

E30 SERIES MODBUS POINT MAP

LEGEND

R/W: R = Read-Only
R/W = Read from float or integer format, Write to integer format only
W = Write-Only
NV: NV = Value is stored in non-volatile memory
V = Value is volatile
SQD ID 1517x: Y = Parameter is valid for this ID
N = Parameter is invalid for this ID
Scale Reg: V = Voltage
W = Power
E = Energy
I = Current
<val> = scale is fixed at value shown. If no value shown, it is assumed to be 0.

Modbus Addresses

There are 2 Modbus addresses associated with the BCM2 - one address for each set of 2 CT strips and set of 4 AUX inputs. The primary Modbus address is set with the main PCB DIPswitches; The secondary address is always the primary address + 1. The Modbus Map detailed here is repeated *in it's entirety* for both addresses.

Supported Commands

Read Holding Register (03h)

Preset Single Register (06h)

Preset Multiple Registers (10h)

Report Slave ID (11h)

This will include the following info in the "Additional Data" area:

"Veris Model Exxx Branch Circuit Monitor, S/N=0x12345678, Location="<location string>"

Integer vs. Floating Point Registers

Integer format registers represent the data as 16 bit signed integer values. Float format registers represent the same data as 32-bit floating point values.

Floats

All floating point variables are read-only.

Floating point registers are packed as follows:

Float	MSB	BYTE3	BYTE2	LSB
Modbus MSW	MSB	LSB		
Modbus LSW			MSB	LSB

Example:

For a floating point value of 3.14159, the encoded 32-bit float value is 0x4049FD0.

Modbus MSW = 0x4049

Modbus LSW = 0x0FD0

Integers

Integer format registers must be used in conjunction with their associated Scale registers.

The Scale Registers represent the exponent of the associated values and are used in conjunction with the integer registers to create the final floating-point results.

Example:

integer register = 27

scale register = -2

final result = $27 * 10^{(-2)} = 0.27$

Note: If a Scale register is not listed for a parameter, it is assumed to be 0.

32-bit integer values, such as KWH, are packed as follows:

32-bit integer	MSB	BYTE3	BYTE2	LSB
Modbus MSW	MSB	LSB		
Modbus LSW			MSB	LSB

Example:

For a 32-bit value of 0x12345678.

Modbus MSW = 0x1234

Modbus LSW = 0x5678

Note that the Scale register for Energy (E) is applied only to the final 32-bit result.

For the Current Scales (I), Power Scales (W) and Energy Scales (E) for 1 phase, 2 phase and/or 3 phase Modbus Point Maps, make sure you are using the correct Scale value

Example:

integer register #1336 (Current Meter 1) = 10

E30 SERIES MODBUS POINT MAP

scale register #1000 = -1
final result = $10 * 10^{(-1)} = 1.0$

Model Differences

The Device ID register (register #5) indicates which registers in the map are valid and invalid

Invalid channels report the following values:

Integer registers: 0x8000 (32768)

Float registers: 0x7FC00000 (NaN)

Section	#Registers
Common	760
1PH	1470
2PH	1302
3PH	1120
TOTAL	4652

Below maps the Device ID to Model Series:

15170 = Model C, current only on all channels, no voltage

15171 = Model B, current only on branch channels, power on AUX channels plus voltage

15172 = Model A, current and power on all channels plus voltage

E30 SERIES MODBUS POINT MAP

Int Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Channel	Model (A,B,C)	Description	Scale Reg	Range	Default
---------	---------------	---------------	-----	----	---------	---------------	-------------	-----------	-------	---------

Manufacturer Info

1			R	NV		A,B,C	Serial Number MSW			
2			R	NV		A,B,C	Serial Number LSW			
3			R	NV		A,B,C	Firmware Revision RS			
4			R	NV		A,B,C	Firmware Revision OS			
5			R	NV		A,B,C	Device ID: 15170 = Model C , current only on all channels, no voltage 15171 = Model B , current only on branch channels, power on channels plus voltage 15172 = Model A , current and power on all channels plus			

General User Setup

6			R/W	NV		A,B,C	Configuration (bit 0 is LSB): bit 0: 0 = normal / sequential, 1 = rotated / odd-even bit 1: 0 = double-row, 1 = single-row bits 2-15: future use Examples: Value 0 = Top Feed Value 1 = Bottom Feed Value 2 = Single Row: Sequential Value 3 = Single Row: Odd / Even see install guide for diagrams			0
7 through 70			R/W	NV		A,B,C	Location String These 64 registers provide for up to 128 packed ASCII text characters (with terminator) It is also used in the Report_ID response Lowest numbered register holds the 1st 2 characters of the Encoding is 1st character in MSB, 2nd in LSB Example for "PDU#3": Reg 7: 0x4450 (PD) Reg 8: 0x2355 (U#) Reg 9: 0x0033 (3<term>) All other Regs: N/A			"Location"

Demand Setup

Setup for Present KW Demand, Max KW Demand, Present Current Demand, Max Current Demand

71			R/W	NV	All	A,B,C	Number of Sub-Intervals per Demand Interval Sets the number of sub-intervals that make a single demand interval. For block demand, set this to 1.		1-6	1
72			R/W	NV	All	A,B,C	Sub-Interval Length in seconds. For sync-to-comms, set this to 0.		0, 10-32767	900 (15minutes)

CT Sizes (Amps)

73			R	NV	1	A,B,C	Branch CT Size		1-32767	100
74			R	NV	2	A,B,C	Branch CT Size		1-32767	100
75			R	NV	3	A,B,C	Branch CT Size		1-32767	100
76			R	NV	4	A,B,C	Branch CT Size		1-32767	100
77			R	NV	5	A,B,C	Branch CT Size		1-32767	100
78			R	NV	6	A,B,C	Branch CT Size		1-32767	100
79			R	NV	7	A,B,C	Branch CT Size		1-32767	100
80			R	NV	8	A,B,C	Branch CT Size		1-32767	100
81			R	NV	9	A,B,C	Branch CT Size		1-32767	100
82			R	NV	10	A,B,C	Branch CT Size		1-32767	100
83			R	NV	11	A,B,C	Branch CT Size		1-32767	100
84			R	NV	12	A,B,C	Branch CT Size		1-32767	100
85			R	NV	13	A,B,C	Branch CT Size		1-32767	100
86			R	NV	14	A,B,C	Branch CT Size		1-32767	100
87			R	NV	15	A,B,C	Branch CT Size		1-32767	100
88			R	NV	16	A,B,C	Branch CT Size		1-32767	100
89			R	NV	17	A,B,C	Branch CT Size		1-32767	100

E30 SERIES MODBUS POINT MAP

Int Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Channel	Model (A,B,C)	Description	Scale Reg	Range	Default
---------	---------------	---------------	-----	----	---------	---------------	-------------	-----------	-------	---------

CT Sizes (Amps) (cont.)

90			R	NV	18	A,B,C	Branch CT Size		1-32767	100
91			R	NV	19	A,B,C	Branch CT Size		1-32767	100
92			R	NV	20	A,B,C	Branch CT Size		1-32767	100
93			R	NV	21	A,B,C	Branch CT Size		1-32767	100
94			R	NV	22	A,B,C	Branch CT Size		1-32767	100
95			R	NV	23	A,B,C	Branch CT Size		1-32767	100
96			R	NV	24	A,B,C	Branch CT Size		1-32767	100
97			R	NV	25	A,B,C	Branch CT Size		1-32767	100
98			R	NV	26	A,B,C	Branch CT Size		1-32767	100
99			R	NV	27	A,B,C	Branch CT Size		1-32767	100
100			R	NV	28	A,B,C	Branch CT Size		1-32767	100
101			R	NV	29	A,B,C	Branch CT Size		1-32767	100
102			R	NV	30	A,B,C	Branch CT Size		1-32767	100
103			R	NV	31	A,B,C	Branch CT Size		1-32767	100
104			R	NV	32	A,B,C	Branch CT Size		1-32767	100
105			R	NV	33	A,B,C	Branch CT Size		1-32767	100
106			R	NV	34	A,B,C	Branch CT Size		1-32767	100
107			R	NV	35	A,B,C	Branch CT Size		1-32767	100
108			R	NV	36	A,B,C	Branch CT Size		1-32767	100
109			R	NV	37	A,B,C	Branch CT Size		1-32767	100
110			R	NV	38	A,B,C	Branch CT Size		1-32767	100
111			R	NV	39	A,B,C	Branch CT Size		1-32767	100
112			R	NV	40	A,B,C	Branch CT Size		1-32767	100
113			R	NV	41	A,B,C	Branch CT Size		1-32767	100
114			R	NV	42	A,B,C	Branch CT Size		1-32767	100
115			R/W	NV	43	A,B,C	AUX CT Size		1-32767	200
116			R/W	NV	44	A,B,C	AUX CT Size		1-32767	200
117			R/W	NV	45	A,B,C	AUX CT Size		1-32767	200
118			R/W	NV	46	A,B,C	AUX CT Size		1-32767	200

Breaker Sizes (Amps)

Setting the breaker size to "0" will disable all alarms for that channel.

Breaker sizes are in Amps

119			R/W	NV	1	A,B,C	Branch Breaker Size		0-32767	20
120			R/W	NV	2	A,B,C	Branch Breaker Size		0-32767	20
121			R/W	NV	3	A,B,C	Branch Breaker Size		0-32767	20
122			R/W	NV	4	A,B,C	Branch Breaker Size		0-32767	20
123			R/W	NV	5	A,B,C	Branch Breaker Size		0-32767	20
124			R/W	NV	6	A,B,C	Branch Breaker Size		0-32767	20
125			R/W	NV	7	A,B,C	Branch Breaker Size		0-32767	20
126			R/W	NV	8	A,B,C	Branch Breaker Size		0-32767	20
127			R/W	NV	9	A,B,C	Branch Breaker Size		0-32767	20
128			R/W	NV	10	A,B,C	Branch Breaker Size		0-32767	20
129			R/W	NV	11	A,B,C	Branch Breaker Size		0-32767	20
130			R/W	NV	12	A,B,C	Branch Breaker Size		0-32767	20
131			R/W	NV	13	A,B,C	Branch Breaker Size		0-32767	20
132			R/W	NV	14	A,B,C	Branch Breaker Size		0-32767	20
133			R/W	NV	15	A,B,C	Branch Breaker Size		0-32767	20
134			R/W	NV	16	A,B,C	Branch Breaker Size		0-32767	20
135			R/W	NV	17	A,B,C	Branch Breaker Size		0-32767	20
136			R/W	NV	18	A,B,C	Branch Breaker Size		0-32767	20
137			R/W	NV	19	A,B,C	Branch Breaker Size		0-32767	20
138			R/W	NV	20	A,B,C	Branch Breaker Size		0-32767	20
139			R/W	NV	21	A,B,C	Branch Breaker Size		0-32767	20
140			R/W	NV	22	A,B,C	Branch Breaker Size		0-32767	20
141			R/W	NV	23	A,B,C	Branch Breaker Size		0-32767	20
142			R/W	NV	24	A,B,C	Branch Breaker Size		0-32767	20
143			R/W	NV	25	A,B,C	Branch Breaker Size		0-32767	20
144			R/W	NV	26	A,B,C	Branch Breaker Size		0-32767	20
145			R/W	NV	27	A,B,C	Branch Breaker Size		0-32767	20
146			R/W	NV	28	A,B,C	Branch Breaker Size		0-32767	20
147			R/W	NV	29	A,B,C	Branch Breaker Size		0-32767	20
148			R/W	NV	30	A,B,C	Branch Breaker Size		0-32767	20
149			R/W	NV	31	A,B,C	Branch Breaker Size		0-32767	20

E30 SERIES MODBUS POINT MAP

Int Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Channel	Model (A,B,C)	Description	Scale Reg	Range	Default
---------	---------------	---------------	-----	----	---------	---------------	-------------	-----------	-------	---------

Breaker Sizes (Amps) (cont.)

150			R/W	NV	32	A,B,C	Branch Breaker Size		0-32767	20
151			R/W	NV	33	A,B,C	Branch Breaker Size		0-32767	20
152			R/W	NV	34	A,B,C	Branch Breaker Size		0-32767	20
153			R/W	NV	35	A,B,C	Branch Breaker Size		0-32767	20
154			R/W	NV	36	A,B,C	Branch Breaker Size		0-32767	20
155			R/W	NV	37	A,B,C	Branch Breaker Size		0-32767	20
156			R/W	NV	38	A,B,C	Branch Breaker Size		0-32767	20
157			R/W	NV	39	A,B,C	Branch Breaker Size		0-32767	20
158			R/W	NV	40	A,B,C	Branch Breaker Size		0-32767	20
159			R/W	NV	41	A,B,C	Branch Breaker Size		0-32767	20
160			R/W	NV	42	A,B,C	Branch Breaker Size		0-32767	20
161			R/W	NV	43	A,B,C	AUX Breaker Size		0-32767	225
162			R/W	NV	44	A,B,C	AUX Breaker Size		0-32767	225
163			R/W	NV	45	A,B,C	AUX Breaker Size		0-32767	225
164			R/W	NV	46	A,B,C	AUX Breaker Size		0-32767	225

Alarm Timers (seconds)

These timers control entry into a latching alarm state. A return to a non-alarm state is instantaneous.

All channels use the same global timers.

Latching Alarm On Time applies to all Latching Alarms.

The parameter measurement rate is expected to be around 2.5 secs, which will limit the effective resolution of these timers.

165			R/W	NV	All	A,B,C	High-High Latching Alarm Time Delay		0-32767	10
166			R/W	NV	All	A,B,C	High Latching Alarm Time Delay		0-32767	10
167			R/W	NV	All	A,B,C	Low Latching Alarm Time Delay		0-32767	10
168			R/W	NV	All	A,B,C	Low-Low Latching Alarm Time Delay		0-32767	10
169			R/W	NV	All	A,B,C	Latching Alarm ON Time (when current is above Low-Low alarm & ON Time elapses then ON state is declared for all latching alarms, ON State enables Alarm Time Delays)		0-32767	10
170			R/W	NV	All	A,B,C	Latching Alarms time until OFF state declared (current is below Low-Low alarm and a ON state was declared)		0-32767	30

Alarm Thresholds

All values are expressed as %breaker-size.

All channels use these same global values.

An entry of 0% for any threshold disables that alarm for all channels.

All Thresholds are scaled by -1 to increase the precision by 1 decimal point

Hysteresis only applies to Non-Latching Alarms

171			R/W	NV	All	A,B,C	High-High Latching Alarm Threshold	-1	0-1000	700
172			R/W	NV	All	A,B,C	High Alarm Latching Alarm Threshold	-1	0-1000	600
173			R/W	NV	All	A,B,C	Low Alarm Latching Alarm Threshold	-1	0-1000	75
174			R/W	NV	All	A,B,C	Low Low Latching Alarm Threshold	-1	0-1000	25
175			R/W	NV	All	A,B,C	Non-Latching High Threshold	-1	0-1000	600
176			R/W	NV	All	A,B,C	Non-Latching Low Threshold	-1	0-1000	50
177			R/W	NV	All	A,B,C	Non-Latching Hysteresis (0-100% percent of setpoint)	-1	0-1000	50

Alarm Status

178			R/W	NV	1	A,B,C	Branch Alarm Status Latching Alarms are cleared by writing a 0 to it's alarm bit. A write to a Non-Latching alarm is ignored Bit 0: High High Latching Alarm Bit 1: High Latching Alarm Bit 2: Low Latching Alarm Bit 3: Low Low Latching Alarm Bit 4: Latching Alarm OFF state declared (1=OFF; ON state must have been achieved prior) Bit 5-7: Reserved for future use (reads 0) Bit 8: High Non-Latching Alarm Bit 9: Low Non-Latching Alarm Bit 10-15: Reserved for future use (reads 0)			
179			R/W	NV	2	A,B,C	Branch Alarm Status			
180			R/W	NV	3	A,B,C	Branch Alarm Status			
181			R/W	NV	4	A,B,C	Branch Alarm Status			
182			R/W	NV	5	A,B,C	Branch Alarm Status			
183			R/W	NV	6	A,B,C	Branch Alarm Status			
184			R/W	NV	7	A,B,C	Branch Alarm Status			

E30 SERIES MODBUS POINT MAP

185			R/W	NV	8	A,B,C	Branch Alarm Status			
186			R/W	NV	9	A,B,C	Branch Alarm Status			
Int Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Channel	Model (A,B,C)	Description	Scale Reg	Range	Default

Alarm Status (cont.)

187			R/W	NV	10	A,B,C	Branch Alarm Status			
188			R/W	NV	11	A,B,C	Branch Alarm Status			
189			R/W	NV	12	A,B,C	Branch Alarm Status			
190			R/W	NV	13	A,B,C	Branch Alarm Status			
191			R/W	NV	14	A,B,C	Branch Alarm Status			
192			R/W	NV	15	A,B,C	Branch Alarm Status			
193			R/W	NV	16	A,B,C	Branch Alarm Status			
194			R/W	NV	17	A,B,C	Branch Alarm Status			
195			R/W	NV	18	A,B,C	Branch Alarm Status			
196			R/W	NV	19	A,B,C	Branch Alarm Status			
197			R/W	NV	20	A,B,C	Branch Alarm Status			
198			R/W	NV	21	A,B,C	Branch Alarm Status			
199			R/W	NV	22	A,B,C	Branch Alarm Status			
200			R/W	NV	23	A,B,C	Branch Alarm Status			
201			R/W	NV	24	A,B,C	Branch Alarm Status			
202			R/W	NV	25	A,B,C	Branch Alarm Status			
203			R/W	NV	26	A,B,C	Branch Alarm Status			
204			R/W	NV	27	A,B,C	Branch Alarm Status			
205			R/W	NV	28	A,B,C	Branch Alarm Status			
206			R/W	NV	29	A,B,C	Branch Alarm Status			
207			R/W	NV	30	A,B,C	Branch Alarm Status			
208			R/W	NV	31	A,B,C	Branch Alarm Status			
209			R/W	NV	32	A,B,C	Branch Alarm Status			
210			R/W	NV	33	A,B,C	Branch Alarm Status			
211			R/W	NV	34	A,B,C	Branch Alarm Status			
212			R/W	NV	35	A,B,C	Branch Alarm Status			
213			R/W	NV	36	A,B,C	Branch Alarm Status			
214			R/W	NV	37	A,B,C	Branch Alarm Status			
215			R/W	NV	38	A,B,C	Branch Alarm Status			
216			R/W	NV	39	A,B,C	Branch Alarm Status			
217			R/W	NV	40	A,B,C	Branch Alarm Status			
218			R/W	NV	41	A,B,C	Branch Alarm Status			
219			R/W	NV	42	A,B,C	Branch Alarm Status			
220			R/W	NV	43	A,B,C	AUX Alarm Status			
221			R/W	NV	44	A,B,C	AUX Alarm Status			
222			R/W	NV	45	A,B,C	AUX Alarm Status			
223			R/W	NV	46	A,B,C	AUX Alarm Status			
224			R	NV	All	A,B,C	Global Latching Alarm Status Bit 0: High High Latching Alarm Bit 1: High Latching Alarm Bit 2: Low Latching Alarm Bit 3: Low Low Latching Alarm Bit 4: Latching Alarm OFF state declared (1=OFF; ON state must have been achieved prior) Bit 5-7: Reserved for future use (reads 0) Bit 8: High Voltage Latching Alarm Bit 9: Low Voltage Latching Alarm Bit 10-15: Reserved for future use (reads 0)			
225			R			A,B,C	Global Non-Latching Alarm Status Bit 0: High Non-Latching Alarm Bit 1: Low Non-Latching Alarm Bit 2-7: Reserved for future use (reads 0) Bit 8: High Voltage Non-Latching Alarm Bit 9: Low Voltage Non-Latching Alarm Bit 10-15: Reserved for future use (reads 0)			
226			R	NV		A,B,C	Global Most-Recent Latching Alarm Channel		0-46, 0=none	
227			R	NV		A,B,C	Global Most-Recent Non-Latching Alarm Channel		0-46, 0=none	
228			R			A,B,C	Total number of channels in alarm (based on latching alarms)			
229			R			A,B,C	Total number of channels in alarm (based on non-latching alarms)			
230			R			A,B,C	Error Bitmap1 (placeholder - bits TBD)			
231			R			A,B,C	Error Bitmap2 (placeholder - bits TBD)			
232			R			A,B,C	Error Bitmap3 (placeholder - bits TBD)			
233			R			A,B,C	Error Bitmap4 (placeholder - bits TBD)			

E30 SERIES MODBUS POINT MAP

234			R			A,B,C	Error Bitmap5 (placeholder - bits TBD)			
235			R			A,B,C	Error Bitmap6 (placeholder - bits TBD)			

E30 SERIES MODBUS POINT MAP

Int Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Channel	Model (A,B,C)	Description	Scale Reg	Range	Default
---------	---------------	---------------	-----	----	---------	---------------	-------------	-----------	-------	---------

L-L Voltage Alarm Timers (seconds)

These timers control entry into an alarm state. A return to a non-alarm state is instantaneous.

All channels use these same global timers.

Note that the parameter measurement update rate is 1.6 secs, which will limit the effective resolution of these timers.

236			R/W	NV		A,B	Overvoltage Alarm Timer		0-32767	
237			R/W	NV		A,B	Undervoltage Alarm Timer		0-32767	

L-L VOLTAGE ALARM THRESHOLDS

All voltage alarm thresholds are expressed as Volts.

All Line-to-Line voltage channels use the same thresholds

An entry of 0 for any threshold disables that alarm for all channels.

Hysteresis is scaled by -1 to increase the precision by 1 decimal point

Hysteresis only applies to Non-Latching Alarms

238			R/W	NV		A,B	Overvoltage Alarm Threshold	244	0-32767	
239			R/W	NV		A,B	Undervoltage Alarm Threshold	244	0-32767	
240			R/W	NV		A,B	Voltage Alarm Hysteresis (percentage of setpoint)	-1	0-1000	

L-L Voltage Alarm Status

241			R/W	NV	1	A,B	Voltage Alarm Status Latching Alarms are cleared by writing a 0 to it's alarm bit. A write to a Non-Latching alarm is ignored Bit 0: High Latching Alarm Bit 1: Low Latching Alarm Bit 2-7: Reserved for future use (reads 0) Bit 8: High Non-Latching Alarm Bit 9: Low Non-Latching Alarm Bit 10-15: Reserved for future use (reads 0)			
242			R/W	NV	2	A,B	Voltage Alarm Status			
243			R/W	NV	3	A,B	Voltage Alarm Status			

VOLTAGE INPUTS

244			R	NV		A,B	Voltage Scale Register			
245	600	601	R			A,B	Frequency (derived from Phase A)	-2	40-70	
246	602	603	R			A,B	VOLTS L-N 3ph Ave	244		
247	604	605	R			A,B	VOLTS L-L 3ph Ave	244		
248	606	607	R			A,B	VOLTS A-N	244		
249	608	609	R			A,B	VOLTS B-N	244		
250	610	611	R			A,B	VOLTS C-N	244		
251	612	613	R			A,B	VOLTS A-B	244		
252	614	615	R			A,B	VOLTS B-C	244		
253	616	617	R			A,B	VOLTS A-C	244		

AUX INPUTS

Voltage/Current Phasing

AUX CT Channel	Current Phase	Voltage Phase
1	1	A
2	2	B
3	3	C
4	4	none

254	618	619	R	NV	43-45	A,B	3ph KWH (MSW)	291		
255			R	NV	43-45	A,B	3ph KWH (LSW)			
256	620	621	R		43-45	A,B	3ph Total KW	292		
257	622	623	R		43-45	A,B	3ph Total PF	-3	0.0 - 1.0	
258	624	625	R		43-45	A,B,C	3ph Average Current (phases 1,2,3)	293		
259	626	627	R		43	A,B	KW Phase 1	288		
260	628	629	R		44	A,B	KW Phase 2	289		
261	630	631	R		45	A,B	KW Phase 3	290		
262	632	633	R		43	A,B	PF Phase 1	-3	0.0 - 1.0	
263	634	635	R		44	A,B	PF Phase 2	-3	0.0 - 1.0	

E30 SERIES MODBUS POINT MAP

Int Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Channel	Model (A,B,C)	Description	Scale Reg	Range	Default
---------	---------------	---------------	-----	----	---------	---------------	-------------	-----------	-------	---------

AUX INPUTS (cont.)

264	636	637	R		45	A,B	PF Phase 3	-3	0.0 - 1.0	
265	638	639	R		43	A,B,C	Current Phase 1	284		
266	640	641	R		44	A,B,C	Current Phase 2	285		
267	642	643	R		45	A,B,C	Current Phase 3	286		
268	644	645	R		46	A,B,C	Current Phase 4	287		
269	646	647	R		43	A,B,C	Present Current Demand Phase 1	284		
270	648	649	R		44	A,B,C	Present Current Demand Phase 2	285		
271	650	651	R		45	A,B,C	Present Current Demand Phase 3	286		
272	652	653	R		46	A,B,C	Present Current Demand Phase 4	287		
273	654	655	R	NV	43	A,B,C	Max Current Demand Phase 1	284		
274	656	657	R	NV	44	A,B,C	Max Current Demand Phase 2	285		
275	658	659	R	NV	45	A,B,C	Max Current Demand Phase 3	286		
276	660	661	R	NV	46	A,B,C	Max Current Demand Phase 4	287		
277	662	663	R		43-45	A,B	3ph Present KW-Total Demand	292		
278	664	665	R	NV	43-45	A,B	3ph Max KW-Total Demand	292		
279	666	667	R	NV	43	A,B,C	Max Current Phase 1	284		
280	668	669	R	NV	44	A,B,C	Max Current Phase 2	285		
281	670	671	R	NV	45	A,B,C	Max Current Phase 3	286		
282	672	673	R	NV	46	A,B,C	Max Current Phase 4	287		
283	674	675	R	NV	43-45	A,B	3ph Max KW-Total	292		
284			R	NV	43	A,B,C	Current Scale Phase 1			
285			R	NV	44	A,B,C	Current Scale Phase 2			
286			R	NV	45	A,B,C	Current Scale Phase 3			
287			R	NV	46	A,B,C	Current Scale Phase 4			
288			R	NV	43	A,B	Power Scale Phase 1			
289			R	NV	44	A,B	Power Scale Phase 2			
290			R	NV	45	A,B	Power Scale Phase 3			
291			R	NV	43-45	A,B	Energy Scale (3ph)			
292			R	NV	43-45	A,B	Power Scale (3ph)			
293			R	NV	43-45	A,B,C	Current Scale 3ph (Avg)			
294			W		All	A,B,C	AUX Resets - Write the listed value to perform the listed reset: 10203 = Clear KWH value to zero 29877 = Clear Max Current and Max KW values to zero			

Global Resets

295			W		All	A,B,C	Global Reset - Write the listed value to perform the listed reset: 26012 = Begin new Demand Sub-interval 26013 = Reset Demand 31010 = Reset all Latching Alarms 10203 = Clear all KWH values to zero 29877 = Clear all Max Current and Max KW values to zero 20097 = Clear all Max Demand values to zero			
-----	--	--	---	--	-----	-------	--	--	--	--

Global Latching Alarm Counters

Global Latching Alarm Counters are incremented each time any one of the 46 corresponding Latching Alarm Counters are incremented

All Global Counters will rollover to the value of 1

Values are saved over a power cycle

296			R	NV	All	A,B,C	High High Latching Alarm Global Counter		0-32767	
297			R	NV	All	A,B,C	High Latching Alarm Global Counter		0-32767	
298			R	NV	All	A,B,C	Low Latching Alarm Global Counter		0-32767	
299			R	NV	All	A,B,C	Low Low Latching Alarm Global Counter		0-32767	
300			R	NV	All	A,B,C	Latching Alarm OFF state Global Counter		0-32767	

Latching Alarm Counters

Latching Alarm Counters are incremented each time their associated Alarm Status Bit has latched

All Counters will rollover to the value of 1

Values are set to 0 over a power cycle

301			R		1	A,B,C	High High Latching Alarm Counter		0-32767	0
302			R		2	A,B,C	High High Latching Alarm Counter		0-32767	0
303			R		3	A,B,C	High High Latching Alarm Counter		0-32767	0
304			R		4	A,B,C	High High Latching Alarm Counter		0-32767	0
305			R		5	A,B,C	High High Latching Alarm Counter		0-32767	0

E30 SERIES MODBUS POINT MAP

Int Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Channel	Model (A,B,C)	Description	Scale Reg	Range	Default
Latching Alarm Counters (cont.)										
306			R		6	A,B,C	High High Latching Alarm Counter		0-32767	0
307			R		7	A,B,C	High High Latching Alarm Counter		0-32767	0
308			R		8	A,B,C	High High Latching Alarm Counter		0-32767	0
309			R		9	A,B,C	High High Latching Alarm Counter		0-32767	0
310			R		10	A,B,C	High High Latching Alarm Counter		0-32767	0
311			R		11	A,B,C	High High Latching Alarm Counter		0-32767	0
312			R		12	A,B,C	High High Latching Alarm Counter		0-32767	0
313			R		13	A,B,C	High High Latching Alarm Counter		0-32767	0
314			R		14	A,B,C	High High Latching Alarm Counter		0-32767	0
315			R		15	A,B,C	High High Latching Alarm Counter		0-32767	0
316			R		16	A,B,C	High High Latching Alarm Counter		0-32767	0
317			R		17	A,B,C	High High Latching Alarm Counter		0-32767	0
318			R		18	A,B,C	High High Latching Alarm Counter		0-32767	0
319			R		19	A,B,C	High High Latching Alarm Counter		0-32767	0
320			R		20	A,B,C	High High Latching Alarm Counter		0-32767	0
321			R		21	A,B,C	High High Latching Alarm Counter		0-32767	0
322			R		22	A,B,C	High High Latching Alarm Counter		0-32767	0
323			R		23	A,B,C	High High Latching Alarm Counter		0-32767	0
324			R		24	A,B,C	High High Latching Alarm Counter		0-32767	0
325			R		25	A,B,C	High High Latching Alarm Counter		0-32767	0
326			R		26	A,B,C	High High Latching Alarm Counter		0-32767	0
327			R		27	A,B,C	High High Latching Alarm Counter		0-32767	0
328			R		28	A,B,C	High High Latching Alarm Counter		0-32767	0
329			R		29	A,B,C	High High Latching Alarm Counter		0-32767	0
330			R		30	A,B,C	High High Latching Alarm Counter		0-32767	0
331			R		31	A,B,C	High High Latching Alarm Counter		0-32767	0
332			R		32	A,B,C	High High Latching Alarm Counter		0-32767	0
333			R		33	A,B,C	High High Latching Alarm Counter		0-32767	0
334			R		34	A,B,C	High High Latching Alarm Counter		0-32767	0
335			R		35	A,B,C	High High Latching Alarm Counter		0-32767	0
336			R		36	A,B,C	High High Latching Alarm Counter		0-32767	0
337			R		37	A,B,C	High High Latching Alarm Counter		0-32767	0
338			R		38	A,B,C	High High Latching Alarm Counter		0-32767	0
339			R		39	A,B,C	High High Latching Alarm Counter		0-32767	0
340			R		40	A,B,C	High High Latching Alarm Counter		0-32767	0
341			R		41	A,B,C	High High Latching Alarm Counter		0-32767	0
342			R		42	A,B,C	High High Latching Alarm Counter		0-32767	0
343			R		43	A,B,C	AUX High High Latching Alarm Counter		0-32767	0
344			R		44	A,B,C	AUX High High Latching Alarm Counter		0-32767	0
345			R		45	A,B,C	AUX High High Latching Alarm Counter		0-32767	0
346			R		46	A,B,C	AUX High High Latching Alarm Counter		0-32767	0
347			R		1	A,B,C	High Latching Alarm Counter		0-32767	0
348			R		2	A,B,C	High Latching Alarm Counter		0-32767	0
349			R		3	A,B,C	High Latching Alarm Counter		0-32767	0
350			R		4	A,B,C	High Latching Alarm Counter		0-32767	0
351			R		5	A,B,C	High Latching Alarm Counter		0-32767	0
352			R		6	A,B,C	High Latching Alarm Counter		0-32767	0
353			R		7	A,B,C	High Latching Alarm Counter		0-32767	0
354			R		8	A,B,C	High Latching Alarm Counter		0-32767	0
355			R		9	A,B,C	High Latching Alarm Counter		0-32767	0
356			R		10	A,B,C	High Latching Alarm Counter		0-32767	0
357			R		11	A,B,C	High Latching Alarm Counter		0-32767	0
358			R		12	A,B,C	High Latching Alarm Counter		0-32767	0
359			R		13	A,B,C	High Latching Alarm Counter		0-32767	0
360			R		14	A,B,C	High Latching Alarm Counter		0-32767	0
361			R		15	A,B,C	High Latching Alarm Counter		0-32767	0
362			R		16	A,B,C	High Latching Alarm Counter		0-32767	0
363			R		17	A,B,C	High Latching Alarm Counter		0-32767	0
364			R		18	A,B,C	High Latching Alarm Counter		0-32767	0
365			R		19	A,B,C	High Latching Alarm Counter		0-32767	0
366			R		20	A,B,C	High Latching Alarm Counter		0-32767	0
367			R		21	A,B,C	High Latching Alarm Counter		0-32767	0
368			R		22	A,B,C	High Latching Alarm Counter		0-32767	0
369			R		23	A,B,C	High Latching Alarm Counter		0-32767	0
370			R		24	A,B,C	High Latching Alarm Counter		0-32767	0

E30 SERIES MODBUS POINT MAP

Int Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Channel	Model (A,B,C)	Description	Scale Reg	Range	Default
---------	------------------	------------------	-----	----	---------	------------------	-------------	--------------	-------	---------

Latching Alarm Counters (cont.)

371			R		25	A,B,C	High Latching Alarm Counter		0-32767	0
372			R		26	A,B,C	High Latching Alarm Counter		0-32767	0
373			R		27	A,B,C	High Latching Alarm Counter		0-32767	0
374			R		28	A,B,C	High Latching Alarm Counter		0-32767	0
375			R		29	A,B,C	High Latching Alarm Counter		0-32767	0
376			R		30	A,B,C	High Latching Alarm Counter		0-32767	0
377			R		31	A,B,C	High Latching Alarm Counter		0-32767	0
378			R		32	A,B,C	High Latching Alarm Counter		0-32767	0
379			R		33	A,B,C	High Latching Alarm Counter		0-32767	0
380			R		34	A,B,C	High Latching Alarm Counter		0-32767	0
381			R		35	A,B,C	High Latching Alarm Counter		0-32767	0
382			R		36	A,B,C	High Latching Alarm Counter		0-32767	0
383			R		37	A,B,C	High Latching Alarm Counter		0-32767	0
384			R		38	A,B,C	High Latching Alarm Counter		0-32767	0
385			R		39	A,B,C	High Latching Alarm Counter		0-32767	0
386			R		40	A,B,C	High Latching Alarm Counter		0-32767	0
387			R		41	A,B,C	High Latching Alarm Counter		0-32767	0
388			R		42	A,B,C	High Latching Alarm Counter		0-32767	0
389			R		43	A,B,C	AUX High Latching Alarm Counter		0-32767	0
390			R		44	A,B,C	AUX High Latching Alarm Counter		0-32767	0
391			R		45	A,B,C	AUX High Latching Alarm Counter		0-32767	0
392			R		46	A,B,C	AUX High Latching Alarm Counter		0-32767	0
393			R		1	A,B,C	Low Latching Alarm Counter		0-32767	0
394			R		2	A,B,C	Low Latching Alarm Counter		0-32767	0
395			R		3	A,B,C	Low Latching Alarm Counter		0-32767	0
396			R		4	A,B,C	Low Latching Alarm Counter		0-32767	0
397			R		5	A,B,C	Low Latching Alarm Counter		0-32767	0
398			R		6	A,B,C	Low Latching Alarm Counter		0-32767	0
399			R		7	A,B,C	Low Latching Alarm Counter		0-32767	0
400			R		8	A,B,C	Low Latching Alarm Counter		0-32767	0
401			R		9	A,B,C	Low Latching Alarm Counter		0-32767	0
402			R		10	A,B,C	Low Latching Alarm Counter		0-32767	0
403			R		11	A,B,C	Low Latching Alarm Counter		0-32767	0
404			R		12	A,B,C	Low Latching Alarm Counter		0-32767	0
405			R		13	A,B,C	Low Latching Alarm Counter		0-32767	0
406			R		14	A,B,C	Low Latching Alarm Counter		0-32767	0
407			R		15	A,B,C	Low Latching Alarm Counter		0-32767	0
408			R		16	A,B,C	Low Latching Alarm Counter		0-32767	0
409			R		17	A,B,C	Low Latching Alarm Counter		0-32767	0
410			R		18	A,B,C	Low Latching Alarm Counter		0-32767	0
411			R		19	A,B,C	Low Latching Alarm Counter		0-32767	0
412			R		20	A,B,C	Low Latching Alarm Counter		0-32767	0
413			R		21	A,B,C	Low Latching Alarm Counter		0-32767	0
414			R		22	A,B,C	Low Latching Alarm Counter		0-32767	0
415			R		23	A,B,C	Low Latching Alarm Counter		0-32767	0
416			R		24	A,B,C	Low Latching Alarm Counter		0-32767	0
417			R		25	A,B,C	Low Latching Alarm Counter		0-32767	0
418			R		26	A,B,C	Low Latching Alarm Counter		0-32767	0
419			R		27	A,B,C	Low Latching Alarm Counter		0-32767	0
420			R		28	A,B,C	Low Latching Alarm Counter		0-32767	0
421			R		29	A,B,C	Low Latching Alarm Counter		0-32767	0
422			R		30	A,B,C	Low Latching Alarm Counter		0-32767	0
423			R		31	A,B,C	Low Latching Alarm Counter		0-32767	0
424			R		32	A,B,C	Low Latching Alarm Counter		0-32767	0
425			R		33	A,B,C	Low Latching Alarm Counter		0-32767	0
426			R		34	A,B,C	Low Latching Alarm Counter		0-32767	0
427			R		35	A,B,C	Low Latching Alarm Counter		0-32767	0
428			R		36	A,B,C	Low Latching Alarm Counter		0-32767	0
429			R		37	A,B,C	Low Latching Alarm Counter		0-32767	0
430			R		38	A,B,C	Low Latching Alarm Counter		0-32767	0
431			R		39	A,B,C	Low Latching Alarm Counter		0-32767	0
432			R		40	A,B,C	Low Latching Alarm Counter		0-32767	0
433			R		41	A,B,C	Low Latching Alarm Counter		0-32767	0
434			R		42	A,B,C	Low Latching Alarm Counter		0-32767	0
435			R		43	A,B,C	AUX Low Latching Alarm Counter		0-32767	0

E30 SERIES MODBUS POINT MAP

Int Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Channel	Model (A,B,C)	Description	Scale Reg	Range	Default
Latching Alarm Counters (cont.)										
436			R		44	A,B,C	AUX Low Latching Alarm Counter		0-32767	0
437			R		45	A,B,C	AUX Low Latching Alarm Counter		0-32767	0
438			R		46	A,B,C	AUX Low Latching Alarm Counter		0-32767	0
439			R		1	A,B,C	Low Low Latching Alarm Counter		0-32767	0
440			R		2	A,B,C	Low Low Latching Alarm Counter		0-32767	0
441			R		3	A,B,C	Low Low Latching Alarm Counter		0-32767	0
442			R		4	A,B,C	Low Low Latching Alarm Counter		0-32767	0
443			R		5	A,B,C	Low Low Latching Alarm Counter		0-32767	0
444			R		6	A,B,C	Low Low Latching Alarm Counter		0-32767	0
445			R		7	A,B,C	Low Low Latching Alarm Counter		0-32767	0
446			R		8	A,B,C	Low Low Latching Alarm Counter		0-32767	0
447			R		9	A,B,C	Low Low Latching Alarm Counter		0-32767	0
448			R		10	A,B,C	Low Low Latching Alarm Counter		0-32767	0
449			R		11	A,B,C	Low Low Latching Alarm Counter		0-32767	0
450			R		12	A,B,C	Low Low Latching Alarm Counter		0-32767	0
451			R		13	A,B,C	Low Low Latching Alarm Counter		0-32767	0
452			R		14	A,B,C	Low Low Latching Alarm Counter		0-32767	0
453			R		15	A,B,C	Low Low Latching Alarm Counter		0-32767	0
454			R		16	A,B,C	Low Low Latching Alarm Counter		0-32767	0
455			R		17	A,B,C	Low Low Latching Alarm Counter		0-32767	0
456			R		18	A,B,C	Low Low Latching Alarm Counter		0-32767	0
457			R		19	A,B,C	Low Low Latching Alarm Counter		0-32767	0
458			R		20	A,B,C	Low Low Latching Alarm Counter		0-32767	0
459			R		21	A,B,C	Low Low Latching Alarm Counter		0-32767	0
460			R		22	A,B,C	Low Low Latching Alarm Counter		0-32767	0
461			R		23	A,B,C	Low Low Latching Alarm Counter		0-32767	0
462			R		24	A,B,C	Low Low Latching Alarm Counter		0-32767	0
463			R		25	A,B,C	Low Low Latching Alarm Counter		0-32767	0
464			R		26	A,B,C	Low Low Latching Alarm Counter		0-32767	0
465			R		27	A,B,C	Low Low Latching Alarm Counter		0-32767	0
466			R		28	A,B,C	Low Low Latching Alarm Counter		0-32767	0
467			R		29	A,B,C	Low Low Latching Alarm Counter		0-32767	0
468			R		30	A,B,C	Low Low Latching Alarm Counter		0-32767	0
469			R		31	A,B,C	Low Low Latching Alarm Counter		0-32767	0
470			R		32	A,B,C	Low Low Latching Alarm Counter		0-32767	0
471			R		33	A,B,C	Low Low Latching Alarm Counter		0-32767	0
472			R		34	A,B,C	Low Low Latching Alarm Counter		0-32767	0
473			R		35	A,B,C	Low Low Latching Alarm Counter		0-32767	0
474			R		36	A,B,C	Low Low Latching Alarm Counter		0-32767	0
475			R		37	A,B,C	Low Low Latching Alarm Counter		0-32767	0
476			R		38	A,B,C	Low Low Latching Alarm Counter		0-32767	0
477			R		39	A,B,C	Low Low Latching Alarm Counter		0-32767	0
478			R		40	A,B,C	Low Low Latching Alarm Counter		0-32767	0
479			R		41	A,B,C	Low Low Latching Alarm Counter		0-32767	0
480			R		42	A,B,C	Low Low Latching Alarm Counter		0-32767	0
481			R		43	A,B,C	AUX Low Low Latching Alarm Counter		0-32767	0
482			R		44	A,B,C	AUX Low Low Latching Alarm Counter		0-32767	0
483			R		45	A,B,C	AUX Low Low Latching Alarm Counter		0-32767	0
484			R		46	A,B,C	AUX Low Low Latching Alarm Counter		0-32767	0
485			R		1	A,B,C	Latching Alarm OFF state Counter		0-32767	0
486			R		2	A,B,C	Latching Alarm OFF state Counter		0-32767	0
487			R		3	A,B,C	Latching Alarm OFF state Counter		0-32767	0
488			R		4	A,B,C	Latching Alarm OFF state Counter		0-32767	0
489			R		5	A,B,C	Latching Alarm OFF state Counter		0-32767	0
490			R		6	A,B,C	Latching Alarm OFF state Counter		0-32767	0
491			R		7	A,B,C	Latching Alarm OFF state Counter		0-32767	0
492			R		8	A,B,C	Latching Alarm OFF state Counter		0-32767	0
493			R		9	A,B,C	Latching Alarm OFF state Counter		0-32767	0
494			R		10	A,B,C	Latching Alarm OFF state Counter		0-32767	0
495			R		11	A,B,C	Latching Alarm OFF state Counter		0-32767	0
496			R		12	A,B,C	Latching Alarm OFF state Counter		0-32767	0
497			R		13	A,B,C	Latching Alarm OFF state Counter		0-32767	0
498			R		14	A,B,C	Latching Alarm OFF state Counter		0-32767	0
499			R		15	A,B,C	Latching Alarm OFF state Counter		0-32767	0
500			R		16	A,B,C	Latching Alarm OFF state Counter		0-32767	0

E30 SERIES MODBUS POINT MAP

Int Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Channel	Model (A,B,C)	Description	Scale Reg	Range	Default
Latching Alarm Counters (cont.)										
501			R		17	A,B,C	Latching Alarm OFF state Counter		0-32767	0
502			R		18	A,B,C	Latching Alarm OFF state Counter		0-32767	0
503			R		19	A,B,C	Latching Alarm OFF state Counter		0-32767	0
504			R		20	A,B,C	Latching Alarm OFF state Counter		0-32767	0
505			R		21	A,B,C	Latching Alarm OFF state Counter		0-32767	0
506			R		22	A,B,C	Latching Alarm OFF state Counter		0-32767	0
507			R		23	A,B,C	Latching Alarm OFF state Counter		0-32767	0
508			R		24	A,B,C	Latching Alarm OFF state Counter		0-32767	0
509			R		25	A,B,C	Latching Alarm OFF state Counter		0-32767	0
510			R		26	A,B,C	Latching Alarm OFF state Counter		0-32767	0
511			R		27	A,B,C	Latching Alarm OFF state Counter		0-32767	0
512			R		28	A,B,C	Latching Alarm OFF state Counter		0-32767	0
513			R		29	A,B,C	Latching Alarm OFF state Counter		0-32767	0
514			R		30	A,B,C	Latching Alarm OFF state Counter		0-32767	0
515			R		31	A,B,C	Latching Alarm OFF state Counter		0-32767	0
516			R		32	A,B,C	Latching Alarm OFF state Counter		0-32767	0
517			R		33	A,B,C	Latching Alarm OFF state Counter		0-32767	0
518			R		34	A,B,C	Latching Alarm OFF state Counter		0-32767	0
519			R		35	A,B,C	Latching Alarm OFF state Counter		0-32767	0
520			R		36	A,B,C	Latching Alarm OFF state Counter		0-32767	0
521			R		37	A,B,C	Latching Alarm OFF state Counter		0-32767	0
522			R		38	A,B,C	Latching Alarm OFF state Counter		0-32767	0
523			R		39	A,B,C	Latching Alarm OFF state Counter		0-32767	0
524			R		40	A,B,C	Latching Alarm OFF state Counter		0-32767	0
525			R		41	A,B,C	Latching Alarm OFF state Counter		0-32767	0
526			R		42	A,B,C	Latching Alarm OFF state Counter		0-32767	0
527			R		43	A,B,C	AUX Latching Alarm OFF state Counter		0-32767	0
528			R		44	A,B,C	AUX Latching Alarm OFF state Counter		0-32767	0
529			R		45	A,B,C	AUX Latching Alarm OFF state Counter		0-32767	0
530			R		46	A,B,C	AUX Latching Alarm OFF state Counter		0-32767	0

Diagnostic Registers

531			R/W	NV		A,B,C	Power Up Counter		0-32767	0
532			R			A,B,C	Device Health Bit 0: Reserved Bit 1: Frequency Out of Range or insufficient voltage on Phase to determine frequency range. *Frequency Range is 40-70 Hz. Bit 2: Phase A Voltage Clipping Bit 3: Phase B Voltage Clipping Bit 4: Phase C Voltage Clipping Bit 5: Current Clipping on at least 1 channel (AUX & Circuit) Bit 6-12: Reserved Bit 13: Current Model, Model C Bit 14: Power Model, Model B Bit 15: Branch Power, Model A			
533			R			A,B,C	Reserved for future use			
534			R			A,B,C	Reserved for future use			
535			R			A,B,C	Reserved for future use			

FW Download Support

60000			R			A,B,C	Modbus Address (based on DIPswitch settings)			
60001			R			A,B,C	Baudrate (based on DIPswitch settings)			
60002			R			A,B,C	Password (always reads 0)			
60003			R			A,B,C	Selftest (always reads 0)			
60004			R			A,B,C	PLOS (reads 0 if application missing, reads > 0 if application running)			
60005 through 60153			R/W			A,B,C	Command interface			

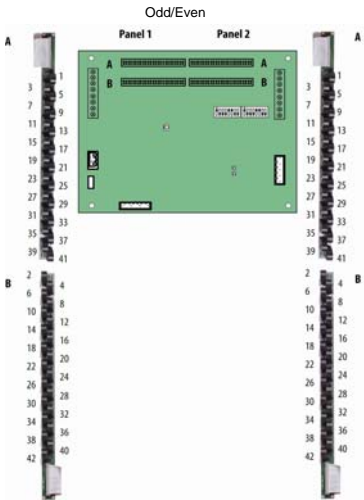
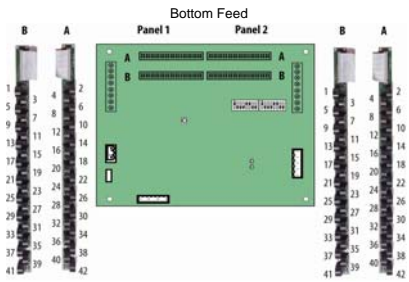
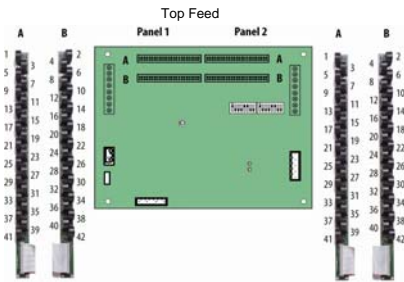
total registers in this section
760

E30 SERIES MODBUS POINT MAP

42 SINGLE-PHASE METERS

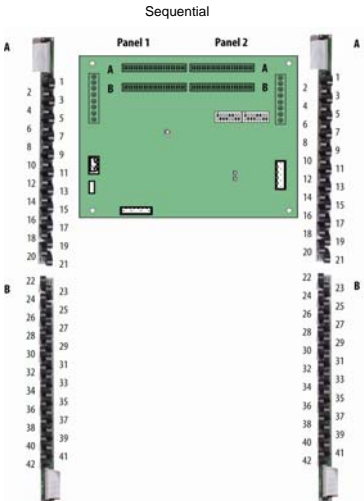
Voltage/Current Phasing for Top Feed, Bottom Feed, Single Row: Odd / Even configuration

Meter	CT Channel	Current Phase	Voltage Phase
1	1	1	A
2	2	1	A
3	3	1	B
4	4	1	B
5	5	1	C
6	6	1	C
7	7	1	A
8	8	1	A
9	9	1	B
10	10	1	B
11	11	1	C
12	12	1	C
13	13	1	A
14	14	1	A
15	15	1	B
16	16	1	B
17	17	1	C
18	18	1	C
19	19	1	A
20	20	1	A
21	21	1	B
22	22	1	B
23	23	1	C
24	24	1	C
25	25	1	A
26	26	1	A
27	27	1	B
28	28	1	B
29	29	1	C
30	30	1	C
31	31	1	A
32	32	1	A
33	33	1	B
34	34	1	B
35	35	1	C
36	36	1	C
37	37	1	A
38	38	1	A
39	39	1	B
40	40	1	B
41	41	1	C
42	42	1	C



Single Row: Sequential

Meter	CT Channel	Current Phase	Voltage Phase
1	1	1	A
2	2	1	B
3	3	1	C
4	4	1	A
5	5	1	B
6	6	1	C
7	7	1	A
8	8	1	B
9	9	1	C
10	10	1	A
11	11	1	B
12	12	1	C
13	13	1	A
14	14	1	B
15	15	1	C
16	16	1	A
17	17	1	B
18	18	1	C
19	19	1	A
20	20	1	B
21	21	1	C
22	22	1	A
23	23	1	B
24	24	1	C
25	25	1	A
26	26	1	B
27	27	1	C
28	28	1	A
29	29	1	B
30	30	1	C
31	31	1	A
32	32	1	B
33	33	1	C
34	34	1	A
35	35	1	B
36	36	1	C
37	37	1	A
38	38	1	B
39	39	1	C
40	40	1	A
41	41	1	B
42	42	1	C



42 SINGLE-PHASE METERS MODBUS POINTMAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	---------------	---------------	-----	----	-------	---------------	-------------	-----------

SCALE REGISTERS

1000			R	NV	1	A,B,C	Current Scale	
1001			R	NV	2	A,B,C	Current Scale	
1002			R	NV	3	A,B,C	Current Scale	
1003			R	NV	4	A,B,C	Current Scale	
1004			R	NV	5	A,B,C	Current Scale	
1005			R	NV	6	A,B,C	Current Scale	
1006			R	NV	7	A,B,C	Current Scale	
1007			R	NV	8	A,B,C	Current Scale	
1008			R	NV	9	A,B,C	Current Scale	
1009			R	NV	10	A,B,C	Current Scale	
1010			R	NV	11	A,B,C	Current Scale	
1011			R	NV	12	A,B,C	Current Scale	
1012			R	NV	13	A,B,C	Current Scale	
1013			R	NV	14	A,B,C	Current Scale	
1014			R	NV	15	A,B,C	Current Scale	
1015			R	NV	16	A,B,C	Current Scale	
1016			R	NV	17	A,B,C	Current Scale	
1017			R	NV	18	A,B,C	Current Scale	
1018			R	NV	19	A,B,C	Current Scale	
1019			R	NV	20	A,B,C	Current Scale	
1020			R	NV	21	A,B,C	Current Scale	
1021			R	NV	22	A,B,C	Current Scale	
1022			R	NV	23	A,B,C	Current Scale	
1023			R	NV	24	A,B,C	Current Scale	
1024			R	NV	25	A,B,C	Current Scale	
1025			R	NV	26	A,B,C	Current Scale	
1026			R	NV	27	A,B,C	Current Scale	
1027			R	NV	28	A,B,C	Current Scale	
1028			R	NV	29	A,B,C	Current Scale	
1029			R	NV	30	A,B,C	Current Scale	
1030			R	NV	31	A,B,C	Current Scale	
1031			R	NV	32	A,B,C	Current Scale	
1032			R	NV	33	A,B,C	Current Scale	
1033			R	NV	34	A,B,C	Current Scale	
1034			R	NV	35	A,B,C	Current Scale	
1035			R	NV	36	A,B,C	Current Scale	
1036			R	NV	37	A,B,C	Current Scale	
1037			R	NV	38	A,B,C	Current Scale	
1038			R	NV	39	A,B,C	Current Scale	
1039			R	NV	40	A,B,C	Current Scale	
1040			R	NV	41	A,B,C	Current Scale	
1041			R	NV	42	A,B,C	Current Scale	
1042			R	NV	1	A	Power Scale	
1043			R	NV	2	A	Power Scale	
1044			R	NV	3	A	Power Scale	
1045			R	NV	4	A	Power Scale	
1046			R	NV	5	A	Power Scale	
1047			R	NV	6	A	Power Scale	
1048			R	NV	7	A	Power Scale	
1049			R	NV	8	A	Power Scale	
1050			R	NV	9	A	Power Scale	
1051			R	NV	10	A	Power Scale	
1052			R	NV	11	A	Power Scale	
1053			R	NV	12	A	Power Scale	
1054			R	NV	13	A	Power Scale	
1055			R	NV	14	A	Power Scale	
1056			R	NV	15	A	Power Scale	
1057			R	NV	16	A	Power Scale	
1058			R	NV	17	A	Power Scale	
1059			R	NV	18	A	Power Scale	
1060			R	NV	19	A	Power Scale	
1061			R	NV	20	A	Power Scale	
1062			R	NV	21	A	Power Scale	
1063			R	NV	22	A	Power Scale	
1064			R	NV	23	A	Power Scale	
1065			R	NV	24	A	Power Scale	

42 SINGLE-PHASE METERS MODBUS POINTMAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	------------------	------------------	-----	----	-------	------------------	-------------	--------------

SCALE REGISTERS (cont.)

1066			R	NV	25	A	Power Scale	
1067			R	NV	26	A	Power Scale	
1068			R	NV	27	A	Power Scale	
1069			R	NV	28	A	Power Scale	
1070			R	NV	29	A	Power Scale	
1071			R	NV	30	A	Power Scale	
1072			R	NV	31	A	Power Scale	
1073			R	NV	32	A	Power Scale	
1074			R	NV	33	A	Power Scale	
1075			R	NV	34	A	Power Scale	
1076			R	NV	35	A	Power Scale	
1077			R	NV	36	A	Power Scale	
1078			R	NV	37	A	Power Scale	
1079			R	NV	38	A	Power Scale	
1080			R	NV	39	A	Power Scale	
1081			R	NV	40	A	Power Scale	
1082			R	NV	41	A	Power Scale	
1083			R	NV	42	A	Power Scale	
1084			R	NV	1	A	Energy Scale	
1085			R	NV	2	A	Energy Scale	
1086			R	NV	3	A	Energy Scale	
1087			R	NV	4	A	Energy Scale	
1088			R	NV	5	A	Energy Scale	
1089			R	NV	6	A	Energy Scale	
1090			R	NV	7	A	Energy Scale	
1091			R	NV	8	A	Energy Scale	
1092			R	NV	9	A	Energy Scale	
1093			R	NV	10	A	Energy Scale	
1094			R	NV	11	A	Energy Scale	
1095			R	NV	12	A	Energy Scale	
1096			R	NV	13	A	Energy Scale	
1097			R	NV	14	A	Energy Scale	
1098			R	NV	15	A	Energy Scale	
1099			R	NV	16	A	Energy Scale	
1100			R	NV	17	A	Energy Scale	
1101			R	NV	18	A	Energy Scale	
1102			R	NV	19	A	Energy Scale	
1103			R	NV	20	A	Energy Scale	
1104			R	NV	21	A	Energy Scale	
1105			R	NV	22	A	Energy Scale	
1106			R	NV	23	A	Energy Scale	
1107			R	NV	24	A	Energy Scale	
1108			R	NV	25	A	Energy Scale	
1109			R	NV	26	A	Energy Scale	
1110			R	NV	27	A	Energy Scale	
1111			R	NV	28	A	Energy Scale	
1112			R	NV	29	A	Energy Scale	
1113			R	NV	30	A	Energy Scale	
1114			R	NV	31	A	Energy Scale	
1115			R	NV	32	A	Energy Scale	
1116			R	NV	33	A	Energy Scale	
1117			R	NV	34	A	Energy Scale	
1118			R	NV	35	A	Energy Scale	
1119			R	NV	36	A	Energy Scale	
1120			R	NV	37	A	Energy Scale	
1121			R	NV	38	A	Energy Scale	
1122			R	NV	39	A	Energy Scale	
1123			R	NV	40	A	Energy Scale	
1124			R	NV	41	A	Energy Scale	
1125			R	NV	42	A	Energy Scale	

RESETS

Also resets corresponding registers in 2PH and 3PH point maps

1126			W		1	A,B,C	Reset - Write the listed value to perform the listed reset:	
							10203 = Clear KWH value to zero	
							29877 = Clear all Max Current and Max KW values to zero	
1127			W		2	A,B,C	Reset	

42 SINGLE-PHASE METERS MODBUS POINTMAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	---------------	---------------	-----	----	-------	---------------	-------------	-----------

RESETS (cont.)

1128			W		3	A,B,C	Reset	
1129			W		4	A,B,C	Reset	
1130			W		5	A,B,C	Reset	
1131			W		6	A,B,C	Reset	
1132			W		7	A,B,C	Reset	
1133			W		8	A,B,C	Reset	
1134			W		9	A,B,C	Reset	
1135			W		10	A,B,C	Reset	
1136			W		11	A,B,C	Reset	
1137			W		12	A,B,C	Reset	
1138			W		13	A,B,C	Reset	
1139			W		14	A,B,C	Reset	
1140			W		15	A,B,C	Reset	
1141			W		16	A,B,C	Reset	
1142			W		17	A,B,C	Reset	
1143			W		18	A,B,C	Reset	
1144			W		19	A,B,C	Reset	
1145			W		20	A,B,C	Reset	
1146			W		21	A,B,C	Reset	
1147			W		22	A,B,C	Reset	
1148			W		23	A,B,C	Reset	
1149			W		24	A,B,C	Reset	
1150			W		25	A,B,C	Reset	
1151			W		26	A,B,C	Reset	
1152			W		27	A,B,C	Reset	
1153			W		28	A,B,C	Reset	
1154			W		29	A,B,C	Reset	
1155			W		30	A,B,C	Reset	
1156			W		31	A,B,C	Reset	
1157			W		32	A,B,C	Reset	
1158			W		33	A,B,C	Reset	
1159			W		34	A,B,C	Reset	
1160			W		35	A,B,C	Reset	
1161			W		36	A,B,C	Reset	
1162			W		37	A,B,C	Reset	
1163			W		38	A,B,C	Reset	
1164			W		39	A,B,C	Reset	
1165			W		40	A,B,C	Reset	
1166			W		41	A,B,C	Reset	
1167			W		42	A,B,C	Reset	

DATA

1168	2000	2001	R	NV	1	A	KWH (MSW)	1084
1169			R	NV	1	A	KWH (LSW)	
1170	2002	2003	R	NV	2	A	KWH (MSW)	1085
1171			R	NV	2	A	KWH (LSW)	
1172	2004	2005	R	NV	3	A	KWH (MSW)	1086
1173			R	NV	3	A	KWH (LSW)	
1174	2006	2007	R	NV	4	A	KWH (MSW)	1087
1175			R	NV	4	A	KWH (LSW)	
1176	2008	2009	R	NV	5	A	KWH (MSW)	1088
1177			R	NV	5	A	KWH (LSW)	
1178	2010	2011	R	NV	6	A	KWH (MSW)	1089
1179			R	NV	6	A	KWH (LSW)	
1180	2012	2013	R	NV	7	A	KWH (MSW)	1090
1181			R	NV	7	A	KWH (LSW)	
1182	2014	2015	R	NV	8	A	KWH (MSW)	1091
1183			R	NV	8	A	KWH (LSW)	
1184	2016	2017	R	NV	9	A	KWH (MSW)	1092
1185			R	NV	9	A	KWH (LSW)	
1186	2018	2019	R	NV	10	A	KWH (MSW)	1093
1187			R	NV	10	A	KWH (LSW)	
1188	2020	2021	R	NV	11	A	KWH (MSW)	1094
1189			R	NV	11	A	KWH (LSW)	
1190	2022	2023	R	NV	12	A	KWH (MSW)	1095
1191			R	NV	12	A	KWH (LSW)	

42 SINGLE-PHASE METERS MODBUS POINTMAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
DATA (cont.)								
1192	2024	2025	R	NV	13	A	KWH (MSW)	1096
1193			R	NV	13	A	KWH (LSW)	
1194	2026	2027	R	NV	14	A	KWH (MSW)	1097
1195			R	NV	14	A	KWH (LSW)	
1196	2028	2029	R	NV	15	A	KWH (MSW)	1098
1197			R	NV	15	A	KWH (LSW)	
1198	2030	2031	R	NV	16	A	KWH (MSW)	1099
1199			R	NV	16	A	KWH (LSW)	
1200	2032	2033	R	NV	17	A	KWH (MSW)	1100
1201			R	NV	17	A	KWH (LSW)	
1202	2034	2035	R	NV	18	A	KWH (MSW)	1101
1203			R	NV	18	A	KWH (LSW)	
1204	2036	2037	R	NV	19	A	KWH (MSW)	1102
1205			R	NV	19	A	KWH (LSW)	
1206	2038	2039	R	NV	20	A	KWH (MSW)	1103
1207			R	NV	20	A	KWH (LSW)	
1208	2040	2041	R	NV	21	A	KWH (MSW)	1104
1209			R	NV	21	A	KWH (LSW)	
1210	2042	2043	R	NV	22	A	KWH (MSW)	1105
1211			R	NV	22	A	KWH (LSW)	
1212	2044	2045	R	NV	23	A	KWH (MSW)	1106
1213			R	NV	23	A	KWH (LSW)	
1214	2046	2047	R	NV	24	A	KWH (MSW)	1107
1215			R	NV	24	A	KWH (LSW)	
1216	2048	2049	R	NV	25	A	KWH (MSW)	1108
1217			R	NV	25	A	KWH (LSW)	
1218	2050	2051	R	NV	26	A	KWH (MSW)	1109
1219			R	NV	26	A	KWH (LSW)	
1220	2052	2053	R	NV	27	A	KWH (MSW)	1110
1221			R	NV	27	A	KWH (LSW)	
1222	2054	2055	R	NV	28	A	KWH (MSW)	1111
1223			R	NV	28	A	KWH (LSW)	
1224	2056	2057	R	NV	29	A	KWH (MSW)	1112
1225			R	NV	29	A	KWH (LSW)	
1226	2058	2059	R	NV	30	A	KWH (MSW)	1113
1227			R	NV	30	A	KWH (LSW)	
1228	2060	2061	R	NV	31	A	KWH (MSW)	1114
1229			R	NV	31	A	KWH (LSW)	
1230	2062	2063	R	NV	32	A	KWH (MSW)	1115
1231			R	NV	32	A	KWH (LSW)	
1232	2064	2065	R	NV	33	A	KWH (MSW)	1116
1233			R	NV	33	A	KWH (LSW)	
1234	2066	2067	R	NV	34	A	KWH (MSW)	1117
1235			R	NV	34	A	KWH (LSW)	
1236	2068	2069	R	NV	35	A	KWH (MSW)	1118
1237			R	NV	35	A	KWH (LSW)	
1238	2070	2071	R	NV	36	A	KWH (MSW)	1119
1239			R	NV	36	A	KWH (LSW)	
1240	2072	2073	R	NV	37	A	KWH (MSW)	1120
1241			R	NV	37	A	KWH (LSW)	
1242	2074	2075	R	NV	38	A	KWH (MSW)	1121
1243			R	NV	38	A	KWH (LSW)	
1244	2076	2077	R	NV	39	A	KWH (MSW)	1122
1245			R	NV	39	A	KWH (LSW)	
1246	2078	2079	R	NV	40	A	KWH (MSW)	1123
1247			R	NV	40	A	KWH (LSW)	
1248	2080	2081	R	NV	41	A	KWH (MSW)	1124
1249			R	NV	41	A	KWH (LSW)	
1250	2082	2083	R	NV	42	A	KWH (MSW)	1125
1251			R	NV	42	A	KWH (LSW)	
1252	2084	2085	R		1	A	KW	1042
1253	2086	2087	R		2	A	KW	1043
1254	2088	2089	R		3	A	KW	1044
1255	2090	2091	R		4	A	KW	1045
1256	2092	2093	R		5	A	KW	1046
1257	2094	2095	R		6	A	KW	1047
1258	2096	2097	R		7	A	KW	1048

42 SINGLE-PHASE METERS MODBUS POINTMAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
DATA (cont.)								
1259	2098	2099	R		8	A	KW	1049
1260	2100	2101	R		9	A	KW	1050
1261	2102	2103	R		10	A	KW	1051
1262	2104	2105	R		11	A	KW	1052
1263	2106	2107	R		12	A	KW	1053
1264	2108	2109	R		13	A	KW	1054
1265	2110	2111	R		14	A	KW	1055
1266	2112	2113	R		15	A	KW	1056
1267	2114	2115	R		16	A	KW	1057
1268	2116	2117	R		17	A	KW	1058
1269	2118	2119	R		18	A	KW	1059
1270	2120	2121	R		19	A	KW	1060
1271	2122	2123	R		20	A	KW	1061
1272	2124	2125	R		21	A	KW	1062
1273	2126	2127	R		22	A	KW	1063
1274	2128	2129	R		23	A	KW	1064
1275	2130	2131	R		24	A	KW	1065
1276	2132	2133	R		25	A	KW	1066
1277	2134	2135	R		26	A	KW	1067
1278	2136	2137	R		27	A	KW	1068
1279	2138	2139	R		28	A	KW	1069
1280	2140	2141	R		29	A	KW	1070
1281	2142	2143	R		30	A	KW	1071
1282	2144	2145	R		31	A	KW	1072
1283	2146	2147	R		32	A	KW	1073
1284	2148	2149	R		33	A	KW	1074
1285	2150	2151	R		34	A	KW	1075
1286	2152	2153	R		35	A	KW	1076
1287	2154	2155	R		36	A	KW	1077
1288	2156	2157	R		37	A	KW	1078
1289	2158	2159	R		38	A	KW	1079
1290	2160	2161	R		39	A	KW	1080
1291	2162	2163	R		40	A	KW	1081
1292	2164	2165	R		41	A	KW	1082
1293	2166	2167	R		42	A	KW	1083
1294	2168	2169	R		1	A	PF	-3
1295	2170	2171	R		2	A	PF	-3
1296	2172	2173	R		3	A	PF	-3
1297	2174	2175	R		4	A	PF	-3
1298	2176	2177	R		5	A	PF	-3
1299	2178	2179	R		6	A	PF	-3
1300	2180	2181	R		7	A	PF	-3
1301	2182	2183	R		8	A	PF	-3
1302	2184	2185	R		9	A	PF	-3
1303	2186	2187	R		10	A	PF	-3
1304	2188	2189	R		11	A	PF	-3
1305	2190	2191	R		12	A	PF	-3
1306	2192	2193	R		13	A	PF	-3
1307	2194	2195	R		14	A	PF	-3
1308	2196	2197	R		15	A	PF	-3
1309	2198	2199	R		16	A	PF	-3
1310	2200	2201	R		17	A	PF	-3
1311	2202	2203	R		18	A	PF	-3
1312	2204	2205	R		19	A	PF	-3
1313	2206	2207	R		20	A	PF	-3
1314	2208	2209	R		21	A	PF	-3
1315	2210	2211	R		22	A	PF	-3
1316	2212	2213	R		23	A	PF	-3
1317	2214	2215	R		24	A	PF	-3
1318	2216	2217	R		25	A	PF	-3
1319	2218	2219	R		26	A	PF	-3
1320	2220	2221	R		27	A	PF	-3
1321	2222	2223	R		28	A	PF	-3
1322	2224	2225	R		29	A	PF	-3
1323	2226	2227	R		30	A	PF	-3

42 SINGLE-PHASE METERS MODBUS POINTMAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
DATA (cont.)								
1324	2228	2229	R		31	A	PF	-3
1325	2230	2231	R		32	A	PF	-3
1326	2232	2233	R		33	A	PF	-3
1327	2234	2235	R		34	A	PF	-3
1328	2236	2237	R		35	A	PF	-3
1329	2238	2239	R		36	A	PF	-3
1330	2240	2241	R		37	A	PF	-3
1331	2242	2243	R		38	A	PF	-3
1332	2244	2245	R		39	A	PF	-3
1333	2246	2247	R		40	A	PF	-3
1334	2248	2249	R		41	A	PF	-3
1335	2250	2251	R		42	A	PF	-3
1336	2252	2253	R		1	A,B,C	Current	1000
1337	2254	2255	R		2	A,B,C	Current	1001
1338	2256	2257	R		3	A,B,C	Current	1002
1339	2258	2259	R		4	A,B,C	Current	1003
1340	2260	2261	R		5	A,B,C	Current	1004
1341	2262	2263	R		6	A,B,C	Current	1005
1342	2264	2265	R		7	A,B,C	Current	1006
1343	2266	2267	R		8	A,B,C	Current	1007
1344	2268	2269	R		9	A,B,C	Current	1008
1345	2270	2271	R		10	A,B,C	Current	1009
1346	2272	2273	R		11	A,B,C	Current	1010
1347	2274	2275	R		12	A,B,C	Current	1011
1348	2276	2277	R		13	A,B,C	Current	1012
1349	2278	2279	R		14	A,B,C	Current	1013
1350	2280	2281	R		15	A,B,C	Current	1014
1351	2282	2283	R		16	A,B,C	Current	1015
1352	2284	2285	R		17	A,B,C	Current	1016
1353	2286	2287	R		18	A,B,C	Current	1017
1354	2288	2289	R		19	A,B,C	Current	1018
1355	2290	2291	R		20	A,B,C	Current	1019
1356	2292	2293	R		21	A,B,C	Current	1020
1357	2294	2295	R		22	A,B,C	Current	1021
1358	2296	2297	R		23	A,B,C	Current	1022
1359	2298	2299	R		24	A,B,C	Current	1023
1360	2300	2301	R		25	A,B,C	Current	1024
1361	2302	2303	R		26	A,B,C	Current	1025
1362	2304	2305	R		27	A,B,C	Current	1026
1363	2306	2307	R		28	A,B,C	Current	1027
1364	2308	2309	R		29	A,B,C	Current	1028
1365	2310	2311	R		30	A,B,C	Current	1029
1366	2312	2313	R		31	A,B,C	Current	1030
1367	2314	2315	R		32	A,B,C	Current	1031
1368	2316	2317	R		33	A,B,C	Current	1032
1369	2318	2319	R		34	A,B,C	Current	1033
1370	2320	2321	R		35	A,B,C	Current	1034
1371	2322	2323	R		36	A,B,C	Current	1035
1372	2324	2325	R		37	A,B,C	Current	1036
1373	2326	2327	R		38	A,B,C	Current	1037
1374	2328	2329	R		39	A,B,C	Current	1038
1375	2330	2331	R		40	A,B,C	Current	1039
1376	2332	2333	R		41	A,B,C	Current	1040
1377	2334	2335	R		42	A,B,C	Current	1041
1378	2336	2337	R		1	A	Present KW Demand	1042
1379	2338	2339	R		2	A	Present KW Demand	1043
1380	2340	2341	R		3	A	Present KW Demand	1044
1381	2342	2343	R		4	A	Present KW Demand	1045
1382	2344	2345	R		5	A	Present KW Demand	1046
1383	2346	2347	R		6	A	Present KW Demand	1047
1384	2348	2349	R		7	A	Present KW Demand	1048
1385	2350	2351	R		8	A	Present KW Demand	1049
1386	2352	2353	R		9	A	Present KW Demand	1050
1387	2354	2355	R		10	A	Present KW Demand	1051
1388	2356	2357	R		11	A	Present KW Demand	1052

42 SINGLE-PHASE METERS MODBUS POINTMAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
DATA (cont.)								
1389	2358	2359	R		12	A	Present KW Demand	1053
1390	2360	2361	R		13	A	Present KW Demand	1054
1391	2362	2363	R		14	A	Present KW Demand	1055
1392	2364	2365	R		15	A	Present KW Demand	1056
1393	2366	2367	R		16	A	Present KW Demand	1057
1394	2368	2369	R		17	A	Present KW Demand	1058
1395	2370	2371	R		18	A	Present KW Demand	1059
1396	2372	2373	R		19	A	Present KW Demand	1060
1397	2374	2375	R		20	A	Present KW Demand	1061
1398	2376	2377	R		21	A	Present KW Demand	1062
1399	2378	2379	R		22	A	Present KW Demand	1063
1400	2380	2381	R		23	A	Present KW Demand	1064
1401	2382	2383	R		24	A	Present KW Demand	1065
1402	2384	2385	R		25	A	Present KW Demand	1066
1403	2386	2387	R		26	A	Present KW Demand	1067
1404	2388	2389	R		27	A	Present KW Demand	1068
1405	2390	2391	R		28	A	Present KW Demand	1069
1406	2392	2393	R		29	A	Present KW Demand	1070
1407	2394	2395	R		30	A	Present KW Demand	1071
1408	2396	2397	R		31	A	Present KW Demand	1072
1409	2398	2399	R		32	A	Present KW Demand	1073
1410	2400	2401	R		33	A	Present KW Demand	1074
1411	2402	2403	R		34	A	Present KW Demand	1075
1412	2404	2405	R		35	A	Present KW Demand	1076
1413	2406	2407	R		36	A	Present KW Demand	1077
1414	2408	2409	R		37	A	Present KW Demand	1078
1415	2410	2411	R		38	A	Present KW Demand	1079
1416	2412	2413	R		39	A	Present KW Demand	1080
1417	2414	2415	R		40	A	Present KW Demand	1081
1418	2416	2417	R		41	A	Present KW Demand	1082
1419	2418	2419	R		42	A	Present KW Demand	1083
1420	2420	2421	R	NV	1	A	Max KW Demand	1042
1421	2422	2423	R	NV	2	A	Max KW Demand	1043
1422	2424	2425	R	NV	3	A	Max KW Demand	1044
1423	2426	2427	R	NV	4	A	Max KW Demand	1045
1424	2428	2429	R	NV	5	A	Max KW Demand	1046
1425	2430	2431	R	NV	6	A	Max KW Demand	1047
1426	2432	2433	R	NV	7	A	Max KW Demand	1048
1427	2434	2435	R	NV	8	A	Max KW Demand	1049
1428	2436	2437	R	NV	9	A	Max KW Demand	1050
1429	2438	2439	R	NV	10	A	Max KW Demand	1051
1430	2440	2441	R	NV	11	A	Max KW Demand	1052
1431	2442	2443	R	NV	12	A	Max KW Demand	1053
1432	2444	2445	R	NV	13	A	Max KW Demand	1054
1433	2446	2447	R	NV	14	A	Max KW Demand	1055
1434	2448	2449	R	NV	15	A	Max KW Demand	1056
1435	2450	2451	R	NV	16	A	Max KW Demand	1057
1436	2452	2453	R	NV	17	A	Max KW Demand	1058
1437	2454	2455	R	NV	18	A	Max KW Demand	1059
1438	2456	2457	R	NV	19	A	Max KW Demand	1060
1439	2458	2459	R	NV	20	A	Max KW Demand	1061
1440	2460	2461	R	NV	21	A	Max KW Demand	1062
1441	2462	2463	R	NV	22	A	Max KW Demand	1063
1442	2464	2465	R	NV	23	A	Max KW Demand	1064
1443	2466	2467	R	NV	24	A	Max KW Demand	1065
1444	2468	2469	R	NV	25	A	Max KW Demand	1066
1445	2470	2471	R	NV	26	A	Max KW Demand	1067
1446	2472	2473	R	NV	27	A	Max KW Demand	1068
1447	2474	2475	R	NV	28	A	Max KW Demand	1069
1448	2476	2477	R	NV	29	A	Max KW Demand	1070
1449	2478	2479	R	NV	30	A	Max KW Demand	1071
1450	2480	2481	R	NV	31	A	Max KW Demand	1072
1451	2482	2483	R	NV	32	A	Max KW Demand	1073
1452	2484	2485	R	NV	33	A	Max KW Demand	1074
1453	2486	2487	R	NV	34	A	Max KW Demand	1075

42 SINGLE-PHASE METERS MODBUS POINTMAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
DATA (cont.)								
1454	2488	2489	R	NV	35	A	Max KW Demand	1076
1455	2490	2491	R	NV	36	A	Max KW Demand	1077
1456	2492	2493	R	NV	37	A	Max KW Demand	1078
1457	2494	2495	R	NV	38	A	Max KW Demand	1079
1458	2496	2497	R	NV	39	A	Max KW Demand	1080
1459	2498	2499	R	NV	40	A	Max KW Demand	1081
1460	2500	2501	R	NV	41	A	Max KW Demand	1082
1461	2502	2503	R	NV	42	A	Max KW Demand	1083
1462	2504	2505	R		1	A,B,C	Present Current Demand	1000
1463	2506	2507	R		2	A,B,C	Present Current Demand	1001
1464	2508	2509	R		3	A,B,C	Present Current Demand	1002
1465	2510	2511	R		4	A,B,C	Present Current Demand	1003
1466	2512	2513	R		5	A,B,C	Present Current Demand	1004
1467	2514	2515	R		6	A,B,C	Present Current Demand	1005
1468	2516	2517	R		7	A,B,C	Present Current Demand	1006
1469	2518	2519	R		8	A,B,C	Present Current Demand	1007
1470	2520	2521	R		9	A,B,C	Present Current Demand	1008
1471	2522	2523	R		10	A,B,C	Present Current Demand	1009
1472	2524	2525	R		11	A,B,C	Present Current Demand	1010
1473	2526	2527	R		12	A,B,C	Present Current Demand	1011
1474	2528	2529	R		13	A,B,C	Present Current Demand	1012
1475	2530	2531	R		14	A,B,C	Present Current Demand	1013
1476	2532	2533	R		15	A,B,C	Present Current Demand	1014
1477	2534	2535	R		16	A,B,C	Present Current Demand	1015
1478	2536	2537	R		17	A,B,C	Present Current Demand	1016
1479	2538	2539	R		18	A,B,C	Present Current Demand	1017
1480	2540	2541	R		19	A,B,C	Present Current Demand	1018
1481	2542	2543	R		20	A,B,C	Present Current Demand	1019
1482	2544	2545	R		21	A,B,C	Present Current Demand	1020
1483	2546	2547	R		22	A,B,C	Present Current Demand	1021
1484	2548	2549	R		23	A,B,C	Present Current Demand	1022
1485	2550	2551	R		24	A,B,C	Present Current Demand	1023
1486	2552	2553	R		25	A,B,C	Present Current Demand	1024
1487	2554	2555	R		26	A,B,C	Present Current Demand	1025
1488	2556	2557	R		27	A,B,C	Present Current Demand	1026
1489	2558	2559	R		28	A,B,C	Present Current Demand	1027
1490	2560	2561	R		29	A,B,C	Present Current Demand	1028
1491	2562	2563	R		30	A,B,C	Present Current Demand	1029
1492	2564	2565	R		31	A,B,C	Present Current Demand	1030
1493	2566	2567	R		32	A,B,C	Present Current Demand	1031
1494	2568	2569	R		33	A,B,C	Present Current Demand	1032
1495	2570	2571	R		34	A,B,C	Present Current Demand	1033
1496	2572	2573	R		35	A,B,C	Present Current Demand	1034
1497	2574	2575	R		36	A,B,C	Present Current Demand	1035
1498	2576	2577	R		37	A,B,C	Present Current Demand	1036
1499	2578	2579	R		38	A,B,C	Present Current Demand	1037
1500	2580	2581	R		39	A,B,C	Present Current Demand	1038
1501	2582	2583	R		40	A,B,C	Present Current Demand	1039
1502	2584	2585	R		41	A,B,C	Present Current Demand	1040
1503	2586	2587	R		42	A,B,C	Present Current Demand	1041
1504	2588	2589	R	NV	1	A,B,C	Max Current Demand	1000
1505	2590	2591	R	NV	2	A,B,C	Max Current Demand	1001
1506	2592	2593	R	NV	3	A,B,C	Max Current Demand	1002
1507	2594	2595	R	NV	4	A,B,C	Max Current Demand	1003
1508	2596	2597	R	NV	5	A,B,C	Max Current Demand	1004
1509	2598	2599	R	NV	6	A,B,C	Max Current Demand	1005
1510	2600	2601	R	NV	7	A,B,C	Max Current Demand	1006
1511	2602	2603	R	NV	8	A,B,C	Max Current Demand	1007
1512	2604	2605	R	NV	9	A,B,C	Max Current Demand	1008
1513	2606	2607	R	NV	10	A,B,C	Max Current Demand	1009
1514	2608	2609	R	NV	11	A,B,C	Max Current Demand	1010
1515	2610	2611	R	NV	12	A,B,C	Max Current Demand	1011
1516	2612	2613	R	NV	13	A,B,C	Max Current Demand	1012
1517	2614	2615	R	NV	14	A,B,C	Max Current Demand	1013
1518	2616	2617	R	NV	15	A,B,C	Max Current Demand	1014

42 SINGLE-PHASE METERS MODBUS POINTMAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	------------------	------------------	-----	----	-------	------------------	-------------	--------------

DATA (cont.)

1519	2618	2619	R	NV	16	A,B,C	Max Current Demand	1015
1520	2620	2621	R	NV	17	A,B,C	Max Current Demand	1016
1521	2622	2623	R	NV	18	A,B,C	Max Current Demand	1017
1522	2624	2625	R	NV	19	A,B,C	Max Current Demand	1018
1523	2626	2627	R	NV	20	A,B,C	Max Current Demand	1019
1524	2628	2629	R	NV	21	A,B,C	Max Current Demand	1020
1525	2630	2631	R	NV	22	A,B,C	Max Current Demand	1021
1526	2632	2633	R	NV	23	A,B,C	Max Current Demand	1022
1527	2634	2635	R	NV	24	A,B,C	Max Current Demand	1023
1528	2636	2637	R	NV	25	A,B,C	Max Current Demand	1024
1529	2638	2639	R	NV	26	A,B,C	Max Current Demand	1025
1530	2640	2641	R	NV	27	A,B,C	Max Current Demand	1026
1531	2642	2643	R	NV	28	A,B,C	Max Current Demand	1027
1532	2644	2645	R	NV	29	A,B,C	Max Current Demand	1028
1533	2646	2647	R	NV	30	A,B,C	Max Current Demand	1029
1534	2648	2649	R	NV	31	A,B,C	Max Current Demand	1030
1535	2650	2651	R	NV	32	A,B,C	Max Current Demand	1031
1536	2652	2653	R	NV	33	A,B,C	Max Current Demand	1032
1537	2654	2655	R	NV	34	A,B,C	Max Current Demand	1033
1538	2656	2657	R	NV	35	A,B,C	Max Current Demand	1034
1539	2658	2659	R	NV	36	A,B,C	Max Current Demand	1035
1540	2660	2661	R	NV	37	A,B,C	Max Current Demand	1036
1541	2662	2663	R	NV	38	A,B,C	Max Current Demand	1037
1542	2664	2665	R	NV	39	A,B,C	Max Current Demand	1038
1543	2666	2667	R	NV	40	A,B,C	Max Current Demand	1039
1544	2668	2669	R	NV	41	A,B,C	Max Current Demand	1040
1545	2670	2671	R	NV	42	A,B,C	Max Current Demand	1041
1546	2672	2673	R	NV	1	A	Max KW-Total	1042
1547	2674	2675	R	NV	2	A	Max KW-Total	1043
1548	2676	2677	R	NV	3	A	Max KW-Total	1044
1549	2678	2679	R	NV	4	A	Max KW-Total	1045
1550	2680	2681	R	NV	5	A	Max KW-Total	1046
1551	2682	2683	R	NV	6	A	Max KW-Total	1047
1552	2684	2685	R	NV	7	A	Max KW-Total	1048
1553	2686	2687	R	NV	8	A	Max KW-Total	1049
1554	2688	2689	R	NV	9	A	Max KW-Total	1050
1555	2690	2691	R	NV	10	A	Max KW-Total	1051
1556	2692	2693	R	NV	11	A	Max KW-Total	1052
1557	2694	2695	R	NV	12	A	Max KW-Total	1053
1558	2696	2697	R	NV	13	A	Max KW-Total	1054
1559	2698	2699	R	NV	14	A	Max KW-Total	1055
1560	2700	2701	R	NV	15	A	Max KW-Total	1056
1561	2702	2703	R	NV	16	A	Max KW-Total	1057
1562	2704	2705	R	NV	17	A	Max KW-Total	1058
1563	2706	2707	R	NV	18	A	Max KW-Total	1059
1564	2708	2709	R	NV	19	A	Max KW-Total	1060
1565	2710	2711	R	NV	20	A	Max KW-Total	1061
1566	2712	2713	R	NV	21	A	Max KW-Total	1062
1567	2714	2715	R	NV	22	A	Max KW-Total	1063
1568	2716	2717	R	NV	23	A	Max KW-Total	1064
1569	2718	2719	R	NV	24	A	Max KW-Total	1065
1570	2720	2721	R	NV	25	A	Max KW-Total	1066
1571	2722	2723	R	NV	26	A	Max KW-Total	1067
1572	2724	2725	R	NV	27	A	Max KW-Total	1068
1573	2726	2727	R	NV	28	A	Max KW-Total	1069
1574	2728	2729	R	NV	29	A	Max KW-Total	1070
1575	2730	2731	R	NV	30	A	Max KW-Total	1071
1576	2732	2733	R	NV	31	A	Max KW-Total	1072
1577	2734	2735	R	NV	32	A	Max KW-Total	1073
1578	2736	2737	R	NV	33	A	Max KW-Total	1074
1579	2738	2739	R	NV	34	A	Max KW-Total	1075
1580	2740	2741	R	NV	35	A	Max KW-Total	1076
1581	2742	2743	R	NV	36	A	Max KW-Total	1077
1582	2744	2745	R	NV	37	A	Max KW-Total	1078
1583	2746	2747	R	NV	38	A	Max KW-Total	1079
1584	2748	2749	R	NV	39	A	Max KW-Total	1080

42 SINGLE-PHASE METERS MODBUS POINTMAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	------------------	------------------	-----	----	-------	------------------	-------------	--------------

DATA (cont.)

1585	2750	2751	R	NV	40	A	Max KW-Total	1081
1586	2752	2753	R	NV	41	A	Max KW-Total	1082
1587	2754	2755	R	NV	42	A	Max KW-Total	1083
1588	2756	2757	R	NV	1	A,B,C	Max Current	1000
1589	2758	2759	R	NV	2	A,B,C	Max Current	1001
1590	2760	2761	R	NV	3	A,B,C	Max Current	1002
1591	2762	2763	R	NV	4	A,B,C	Max Current	1003
1592	2764	2765	R	NV	5	A,B,C	Max Current	1004
1593	2766	2767	R	NV	6	A,B,C	Max Current	1005
1594	2768	2769	R	NV	7	A,B,C	Max Current	1006
1595	2770	2771	R	NV	8	A,B,C	Max Current	1007
1596	2772	2773	R	NV	9	A,B,C	Max Current	1008
1597	2774	2775	R	NV	10	A,B,C	Max Current	1009
1598	2776	2777	R	NV	11	A,B,C	Max Current	1010
1599	2778	2779	R	NV	12	A,B,C	Max Current	1011
1600	2780	2781	R	NV	13	A,B,C	Max Current	1012
1601	2782	2783	R	NV	14	A,B,C	Max Current	1013
1602	2784	2785	R	NV	15	A,B,C	Max Current	1014
1603	2786	2787	R	NV	16	A,B,C	Max Current	1015
1604	2788	2789	R	NV	17	A,B,C	Max Current	1016
1605	2790	2791	R	NV	18	A,B,C	Max Current	1017
1606	2792	2793	R	NV	19	A,B,C	Max Current	1018
1607	2794	2795	R	NV	20	A,B,C	Max Current	1019
1608	2796	2797	R	NV	21	A,B,C	Max Current	1020
1609	2798	2799	R	NV	22	A,B,C	Max Current	1021
1610	2800	2801	R	NV	23	A,B,C	Max Current	1022
1611	2802	2803	R	NV	24	A,B,C	Max Current	1023
1612	2804	2805	R	NV	25	A,B,C	Max Current	1024
1613	2806	2807	R	NV	26	A,B,C	Max Current	1025
1614	2808	2809	R	NV	27	A,B,C	Max Current	1026
1615	2810	2811	R	NV	28	A,B,C	Max Current	1027
1616	2812	2813	R	NV	29	A,B,C	Max Current	1028
1617	2814	2815	R	NV	30	A,B,C	Max Current	1029
1618	2816	2817	R	NV	31	A,B,C	Max Current	1030
1619	2818	2819	R	NV	32	A,B,C	Max Current	1031
1620	2820	2821	R	NV	33	A,B,C	Max Current	1032
1621	2822	2823	R	NV	34	A,B,C	Max Current	1033
1622	2824	2825	R	NV	35	A,B,C	Max Current	1034
1623	2826	2827	R	NV	36	A,B,C	Max Current	1035
1624	2828	2829	R	NV	37	A,B,C	Max Current	1036
1625	2830	2831	R	NV	38	A,B,C	Max Current	1037
1626	2832	2833	R	NV	39	A,B,C	Max Current	1038
1627	2834	2835	R	NV	40	A,B,C	Max Current	1039
1628	2836	2837	R	NV	41	A,B,C	Max Current	1040
1629	2838	2839	R	NV	42	A,B,C	Max Current	1041

total registers in this section

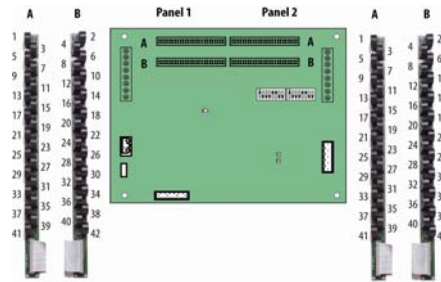
1470

E30 SERIES MODBUS POINT MAP

21 DUAL-PHASE METERS

Voltage/Current Phasing for Top Feed configuration

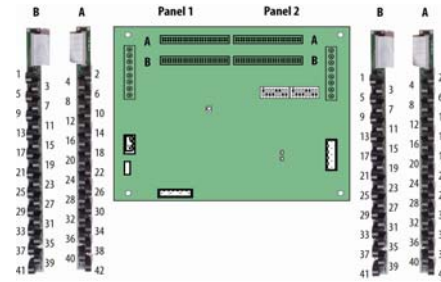
Meter	CT Number	Current Phase	Voltage Phase
1	1	1	A
	3	2	B
2	2	1	A
	4	2	B
3	5	1	C
	7	2	A
4	6	1	C
	8	2	A
5	9	1	B
	11	2	C
6	10	1	B
	12	2	C
7	13	1	A
	15	2	B
8	14	1	A
	16	2	B
9	17	1	C
	19	2	A
10	18	1	C
	20	2	A
11	21	1	B
	23	2	C
12	22	1	B
	24	2	C
13	25	1	A
	27	2	B
14	26	1	A
	28	2	B
15	29	1	C
	31	2	A
16	30	1	C
	32	2	A
17	33	1	B
	35	2	C
18	34	1	B
	36	2	C
19	37	1	A
	39	2	B
20	38	1	A
	40	2	B
21	41	1	C
	42	2	C



*Meter 21 will not produce meaningful data for Top Feed 2-phase

Voltage/Current Phasing for Bottom Feed configuration

Meter	CT Number	Current Phase	Voltage Phase
1	1	1	A
	3	2	B
2	2	1	A
	4	2	B
3	5	1	C
	7	2	A
4	6	1	C
	8	2	A
5	9	1	B
	11	2	C
6	10	1	B
	12	2	C
7	13	1	A
	15	2	B
8	14	1	A
	16	2	B
9	17	1	C
	19	2	A
10	18	1	C
	20	2	A
11	21	1	B
	23	2	C
12	22	1	B
	24	2	C
13	25	1	A
	27	2	B
14	26	1	A
	28	2	B
15	29	1	C
	31	2	A
16	30	1	C
	32	2	A
17	33	1	B
	35	2	C
18	34	1	B
	36	2	C
19	37	1	A
	39	2	B
20	38	1	A
	40	2	B
21	41	1	C
	42	2	C

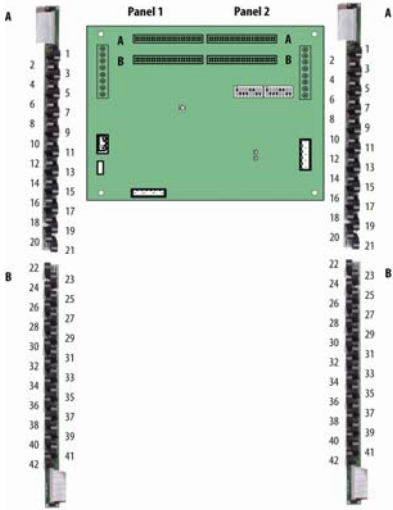


*Meter 21 will not produce meaningful data for Bottom Feed 2-phase

E30 SERIES MODBUS POINT MAP

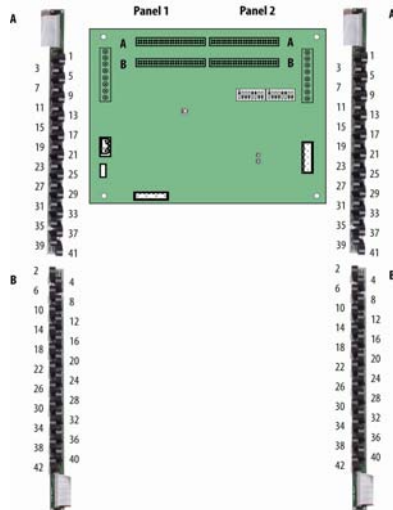
Voltage/Current Phasing for Single Row: Sequential configuration

Meter	CT Number	Current Phase	Voltage Phase
1	1	1	A
	2	2	B
2	3	1	C
	4	2	A
3	5	1	B
	6	2	C
4	7	1	A
	8	2	B
5	9	1	C
	10	2	A
6	11	1	B
	12	2	C
7	13	1	A
	14	2	B
8	15	1	C
	16	2	A
9	17	1	B
	18	2	C
10	19	1	A
	20	2	B
11	21	1	C
	22	2	A
12	23	1	B
	24	2	C
13	25	1	A
	26	2	B
14	27	1	C
	28	2	A
15	29	1	B
	30	2	C
16	31	1	A
	32	2	B
17	33	1	C
	34	2	A
18	35	1	B
	36	2	C
19	37	1	A
	38	2	B
20	39	1	C
	40	2	A
21	41	1	B
	42	2	C



Voltage/Current Phasing for Single Row: Odd / Even configuration

Meter	CT Number	Current Phase	Voltage Phase
1	1	1	A
	3	2	B
2	5	1	C
	7	2	A
3	9	1	B
	11	2	C
4	13	1	A
	15	2	B
5	17	1	C
	19	2	A
6	21	1	B
	23	2	C
7	25	1	A
	27	2	B
8	29	1	C
	31	2	A
9	33	1	B
	35	2	C
10	37	1	A
	39	2	B
11	41	1	C
	2	2	A
12	4	1	B
	6	2	C
13	8	1	A
	10	2	B
14	12	1	C
	14	2	A
15	16	1	B
	18	2	C
16	20	1	A
	22	2	B
17	24	1	C
	26	2	A
18	28	1	B
	30	2	C
19	32	1	A
	34	2	B
20	36	1	C
	38	2	A
21	40	1	B
	42	2	C



21 DUAL-PHASE METER MODBUS POINT MAP

Note: This map assumes that all pairs of branch CT's are identical

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	---------------	---------------	-----	----	-------	---------------	-------------	-----------

SCALE REGISTERS

4000			R	NV	1	A,B,C	Current Scale	
4001			R	NV	2	A,B,C	Current Scale	
4002			R	NV	3	A,B,C	Current Scale	
4003			R	NV	4	A,B,C	Current Scale	
4004			R	NV	5	A,B,C	Current Scale	
4005			R	NV	6	A,B,C	Current Scale	
4006			R	NV	7	A,B,C	Current Scale	
4007			R	NV	8	A,B,C	Current Scale	
4008			R	NV	9	A,B,C	Current Scale	
4009			R	NV	10	A,B,C	Current Scale	
4010			R	NV	11	A,B,C	Current Scale	
4011			R	NV	12	A,B,C	Current Scale	
4012			R	NV	13	A,B,C	Current Scale	
4013			R	NV	14	A,B,C	Current Scale	
4014			R	NV	15	A,B,C	Current Scale	
4015			R	NV	16	A,B,C	Current Scale	
4016			R	NV	17	A,B,C	Current Scale	
4017			R	NV	18	A,B,C	Current Scale	
4018			R	NV	19	A,B,C	Current Scale	
4019			R	NV	20	A,B,C	Current Scale	
4020			R	NV	21	A,B,C	Current Scale	
4021			R	NV	1	A	Power Scale	
4022			R	NV	2	A	Power Scale	
4023			R	NV	3	A	Power Scale	
4024			R	NV	4	A	Power Scale	
4025			R	NV	5	A	Power Scale	
4026			R	NV	6	A	Power Scale	
4027			R	NV	7	A	Power Scale	
4028			R	NV	8	A	Power Scale	
4029			R	NV	9	A	Power Scale	
4030			R	NV	10	A	Power Scale	
4031			R	NV	11	A	Power Scale	
4032			R	NV	12	A	Power Scale	
4033			R	NV	13	A	Power Scale	
4034			R	NV	14	A	Power Scale	
4035			R	NV	15	A	Power Scale	
4036			R	NV	16	A	Power Scale	
4037			R	NV	17	A	Power Scale	
4038			R	NV	18	A	Power Scale	
4039			R	NV	19	A	Power Scale	
4040			R	NV	20	A	Power Scale	
4041			R	NV	21	A	Power Scale	
4042			R	NV	1	A	Energy Scale	
4043			R	NV	2	A	Energy Scale	
4044			R	NV	3	A	Energy Scale	
4045			R	NV	4	A	Energy Scale	
4046			R	NV	5	A	Energy Scale	
4047			R	NV	6	A	Energy Scale	
4048			R	NV	7	A	Energy Scale	
4049			R	NV	8	A	Energy Scale	
4050			R	NV	9	A	Energy Scale	
4051			R	NV	10	A	Energy Scale	
4052			R	NV	11	A	Energy Scale	
4053			R	NV	12	A	Energy Scale	
4054			R	NV	13	A	Energy Scale	
4055			R	NV	14	A	Energy Scale	
4056			R	NV	15	A	Energy Scale	
4057			R	NV	16	A	Energy Scale	
4058			R	NV	17	A	Energy Scale	
4059			R	NV	18	A	Energy Scale	
4060			R	NV	19	A	Energy Scale	
4061			R	NV	20	A	Energy Scale	
4062			R	NV	21	A	Energy Scale	

21 DUAL-PHASE METER MODBUS POINT MAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	---------------	---------------	-----	----	-------	---------------	-------------	-----------

RESETS

Also resets corresponding registers in 1PH and 3PH maps

4063			W		1	A,B,C	Reset - Write the listed value to perform the listed reset: 10203 = Clear KWH value to zero 29877 = Clear all Max Current and Max KW values to zero	
4064			W		2	A,B,C	Reset	
4065			W		3	A,B,C	Reset	
4066			W		4	A,B,C	Reset	
4067			W		5	A,B,C	Reset	
4068			W		6	A,B,C	Reset	
4069			W		7	A,B,C	Reset	
4070			W		8	A,B,C	Reset	
4071			W		9	A,B,C	Reset	
4072			W		10	A,B,C	Reset	
4073			W		11	A,B,C	Reset	
4074			W		12	A,B,C	Reset	
4075			W		13	A,B,C	Reset	
4076			W		14	A,B,C	Reset	
4077			W		15	A,B,C	Reset	
4078			W		16	A,B,C	Reset	
4079			W		17	A,B,C	Reset	
4080			W		18	A,B,C	Reset	
4081			W		19	A,B,C	Reset	
4082			W		20	A,B,C	Reset	
4083			W		21	A,B,C	Reset	

DATA

4084	5000	5001	R	NV	1	A	KWH (MSW)	4042
4085			R	NV	1	A	KWH (LSW)	
4086	5002	5003	R	NV	2	A	KWH (MSW)	4043
4087			R	NV	2	A	KWH (LSW)	
4088	5004	5005	R	NV	3	A	KWH (MSW)	4044
4089			R	NV	3	A	KWH (LSW)	
4090	5006	5007	R	NV	4	A	KWH (MSW)	4045
4091			R	NV	4	A	KWH (LSW)	
4092	5008	5009	R	NV	5	A	KWH (MSW)	4046
4093			R	NV	5	A	KWH (LSW)	
4094	5010	5011	R	NV	6	A	KWH (MSW)	4047
4095			R	NV	6	A	KWH (LSW)	
4096	5012	5013	R	NV	7	A	KWH (MSW)	4048
4097			R	NV	7	A	KWH (LSW)	
4098	5014	5015	R	NV	8	A	KWH (MSW)	4049
4099			R	NV	8	A	KWH (LSW)	
4100	5016	5017	R	NV	9	A	KWH (MSW)	4050
4101			R	NV	9	A	KWH (LSW)	
4102	5018	5019	R	NV	10	A	KWH (MSW)	4051
4103			R	NV	10	A	KWH (LSW)	
4104	5020	5021	R	NV	11	A	KWH (MSW)	4052
4105			R	NV	11	A	KWH (LSW)	
4106	5022	5023	R	NV	12	A	KWH (MSW)	4053
4107			R	NV	12	A	KWH (LSW)	
4108	5024	5025	R	NV	13	A	KWH (MSW)	4054
4109			R	NV	13	A	KWH (LSW)	
4110	5026	5027	R	NV	14	A	KWH (MSW)	4055
4111			R	NV	14	A	KWH (LSW)	
4112	5028	5029	R	NV	15	A	KWH (MSW)	4056
4113			R	NV	15	A	KWH (LSW)	
4114	5030	5031	R	NV	16	A	KWH (MSW)	4057
4115			R	NV	16	A	KWH (LSW)	
4116	5032	5033	R	NV	17	A	KWH (MSW)	4058
4117			R	NV	17	A	KWH (LSW)	
4118	5034	5035	R	NV	18	A	KWH (MSW)	4059
4119			R	NV	18	A	KWH (LSW)	

21 DUAL-PHASE METER MODBUS POINT MAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	---------------	---------------	-----	----	-------	---------------	-------------	-----------

DATA (CONT)

4120	5036	5037	R	NV	19	A	KWH (MSW)	4060
4121			R	NV	19	A	KWH (LSW)	
4122	5038	5039	R	NV	20	A	KWH (MSW)	4061
4123			R	NV	20	A	KWH (LSW)	
4124	5040	5041	R	NV	21	A	KWH (MSW)	4062
4125			R	NV	21	A	KWH (LSW)	
4126	5042	5043	R		1	A	KW Total	4021
4127	5044	5045	R		2	A	KW Total	4022
4128	5046	5047	R		3	A	KW Total	4023
4129	5048	5049	R		4	A	KW Total	4024
4130	5050	5051	R		5	A	KW Total	4025
4131	5052	5053	R		6	A	KW Total	4026
4132	5054	5055	R		7	A	KW Total	4027
4133	5056	5057	R		8	A	KW Total	4028
4134	5058	5059	R		9	A	KW Total	4029
4135	5060	5061	R		10	A	KW Total	4030
4136	5062	5063	R		11	A	KW Total	4031
4137	5064	5065	R		12	A	KW Total	4032
4138	5066	5067	R		13	A	KW Total	4033
4139	5068	5069	R		14	A	KW Total	4034
4140	5070	5071	R		15	A	KW Total	4035
4141	5072	5073	R		16	A	KW Total	4036
4142	5074	5075	R		17	A	KW Total	4037
4143	5076	5077	R		18	A	KW Total	4038
4144	5078	5079	R		19	A	KW Total	4039
4145	5080	5081	R		20	A	KW Total	4040
4146	5082	5083	R		21	A	KW Total	4041
4147	5084	5085	R		1	A	PF Total	-3
4148	5086	5087	R		2	A	PF Total	-3
4149	5088	5089	R		3	A	PF Total	-3
4150	5090	5091	R		4	A	PF Total	-3
4151	5092	5093	R		5	A	PF Total	-3
4152	5094	5095	R		6	A	PF Total	-3
4153	5096	5097	R		7	A	PF Total	-3
4154	5098	5099	R		8	A	PF Total	-3
4155	5100	5101	R		9	A	PF Total	-3
4156	5102	5103	R		10	A	PF Total	-3
4157	5104	5105	R		11	A	PF Total	-3
4158	5106	5107	R		12	A	PF Total	-3
4159	5108	5109	R		13	A	PF Total	-3
4160	5110	5111	R		14	A	PF Total	-3
4161	5112	5113	R		15	A	PF Total	-3
4162	5114	5115	R		16	A	PF Total	-3
4163	5116	5117	R		17	A	PF Total	-3
4164	5118	5119	R		18	A	PF Total	-3
4165	5120	5121	R		19	A	PF Total	-3
4166	5122	5123	R		20	A	PF Total	-3
4167	5124	5125	R		21	A	PF Total	-3
4168	5126	5127	R		1	A,B,C	Current Average of 2 phases	4000
4169	5128	5129	R		2	A,B,C	Current Average of 2 phases	4001
4170	5130	5131	R		3	A,B,C	Current Average of 2 phases	4002
4171	5132	5133	R		4	A,B,C	Current Average of 2 phases	4003
4172	5134	5135	R		5	A,B,C	Current Average of 2 phases	4004
4173	5136	5137	R		6	A,B,C	Current Average of 2 phases	4005
4174	5138	5139	R		7	A,B,C	Current Average of 2 phases	4006
4175	5140	5141	R		8	A,B,C	Current Average of 2 phases	4007
4176	5142	5143	R		9	A,B,C	Current Average of 2 phases	4008
4177	5144	5145	R		10	A,B,C	Current Average of 2 phases	4009
4178	5146	5147	R		11	A,B,C	Current Average of 2 phases	4010
4179	5148	5149	R		12	A,B,C	Current Average of 2 phases	4011
4180	5150	5151	R		13	A,B,C	Current Average of 2 phases	4012
4181	5152	5153	R		14	A,B,C	Current Average of 2 phases	4013
4182	5154	5155	R		15	A,B,C	Current Average of 2 phases	4014
4183	5156	5157	R		16	A,B,C	Current Average of 2 phases	4015

21 DUAL-PHASE METER MODBUS POINT MAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	---------------	---------------	-----	----	-------	---------------	-------------	-----------

DATA (cont.)

4184	5158	5159	R		17	A,B,C	Current Average of 2 phases	4016
4185	5160	5161	R		18	A,B,C	Current Average of 2 phases	4017
4186	5162	5163	R		19	A,B,C	Current Average of 2 phases	4018
4187	5164	5165	R		20	A,B,C	Current Average of 2 phases	4019
4188	5166	5167	R		21	A,B,C	Current Average of 2 phases	4020
4189	5168	5169	R		1	A	KW Phase 1	4021
4190	5170	5171	R		2	A	KW Phase 1	4022
4191	5172	5173	R		3	A	KW Phase 1	4023
4192	5174	5175	R		4	A	KW Phase 1	4024
4193	5176	5177	R		5	A	KW Phase 1	4025
4194	5178	5179	R		6	A	KW Phase 1	4026
4195	5180	5181	R		7	A	KW Phase 1	4027
4196	5182	5183	R		8	A	KW Phase 1	4028
4197	5184	5185	R		9	A	KW Phase 1	4029
4198	5186	5187	R		10	A	KW Phase 1	4030
4199	5188	5189	R		11	A	KW Phase 1	4031
4200	5190	5191	R		12	A	KW Phase 1	4032
4201	5192	5193	R		13	A	KW Phase 1	4033
4202	5194	5195	R		14	A	KW Phase 1	4034
4203	5196	5197	R		15	A	KW Phase 1	4035
4204	5198	5199	R		16	A	KW Phase 1	4036
4205	5200	5201	R		17	A	KW Phase 1	4037
4206	5202	5203	R		18	A	KW Phase 1	4038
4207	5204	5205	R		19	A	KW Phase 1	4039
4208	5206	5207	R		20	A	KW Phase 1	4040
4209	5208	5209	R		21	A	KW Phase 1	4041
4210	5210	5211	R		1	A	KW Phase 2	4021
4211	5212	5213	R		2	A	KW Phase 2	4022
4212	5214	5215	R		3	A	KW Phase 2	4023
4213	5216	5217	R		4	A	KW Phase 2	4024
4214	5218	5219	R		5	A	KW Phase 2	4025
4215	5220	5221	R		6	A	KW Phase 2	4026
4216	5222	5223	R		7	A	KW Phase 2	4027
4217	5224	5225	R		8	A	KW Phase 2	4028
4218	5226	5227	R		9	A	KW Phase 2	4029
4219	5228	5229	R		10	A	KW Phase 2	4030
4220	5230	5231	R		11	A	KW Phase 2	4031
4221	5232	5233	R		12	A	KW Phase 2	4032
4222	5234	5235	R		13	A	KW Phase 2	4033
4223	5236	5237	R		14	A	KW Phase 2	4034
4224	5238	5239	R		15	A	KW Phase 2	4035
4225	5240	5241	R		16	A	KW Phase 2	4036
4226	5242	5243	R		17	A	KW Phase 2	4037
4227	5244	5245	R		18	A	KW Phase 2	4038
4228	5246	5247	R		19	A	KW Phase 2	4039
4229	5248	5249	R		20	A	KW Phase 2	4040
4230	5250	5251	R		21	A	KW Phase 2	4041
4231	5252	5253	R		1	A	PF Phase 1	-3
4232	5254	5255	R		2	A	PF Phase 1	-3
4233	5256	5257	R		3	A	PF Phase 1	-3
4234	5258	5259	R		4	A	PF Phase 1	-3
4235	5260	5261	R		5	A	PF Phase 1	-3
4236	5262	5263	R		6	A	PF Phase 1	-3
4237	5264	5265	R		7	A	PF Phase 1	-3
4238	5266	5267	R		8	A	PF Phase 1	-3
4239	5268	5269	R		9	A	PF Phase 1	-3
4240	5270	5271	R		10	A	PF Phase 1	-3
4241	5272	5273	R		11	A	PF Phase 1	-3
4242	5274	5275	R		12	A	PF Phase 1	-3
4243	5276	5277	R		13	A	PF Phase 1	-3
4244	5278	5279	R		14	A	PF Phase 1	-3
4245	5280	5281	R		15	A	PF Phase 1	-3
4246	5282	5283	R		16	A	PF Phase 1	-3

21 DUAL-PHASE METER MODBUS POINT MAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	---------------	---------------	-----	----	-------	---------------	-------------	-----------

DATA (cont.)

4247	5284	5285	R		17	A	PF Phase 1	-3
4248	5286	5287	R		18	A	PF Phase 1	-3
4249	5288	5289	R		19	A	PF Phase 1	-3
4250	5290	5291	R		20	A	PF Phase 1	-3
4251	5292	5293	R		21	A	PF Phase 1	-3
4252	5294	5295	R		1	A	PF Phase 2	-3
4253	5296	5297	R		2	A	PF Phase 2	-3
4254	5298	5299	R		3	A	PF Phase 2	-3
4255	5300	5301	R		4	A	PF Phase 2	-3
4256	5302	5303	R		5	A	PF Phase 2	-3
4257	5304	5305	R		6	A	PF Phase 2	-3
4258	5306	5307	R		7	A	PF Phase 2	-3
4259	5308	5309	R		8	A	PF Phase 2	-3
4260	5310	5311	R		9	A	PF Phase 2	-3
4261	5312	5313	R		10	A	PF Phase 2	-3
4262	5314	5315	R		11	A	PF Phase 2	-3
4263	5316	5317	R		12	A	PF Phase 2	-3
4264	5318	5319	R		13	A	PF Phase 2	-3
4265	5320	5321	R		14	A	PF Phase 2	-3
4266	5322	5323	R		15	A	PF Phase 2	-3
4267	5324	5325	R		16	A	PF Phase 2	-3
4268	5326	5327	R		17	A	PF Phase 2	-3
4269	5328	5329	R		18	A	PF Phase 2	-3
4270	5330	5331	R		19	A	PF Phase 2	-3
4271	5332	5333	R		20	A	PF Phase 2	-3
4272	5334	5335	R		21	A	PF Phase 2	-3
4273	5336	5337	R		1	A,B,C	Current Phase 1	4000
4274	5338	5339	R		2	A,B,C	Current Phase 1	4001
4275	5340	5341	R		3	A,B,C	Current Phase 1	4002
4276	5342	5343	R		4	A,B,C	Current Phase 1	4003
4277	5344	5345	R		5	A,B,C	Current Phase 1	4004
4278	5346	5347	R		6	A,B,C	Current Phase 1	4005
4279	5348	5349	R		7	A,B,C	Current Phase 1	4006
4280	5350	5351	R		8	A,B,C	Current Phase 1	4007
4281	5352	5353	R		9	A,B,C	Current Phase 1	4008
4282	5354	5355	R		10	A,B,C	Current Phase 1	4009
4283	5356	5357	R		11	A,B,C	Current Phase 1	4010
4284	5358	5359	R		12	A,B,C	Current Phase 1	4011
4285	5360	5361	R		13	A,B,C	Current Phase 1	4012
4286	5362	5363	R		14	A,B,C	Current Phase 1	4013
4287	5364	5365	R		15	A,B,C	Current Phase 1	4014
4288	5366	5367	R		16	A,B,C	Current Phase 1	4015
4289	5368	5369	R		17	A,B,C	Current Phase 1	4016
4290	5370	5371	R		18	A,B,C	Current Phase 1	4017
4291	5372	5373	R		19	A,B,C	Current Phase 1	4018
4292	5374	5375	R		20	A,B,C	Current Phase 1	4019
4293	5376	5377	R		21	A,B,C	Current Phase 1	4020
4294	5378	5379	R		1	A,B,C	Current Phase 2	4000
4295	5380	5381	R		2	A,B,C	Current Phase 2	4001
4296	5382	5383	R		3	A,B,C	Current Phase 2	4002
4297	5384	5385	R		4	A,B,C	Current Phase 2	4003
4298	5386	5387	R		5	A,B,C	Current Phase 2	4004
4299	5388	5389	R		6	A,B,C	Current Phase 2	4005
4300	5390	5391	R		7	A,B,C	Current Phase 2	4006
4301	5392	5393	R		8	A,B,C	Current Phase 2	4007
4302	5394	5395	R		9	A,B,C	Current Phase 2	4008
4303	5396	5397	R		10	A,B,C	Current Phase 2	4009
4304	5398	5399	R		11	A,B,C	Current Phase 2	4010
4305	5400	5401	R		12	A,B,C	Current Phase 2	4011
4306	5402	5403	R		13	A,B,C	Current Phase 2	4012
4307	5404	5405	R		14	A,B,C	Current Phase 2	4013
4308	5406	5407	R		15	A,B,C	Current Phase 2	4014
4309	5408	5409	R		16	A,B,C	Current Phase 2	4015

21 DUAL-PHASE METER MODBUS POINT MAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	------------------	------------------	-----	----	-------	------------------	-------------	--------------

DATA (cont.)

4310	5410	5411	R		17	A,B,C	Current Phase 2	4016
4311	5412	5413	R		18	A,B,C	Current Phase 2	4017
4312	5414	5415	R		19	A,B,C	Current Phase 2	4018
4313	5416	5417	R		20	A,B,C	Current Phase 2	4019
4314	5418	5419	R		21	A,B,C	Current Phase 2	4020
4315	5420	5421	R		1	A	Present KW-Total Demand	4021
4316	5422	5423	R		2	A	Present KW-Total Demand	4022
4317	5424	5425	R		3	A	Present KW-Total Demand	4023
4318	5426	5427	R		4	A	Present KW-Total Demand	4024
4319	5428	5429	R		5	A	Present KW-Total Demand	4025
4320	5430	5431	R		6	A	Present KW-Total Demand	4026
4321	5432	5433	R		7	A	Present KW-Total Demand	4027
4322	5434	5435	R		8	A	Present KW-Total Demand	4028
4323	5436	5437	R		9	A	Present KW-Total Demand	4029
4324	5438	5439	R		10	A	Present KW-Total Demand	4030
4325	5440	5441	R		11	A	Present KW-Total Demand	4031
4326	5442	5443	R		12	A	Present KW-Total Demand	4032
4327	5444	5445	R		13	A	Present KW-Total Demand	4033
4328	5446	5447	R		14	A	Present KW-Total Demand	4034
4329	5448	5449	R		15	A	Present KW-Total Demand	4035
4330	5450	5451	R		16	A	Present KW-Total Demand	4036
4331	5452	5453	R		17	A	Present KW-Total Demand	4037
4332	5454	5455	R		18	A	Present KW-Total Demand	4038
4333	5456	5457	R		19	A	Present KW-Total Demand	4039
4334	5458	5459	R		20	A	Present KW-Total Demand	4040
4335	5460	5461	R		21	A	Present KW-Total Demand	4041
4336	5462	5463	R	NV	1	A	Max KW-Total Demand	4021
4337	5464	5465	R	NV	2	A	Max KW-Total Demand	4022
4338	5466	5467	R	NV	3	A	Max KW-Total Demand	4023
4339	5468	5469	R	NV	4	A	Max KW-Total Demand	4024
4340	5470	5471	R	NV	5	A	Max KW-Total Demand	4025
4341	5472	5473	R	NV	6	A	Max KW-Total Demand	4026
4342	5474	5475	R	NV	7	A	Max KW-Total Demand	4027
4343	5476	5477	R	NV	8	A	Max KW-Total Demand	4028
4344	5478	5479	R	NV	9	A	Max KW-Total Demand	4029
4345	5480	5481	R	NV	10	A	Max KW-Total Demand	4030
4346	5482	5483	R	NV	11	A	Max KW-Total Demand	4031
4347	5484	5485	R	NV	12	A	Max KW-Total Demand	4032
4348	5486	5487	R	NV	13	A	Max KW-Total Demand	4033
4349	5488	5489	R	NV	14	A	Max KW-Total Demand	4034
4350	5490	5491	R	NV	15	A	Max KW-Total Demand	4035
4351	5492	5493	R	NV	16	A	Max KW-Total Demand	4036
4352	5494	5495	R	NV	17	A	Max KW-Total Demand	4037
4353	5496	5497	R	NV	18	A	Max KW-Total Demand	4038
4354	5498	5499	R	NV	19	A	Max KW-Total Demand	4039
4355	5500	5501	R	NV	20	A	Max KW-Total Demand	4040
4356	5502	5503	R	NV	21	A	Max KW-Total Demand	4041
4357	5504	5505	R		1	A,B,C	Present Current Demand Phase 1	4000
4358	5506	5507	R		2	A,B,C	Present Current Demand Phase 1	4001
4359	5508	5509	R		3	A,B,C	Present Current Demand Phase 1	4002
4360	5510	5511	R		4	A,B,C	Present Current Demand Phase 1	4003
4361	5512	5513	R		5	A,B,C	Present Current Demand Phase 1	4004
4362	5514	5515	R		6	A,B,C	Present Current Demand Phase 1	4005
4363	5516	5517	R		7	A,B,C	Present Current Demand Phase 1	4006
4364	5518	5519	R		8	A,B,C	Present Current Demand Phase 1	4007
4365	5520	5521	R		9	A,B,C	Present Current Demand Phase 1	4008
4366	5522	5523	R		10	A,B,C	Present Current Demand Phase 1	4009
4367	5524	5525	R		11	A,B,C	Present Current Demand Phase 1	4010
4368	5526	5527	R		12	A,B,C	Present Current Demand Phase 1	4011
4369	5528	5529	R		13	A,B,C	Present Current Demand Phase 1	4012
4370	5530	5531	R		14	A,B,C	Present Current Demand Phase 1	4013
4371	5532	5533	R		15	A,B,C	Present Current Demand Phase 1	4014
4372	5534	5535	R		16	A,B,C	Present Current Demand Phase 1	4015

21 DUAL-PHASE METER MODBUS POINT MAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	------------------	------------------	-----	----	-------	------------------	-------------	--------------

DATA (cont.)

4373	5536	5537	R		17	A,B,C	Present Current Demand Phase 1	4016
4374	5538	5539	R		18	A,B,C	Present Current Demand Phase 1	4017
4375	5540	5541	R		19	A,B,C	Present Current Demand Phase 1	4018
4376	5542	5543	R		20	A,B,C	Present Current Demand Phase 1	4019
4377	5544	5545	R		21	A,B,C	Present Current Demand Phase 1	4020
4378	5546	5547	R		1	A,B,C	Present Current Demand Phase 2	4000
4379	5548	5549	R		2	A,B,C	Present Current Demand Phase 2	4001
4380	5550	5551	R		3	A,B,C	Present Current Demand Phase 2	4002
4381	5552	5553	R		4	A,B,C	Present Current Demand Phase 2	4003
4382	5554	5555	R		5	A,B,C	Present Current Demand Phase 2	4004
4383	5556	5557	R		6	A,B,C	Present Current Demand Phase 2	4005
4384	5558	5559	R		7	A,B,C	Present Current Demand Phase 2	4006
4385	5560	5561	R		8	A,B,C	Present Current Demand Phase 2	4007
4386	5562	5563	R		9	A,B,C	Present Current Demand Phase 2	4008
4387	5564	5565	R		10	A,B,C	Present Current Demand Phase 2	4009
4388	5566	5567	R		11	A,B,C	Present Current Demand Phase 2	4010
4389	5568	5569	R		12	A,B,C	Present Current Demand Phase 2	4011
4390	5570	5571	R		13	A,B,C	Present Current Demand Phase 2	4012
4391	5572	5573	R		14	A,B,C	Present Current Demand Phase 2	4013
4392	5574	5575	R		15	A,B,C	Present Current Demand Phase 2	4014
4393	5576	5577	R		16	A,B,C	Present Current Demand Phase 2	4015
4394	5578	5579	R		17	A,B,C	Present Current Demand Phase 2	4016
4395	5580	5581	R		18	A,B,C	Present Current Demand Phase 2	4017
4396	5582	5583	R		19	A,B,C	Present Current Demand Phase 2	4018
4397	5584	5585	R		20	A,B,C	Present Current Demand Phase 2	4019
4398	5586	5587	R		21	A,B,C	Present Current Demand Phase 2	4020
4399	5588	5589	R	NV	1	A,B,C	Max Current Demand Phase 1	4000
4400	5590	5591	R	NV	2	A,B,C	Max Current Demand Phase 1	4001
4401	5592	5593	R	NV	3	A,B,C	Max Current Demand Phase 1	4002
4402	5594	5595	R	NV	4	A,B,C	Max Current Demand Phase 1	4003
4403	5596	5597	R	NV	5	A,B,C	Max Current Demand Phase 1	4004
4404	5598	5599	R	NV	6	A,B,C	Max Current Demand Phase 1	4005
4405	5600	5601	R	NV	7	A,B,C	Max Current Demand Phase 1	4006
4406	5602	5603	R	NV	8	A,B,C	Max Current Demand Phase 1	4007
4407	5604	5605	R	NV	9	A,B,C	Max Current Demand Phase 1	4008
4408	5606	5607	R	NV	10	A,B,C	Max Current Demand Phase 1	4009
4409	5608	5609	R	NV	11	A,B,C	Max Current Demand Phase 1	4010
4410	5610	5611	R	NV	12	A,B,C	Max Current Demand Phase 1	4011
4411	5612	5613	R	NV	13	A,B,C	Max Current Demand Phase 1	4012
4412	5614	5615	R	NV	14	A,B,C	Max Current Demand Phase 1	4013
4413	5616	5617	R	NV	15	A,B,C	Max Current Demand Phase 1	4014
4414	5618	5619	R	NV	16	A,B,C	Max Current Demand Phase 1	4015
4415	5620	5621	R	NV	17	A,B,C	Max Current Demand Phase 1	4016
4416	5622	5623	R	NV	18	A,B,C	Max Current Demand Phase 1	4017
4417	5624	5625	R	NV	19	A,B,C	Max Current Demand Phase 1	4018
4418	5626	5627	R	NV	20	A,B,C	Max Current Demand Phase 1	4019
4419	5628	5629	R	NV	21	A,B,C	Max Current Demand Phase 1	4020
4420	5630	5631	R	NV	1	A,B,C	Max Current Demand Phase 2	4000
4421	5632	5633	R	NV	2	A,B,C	Max Current Demand Phase 2	4001
4422	5634	5635	R	NV	3	A,B,C	Max Current Demand Phase 2	4002
4423	5636	5637	R	NV	4	A,B,C	Max Current Demand Phase 2	4003
4424	5638	5639	R	NV	5	A,B,C	Max Current Demand Phase 2	4004
4425	5640	5641	R	NV	6	A,B,C	Max Current Demand Phase 2	4005
4426	5642	5643	R	NV	7	A,B,C	Max Current Demand Phase 2	4006
4427	5644	5645	R	NV	8	A,B,C	Max Current Demand Phase 2	4007
4428	5646	5647	R	NV	9	A,B,C	Max Current Demand Phase 2	4008
4429	5648	5649	R	NV	10	A,B,C	Max Current Demand Phase 2	4009
4430	5650	5651	R	NV	11	A,B,C	Max Current Demand Phase 2	4010
4431	5652	5653	R	NV	12	A,B,C	Max Current Demand Phase 2	4011
4432	5654	5655	R	NV	13	A,B,C	Max Current Demand Phase 2	4012
4433	5656	5657	R	NV	14	A,B,C	Max Current Demand Phase 2	4013
4434	5658	5659	R	NV	15	A,B,C	Max Current Demand Phase 2	4014
4435	5660	5661	R	NV	16	A,B,C	Max Current Demand Phase 2	4015
4436	5662	5663	R	NV	17	A,B,C	Max Current Demand Phase 2	4016

21 DUAL-PHASE METER MODBUS POINT MAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	------------------	------------------	-----	----	-------	------------------	-------------	--------------

DATA (cont.)

4437	5664	5665	R	NV	18	A,B,C	Max Current Demand Phase 2	4017
4438	5666	5667	R	NV	19	A,B,C	Max Current Demand Phase 2	4018
4439	5668	5669	R	NV	20	A,B,C	Max Current Demand Phase 2	4019
4440	5670	5671	R	NV	21	A,B,C	Max Current Demand Phase 2	4020
4441	5672	5673	R	NV	1	A,B,C	Max Current Phase 1	4000
4442	5674	5675	R	NV	2	A,B,C	Max Current Phase 1	4001
4443	5676	5677	R	NV	3	A,B,C	Max Current Phase 1	4002
4444	5678	5679	R	NV	4	A,B,C	Max Current Phase 1	4003
4445	5680	5681	R	NV	5	A,B,C	Max Current Phase 1	4004
4446	5682	5683	R	NV	6	A,B,C	Max Current Phase 1	4005
4447	5684	5685	R	NV	7	A,B,C	Max Current Phase 1	4006
4448	5686	5687	R	NV	8	A,B,C	Max Current Phase 1	4007
4449	5688	5689	R	NV	9	A,B,C	Max Current Phase 1	4008
4450	5690	5691	R	NV	10	A,B,C	Max Current Phase 1	4009
4451	5692	5693	R	NV	11	A,B,C	Max Current Phase 1	4010
4452	5694	5695	R	NV	12	A,B,C	Max Current Phase 1	4011
4453	5696	5697	R	NV	13	A,B,C	Max Current Phase 1	4012
4454	5698	5699	R	NV	14	A,B,C	Max Current Phase 1	4013
4455	5700	5701	R	NV	15	A,B,C	Max Current Phase 1	4014
4456	5702	5703	R	NV	16	A,B,C	Max Current Phase 1	4015
4457	5704	5705	R	NV	17	A,B,C	Max Current Phase 1	4016
4458	5706	5707	R	NV	18	A,B,C	Max Current Phase 1	4017
4459	5708	5709	R	NV	19	A,B,C	Max Current Phase 1	4018
4460	5710	5711	R	NV	20	A,B,C	Max Current Phase 1	4019
4461	5712	5713	R	NV	21	A,B,C	Max Current Phase 1	4020
4462	5714	5715	R	NV	1	A,B,C	Max Current Phase 2	4000
4463	5716	5717	R	NV	2	A,B,C	Max Current Phase 2	4001
4464	5718	5719	R	NV	3	A,B,C	Max Current Phase 2	4002
4465	5720	5721	R	NV	4	A,B,C	Max Current Phase 2	4003
4466	5722	5723	R	NV	5	A,B,C	Max Current Phase 2	4004
4467	5724	5725	R	NV	6	A,B,C	Max Current Phase 2	4005
4468	5726	5727	R	NV	7	A,B,C	Max Current Phase 2	4006
4469	5728	5729	R	NV	8	A,B,C	Max Current Phase 2	4007
4470	5730	5731	R	NV	9	A,B,C	Max Current Phase 2	4008
4471	5732	5733	R	NV	10	A,B,C	Max Current Phase 2	4009
4472	5734	5735	R	NV	11	A,B,C	Max Current Phase 2	4010
4473	5736	5737	R	NV	12	A,B,C	Max Current Phase 2	4011
4474	5738	5739	R	NV	13	A,B,C	Max Current Phase 2	4012
4475	5740	5741	R	NV	14	A,B,C	Max Current Phase 2	4013
4476	5742	5743	R	NV	15	A,B,C	Max Current Phase 2	4014
4477	5744	5745	R	NV	16	A,B,C	Max Current Phase 2	4015
4478	5746	5747	R	NV	17	A,B,C	Max Current Phase 2	4016
4479	5748	5749	R	NV	18	A,B,C	Max Current Phase 2	4017
4480	5750	5751	R	NV	19	A,B,C	Max Current Phase 2	4018
4481	5752	5753	R	NV	20	A,B,C	Max Current Phase 2	4019
4482	5754	5755	R	NV	21	A,B,C	Max Current Phase 2	4020
4483	5756	5757	R	NV	1	A	Max KW Total	4021
4484	5758	5759	R	NV	2	A	Max KW Total	4022
4485	5760	5761	R	NV	3	A	Max KW Total	4023
4486	5762	5763	R	NV	4	A	Max KW Total	4024
4487	5764	5765	R	NV	5	A	Max KW Total	4025
4488	5766	5767	R	NV	6	A	Max KW Total	4026
4489	5768	5769	R	NV	7	A	Max KW Total	4027
4490	5770	5771	R	NV	8	A	Max KW Total	4028
4491	5772	5773	R	NV	9	A	Max KW Total	4029
4492	5774	5775	R	NV	10	A	Max KW Total	4030
4493	5776	5777	R	NV	11	A	Max KW Total	4031
4494	5778	5779	R	NV	12	A	Max KW Total	4032
4495	5780	5781	R	NV	13	A	Max KW Total	4033
4496	5782	5783	R	NV	14	A	Max KW Total	4034
4497	5784	5785	R	NV	15	A	Max KW Total	4035
4498	5786	5787	R	NV	16	A	Max KW Total	4036
4499	5788	5789	R	NV	17	A	Max KW Total	4037

21 DUAL-PHASE METER MODBUS POINT MAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	------------------	------------------	-----	----	-------	------------------	-------------	--------------

DATA (cont.)

4500	5790	5791	R	NV	18	A	Max KW Total	4038
4501	5792	5793	R	NV	19	A	Max KW Total	4039
4502	5794	5795	R	NV	20	A	Max KW Total	4040
4503	5796	5797	R	NV	21	A	Max KW Total	4041

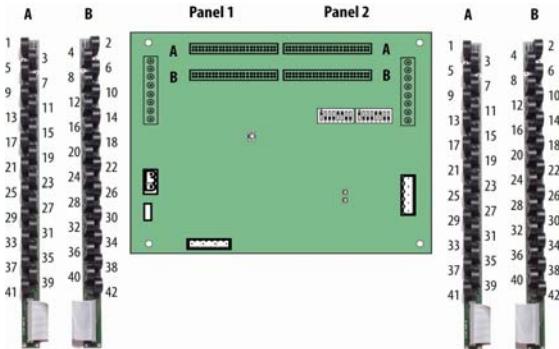
total registers in this section
1302

E30 SERIES MODBUS POINT MAP

14 3-PHASE METERS

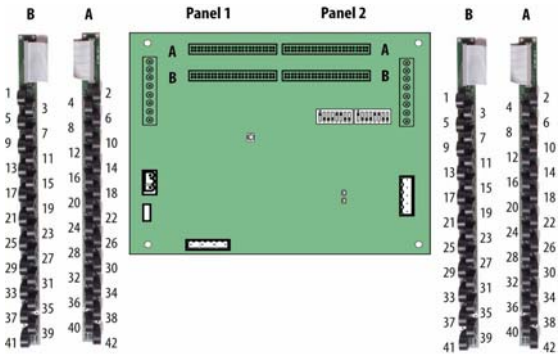
Voltage/Current Phasing for Top Feed configuration

Meter	CT Number	Current Phase	Voltage Phase
1	1	1	A
	3	2	B
	5	3	C
2	2	1	A
	4	2	B
	6	3	C
3	7	1	A
	9	2	B
	11	3	C
4	8	1	A
	10	2	B
	12	3	C
5	13	1	A
	15	2	B
	17	3	C
6	14	1	A
	16	2	B
	18	3	C
7	19	1	A
	21	2	B
	23	3	C
8	20	1	A
	22	2	B
	24	3	C
9	25	1	A
	27	2	B
	29	3	C
10	26	1	A
	28	2	B
	30	3	C
11	31	1	A
	33	2	B
	35	3	C
12	32	1	A
	34	2	B
	36	3	C
13	37	1	A
	39	2	B
	41	3	C
14	38	1	A
	40	2	B
	42	3	C



Voltage/Current Phasing for Bottom Feed configuration

Meter	CT Number	Current Phase	Voltage Phase
1	1	1	A
	3	2	B
	5	3	C
2	2	1	A
	4	2	B
	6	3	C
3	7	1	A
	9	2	B
	11	3	C
4	8	1	A
	10	2	B
	12	3	C
5	13	1	A
	15	2	B
	17	3	C
6	14	1	A
	16	2	B
	18	3	C
7	19	1	A
	21	2	B
	23	3	C
8	20	1	A

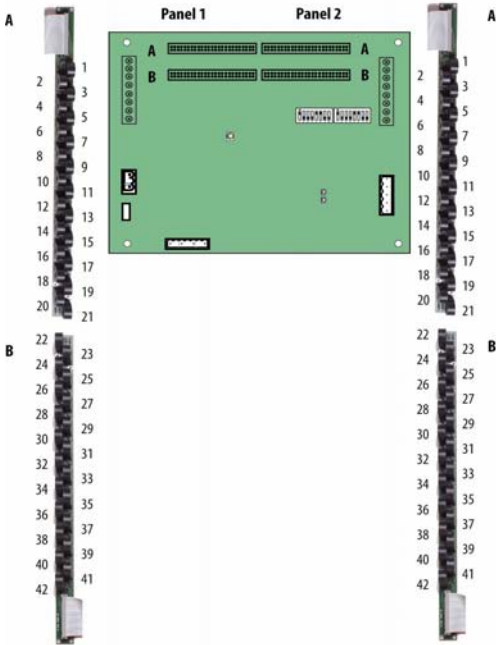


E30 SERIES MODBUS POINT MAP

9	22	2	B
	24	3	C
	25	1	A
	27	2	B
10	29	3	C
	26	1	A
	28	2	B
	30	3	C
11	31	1	A
	33	2	B
	35	3	C
12	32	1	A
	34	2	B
	36	3	C
13	37	1	A
	39	2	B
	41	3	C
14	38	1	A
	40	2	B
	42	3	C

Voltage/Current Phasing for Single Row: Sequential configuration

Meter	CT Number	Current Phase	Voltage Phase
1	1	1	A
	2	2	B
	3	3	C
2	4	1	A
	5	2	B
	6	3	C
3	7	1	A
	8	2	B
	9	3	C
4	10	1	A
	11	2	B
	12	3	C
5	13	1	A
	14	2	B
	15	3	C
6	16	1	A
	17	2	B
	18	3	C
7	19	1	A
	20	2	B
	21	3	C
8	22	1	A
	23	2	B
	24	3	C
9	25	1	A
	26	2	B
	27	3	C
10	28	1	A
	29	2	B
	30	3	C
11	31	1	A
	32	2	B
	33	3	C
12	34	1	A
	35	2	B
	36	3	C
13	37	1	A
	38	2	B
	39	3	C
14	40	1	A
	41	2	B
	42	3	C



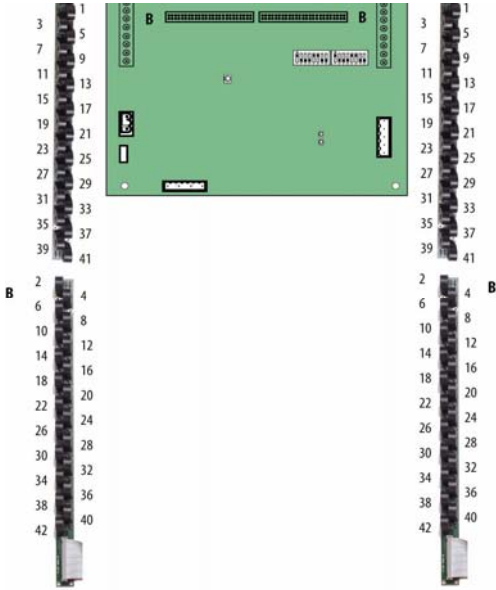
Voltage/Current Phasing for Single Row: Odd / Even configuration

Meter	CT Number	Current Phase	Voltage Phase
1	1	1	A
	3	2	B
	5	3	C



E30 SERIES MODBUS POINT MAP

2	7	1	A
	9	2	B
	11	3	C
3	13	1	A
	15	2	B
	17	3	C
4	19	1	A
	21	2	B
	23	3	C
5	25	1	A
	27	2	B
	29	3	C
6	31	1	A
	33	2	B
	35	3	C
7	37	1	A
	39	2	B
	41	3	C
8	2	1	A
	4	2	B
	6	3	C
9	8	1	A
	10	2	B
	12	3	C
10	14	1	A
	16	2	B
	18	3	C
11	20	1	A
	22	2	B
	24	3	C
12	26	1	A
	28	2	B
	30	3	C
13	32	1	A
	34	2	B
	36	3	C
14	38	1	A
	40	2	B
	42	3	C



14 3-PHASE METERS MODBUS POINT MAP

Note: This map assumes that all 3ph sets of branch CT's are identical

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	---------------	---------------	-----	----	-------	---------------	-------------	-----------

SCALE REGISTERS

7000			R	NV	1	A,B,C	Current Scale	
7001			R	NV	2	A,B,C	Current Scale	
7002			R	NV	3	A,B,C	Current Scale	
7003			R	NV	4	A,B,C	Current Scale	
7004			R	NV	5	A,B,C	Current Scale	
7005			R	NV	6	A,B,C	Current Scale	
7006			R	NV	7	A,B,C	Current Scale	
7007			R	NV	8	A,B,C	Current Scale	
7008			R	NV	9	A,B,C	Current Scale	
7009			R	NV	10	A,B,C	Current Scale	
7010			R	NV	11	A,B,C	Current Scale	
7011			R	NV	12	A,B,C	Current Scale	
7012			R	NV	13	A,B,C	Current Scale	
7013			R	NV	14	A,B,C	Current Scale	
7014			R	NV	1	A	Power Scale	
7015			R	NV	2	A	Power Scale	
7016			R	NV	3	A	Power Scale	
7017			R	NV	4	A	Power Scale	
7018			R	NV	5	A	Power Scale	
7019			R	NV	6	A	Power Scale	
7020			R	NV	7	A	Power Scale	
7021			R	NV	8	A	Power Scale	
7022			R	NV	9	A	Power Scale	
7023			R	NV	10	A	Power Scale	
7024			R	NV	11	A	Power Scale	
7025			R	NV	12	A	Power Scale	
7026			R	NV	13	A	Power Scale	
7027			R	NV	14	A	Power Scale	
7028			R	NV	1	A	Energy Scale	
7029			R	NV	2	A	Energy Scale	
7030			R	NV	3	A	Energy Scale	
7031			R	NV	4	A	Energy Scale	
7032			R	NV	5	A	Energy Scale	
7033			R	NV	6	A	Energy Scale	
7034			R	NV	7	A	Energy Scale	
7035			R	NV	8	A	Energy Scale	
7036			R	NV	9	A	Energy Scale	
7037			R	NV	10	A	Energy Scale	
7038			R	NV	11	A	Energy Scale	
7039			R	NV	12	A	Energy Scale	
7040			R	NV	13	A	Energy Scale	
7041			R	NV	14	A	Energy Scale	

RESETS

Also resets corresponding registers in 1PH and 2PH maps

7042			W		1	A,B,C	Reset - Write the listed value to perform the listed reset: 10203 = Clear KWH value to zero 29877 = Clear all Max Current and Max KW values to zero	
7043			W		2	A,B,C	Reset	
7044			W		3	A,B,C	Reset	
7045			W		4	A,B,C	Reset	
7046			W		5	A,B,C	Reset	
7047			W		6	A,B,C	Reset	
7048			W		7	A,B,C	Reset	
7049			W		8	A,B,C	Reset	
7050			W		9	A,B,C	Reset	
7051			W		10	A,B,C	Reset	
7052			W		11	A,B,C	Reset	
7053			W		12	A,B,C	Reset	
7054			W		13	A,B,C	Reset	
7055			W		14	A,B,C	Reset	

14 3-PHASE METERS MODBUS POINT MAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	---------------	---------------	-----	----	-------	---------------	-------------	-----------

DATA

7056	8000	8001	R	NV	1	A	KWH (MSW)	7028
7057			R	NV	1	A	KWH (LSW)	
7058	8002	8003	R	NV	2	A	KWH (MSW)	7029
7059			R	NV	2	A	KWH (LSW)	
7060	8004	8005	R	NV	3	A	KWH (MSW)	7030
7061			R	NV	3	A	KWH (LSW)	
7062	8006	8007	R	NV	4	A	KWH (MSW)	7031
7063			R	NV	4	A	KWH (LSW)	
7064	8008	8009	R	NV	5	A	KWH (MSW)	7032
7065			R	NV	5	A	KWH (LSW)	
7066	8010	8011	R	NV	6	A	KWH (MSW)	7033
7067			R	NV	6	A	KWH (LSW)	
7068	8012	8013	R	NV	7	A	KWH (MSW)	7034
7069			R	NV	7	A	KWH (LSW)	
7070	8014	8015	R	NV	8	A	KWH (MSW)	7035
7071			R	NV	8	A	KWH (LSW)	
7072	8016	8017	R	NV	9	A	KWH (MSW)	7036
7073			R	NV	9	A	KWH (LSW)	
7074	8018	8019	R	NV	10	A	KWH (MSW)	7037
7075			R	NV	10	A	KWH (LSW)	
7076	8020	8021	R	NV	11	A	KWH (MSW)	7038
7077			R	NV	11	A	KWH (LSW)	
7078	8022	8023	R	NV	12	A	KWH (MSW)	7039
7079			R	NV	12	A	KWH (LSW)	
7080	8024	8025	R	NV	13	A	KWH (MSW)	7040
7081			R	NV	13	A	KWH (LSW)	
7082	8026	8027	R	NV	14	A	KWH (MSW)	7041
7083			R	NV	14	A	KWH (LSW)	
7084	8028	8029	R		1	A	KW Total	7014
7085	8030	8031	R		2	A	KW Total	7015
7086	8032	8033	R		3	A	KW Total	7016
7087	8034	8035	R		4	A	KW Total	7017
7088	8036	8037	R		5	A	KW Total	7018
7089	8038	8039	R		6	A	KW Total	7019
7090	8040	8041	R		7	A	KW Total	7020
7091	8042	8043	R		8	A	KW Total	7021
7092	8044	8045	R		9	A	KW Total	7022
7093	8046	8047	R		10	A	KW Total	7023
7094	8048	8049	R		11	A	KW Total	7024
7095	8050	8051	R		12	A	KW Total	7025
7096	8052	8053	R		13	A	KW Total	7026
7097	8054	8055	R		14	A	KW Total	7027
7098	8056	8057	R		1	A	PF Total	-3
7099	8058	8059	R		2	A	PF Total	-3
7100	8060	8061	R		3	A	PF Total	-3
7101	8062	8063	R		4	A	PF Total	-3
7102	8064	8065	R		5	A	PF Total	-3
7103	8066	8067	R		6	A	PF Total	-3
7104	8068	8069	R		7	A	PF Total	-3
7105	8070	8071	R		8	A	PF Total	-3
7106	8072	8073	R		9	A	PF Total	-3
7107	8074	8075	R		10	A	PF Total	-3
7108	8076	8077	R		11	A	PF Total	-3
7109	8078	8079	R		12	A	PF Total	-3
7110	8080	8081	R		13	A	PF Total	-3
7111	8082	8083	R		14	A	PF Total	-3
7112	8084	8085	R		1	A,B,C	Current Average of 3 phases	7000
7113	8086	8087	R		2	A,B,C	Current Average of 3 phases	7001
7114	8088	8089	R		3	A,B,C	Current Average of 3 phases	7002
7115	8090	8091	R		4	A,B,C	Current Average of 3 phases	7003
7116	8092	8093	R		5	A,B,C	Current Average of 3 phases	7004
7117	8094	8095	R		6	A,B,C	Current Average of 3 phases	7005
7118	8096	8097	R		7	A,B,C	Current Average of 3 phases	7006
7119	8098	8099	R		8	A,B,C	Current Average of 3 phases	7007
7120	8100	8101	R		9	A,B,C	Current Average of 3 phases	7008

14 3-PHASE METERS MODBUS POINT MAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	---------------	---------------	-----	----	-------	---------------	-------------	-----------

DATA (cont.)

7121	8102	8103	R		10	A,B,C	Current Average of 3 phases	7009
7122	8104	8105	R		11	A,B,C	Current Average of 3 phases	7010
7123	8106	8107	R		12	A,B,C	Current Average of 3 phases	7011
7124	8108	8109	R		13	A,B,C	Current Average of 3 phases	7012
7125	8110	8111	R		14	A,B,C	Current Average of 3 phases	7013
7126	8112	8113	R		1	A	KW Phase 1	7014
7127	8114	8115	R		2	A	KW Phase 1	7015
7128	8116	8117	R		3	A	KW Phase 1	7016
7129	8118	8119	R		4	A	KW Phase 1	7017
7130	8120	8121	R		5	A	KW Phase 1	7018
7131	8122	8123	R		6	A	KW Phase 1	7019
7132	8124	8125	R		7	A	KW Phase 1	7020
7133	8126	8127	R		8	A	KW Phase 1	7021
7134	8128	8129	R		9	A	KW Phase 1	7022
7135	8130	8131	R		10	A	KW Phase 1	7023
7136	8132	8133	R		11	A	KW Phase 1	7024
7137	8134	8135	R		12	A	KW Phase 1	7025
7138	8136	8137	R		13	A	KW Phase 1	7026
7139	8138	8139	R		14	A	KW Phase 1	7027
7140	8140	8141	R		1	A	KW Phase 2	7014
7141	8142	8143	R		2	A	KW Phase 2	7015
7142	8144	8145	R		3	A	KW Phase 2	7016
7143	8146	8147	R		4	A	KW Phase 2	7017
7144	8148	8149	R		5	A	KW Phase 2	7018
7145	8150	8151	R		6	A	KW Phase 2	7019
7146	8152	8153	R		7	A	KW Phase 2	7020
7147	8154	8155	R		8	A	KW Phase 2	7021
7148	8156	8157	R		9	A	KW Phase 2	7022
7149	8158	8159	R		10	A	KW Phase 2	7023
7150	8160	8161	R		11	A	KW Phase 2	7024
7151	8162	8163	R		12	A	KW Phase 2	7025
7152	8164	8165	R		13	A	KW Phase 2	7026
7153	8166	8167	R		14	A	KW Phase 2	7027
7154	8168	8169	R		1	A	KW Phase 3	7014
7155	8170	8171	R		2	A	KW Phase 3	7015
7156	8172	8173	R		3	A	KW Phase 3	7016
7157	8174	8175	R		4	A	KW Phase 3	7017
7158	8176	8177	R		5	A	KW Phase 3	7018
7159	8178	8179	R		6	A	KW Phase 3	7019
7160	8180	8181	R		7	A	KW Phase 3	7020
7161	8182	8183	R		8	A	KW Phase 3	7021
7162	8184	8185	R		9	A	KW Phase 3	7022
7163	8186	8187	R		10	A	KW Phase 3	7023
7164	8188	8189	R		11	A	KW Phase 3	7024
7165	8190	8191	R		12	A	KW Phase 3	7025
7166	8192	8193	R		13	A	KW Phase 3	7026
7167	8194	8195	R		14	A	KW Phase 3	7027
7168	8196	8197	R		1	A	PF Phase 1	-3
7169	8198	8199	R		2	A	PF Phase 1	-3
7170	8200	8201	R		3	A	PF Phase 1	-3
7171	8202	8203	R		4	A	PF Phase 1	-3
7172	8204	8205	R		5	A	PF Phase 1	-3
7173	8206	8207	R		6	A	PF Phase 1	-3
7174	8208	8209	R		7	A	PF Phase 1	-3
7175	8210	8211	R		8	A	PF Phase 1	-3
7176	8212	8213	R		9	A	PF Phase 1	-3
7177	8214	8215	R		10	A	PF Phase 1	-3
7178	8216	8217	R		11	A	PF Phase 1	-3
7179	8218	8219	R		12	A	PF Phase 1	-3
7180	8220	8221	R		13	A	PF Phase 1	-3
7181	8222	8223	R		14	A	PF Phase 1	-3
7182	8224	8225	R		1	A	PF Phase 2	-3
7183	8226	8227	R		2	A	PF Phase 2	-3
7184	8228	8229	R		3	A	PF Phase 2	-3
7185	8230	8231	R		4	A	PF Phase 2	-3

14 3-PHASE METERS MODBUS POINT MAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	---------------	---------------	-----	----	-------	---------------	-------------	-----------

DATA (cont.)

7186	8232	8233	R		5	A	PF Phase 2	-3
7187	8234	8235	R		6	A	PF Phase 2	-3
7188	8236	8237	R		7	A	PF Phase 2	-3
7189	8238	8239	R		8	A	PF Phase 2	-3
7190	8240	8241	R		9	A	PF Phase 2	-3
7191	8242	8243	R		10	A	PF Phase 2	-3
7192	8244	8245	R		11	A	PF Phase 2	-3
7193	8246	8247	R		12	A	PF Phase 2	-3
7194	8248	8249	R		13	A	PF Phase 2	-3
7195	8250	8251	R		14	A	PF Phase 2	-3
7196	8252	8253	R		1	A	PF Phase 3	-3
7197	8254	8255	R		2	A	PF Phase 3	-3
7198	8256	8257	R		3	A	PF Phase 3	-3
7199	8258	8259	R		4	A	PF Phase 3	-3
7200	8260	8261	R		5	A	PF Phase 3	-3
7201	8262	8263	R		6	A	PF Phase 3	-3
7202	8264	8265	R		7	A	PF Phase 3	-3
7203	8266	8267	R		8	A	PF Phase 3	-3
7204	8268	8269	R		9	A	PF Phase 3	-3
7205	8270	8271	R		10	A	PF Phase 3	-3
7206	8272	8273	R		11	A	PF Phase 3	-3
7207	8274	8275	R		12	A	PF Phase 3	-3
7208	8276	8277	R		13	A	PF Phase 3	-3
7209	8278	8279	R		14	A	PF Phase 3	-3
7210	8280	8281	R		1	A,B,C	Current Phase 1	7000
7211	8282	8283	R		2	A,B,C	Current Phase 1	7001
7212	8284	8285	R		3	A,B,C	Current Phase 1	7002
7213	8286	8287	R		4	A,B,C	Current Phase 1	7003
7214	8288	8289	R		5	A,B,C	Current Phase 1	7004
7215	8290	8291	R		6	A,B,C	Current Phase 1	7005
7216	8292	8293	R		7	A,B,C	Current Phase 1	7006
7217	8294	8295	R		8	A,B,C	Current Phase 1	7007
7218	8296	8297	R		9	A,B,C	Current Phase 1	7008
7219	8298	8299	R		10	A,B,C	Current Phase 1	7009
7220	8300	8301	R		11	A,B,C	Current Phase 1	7010
7221	8302	8303	R		12	A,B,C	Current Phase 1	7011
7222	8304	8305	R		13	A,B,C	Current Phase 1	7012
7223	8306	8307	R		14	A,B,C	Current Phase 1	7013
7224	8308	8309	R		1	A,B,C	Current Phase 2	7000
7225	8310	8311	R		2	A,B,C	Current Phase 2	7001
7226	8312	8313	R		3	A,B,C	Current Phase 2	7002
7227	8314	8315	R		4	A,B,C	Current Phase 2	7003
7228	8316	8317	R		5	A,B,C	Current Phase 2	7004
7229	8318	8319	R		6	A,B,C	Current Phase 2	7005
7230	8320	8321	R		7	A,B,C	Current Phase 2	7006
7231	8322	8323	R		8	A,B,C	Current Phase 2	7007
7232	8324	8325	R		9	A,B,C	Current Phase 2	7008
7233	8326	8327	R		10	A,B,C	Current Phase 2	7009
7234	8328	8329	R		11	A,B,C	Current Phase 2	7010
7235	8330	8331	R		12	A,B,C	Current Phase 2	7011
7236	8332	8333	R		13	A,B,C	Current Phase 2	7012
7237	8334	8335	R		14	A,B,C	Current Phase 2	7013
7238	8336	8337	R		1	A,B,C	Current Phase 3	7000
7239	8338	8339	R		2	A,B,C	Current Phase 3	7001
7240	8340	8341	R		3	A,B,C	Current Phase 3	7002
7241	8342	8343	R		4	A,B,C	Current Phase 3	7003
7242	8344	8345	R		5	A,B,C	Current Phase 3	7004
7243	8346	8347	R		6	A,B,C	Current Phase 3	7005
7244	8348	8349	R		7	A,B,C	Current Phase 3	7006
7245	8350	8351	R		8	A,B,C	Current Phase 3	7007
7246	8352	8353	R		9	A,B,C	Current Phase 3	7008
7247	8354	8355	R		10	A,B,C	Current Phase 3	7009
7248	8356	8357	R		11	A,B,C	Current Phase 3	7010
7249	8358	8359	R		12	A,B,C	Current Phase 3	7011
7250	8360	8361	R		13	A,B,C	Current Phase 3	7012
7251	8362	8363	R		14	A,B,C	Current Phase 3	7013

14 3-PHASE METERS MODBUS POINT MAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	---------------	---------------	-----	----	-------	---------------	-------------	-----------

DATA (cont.)

7252	8364	8365	R		1	A	Present KW-Total Demand	7014
7253	8366	8367	R		2	A	Present KW-Total Demand	7015
7254	8368	8369	R		3	A	Present KW-Total Demand	7016
7255	8370	8371	R		4	A	Present KW-Total Demand	7017
7256	8372	8373	R		5	A	Present KW-Total Demand	7018
7257	8374	8375	R		6	A	Present KW-Total Demand	7019
7258	8376	8377	R		7	A	Present KW-Total Demand	7020
7259	8378	8379	R		8	A	Present KW-Total Demand	7021
7260	8380	8381	R		9	A	Present KW-Total Demand	7022
7261	8382	8383	R		10	A	Present KW-Total Demand	7023
7262	8384	8385	R		11	A	Present KW-Total Demand	7024
7263	8386	8387	R		12	A	Present KW-Total Demand	7025
7264	8388	8389	R		13	A	Present KW-Total Demand	7026
7265	8390	8391	R		14	A	Present KW-Total Demand	7027
7266	8392	8393	R	NV	1	A	Max KW-Total Demand	7014
7267	8394	8395	R	NV	2	A	Max KW-Total Demand	7015
7268	8396	8397	R	NV	3	A	Max KW-Total Demand	7016
7269	8398	8399	R	NV	4	A	Max KW-Total Demand	7017
7270	8400	8401	R	NV	5	A	Max KW-Total Demand	7018
7271	8402	8403	R	NV	6	A	Max KW-Total Demand	7019
7272	8404	8405	R	NV	7	A	Max KW-Total Demand	7020
7273	8406	8407	R	NV	8	A	Max KW-Total Demand	7021
7274	8408	8409	R	NV	9	A	Max KW-Total Demand	7022
7275	8410	8411	R	NV	10	A	Max KW-Total Demand	7023
7276	8412	8413	R	NV	11	A	Max KW-Total Demand	7024
7277	8414	8415	R	NV	12	A	Max KW-Total Demand	7025
7278	8416	8417	R	NV	13	A	Max KW-Total Demand	7026
7279	8418	8419	R	NV	14	A	Max KW-Total Demand	7027
7280	8420	8421	R		1	A,B,C	Present Current Demand Phase 1	7000
7281	8422	8423	R		2	A,B,C	Present Current Demand Phase 1	7001
7282	8424	8425	R		3	A,B,C	Present Current Demand Phase 1	7002
7283	8426	8427	R		4	A,B,C	Present Current Demand Phase 1	7003
7284	8428	8429	R		5	A,B,C	Present Current Demand Phase 1	7004
7285	8430	8431	R		6	A,B,C	Present Current Demand Phase 1	7005
7286	8432	8433	R		7	A,B,C	Present Current Demand Phase 1	7006
7287	8434	8435	R		8	A,B,C	Present Current Demand Phase 1	7007
7288	8436	8437	R		9	A,B,C	Present Current Demand Phase 1	7008
7289	8438	8439	R		10	A,B,C	Present Current Demand Phase 1	7009
7290	8440	8441	R		11	A,B,C	Present Current Demand Phase 1	7010
7291	8442	8443	R		12	A,B,C	Present Current Demand Phase 1	7011
7292	8444	8445	R		13	A,B,C	Present Current Demand Phase 1	7012
7293	8446	8447	R		14	A,B,C	Present Current Demand Phase 1	7013
7294	8448	8449	R		1	A,B,C	Present Current Demand Phase 2	7000
7295	8450	8451	R		2	A,B,C	Present Current Demand Phase 2	7001
7296	8452	8453	R		3	A,B,C	Present Current Demand Phase 2	7002
7297	8454	8455	R		4	A,B,C	Present Current Demand Phase 2	7003
7298	8456	8457	R		5	A,B,C	Present Current Demand Phase 2	7004
7299	8458	8459	R		6	A,B,C	Present Current Demand Phase 2	7005
7300	8460	8461	R		7	A,B,C	Present Current Demand Phase 2	7006
7301	8462	8463	R		8	A,B,C	Present Current Demand Phase 2	7007
7302	8464	8465	R		9	A,B,C	Present Current Demand Phase 2	7008
7303	8466	8467	R		10	A,B,C	Present Current Demand Phase 2	7009
7304	8468	8469	R		11	A,B,C	Present Current Demand Phase 2	7010
7305	8470	8471	R		12	A,B,C	Present Current Demand Phase 2	7011
7306	8472	8473	R		13	A,B,C	Present Current Demand Phase 2	7012
7307	8474	8475	R		14	A,B,C	Present Current Demand Phase 2	7013
7308	8476	8477	R		1	A,B,C	Present Current Demand Phase 3	7000
7309	8478	8479	R		2	A,B,C	Present Current Demand Phase 3	7001
7310	8480	8481	R		3	A,B,C	Present Current Demand Phase 3	7002
7311	8482	8483	R		4	A,B,C	Present Current Demand Phase 3	7003
7312	8484	8485	R		5	A,B,C	Present Current Demand Phase 3	7004
7313	8486	8487	R		6	A,B,C	Present Current Demand Phase 3	7005
7314	8488	8489	R		7	A,B,C	Present Current Demand Phase 3	7006
7315	8490	8491	R		8	A,B,C	Present Current Demand Phase 3	7007
7316	8492	8493	R		9	A,B,C	Present Current Demand Phase 3	7008
7317	8494	8495	R		10	A,B,C	Present Current Demand Phase 3	7009

14 3-PHASE METERS MODBUS POINT MAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
-------------	---------------	---------------	-----	----	-------	---------------	-------------	-----------

DATA (cont.)

7318	8496	8497	R		11	A,B,C	Present Current Demand Phase 3	7010
7319	8498	8499	R		12	A,B,C	Present Current Demand Phase 3	7011
7320	8500	8501	R		13	A,B,C	Present Current Demand Phase 3	7012
7321	8502	8503	R		14	A,B,C	Present Current Demand Phase 3	7013
7322	8504	8505	R	NV	1	A,B,C	Max Current Demand Phase 1	7000
7323	8506	8507	R	NV	2	A,B,C	Max Current Demand Phase 1	7001
7324	8508	8509	R	NV	3	A,B,C	Max Current Demand Phase 1	7002
7325	8510	8511	R	NV	4	A,B,C	Max Current Demand Phase 1	7003
7326	8512	8513	R	NV	5	A,B,C	Max Current Demand Phase 1	7004
7327	8514	8515	R	NV	6	A,B,C	Max Current Demand Phase 1	7005
7328	8516	8517	R	NV	7	A,B,C	Max Current Demand Phase 1	7006
7329	8518	8519	R	NV	8	A,B,C	Max Current Demand Phase 1	7007
7330	8520	8521	R	NV	9	A,B,C	Max Current Demand Phase 1	7008
7331	8522	8523	R	NV	10	A,B,C	Max Current Demand Phase 1	7009
7332	8524	8525	R	NV	11	A,B,C	Max Current Demand Phase 1	7010
7333	8526	8527	R	NV	12	A,B,C	Max Current Demand Phase 1	7011
7334	8528	8529	R	NV	13	A,B,C	Max Current Demand Phase 1	7012
7335	8530	8531	R	NV	14	A,B,C	Max Current Demand Phase 1	7013
7336	8532	8533	R	NV	1	A,B,C	Max Current Demand Phase 2	7000
7337	8534	8535	R	NV	2	A,B,C	Max Current Demand Phase 2	7001
7338	8536	8537	R	NV	3	A,B,C	Max Current Demand Phase 2	7002
7339	8538	8539	R	NV	4	A,B,C	Max Current Demand Phase 2	7003
7340	8540	8541	R	NV	5	A,B,C	Max Current Demand Phase 2	7004
7341	8542	8543	R	NV	6	A,B,C	Max Current Demand Phase 2	7005
7342	8544	8545	R	NV	7	A,B,C	Max Current Demand Phase 2	7006
7343	8546	8547	R	NV	8	A,B,C	Max Current Demand Phase 2	7007
7344	8548	8549	R	NV	9	A,B,C	Max Current Demand Phase 2	7008
7345	8550	8551	R	NV	10	A,B,C	Max Current Demand Phase 2	7009
7346	8552	8553	R	NV	11	A,B,C	Max Current Demand Phase 2	7010
7347	8554	8555	R	NV	12	A,B,C	Max Current Demand Phase 2	7011
7348	8556	8557	R	NV	13	A,B,C	Max Current Demand Phase 2	7012
7349	8558	8559	R	NV	14	A,B,C	Max Current Demand Phase 2	7013
7350	8560	8561	R	NV	1	A,B,C	Max Current Demand Phase 3	7000
7351	8562	8563	R	NV	2	A,B,C	Max Current Demand Phase 3	7001
7352	8564	8565	R	NV	3	A,B,C	Max Current Demand Phase 3	7002
7353	8566	8567	R	NV	4	A,B,C	Max Current Demand Phase 3	7003
7354	8568	8569	R	NV	5	A,B,C	Max Current Demand Phase 3	7004
7355	8570	8571	R	NV	6	A,B,C	Max Current Demand Phase 3	7005
7356	8572	8573	R	NV	7	A,B,C	Max Current Demand Phase 3	7006
7357	8574	8575	R	NV	8	A,B,C	Max Current Demand Phase 3	7007
7358	8576	8577	R	NV	9	A,B,C	Max Current Demand Phase 3	7008
7359	8578	8579	R	NV	10	A,B,C	Max Current Demand Phase 3	7009
7360	8580	8581	R	NV	11	A,B,C	Max Current Demand Phase 3	7010
7361	8582	8583	R	NV	12	A,B,C	Max Current Demand Phase 3	7011
7362	8584	8585	R	NV	13	A,B,C	Max Current Demand Phase 3	7012
7363	8586	8587	R	NV	14	A,B,C	Max Current Demand Phase 3	7013
7364	8588	8589	R	NV	1	A,B,C	Max Current Phase 1	7000
7365	8590	8591	R	NV	2	A,B,C	Max Current Phase 1	7001
7366	8592	8593	R	NV	3	A,B,C	Max Current Phase 1	7002
7367	8594	8595	R	NV	4	A,B,C	Max Current Phase 1	7003
7368	8596	8597	R	NV	5	A,B,C	Max Current Phase 1	7004
7369	8598	8599	R	NV	6	A,B,C	Max Current Phase 1	7005
7370	8600	8601	R	NV	7	A,B,C	Max Current Phase 1	7006
7371	8602	8603	R	NV	8	A,B,C	Max Current Phase 1	7007
7372	8604	8605	R	NV	9	A,B,C	Max Current Phase 1	7008
7373	8606	8607	R	NV	10	A,B,C	Max Current Phase 1	7009
7374	8608	8609	R	NV	11	A,B,C	Max Current Phase 1	7010
7375	8610	8611	R	NV	12	A,B,C	Max Current Phase 1	7011
7376	8612	8613	R	NV	13	A,B,C	Max Current Phase 1	7012
7377	8614	8615	R	NV	14	A,B,C	Max Current Phase 1	7013
7378	8616	8617	R	NV	1	A,B,C	Max Current Phase 2	7000
7379	8618	8619	R	NV	2	A,B,C	Max Current Phase 2	7001
7380	8620	8621	R	NV	3	A,B,C	Max Current Phase 2	7002
7381	8622	8623	R	NV	4	A,B,C	Max Current Phase 2	7003
7382	8624	8625	R	NV	5	A,B,C	Max Current Phase 2	7004

14 3-PHASE METERS MODBUS POINT MAP

Integer Reg	Float Reg MSW	Float Reg LSW	R/W	NV	Meter	Model (A,B,C)	Description	Scale Reg
DATA (cont.)								
7383	8626	8627	R	NV	6	A,B,C	Max Current Phase 2	7005
7384	8628	8629	R	NV	7	A,B,C	Max Current Phase 2	7006
7385	8630	8631	R	NV	8	A,B,C	Max Current Phase 2	7007
7386	8632	8633	R	NV	9	A,B,C	Max Current Phase 2	7008
7387	8634	8635	R	NV	10	A,B,C	Max Current Phase 2	7009
7388	8636	8637	R	NV	11	A,B,C	Max Current Phase 2	7010
7389	8638	8639	R	NV	12	A,B,C	Max Current Phase 2	7011
7390	8640	8641	R	NV	13	A,B,C	Max Current Phase 2	7012
7391	8642	8643	R	NV	14	A,B,C	Max Current Phase 2	7013
7392	8644	8645	R	NV	1	A,B,C	Max Current Phase 3	7000
7393	8646	8647	R	NV	2	A,B,C	Max Current Phase 3	7001
7394	8648	8649	R	NV	3	A,B,C	Max Current Phase 3	7002
7395	8650	8651	R	NV	4	A,B,C	Max Current Phase 3	7003
7396	8652	8653	R	NV	5	A,B,C	Max Current Phase 3	7004
7397	8654	8655	R	NV	6	A,B,C	Max Current Phase 3	7005
7398	8656	8657	R	NV	7	A,B,C	Max Current Phase 3	7006
7399	8658	8659	R	NV	8	A,B,C	Max Current Phase 3	7007
7400	8660	8661	R	NV	9	A,B,C	Max Current Phase 3	7008
7401	8662	8663	R	NV	10	A,B,C	Max Current Phase 3	7009
7402	8664	8665	R	NV	11	A,B,C	Max Current Phase 3	7010
7403	8666	8667	R	NV	12	A,B,C	Max Current Phase 3	7011
7404	8668	8669	R	NV	13	A,B,C	Max Current Phase 3	7012
7405	8670	8671	R	NV	14	A,B,C	Max Current Phase 3	7013
7406	8672	8673	R	NV	1	A	Max KW Total	7014
7407	8674	8675	R	NV	2	A	Max KW Total	7015
7408	8676	8677	R	NV	3	A	Max KW Total	7016
7409	8678	8679	R	NV	4	A	Max KW Total	7017
7410	8680	8681	R	NV	5	A	Max KW Total	7018
7411	8682	8683	R	NV	6	A	Max KW Total	7019
7412	8684	8685	R	NV	7	A	Max KW Total	7020
7413	8686	8687	R	NV	8	A	Max KW Total	7021
7414	8688	8689	R	NV	9	A	Max KW Total	7022
7415	8690	8691	R	NV	10	A	Max KW Total	7023
7416	8692	8693	R	NV	11	A	Max KW Total	7024
7417	8694	8695	R	NV	12	A	Max KW Total	7025
7418	8696	8697	R	NV	13	A	Max KW Total	7026
7419	8698	8699	R	NV	14	A	Max KW Total	7027

total registers in this section
1120