01 00 00 The answer is in the following format :		
FF 03 20 W0 W1 W2 W3 W4 W5 W6 W7 W8 W9 W10 W11 W12 W13 W14 W15		
The meaning of the WORDs is the following: W15.W6.W4.W3.W2.W1.W0: no meaning		
W14 : Measure on line 1 of custom page 0: V phase 1 1: V12 2: I phase 1 3: I Neutral 4: P 3-phase 5: Q 3-phase 6: S 3-phase 7: P phase 1 8: Q phase 1 9: S phase 1	W13 : Measure on line 2 of custom page 0: V phase 2 1: V23 2: I phase 2 3: P 3-phase 4: Q 3-phase 5: S 3-phase 6: P phase 2 7: Q phase 2 8: S phase 2 9: Frequency	W12 : Measure on line 3 of custom page 0 => V phase 3 1 => V31 2 => I phase 3 3 => P 3-phase 4 => Q 3-phase 5 => S 3-phase 6 => P phase 3 7 => Q phase 3 8 => S phase 3 9 => P phase 1
W11 : Insertion type 0: 3N3E 1: 3-3E 2: 3-2E 3: 1N1E 4: 3N1E 5: 3-1E	W10 : Average and Max. demand calculation time 0: 5 minutes 1: 8 minutes 2: 10 minutes 3: 15 minutes 4: 20 minutes 5: 30 minutes 6: 60 minutes	W9 : Display contrast 0: level 0 1: level 1 2: level 2 3: level 3
W8 : Backlight intensity 0: 0% 1: 30% 2: 70%	W7 : Rated TA current 0: 5A 1: 1A	W5 : Run hour meter active on 0: start on V1 1: start on P
Note 2 - Output option Setup parameters		
Readable / Writable in a 24 WORDS format :		
FF 03 22 00 00 18		
FF 03 30 00 02 00 01		
The answer is in the following format :		
FF 03 30 W0 W1 W2 W3 W4 W5 W6 W7 W8 W9 W10 W11 W12 W13 W14 W15 W16 W17 W18 W19 W20 W21 W22 W23		
The meaning of the WORDs is the following: W20.W0.W8.W7.W6.W5.W4.W3.W2.W1.W0: no meaning		



Register Number	Register Address (Dec)	Register Address (Hex)	Dimension [word]	Bit Position	Description	Type	Scale	Unit	Range	Note	Read Function Codes (Dec)	Write Function Codes (Hex)	Data Storing (2)
	W23 : Type of measure			6: I1 7: I2 8: I3 9: Frequency 10: Active Energy 11: Reactive Energy	W22 : Sign of Alarm setpoint (only for Energies) 0: "+" 1: "-"		W21 : Unit of setpoint 0: X.XXX 1: XX.XX 2: XXX.X 3: X.XXX k 4: XX.XX k 5: XXX.X k 6: X.XXX M 7: XX.XX M 8: XXX.X M						
	W19 : Alarm Setpoint 0 ÷ 9999			W18 : Alarm on Min Value or Max Value 0: Min 1: Max		W17 : Relay (NO/NC) 0: NO 1: NC							
	W16 : Hysteresis 0 % ÷ 20 %			W15 : Alarm activation delay Expressede in "seconds" 0÷99		W14 : Alarm deactivation delay or Relay closing time (if Output type = Timed Remote command) Expressede in "seconds" 0÷99							
	W13 : Pulse active on 0: Active Energy 1: Reactive Energy			W12 : Pulse weight 0: 0,01 k 1: 0,1 k 2: 1,0 k 3: 10,0 k 4: 100,0 k 5: 1,0 M 6: 10,0 M		W11 : Pulse duration 0: 50 ms 1: 100 ms 2: 200 ms 3: 300 ms 4: 400 ms 5: 500 ms							
	W10 : Output type 0: Pulse out 1: Alarm out 2: Remote command 3: Timed Remote command												
	Note 3 - Reset parameters												
	To reset desired measurements write the following word (in binary): 0 0 0 0 0 0 0 0 b8 b7 b6 b5 b4 b3 b2 b1 b0												
	b0 = 1 => Reset Hour Meter b1 = 1 => Reset Maximum Powers b2 = 1 => Reset Maximum Voltages b3 = 1 => Reset Maximum Currents b4 = 1 => Reset Minimum Voltages b5 = 1 => Reset Active Partial Energy b6 = 1 => Reset Reactive Partial Energy												
	b7 ÷ b15 = 0												
	Note 3 - Configuration Procedure												
	1) "Master Unlock Key" command (write the value = 0x5AA5 in the register 0x2700)												
	2) Write the new Configuration (one or more registers...)												
	3) "Master Unlock Key" command (write the value = 0x5AA5 in the register 0x2700)												
	4) Save/Confirm the new Configuration (writing the value 0x000A in the register 0x2600)												
	5) The new Configuration is now available												
	Note 4 - Restore default parameters												
1) "Master Unlock Key" command (write the value = 0x5AA5 in the register 0x2700)													
3) Return to the Default configuration (writing the value 0x000B in the register 0x2800)													
4) The Default configuration has been restored													