Industrial communication solutions for Windows

# XGEF650 Driver Manual

*GE F650 Digital Bay Controller Modbus RTU Protocol Driver*

## Contents


XGEF650 technical specifications ..... 3
General information ..... 3
Command list ..... 3
Generic Commands ..... 3
Read Random Registers ..... 3
Read Last Fault ..... 4
Read Events ..... 5
Synchronize ..... 6
Download Disturbance Record ..... 7
Customized Commands ..... 8
Read Identificacion ..... 8
Read Clock ..... 9
Read Control Elements - Autorecloser States ..... 9
Read Control Elements - Autorecloser Status ..... 10
Read Control Elements - Broken Conductor ..... 11
Read Control Elements - Frecuency ..... 12
Read Control Elements - Setting Groups ..... 12
Read Control Elements - VT Fuse Failure ..... 13
Read Front Panel Leds ..... 13
Read Protection - Protection Blocks ..... 14
Read Protection - Protection Blocks 2 ..... 15
Read Protection - Protection Blocks 3 ..... 16
Read Protection - Protection Blocks 4 ..... 17
Read Protection - Protection Blocks 5 ..... 17
Read Protection - Protection Blocks 6 ..... 18
Read Protection - Protection Blocks 7 ..... 19
Read Protection - Protection Blocks 8 ..... 20
Read Protection - Protection Blocks 9 ..... 20
Read Protection - Protection Blocks 10 ..... 21
Read SNTP IRIGB ..... 21
Read Remote Inputs - Remote Inputs ..... 22
Read Remote Inputs - Remote Devices ..... 23
Read Remote Inputs - Remote GOOSE Analog Inputs ..... 24
Read Remote Inputs - Remote GOOSE Digital Inputs ..... 25
Read Remote Inputs - Remote GOOSE Digital Outputs ..... 26
Read Contact Inputs - Board F ..... 27



CPKSoft Engineering

Industrial communication drivers.

www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354



1990-2013

Read Contact Output Status - Board F ... 28
Read Contact Output Operates - Board F ... 28
Read Contact Output Resets - Board F ... 29
Read Frequency ... 30
Read Primary Values - Currents 1 ... 30
Read Primary Values - Currents 2 ... 31
Read Primary Values - Voltages 1 ... 32
Read Primary Values - Voltages 2 ... 32
Read Primary Values - Power ... 33
Read Primary Values - Energy ... 34
Read Secondary Values - Current ... 35
Read Secondary Values - Voltage ... 35
Read Secondary Values - Power ... 36
Read Measurements ... 37
Get Disturbance Records Information ... 38
Internal Text Arrays ... 39
0x0E36 AR STATUS ... 39
0x0E37 AR LOCKOUT ... 39
0x0E38 AR BLOCK MODE ... 39
Error messages ... 39
Supported devices ... 40

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

# XGEF650 technical specifications

## General information

XGEF650 driver supports GE Multilin F650 Digital Bay Controller using the Modbus RTU and Modbus TCP protocols according to the GE Consumer and Industrial F650 Digital Bay Controller Instruction manual GEK-106310N, Firmware version 2.20, EnerVista F650 Setup version 2.20.

## Command list

### Generic Commands

#### *Read Random Registers*

**Description of this command:**
Reads information from the slave.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-250
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
Indicates the format for returned dates:
0 = Use English format (MM/DD/YYYY)
1 = Use Spanish format (DD/MM/YYYY)
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
Comma-separated list of register items to be read, using the format "NNNFD:AAAA,NNNFD:AAAA,NNNFD:AAAA,..." where:
- <NNN> = Number of pointvalues to be returned by this item (1-999). If the item returns more values than reserved points, extra values are discarded. If it returns less values, points are filled with -1 and empty texts.
- <F> = Format code, where:
- D=Get date from an unsigned __int64 milliseconds since 01/01/2000
- T=Get time from an unsigned __int64 milliseconds since 01/01/2000
- s=Get text from WORD Modbus registers (use the Divisor format parameter to set the number of registers to be read. For example, 's5' will read 5 registers, this is, 10 bytes).
- u=Get a 16-bit unsigned integer (WORD, 1 Modbus register)
- U=Get a 32-bit unsigned integer (DWORD, 2 Modbus registers)
- V=Get a 64-bit unsigned integer (UINT64, 4 Modbus registers)
- i=Get a 16-bit signed integer (short, 1 Modbus register)
- I=Get a 32-bit signed integer (int, 2 Modbus registers)
- f=Get a 32-bit IEEE floating point number (float, 2 Modbus registers)
- F=Get a 64-bit IEEE floating point number (double, 4 Modbus registers)

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

- b=Get individual bit values as 0 or 1 (registers will be considered as words and number of actual words requested will be (NN/16)+1)
- a=Get individual bit values as active or inactive (same as case 'b')
- A=Get individual bit values as Active or Inactive (same as case 'b')
- l=Get individual bit values as high or low (same as case 'b')
- L=Get individual bit values as High or Low (same as case 'b')
- o=Get individual bit values as on or off (same as case 'b')
- O=Get individual bit values as On or Off (same as case 'b')
- y=Get individual bit values as yes or no (same as case 'b')
- Y=Get individual bit values as Yes or No (same as case 'b')
- @=Get text from a built-in text array based on the '16-bit unsigned' register value
- <D> = Divisor, where:
- 0=No divisor
- 1=Divide by 10
- 2=Divide by 100
- 3=Divide by 1000
- 4=Divide by 10000
- 5=Divide by 100000
- <AAAA> = First register address, as a 4-digit uppercase hexadecimal number (0000-FFFF)
- Example = 001D0:FFF0,001T0:FFF0,003@0:0E36,192O0:0294

**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Important note:**
Consider that each item may return several values, so DriverNumPoints should be big enough to receive all values.
**Values that are returned:**
Value in PointValue (0) = First numeric data returned by first item
Text in PointText (0) = First text data returned by first item
...
Value in PointValue (DriverNumPoints-1) = Last numeric data returned by last item
Text in PointText (DriverNumPoints-1) = Last text data returned by last item

### *Read Last Fault*

**Description of this command:**
Reads last fault information.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-31
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
8
**Meaning of the DriverP2 parameter:**
Record number, or -1 for last record available.
**Meaning of the DriverP3 parameter:**
Indicates the format for returned dates:
0 = Use English format (MM/DD/YYYY hh:mm:ss.000)
1 = Use Spanish format (DD/MM/YYYY hh:mm:ss.000)
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of data request retries before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
Not used.

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (0) = Newest Record Number
Text in PointText (1) = Number (as shown if FLTxxx.TXT file)
Text in PointText (2) = Date (DD-MMM-YYYY)
Text in PointText (3) = Time (hh:mm:ss)
Text in PointText (4) = Event number at trigger
Text in PointText (5) = Positive sequence impedance (Ohm)
Text in PointText (6) = Zero sequence impedance (Ohm)
Text in PointText (7) = Line length
Text in PointText (8) = Fault type
Text in PointText (9) = Distance
Text in PointText (10) = Recloser state
Text in PointText (11) = Breaker closings
Text in PointText (12) = Pre-Fault Vab (KV)
Text in PointText (13) = Pre-Fault Vbc (KV)
Text in PointText (14) = Pre-Fault Vca (KV)
Text in PointText (15) = Pre-Fault Ia (KA)
Text in PointText (16) = Pre-Fault Ib (KA)
Text in PointText (17) = Pre-Fault Ic (KA)
Text in PointText (18) = Pre-Fault Ig (KA)
Text in PointText (19) = Pre-Fault I0 (KA)
Text in PointText (20) = Pre-Fault I1 (KA)
Text in PointText (21) = Pre-Fault I2 (KA)
Text in PointText (22) = Fault Vab (KV)
Text in PointText (23) = Fault Vbc (KV)
Text in PointText (24) = Fault Vca (KV)
Text in PointText (25) = Fault Ia (KA)
Text in PointText (26) = Fault Ib (KA)
Text in PointText (27) = Fault Ic (KA)
Text in PointText (28) = Fault Ig (KA)
Text in PointText (29) = Fault I0 (KA)
Text in PointText (30) = Fault I1 (KA)
Text in PointText (31) = Fault I2 (KA)

### *Read Events*

**Description of this command:**
Requests the slave to send snap-shot events.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
7
**Meaning of the DriverP2 parameter:**
Indicate what event must be obtained:
- Use -3 to skip snap-shot events (if only additional events defined in P8 must be downloaded)
- Use -2 to get All snap-shot events
- Use -1 to get New snap-shot events
- Use a number between 1 and 9999 to get snap-shot events starting by that number

**Meaning of the DriverP3 parameter:**
Indicates the format for returned dates:
0 = Use English format (MM/DD/YYYY hh:mm:ss.000)
1 = Use Spanish format (DD/MM/YYYY hh:mm:ss.000)
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

1 = TCP (for slave ethernet ports)

**Meaning of the DriverP5 parameter:**

Number of data request retries before discarding the whole communication.

**Meaning of the DriverP6 parameter:**

Indicates the path where the event file will be generated. If this property is empty, the local driver folder is used by default.

**Meaning of the DriverP7 parameter:**

Indicate if fault values must be included after each event (0=No, 1=Yes).

**Meaning of the DriverP8 parameter:**

Indicate additional events to be downloaded:
0 = None
1 = Control events

**Meaning of the DriverP9 parameter:**

Filename for event file. If empty, 'XGEF650_Events.Relayxxx.txt' will be used, where xxx is the unit address given in DriverP0.

**Values that are returned:**

Value in PointValue (0) = Indicates how many events have been extracted.
Text in PointText (0) = Description of last event extracted (n/a if no events extracted).

### *Synchronize*

**Description of this command:**

Sets a new date and time using the PC clock date and time.
*This command follows this procedure:*

- Reads the current date and time from the slave.
- Compares the received slave date and time (plus the estimated reading delay indicated in DriverP6) against the current PC clock date and time.
- Based on the allowed time difference given in the P2 parameter, the driver determines if a synchronization is neccesary.
- If a synchronization is required, the driver sends the current PC clock date and time (plus the estimated transmission delay indicated in DriverP7) to the slave.
- After synchronization, reads back the new date and time from the slave.
- Compares the received slave date and time (plus the estimated reading delay indicated in DriverP6) against the current PC clock date and time.
- Based on the allowed time difference given in the P2 parameter, the driver determines if the synchronization was successfull or not.
- Returns status or error information about the synchronization result.

**Methods used to run this command:**

Analog Input (ReadNumericValues)

**Number of points accepted by this command:**

1-9

**Meaning of the DriverP0 parameter:**

Unit Address (1-255).

**Meaning of the DriverP1 parameter:**

Synchronization mode, that sets the type of driver reaction when a synchronization resulted in the slave clock to be out of the allowed difference:
10 = If not successful, the driver call is considered successful and the unsuccessfull situation is reported in PointValue(0) and PointText(0).
11 = If not successful, the driver call is considered as failed and a driver error is returned.
12 = If not successful, a broadcast synchronization command is sent to all slaves (using slave address 900) and after that synchronization is automatically retried, reporting the final situation in PointValue(0) and PointText(0).

**Meaning of the DriverP2 parameter:**

Allowed difference, in milliseconds.

**Meaning of the DriverP3 parameter:**

Indicates the format for returned dates:
0 = Use English format (MM/DD/YYYY hh:mm:ss.000)
1 = Use Spanish format (DD/MM/YYYY hh:mm:ss.000)

**Meaning of the DriverP4 parameter:**

Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP5 parameter:**
Number of retries before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Estimated communication delay when reading date and time from the slave, in milliseconds. This delay has to do with the communication link and compensates the elapsed time between the moment the slave transmits the telegram with its date and time and the moment the telegram is received and processed by the driver.
**Meaning of the DriverP7 parameter:**
Estimated communication delay when transmitting date and time to the slave, in milliseconds. This delay has to do with the communication link and compensates the elapsed time between the moment the driver transmits the telegram with the PC clock date and time to the relay and the moment the telegram is received and processed by the slave.
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Value in PointValue (0) = 0 if synchronization not needed, 1 if synchronized OK, 2 if error synchronizing.
Value in PointValue (1) = Returns how many retries where done with the broadcast command sent to all slaves (if it was neccesary).
Value in PointValue (3) = Time difference before synchronization in milliseconds.
Value in PointValue (8) = Time difference after synchronization in milliseconds (also returns previous difference if synchronization was not needed).
Text in PointText (0) = Returned status or error message.
Text in PointText (1) = PC clock date and time obtained when starting communication.
Text in PointText (2) = Slave date and time received when starting communication.
Text in PointText (3) = Slave date and time received when starting communication, corrected with reading delay.
Text in PointText (4) = PC clock date and time obtained before synchronization (empty if synchronization was not needed).
Text in PointText (5) = Actual PC clock date and time used for synchronization, corrected with transmitting delay (empty if synchronization was not needed).
Text in PointText (6) = PC clock date and time obtained after synchronization (empty if synchronization was not needed).
Text in PointText (7) = Slave date and time received after synchronization (previous date and time if synchronization was not needed).
Text in PointText (8) = Slave date and time received after synchronization, corrected with reading delay (previous date and time if synchronization was not needed).

### *Download Disturbance Record*

**Description of this command:**
Requests the slave to send the complete disturbance record information that correspond to the newest or a selected record number. Format of output files is COMTRADE ASCII or BINARY. Both .cfg and .dat are generated according to IEEE Standard Common Format for Transient Data Exchange (COMTRADE) for Power Systems (1997 format). Additional .hdr and .inf files are generated, and can include user-supplied information through the DriverP8 parameter. This command automatically forces a minimum timeout of 3000 ms.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-8
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
COMTRADE format:
2 = ASCII
3 = BINARY
**Meaning of the DriverP2 parameter:**
Record index to be downloaded where:
0 = Download newest record 1-999 = Record index to download

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP3 parameter:**
Indicates the format for returned dates:
0 = Use English format (MM/DD/YYYY hh:mm:ss.000)
1 = Use Spanish format (DD/MM/YYYY hh:mm:ss.000)
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of data request retries before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Indicates the path where the COMTRADE files will be generated. If this property is empty, the local driver folder is used by default.
**Meaning of the DriverP7 parameter:**
Indicates a TriggerTime that should not be downloaded if it happens to be the last TriggerTime available in the protection. If empty, the last TriggerTime available is downloaded. Format must be 'YYYY-MM-DD hh:mm:ss.uuuuuu000', where uuuuuu=microseconds.
**Meaning of the DriverP8 parameter:**
Comma-separated list with additional information about the protection to be used in the .hdr and .inf files. Format: FieldName1=value1,FieldName2=value2,etc. Example: ID=123456,SerialNumber=A55GH77,Port=Ethernet
**Meaning of the DriverP9 parameter:**
Filename root for .hdr, .cfg, .dat and .inf files. If empty, 'XGEF650_DisturbanceRecord.Relayxxx.hdr', 'XGEF650_DisturbanceRecord.Relayxxx.cfg', , 'XGEF650_DisturbanceRecord.Relayxxx.dat' and 'XGEF650_DisturbanceRecord.Relayxxx.inf' will be used, where xxx is the protection unit address. Existing files with same name are overwritten.
**Values that are returned:**
Text in PointText (0) = Download status
Text in PointText (1) = Record number
Text in PointText (2) = Trigger position
Text in PointText (3) = First sample time
Text in PointText (4) = Trigger time
Text in PointText (5) = Last sample time
Text in PointText (6) = Total samples
Text in PointText (7) = Samples per cycle
Value in PointValue (0) = Number of channels downloaded
Value in PointValue (1) = Record number
Value in PointValue (2) = Number of triggers
Value in PointValue (3) = System frequency (Hz)
Value in PointValue (4) = Cycles per record
Value in PointValue (5) = Available records
Value in PointValue (6) = Number of analog channels
Value in PointValue (7) = Number of digital channels
[Customized Commands]

## Customized Commands

### *Read Identificacion*

**Description of this command:**
Reads device identification information.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-5
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
Indicates the format for returned dates:

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

0 = Use English format (MM/DD/YYYY hh:mm:ss.000)
1 = Use Spanish format (DD/MM/YYYY hh:mm:ss.000)

**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)

**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.

**Meaning of the DriverP6 parameter:**
Not used.

**Meaning of the DriverP7 parameter:**
001s8:B000,001s2:B008,001s6:B027,001s4:B02D,001s8:B031

**Meaning of the DriverP8 parameter:**
Not used.

**Meaning of the DriverP9 parameter:**
Not used.

**Values that are returned:**
Text in PointText (0) = Relay model
Text in PointText (1) = Firmware version
Text in PointText (2) = MAC Address
Text in PointText (3) = Serial Number
Text in PointText (4) = Manufacturing Date

### *Read Clock*

**Description of this command:**
Reads Current Clock Date and Time.

**Methods used to run this command:**
Analog Input (ReadNumericValues)

**Number of points accepted by this command:**
1-2

**Meaning of the DriverP0 parameter:**
Unit Address (1-255).

**Meaning of the DriverP1 parameter:**
0

**Meaning of the DriverP2 parameter:**
Not used.

**Meaning of the DriverP3 parameter:**
Indicates the format for returned dates:
0 = Use English format (MM/DD/YYYY hh:mm:ss.000)
1 = Use Spanish format (DD/MM/YYYY hh:mm:ss.000)

**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)

**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.

**Meaning of the DriverP6 parameter:**
Not used.

**Meaning of the DriverP7 parameter:**
001D0:FFF0,001T0:FFF0

**Meaning of the DriverP8 parameter:**
Not used.

**Meaning of the DriverP9 parameter:**
Not used.

**Values that are returned:**
Text in PointText (0) = Date (MM/DD/YYYY or DD/MM/YYYY)
Text in PointText (1) = Time (hh:mm:ss.xxx)

### *Read Control Elements - Autorecloser States*

**Description of this command:**
Reads Autorecloser States Control Elements.

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-48
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
048O0:01F5
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (3) = AR LEVEL BLOCK
Text in PointText (4) = AR PULSE BLOCK
Text in PointText (5) = AR PULSE UNBLOCK
Text in PointText (6) = AR INITIATE
Text in PointText (24) = AR CONDS INPUT
Text in PointText (25) = AR CLOSE BREAKER
Text in PointText (26) = AR OUT OF SERVICE
Text in PointText (27) = AR READY
Text in PointText (28) = AR LOCKOUT
Text in PointText (29) = AR BLOCK
Text in PointText (30) = AR RCL IN PROGRESS
Text in PointText (31) = AR LCK BY ANOMALY
Text in PointText (16) = AR LCK BY FAIL OPEN
Text in PointText (17) = AR LCK BY FAIL CLOSE
Text in PointText (18) = AR LCK BY USER
Text in PointText (19) = AR LCK BY CONDS
Text in PointText (20) = AR LCK BY TRIPS
Text in PointText (21) = AR LCK BY SHOTS
Text in PointText (22) = AR BLK AFTER 1 SHOT
Text in PointText (23) = AR BLK AFTER 2 SHOT
Text in PointText (40) = AR BLK AFTER 3 SHOT
Text in PointText (41) = AR BLK AFTER 4 SHOT
Text in PointText (42) = AR BLOCK BY LEVEL
Text in PointText (43) = AR BLOCK BY PULSE

### *Read Control Elements - Autorecloser Status*

**Description of this command:**
Reads Autorecloser Status Control Elements.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-32
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
003@0:0E36
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (0) = AR STATUS
Text in PointText (1) = AR LOCKOUT MODE
Text in PointText (2) = AR BLOCK MODE

### *Read Control Elements - Broken Conductor*

**Description of this command:**
Reads Broken Conductor Control Elements.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-192
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
192O0:0294
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (3) = BROKEN CONDUCT1 PKP
Text in PointText (4) = BROKEN CONDUCT1 OP
Text in PointText (86) = BROKEN CONDUCT2 PKP
Text in PointText (87) = BROKEN CONDUCT2 OP
Text in PointText (185) = BROKEN CONDUCT3 PKP
Text in PointText (186) = BROKEN CONDUCT3 OP

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

### *Read Control Elements - Frecuency*

**Description of this command:**
Reads Frecuency Control Elements.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-432
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
432O0:025A
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (5) = OVERFREQ1 PKP
Text in PointText (6) = OVERFREQ1 OP
Text in PointText (104) = OVERFREQ2 PKP
Text in PointText (105) = OVERFREQ2 OP
Text in PointText (187) = OVERFREQ3 PKP
Text in PointText (188) = OVERFREQ3 OP
Text in PointText (270) = UNDERFREQ1 PKP
Text in PointText (271) = UNDERFREQ1 OP
Text in PointText (337) = UNDERFREQ2 PKP
Text in PointText (338) = UNDERFREQ2 OP
Text in PointText (420) = UNDERFREQ3 PKP
Text in PointText (421) = UNDERFREQ3 OP

### *Read Control Elements - Setting Groups*

**Description of this command:**
Reads Setting Groups Control Elements.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-16
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

1 = TCP (for slave ethernet ports)

**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.

**Meaning of the DriverP6 parameter:**
Not used.

**Meaning of the DriverP7 parameter:**
016O0:028F

**Meaning of the DriverP8 parameter:**
Not used.

**Meaning of the DriverP9 parameter:**
Not used.

**Values that are returned:**
Text in PointText (10) = GROUP 1 ACT ON
Text in PointText (11) = GROUP 2 ACT ON
Text in PointText (12) = GROUP 3 ACT ON
Text in PointText (13) = SETT GROUPS BLOCK
Text in PointText (14) = GROUP 1 BLOCKED
Text in PointText (15) = GROUP 2 BLOCKED
Text in PointText (0) = GROUP 3 BLOCKED

### *Read Control Elements - VT Fuse Failure*

**Description of this command:**
Reads VT Fuse Failure Control Elements.

**Methods used to run this command:**
Analog Input (ReadNumericValues)

**Number of points accepted by this command:**
1-16

**Meaning of the DriverP0 parameter:**
Unit Address (1-255).

**Meaning of the DriverP1 parameter:**
0

**Meaning of the DriverP2 parameter:**
Not used.

**Meaning of the DriverP3 parameter:**
0

**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)

**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.

**Meaning of the DriverP6 parameter:**
Not used.

**Meaning of the DriverP7 parameter:**
016O0:01EB

**Meaning of the DriverP8 parameter:**
Not used.

**Meaning of the DriverP9 parameter:**
Not used.

**Values that are returned:**
Text in PointText (8) = VT FUSE FAILURE

### *Read Front Panel Leds*

**Description of this command:**
Reads front panel leds status.

**Methods used to run this command:**
Analog Input (ReadNumericValues)

**Number of points accepted by this command:**
1-32

**Meaning of the DriverP0 parameter:**
Unit Address (1-255).

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
032O0:00D1
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (0) = LED 2
Text in PointText (1) = LED 3
Text in PointText (2) = LED 4
Text in PointText (3) = LED 5
Text in PointText (4) = LED 6
Text in PointText (5) = LED 7
Text in PointText (6) = LED 8
Text in PointText (7) = LED 9
Text in PointText (8) = Reserved
Text in PointText (9) = Reserved
Text in PointText (10) = Reserved
Text in PointText (11) = Reserved
Text in PointText (12) = Reserved
Text in PointText (13) = Reserved
Text in PointText (14) = READY LED
Text in PointText (15) = LED 1"
Text in PointText (16) = * Key
Text in PointText (17) = F1 Key
Text in PointText (18) = F2 Key
Text in PointText (19) = LOCAL OPERATION MODE
Text in PointText (20) = OPERATIONS BLOCKED
Text in PointText (21) = DSP COMM ERROR
Text in PointText (22) = MAGNETIC MODULE ERROR
Text in PointText (23) = LED RESET INPUT
Text in PointText (24) = LED 10
Text in PointText (25) = LED 11
Text in PointText (26) = LED 12
Text in PointText (27) = LED 13
Text in PointText (28) = LED 14
Text in PointText (29) = LED 15
Text in PointText (30) = I Key
Text in PointText (31) = O Key

### *Read Protection - Protection Blocks*

**Description of this command:**
Reads Protection Blocks.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-985

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
985O0:00F2
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (7) = PH IOC1 HIGH A BLK
Text in PointText (24) = PH IOC1 HIGH B BLK
Text in PointText (25) = PH IOC1 HIGH C BLK
Text in PointText (98) = PH IOC2 HIGH A BLK
Text in PointText (99) = PH IOC2 HIGH B BLK
Text in PointText (100) = PH IOC2 HIGH C BLK
Text in PointText (205) = PH IOC3 HIGH A BLK
Text in PointText (206) = PH IOC3 HIGH B BLK
Text in PointText (207) = PH IOC3 HIGH C BLK
Text in PointText (296) = PH IOC1 LOW A BLK
Text in PointText (297) = PH IOC1 LOW B BLK
Text in PointText (298) = PH IOC1 LOW C BLK
Text in PointText (371) = PH IOC2 LOW A BLK
Text in PointText (372) = PH IOC2 LOW B BLK
Text in PointText (373) = PH IOC2 LOW C BLK
Text in PointText (478) = PH IOC3 LOW A BLK
Text in PointText (479) = PH IOC3 LOW B BLK
Text in PointText (464) = PH IOC3 LOW C BLK
Text in PointText (569) = NEUTRAL IOC1 BLOCK
Text in PointText (652) = NEUTRAL IOC2 BLOCK
Text in PointText (735) = NEUTRAL IOC3 BLOCK
Text in PointText (802) = GROUND IOC1 BLOCK
Text in PointText (885) = GROUND IOC2 BLOCK
Text in PointText (984) = GROUND IOC3 BLOCK

### *Read Protection - Protection Blocks 2*

**Description of this command:**
Reads Protection Blocks 2.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-933
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
933O0:0134
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (11) = SENS GND IOC1 BLK
Text in PointText (94) = SENS GND IOC2 BLK
Text in PointText (161) = SENS GND IOC3 BLK
Text in PointText (244) = PH TOC1 HIGH A BLK
Text in PointText (245) = PH TOC1 HIGH B BLK
Text in PointText (246) = PH TOC1 HIGH C BLK
Text in PointText (351) = PH TOC2 HIGH A BLK
Text in PointText (336) = PH TOC2 HIGH B BLK
Text in PointText (337) = PH TOC2 HIGH C BLK
Text in PointText (442) = PH TOC3 HIGH A BLK
Text in PointText (443) = PH TOC3 HIGH B BLK
Text in PointText (444) = PH TOC3 HIGH C BLK
Text in PointText (517) = NEUTRAL TOC1 BLOCK
Text in PointText (616) = NEUTRAL TOC2 BLOCK
Text in PointText (699) = NEUTRAL TOC3 BLOCK
Text in PointText (782) = GROUND TOC1 BLOCK
Text in PointText (849) = GROUND TOC2 BLOCK
Text in PointText (932) = GROUND TOC3 BLOCK

### *Read Protection - Protection Blocks 3*

**Description of this command:**
Reads Protection Blocks 3.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-991
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
991O0:0173

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (7) = SENS GND TOC1 BLOCK
Text in PointText (106) = SENS GND TOC2 BLOCK
Text in PointText (189) = SENS GND TOC3 BLOCK
Text in PointText (256) = PHASE UV1 BLOCK
Text in PointText (367) = PHASE UV2 BLOCK
Text in PointText (462) = PHASE UV3 BLOCK
Text in PointText (557) = NEG SEQ OV1 BLOCK
Text in PointText (624) = NEG SEQ OV2 BLOCK
Text in PointText (707) = NEG SEQ OV3 BLOCK
Text in PointText (790) = THERMAL1 BLOCK
Text in PointText (882) = THERMAL2 BLOCK
Text in PointText (990) = THERMAL3 BLOCK

### *Read Protection - Protection Blocks 4*

**Description of this command:**
Reads Protection Blocks 4.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-687
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
687O0:01B6
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (10) = PHASE DIR1 BLK INP
Text in PointText (81) = PHASE DIR2 BLK INP
Text in PointText (184) = PHASE DIR3 BLK INP
Text in PointText (271) = NEUTRAL DIR1 BLK INP
Text in PointText (338) = NEUTRAL DIR2 BLK INP
Text in PointText (421) = NEUTRAL DIR3 BLK INP
Text in PointText (520) = GROUND DIR1 BLK INP
Text in PointText (603) = GROUND DIR2 BLK INP
Text in PointText (686) = GROUND DIR3 BLK INP

### *Read Protection - Protection Blocks 5*

**Description of this command:**
Reads Protection Blocks 5.

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-938
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
938O0:01FC
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (12) = NEUTRAL OV1 HIGH BLK
Text in PointText (95) = NEUTRAL OV2 HIGH BLK
Text in PointText (162) = NEUTRAL OV3 HIGH BLK
Text in PointText (245) = NEUTRAL OV1 LOW BLK
Text in PointText (344) = NEUTRAL OV2 LOW BLK
Text in PointText (427) = NEUTRAL OV3 LOW BLK
Text in PointText (510) = AUXILIARY UV1 BLOCK
Text in PointText (577) = AUXILIARY UV2 BLOCK
Text in PointText (660) = AUXILIARY UV3 BLOCK
Text in PointText (743) = PHASE OV1 BLOCK
Text in PointText (832) = PHASE OV2 BLOCK
Text in PointText (937) = PHASE OV3 BLOCK

### *Read Protection - Protection Blocks 6*

**Description of this command:**
Reads Protection Blocks 6.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-916
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
916O0:023B
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (2) = AUXILIARY OV1 BLOCK
Text in PointText (85) = AUXILIARY OV2 BLOCK
Text in PointText (184) = AUXILIARY OV3 BLOCK
Text in PointText (267) = NEG SEQ TOC1 BLOCK
Text in PointText (350) = NEG SEQ TOC2 BLOCK
Text in PointText (417) = NEG SEQ TOC3 BLOCK
Text in PointText (500) = OVERFREQ1 BLOCK
Text in PointText (583) = OVERFREQ2 BLOCK
Text in PointText (682) = OVERFREQ3 BLOCK
Text in PointText (765) = UNDERFREQ1 BLOCK
Text in PointText (832) = UNDERFREQ2 BLOCK
Text in PointText (915) = UNDERFREQ3 BLOCK

### *Read Protection - Protection Blocks 7*

**Description of this command:**
Reads Protection Blocks 7.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-898
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
898O0:028F
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (13) = SETT GROUPS BLOCK
Text in PointText (82) = BROKEN CONDUCT1 BLK
Text in PointText (165) = BROKEN CONDUCT2 BLK
Text in PointText (264) = BROKEN CONDUCT3 BLK
Text in PointText (670) = ISOLATED GND1 BLK
Text in PointText (897) = ISOLATED GND2 BLK

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

### *Read Protection - Protection Blocks 8*

**Description of this command:**
Reads Protection Blocks 8.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-683
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
683O0:02D6
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (4) = ISOLATED GND3 BLK
Text in PointText (247) = SENS GND DIR1 BLK IP
Text in PointText (346) = SENS GND DIR2 BLK IP
Text in PointText (429) = SENS GND DIR3 BLK IP
Text in PointText (496) = FWD PWR1 BLOCK
Text in PointText (581) = FWD PWR2 BLOCK
Text in PointText (682) = FWD PWR3 BLOCK

### *Read Protection - Protection Blocks 9*

**Description of this command:**
Reads Protection Blocks 9.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-204
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP7 parameter:**
204O0:0363
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (3) = PH TOC1 LOW A BLK
Text in PointText (4) = PH TOC1 LOW B BLK
Text in PointText (5) = PH TOC1 LOW C BLK
Text in PointText (110) = PH TOC2 LOW A BLK
Text in PointText (111) = PH TOC2 LOW B BLK
Text in PointText (96) = PH TOC2 LOW C BLK
Text in PointText (201) = PH TOC3 LOW A BLK
Text in PointText (202) = PH TOC3 LOW B BLK
Text in PointText (203) = PH TOC3 LOW C BLK

### *Read Protection - Protection Blocks 10*

**Description of this command:**
Reads Protection Blocks 10.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-315
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
315O0:03B2
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (15) = DIR PWR1 BLOCK
Text in PointText (86) = DIR PWR2 BLOCK
Text in PointText (189) = DIR PWR3 BLOCK
Text in PointText (260) = LOCKED ROTOR1 BLK
Text in PointText (279) = LOCKED ROTOR2 BLK
Text in PointText (314) = LOCKED ROTOR3 BLK

### *Read SNTP IRIGB*

**Description of this command:**
Reads SNTP IRIGB.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-5

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
005O0:03F2
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (3) = SNTP FAILURE
Text in PointText (4) = IRIGB FAILURE

### *Read Remote Inputs - Remote Inputs*

**Description of this command:**
Reads Remote Inputs - Remote Inputs.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-35
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
035O0:03EB
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (3) = Remote Input 1
Text in PointText (4) = Remote Input 2
Text in PointText (5) = Remote Input 3
Text in PointText (6) = Remote Input 4
Text in PointText (7) = Remote Input 5
Text in PointText (8) = Remote Input 6

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

Text in PointText (9) = Remote Input 7
Text in PointText (10) = Remote Input 8
Text in PointText (11) = Remote Input 9
Text in PointText (28) = Remote Input 10
Text in PointText (29) = Remote Input 11
Text in PointText (30) = Remote Input 12
Text in PointText (31) = Remote Input 13
Text in PointText (16) = Remote Input 14
Text in PointText (17) = Remote Input 15
Text in PointText (18) = Remote Input 16
Text in PointText (19) = Remote Input 17
Text in PointText (20) = Remote Input 18
Text in PointText (21) = Remote Input 19
Text in PointText (22) = Remote Input 20
Text in PointText (23) = Remote Input 21
Text in PointText (24) = Remote Input 22
Text in PointText (25) = Remote Input 23
Text in PointText (26) = Remote Input 24
Text in PointText (27) = Remote Input 25
Text in PointText (28) = Remote Input 26
Text in PointText (29) = Remote Input 27
Text in PointText (30) = Remote Input 28
Text in PointText (31) = Remote Input 29
Text in PointText (32) = Remote Input 30
Text in PointText (33) = Remote Input 31
Text in PointText (34) = Remote Input 32

### *Read Remote Inputs - Remote Devices*

**Description of this command:**
Reads Remote Inputs - Remote Devices.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-35
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
035O0:03ED
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (3) = Remote Device 1
Text in PointText (4) = Remote Device 2
Text in PointText (5) = Remote Device 3
Text in PointText (6) = Remote Device 4
Text in PointText (7) = Remote Device 5

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

Text in PointText (8) = Remote Device 6
Text in PointText (9) = Remote Device 7
Text in PointText (10) = Remote Device 8
Text in PointText (11) = Remote Device 9
Text in PointText (28) = Remote Device 10
Text in PointText (29) = Remote Device 11
Text in PointText (30) = Remote Device 12
Text in PointText (31) = Remote Device 13
Text in PointText (16) = Remote Device 14
Text in PointText (17) = Remote Device 15
Text in PointText (18) = Remote Device 16
Text in PointText (19) = Remote Device 17
Text in PointText (20) = Remote Device 18
Text in PointText (21) = Remote Device 19
Text in PointText (22) = Remote Device 20
Text in PointText (23) = Remote Device 21
Text in PointText (24) = Remote Device 22
Text in PointText (25) = Remote Device 23
Text in PointText (26) = Remote Device 24
Text in PointText (27) = Remote Device 25
Text in PointText (28) = Remote Device 26
Text in PointText (29) = Remote Device 27
Text in PointText (30) = Remote Device 28
Text in PointText (31) = Remote Device 29
Text in PointText (32) = Remote Device 30
Text in PointText (33) = Remote Device 31
Text in PointText (34) = Remote Device 32

### *Read Remote Inputs - Remote GOOSE Analog Inputs*

**Description of this command:**
Reads Remote Inputs - Remote GOOSE Analog Inputs.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-16
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
008f0:126D,008I0:127D
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (0) = Rem Ana Inp FLOAT 1
Text in PointText (1) = Rem Ana Inp FLOAT 2
Text in PointText (2) = Rem Ana Inp FLOAT 3
Text in PointText (3) = Rem Ana Inp FLOAT 4

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

Text in PointText (4) = Rem Ana Inp FLOAT 5
Text in PointText (5) = Rem Ana Inp FLOAT 6
Text in PointText (6) = Rem Ana Inp FLOAT 7
Text in PointText (7) = Rem Ana Inp FLOAT 8
Text in PointText (8) = Rem Ana Inp INT 1
Text in PointText (9) = Rem Ana Inp INT 2
Text in PointText (10) = Rem Ana Inp INT 3
Text in PointText (11) = Rem Ana Inp INT 4
Text in PointText (12) = Rem Ana Inp INT 5
Text in PointText (13) = Rem Ana Inp INT 6
Text in PointText (14) = Rem Ana Inp INT 7
Text in PointText (15) = Rem Ana Inp INT 8

### *Read Remote Inputs - Remote GOOSE Digital Inputs*

**Description of this command:**
Reads Remote Inputs - Remote GOOSE Digital Inputs.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-45
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
045O0:0421
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (13) = Rem GOOSE Dig Inp 1
Text in PointText (14) = Rem GOOSE Dig Inp 2
Text in PointText (15) = Rem GOOSE Dig Inp 3
Text in PointText (0) = Rem GOOSE Dig Inp 4
Text in PointText (1) = Rem GOOSE Dig Inp 5
Text in PointText (2) = Rem GOOSE Dig Inp 6
Text in PointText (3) = Rem GOOSE Dig Inp 7
Text in PointText (4) = Rem GOOSE Dig Inp 8
Text in PointText (5) = Rem GOOSE Dig Inp 9
Text in PointText (6) = Rem GOOSE Dig Inp 10
Text in PointText (7) = Rem GOOSE Dig Inp 11
Text in PointText (24) = Rem GOOSE Dig Inp 12
Text in PointText (25) = Rem GOOSE Dig Inp 13
Text in PointText (26) = Rem GOOSE Dig Inp 14
Text in PointText (27) = Rem GOOSE Dig Inp 15
Text in PointText (28) = Rem GOOSE Dig Inp 16
Text in PointText (29) = Rem GOOSE Dig Inp 17
Text in PointText (30) = Rem GOOSE Dig Inp 18
Text in PointText (31) = Rem GOOSE Dig Inp 19

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

Text in PointText (16) = Rem GOOSE Dig Inp 20
Text in PointText (17) = Rem GOOSE Dig Inp 21
Text in PointText (18) = Rem GOOSE Dig Inp 22
Text in PointText (19) = Rem GOOSE Dig Inp 23
Text in PointText (20) = Rem GOOSE Dig Inp 24
Text in PointText (21) = Rem GOOSE Dig Inp 25
Text in PointText (22) = Rem GOOSE Dig Inp 26
Text in PointText (23) = Rem GOOSE Dig Inp 27
Text in PointText (40) = Rem GOOSE Dig Inp 28
Text in PointText (41) = Rem GOOSE Dig Inp 29
Text in PointText (42) = Rem GOOSE Dig Inp 30
Text in PointText (43) = Rem GOOSE Dig Inp 31
Text in PointText (44) = Rem GOOSE Dig Inp 32

### *Read Remote Inputs - Remote GOOSE Digital Outputs*

**Description of this command:**
Reads Remote Inputs - Remote GOOSE Digital Outputs.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-45
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
045O0:0423
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (13) = Rem GOOSE Dig Out 1
Text in PointText (14) = Rem GOOSE Dig Out 2
Text in PointText (15) = Rem GOOSE Dig Out 3
Text in PointText (0) = Rem GOOSE Dig Out 4
Text in PointText (1) = Rem GOOSE Dig Out 5
Text in PointText (2) = Rem GOOSE Dig Out 6
Text in PointText (3) = Rem GOOSE Dig Out 7
Text in PointText (4) = Rem GOOSE Dig Out 8
Text in PointText (5) = Rem GOOSE Dig Out 9
Text in PointText (6) = Rem GOOSE Dig Out 10
Text in PointText (7) = Rem GOOSE Dig Out 11
Text in PointText (24) = Rem GOOSE Dig Out 12
Text in PointText (25) = Rem GOOSE Dig Out 13
Text in PointText (26) = Rem GOOSE Dig Out 14
Text in PointText (27) = Rem GOOSE Dig Out 15
Text in PointText (28) = Rem GOOSE Dig Out 16
Text in PointText (29) = Rem GOOSE Dig Out 17
Text in PointText (30) = Rem GOOSE Dig Out 18

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

Text in PointText (31) = Rem GOOSE Dig Out 19
Text in PointText (16) = Rem GOOSE Dig Out 20
Text in PointText (17) = Rem GOOSE Dig Out 21
Text in PointText (18) = Rem GOOSE Dig Out 22
Text in PointText (19) = Rem GOOSE Dig Out 23
Text in PointText (20) = Rem GOOSE Dig Out 24
Text in PointText (21) = Rem GOOSE Dig Out 25
Text in PointText (22) = Rem GOOSE Dig Out 26
Text in PointText (23) = Rem GOOSE Dig Out 27
Text in PointText (40) = Rem GOOSE Dig Out 28
Text in PointText (41) = Rem GOOSE Dig Out 29
Text in PointText (42) = Rem GOOSE Dig Out 30
Text in PointText (43) = Rem GOOSE Dig Out 31
Text in PointText (44) = Rem GOOSE Dig Out 32

### *Read Contact Inputs - Board F*

**Description of this command:**
Reads Contact Inputs - Board F.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-93
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
093O0:0087
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (12) = CONT IP_F_CC1
Text in PointText (13) = CONT IP_F_CC2
Text in PointText (14) = CONT IP_F_CC3
Text in PointText (15) = CONT IP_F_CC4
Text in PointText (16) = CONT IP_F_CC5
Text in PointText (17) = CONT IP_F_CC6
Text in PointText (18) = CONT IP_F_CC7
Text in PointText (19) = CONT IP_F_CC8
Text in PointText (20) = CONT IP_F_CC9
Text in PointText (21) = CONT IP_F_CC10
Text in PointText (22) = CONT IP_F_CC11
Text in PointText (23) = CONT IP_F_CC12
Text in PointText (24) = CONT IP_F_CC13
Text in PointText (25) = CONT IP_F_CC14
Text in PointText (26) = CONT IP_F_CC15
Text in PointText (27) = CONT IP_F_CC16
Text in PointText (92) = BOARD F STATUS

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

### *Read Contact Output Status - Board F*

**Description of this command:**
Reads Contact Output Status - Board F.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-28
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
028O0:008B
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (12) = CONT OP_F_01
Text in PointText (13) = CONT OP_F_02
Text in PointText (14) = CONT OP_F_03
Text in PointText (15) = CONT OP_F_04
Text in PointText (0) = CONT OP_F_05
Text in PointText (1) = CONT OP_F_06
Text in PointText (2) = CONT OP_F_07
Text in PointText (3) = CONT OP_F_08
Text in PointText (4) = CONT OP_F_09
Text in PointText (5) = CONT OP_F_10
Text in PointText (6) = CONT OP_F_11
Text in PointText (7) = CONT OP_F_12
Text in PointText (8) = CONT OP_F_13
Text in PointText (9) = CONT OP_F_14
Text in PointText (10) = CONT OP_F_15
Text in PointText (27) = CONT OP_F_16

### *Read Contact Output Operates - Board F*

**Description of this command:**
Reads Contact Output Operates - Board F.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-28
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
064O0:0089
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (12) = CONT OP OPER_F_01
Text in PointText (13) = CONT OP OPER_F_02
Text in PointText (14) = CONT OP OPER_F_03
Text in PointText (15) = CONT OP OPER_F_04
Text in PointText (16) = CONT OP OPER_F_05
Text in PointText (17) = CONT OP OPER_F_06
Text in PointText (18) = CONT OP OPER_F_07
Text in PointText (19) = CONT OP OPER_F_08
Text in PointText (20) = CONT OP OPER_F_09
Text in PointText (21) = CONT OP OPER_F_10
Text in PointText (22) = CONT OP OPER_F_11
Text in PointText (23) = CONT OP OPER_F_12
Text in PointText (24) = CONT OP OPER_F_13
Text in PointText (25) = CONT OP OPER_F_14
Text in PointText (26) = CONT OP OPER_F_15
Text in PointText (27) = CONT OP OPER_F_16

### *Read Contact Output Resets - Board F*

**Description of this command:**
Reads Contact Output Resets - Board F.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-28
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
048O0:008A
**Meaning of the DriverP8 parameter:**
Not used.

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (12) = CONT OP RESET_F_1
Text in PointText (13) = CONT OP RESET_F_2
Text in PointText (14) = CONT OP RESET_F_3
Text in PointText (15) = CONT OP RESET_F_4
Text in PointText (16) = CONT OP RESET_F_5
Text in PointText (17) = CONT OP RESET_F_6
Text in PointText (18) = CONT OP RESET_F_7
Text in PointText (19) = CONT OP RESET_F_8
Text in PointText (20) = CONT OP RESET_F_9
Text in PointText (21) = CONT OP RESET_F_10
Text in PointText (22) = CONT OP RESET_F_11
Text in PointText (23) = CONT OP RESET_F_12
Text in PointText (24) = CONT OP RESET_F_13
Text in PointText (25) = CONT OP RESET_F_14
Text in PointText (26) = CONT OP RESET_F_15
Text in PointText (27) = CONT OP RESET_F_16

### *Read Frequency*

**Description of this command:**
Reads Frequency values.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-2
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
002I3:0C90
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (0) = Line Frequency (Hz)
Text in PointText (1) = Bus Frequency (Hz)

### *Read Primary Values - Currents 1*

**Description of this command:**
Reads Primary Values - Currents 1.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-10

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
010I3:0CB4
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (0) = CT Ratio
Text in PointText (1) = CT Ratio Ig
Text in PointText (2) = CT Ratio Isg
Text in PointText (4) = Ia Angle (Deg)
Text in PointText (5) = Ib Angle (Deg)
Text in PointText (6) = Ic Angle (Deg)
Text in PointText (7) = In Angle (Deg)
Text in PointText (8) = Ig Angle (Deg)
Text in PointText (9) = Isg Angle (Deg)

### *Read Primary Values - Currents 2*

**Description of this command:**
Reads Primary Values - Currents 2.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-14
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
014I3:0EE2
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Values that are returned:**
Text in PointText (0) = Phasor Ia Primary (KA)
Text in PointText (1) = Phasor Ib Primary (KA)
Text in PointText (2) = Phasor Ic Primary (KA)
Text in PointText (3) = Phasor Ig Primary (KA)
Text in PointText (4) = Phasor Isg Primary (KA)
Text in PointText (5) = Phasor In Primary (KA)
Text in PointText (6) = RMS Ia Primary (KA)
Text in PointText (7) = RMS Ib Primary (KA)
Text in PointText (8) = RMS Ic Primary (KA)
Text in PointText (9) = RMS Ig Primary (KA)
Text in PointText (10) = RMS Isg Primary (KA)
Text in PointText (11) = I0 Primary (KA)
Text in PointText (12) = I1 Primary (KA)
Text in PointText (13) = I2 Primary (KA)

### *Read Primary Values - Voltages 1*

**Description of this command:**
Reads Primary Values - Voltages 1.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-15
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
015I3:0CBA
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (0) = PT Ratio
Text in PointText (7) = Va Angle (Deg)
Text in PointText (8) = Vb Angle (Deg)
Text in PointText (9) = Vc Angle (Deg)
Text in PointText (10) = Vn Angle (Deg)
Text in PointText (11) = Vx Angle (Deg)
Text in PointText (12) = Vab Angle (Deg)
Text in PointText (13) = Vbc Angle (Deg)
Text in PointText (14) = Vca Angle (Deg)

### *Read Primary Values - Voltages 2*

**Description of this command:**
Reads Primary Values - Voltages 2.
**Methods used to run this command:**
Analog Input (ReadNumericValues)

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Number of points accepted by this command:**
1-13
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
013I3:0EFE
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (0) = V0 Primary (KV)
Text in PointText (1) = V1 Primary (KV)
Text in PointText (2) = V2 Primary (KV)
Text in PointText (3) = Vab Primary (KV)
Text in PointText (4) = Vbc Primary (KV)
Text in PointText (5) = Vca Primary (KV)
Text in PointText (6) = Va Primary (KV)
Text in PointText (7) = Vb Primary (KV)
Text in PointText (8) = Vc Primary (KV)
Text in PointText (9) = Vn Primary (KV)
Text in PointText (10) = Vx Primary (KV)
Text in PointText (11) = VBB Primary (KV)
Text in PointText (12) = VL Primary (KV)

### *Read Primary Values - Power*

**Description of this command:**
Reads Primary Values - Power.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-16
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP7 parameter:**
016I3:0F18
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (0) = Phase A Real Pwr (MW)
Text in PointText (1) = Phase A Reactive Pwr (MVAr)
Text in PointText (2) = Phase A Apparent Pwr (MVA)
Text in PointText (3) = Phase B Real Pwr (MW)
Text in PointText (4) = Phase B Reactive Pwr (MVAr)
Text in PointText (5) = Phase B Apparent Pwr (MVA)
Text in PointText (6) = Phase C Real Pwr (MW)
Text in PointText (7) = Phase C Reactive Pwr (MVAr)
Text in PointText (8) = Phase C Apparent Pwr (MVA)
Text in PointText (9) = 3 Phase Real Pwr (MW)
Text in PointText (10) = 3 Phase Reactive Pwr (MVAr)
Text in PointText (11) = 3 Phase Apparent Pwr (MVA)
Text in PointText (12) = Phase A Power Factor
Text in PointText (13) = Phase B Power Factor
Text in PointText (14) = Phase C Power Factor
Text in PointText (15) = 3 Phase Power Factor

### *Read Primary Values - Energy*

**Description of this command:**
Reads Primary Values - Energy.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-8
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
008I3:0F3C
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (0) = Positive MWatthour (MWh)
Text in PointText (1) = Negative MWatthour (MWh)
Text in PointText (2) = Positive MVarhour (MVArh)
Text in PointText (3) = Negative MVarhour (MVArh)
Text in PointText (4) = Pos MWatthour Cnt (MWh)
Text in PointText (5) = Neg MWatthour Cnt (MWh)
Text in PointText (6) = Pos MVarhour Cnt (MVArh)
Text in PointText (7) = Neg MVarhour Cnt (MVArh)

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

### *Read Secondary Values - Current*

**Description of this command:**
Reads Secondary Values - Current.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-30
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
030I3:0C00
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (0) = Phasor Ia (A)
Text in PointText (1) = RMS Ia (A)
Text in PointText (4) = Phasor Ib (A)
Text in PointText (5) = RMS Ib (A)
Text in PointText (8) = Phasor Ic (A)
Text in PointText (9) = RMS Ic (A)
Text in PointText (12) = Phasor In (A)
Text in PointText (15) = Phasor Ig (A)
Text in PointText (16) = RMS Ig (A)
Text in PointText (19) = Phasor Isg (A)
Text in PointText (20) = RMS Isg (A)
Text in PointText (23) = Zero seq I0 (A)
Text in PointText (26) = Positive Seq I1 (A)
Text in PointText (29) = Negative Seq I2 (A)

### *Read Secondary Values - Voltage*

**Description of this command:**
Reads Secondary Values - Voltage.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-40
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
040I3:0C40
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (0) = Phasor Vab (V)
Text in PointText (3) = Phasor Vbc (V)
Text in PointText (6) = Phasor Vca (V)
Text in PointText (9) = Phasor Van (V)
Text in PointText (12) = Phasor Vbn (V)
Text in PointText (15) = Phasor Vcn (V)
Text in PointText (18) = Phasor Vn (V)
Text in PointText (21) = Positive Seq V1 (V)
Text in PointText (24) = Negative Seq V2 (V)
Text in PointText (27) = Zero Seq V0 (V)
Text in PointText (30) = Phasor Vx (V)
Text in PointText (33) = Nominal Voltage (V)
Text in PointText (38) = Line Voltage (V)
Text in PointText (39) = Bus Voltage (V)

*Read Secondary Values - Power*

**Description of this command:**
Reads Secondary Values - Power.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-16
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
016I3:0C94
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (0) = Phase A Apparent Pwr (VA)
Text in PointText (1) = Phase B Apparent Pwr (VA)

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

Text in PointText (2) = Phase C Apparent Pwr (VA)
Text in PointText (3) = Phase A Real Pwr (W)
Text in PointText (4) = Phase B Real Pwr (W)
Text in PointText (5) = Phase C Real Pwr (W)
Text in PointText (6) = Phase A Reactive Pwr (VAr)
Text in PointText (7) = Phase B Reactive Pwr (VAr)
Text in PointText (8) = Phase C Reactive Pwr (VAr)
Text in PointText (9) = 3 Phase Apparent Pwr (VA)
Text in PointText (10) = 3 Phase Real Pwr (W)
Text in PointText (11) = 3 Phase Reactive Pwr (VAr)
Text in PointText (12) = Phase A Power Factor
Text in PointText (13) = Phase B Power Factor
Text in PointText (14) = Phase C Power Factor
Text in PointText (15) = 3 Phase Power Factor

### *Read Measurements*

**Description of this command:**
Reads measurements from slave.
**Methods used to run this command:**
Analog Input (ReadNumericValues)
**Number of points accepted by this command:**
1-72
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
018I3:0CB4,054I3:0EE2
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (0) = CT Ratio
Text in PointText (1) = CT Ratio Ig
Text in PointText (2) = CT Ratio Isg
Text in PointText (3) = PT Ratio
Text in PointText (4) = Ia Angle (Deg)
Text in PointText (5) = Ib Angle (Deg)
Text in PointText (6) = Ic Angle (Deg)
Text in PointText (7) = In Angle (Deg)
Text in PointText (8) = Ig Angle (Deg)
Text in PointText (9) = Isg Angle (Deg)
Text in PointText (10) = Va Angle (Deg)
Text in PointText (11) = Vb Angle (Deg)
Text in PointText (12) = Vc Angle (Deg)
Text in PointText (13) = Vn Angle (Deg)
Text in PointText (14) = Vx Angle (Deg)
Text in PointText (15) = Vab Angle (Deg)
Text in PointText (16) = Vbc Angle (Deg)

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

Text in PointText (17) = Vca Angle (Deg)
Text in PointText (18) = Phasor Ia Primary (KA)
Text in PointText (19) = Phasor Ib Primary (KA)
Text in PointText (20) = Phasor Ic Primary (KA)
Text in PointText (21) = Phasor Ig Primary (KA)
Text in PointText (22) = Phasor Isg Primary (KA)
Text in PointText (23) = Phasor In Primary (KA)
Text in PointText (24) = RMS Ia Primary (KA)
Text in PointText (25) = RMS Ib Primary (KA)
Text in PointText (26) = RMS Ic Primary (KA)
Text in PointText (27) = RMS Ig Primary (KA)
Text in PointText (28) = RMS Isg Primary (KA)
Text in PointText (29) = I0 Primary (KA)
Text in PointText (30) = I1 Primary (KA)
Text in PointText (31) = I2 Primary (KA)
Text in PointText (32) = V0 Primary (KV)
Text in PointText (33) = V1 Primary (KV)
Text in PointText (34) = V2 Primary (KV)
Text in PointText (35) = Vab Primary (KV)
Text in PointText (36) = Vbc Primary (KV)
Text in PointText (37) = Vca Primary (KV)
Text in PointText (38) = Va Primary (KV)
Text in PointText (39) = Vb Primary (KV)
Text in PointText (40) = Vc Primary (KV)
Text in PointText (41) = Vn Primary (KV)
Text in PointText (42) = Vx Primary (KV)
Text in PointText (43) = VBB Primary (KV)
Text in PointText (44) = VL Primary (KV)
Text in PointText (45) = Phase A Real Pwr
Text in PointText (46) = Phase A Reactive Pwr
Text in PointText (47) = Phase A Apparent Pwr
Text in PointText (48) = Phase B Real Pwr
Text in PointText (49) = Phase B Reactive Pwr
Text in PointText (50) = Phase B Apparent Pwr
Text in PointText (51) = Phase C Real Pwr
Text in PointText (52) = Phase C Reactive Pwr
Text in PointText (53) = Phase C Apparent Pwr
Text in PointText (54) = 3 Phase Real Pwr
Text in PointText (55) = 3 Phase Reactive Pwr
Text in PointText (56) = 3 Phase Apparent Pwr
Text in PointText (57) = Phase A Power Factor
Text in PointText (58) = Phase B Power Factor
Text in PointText (59) = Phase C Power Factor
Text in PointText (60) = 3 Phase Power Factor
Text in PointText (61) = Line Frequency
Text in PointText (62) = Bus Frequency
Text in PointText (63) = Positive MWatthour
Text in PointText (64) = Negative MWatthour
Text in PointText (65) = Positive MVarhour
Text in PointText (66) = Negative MVarhour
Text in PointText (67) = Pos MWatthour Cnt
Text in PointText (68) = Neg MWatthour Cnt
Text in PointText (69) = Pos MVarhour Cnt
Text in PointText (70) = Neg MVarhour Cnt
Text in PointText (71) = % of Load-To-Trip (%)

### *Get Disturbance Records Information*

**Description of this command:**
Requests the slave to send information about available disturbance records.
**Methods used to run this command:**
Analog Input (ReadNumericValues)

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

**Number of points accepted by this command:**
1-3
**Meaning of the DriverP0 parameter:**
Unit Address (1-255).
**Meaning of the DriverP1 parameter:**
0
**Meaning of the DriverP2 parameter:**
Not used.
**Meaning of the DriverP3 parameter:**
0
**Meaning of the DriverP4 parameter:**
Modbus protocol type, where:
0 = RTU (for slave serial ports)
1 = TCP (for slave ethernet ports)
**Meaning of the DriverP5 parameter:**
Number of retries reading each item, before discarding the whole communication.
**Meaning of the DriverP6 parameter:**
Not used.
**Meaning of the DriverP7 parameter:**
003u0:0EB6
**Meaning of the DriverP8 parameter:**
Not used.
**Meaning of the DriverP9 parameter:**
Not used.
**Values that are returned:**
Text in PointText (0) = NUMBER OF TRIGGERS
Text in PointText (1) = CYCLES PER RECORD
Text in PointText (2) = AVAILABLE RECORDS
[Internal Text Arrays]

## Internal Text Arrays

### *0x0E36 AR STATUS*

- 0=OUT OF SERVICE
- 1=READY
- 2=LOCKOUT
- 3=BLOCK
- 4=RECLOSE IN PROGRESS

### *0x0E37 AR LOCKOUT*

- 0=NONE
- 1=ANOMALY
- 2=FAIL TO OPEN
- 3=FAIL TO CLOSE
- 4=MANUAL
- 5=NO CONDITIONS
- 6=MAX NUMBER OF TRIPS
- 7=LAST SHOT

### *0x0E38 AR BLOCK MODE*

- 0=NONE
- 1=LEVEL
- 2=PULSE
- 3=LEVEL+PULSE

## Error messages

The following list shows the possible error messages that can be returned by the driver during a failed communication in the 'Status' property.

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013

[1005] DRIVER (Internal): Invalid driver stage
[1007] DRIVER (Internal): Code logic error
[1008] DRIVER (Internal): Command execution requires a valid license
[1009] DRIVER (Internal): Buffer size exceeded
[1010] DRIVER (Internal): Error calculating elapsed milliseconds
[1201] DRIVER (System): Error closing %s
[1202] DRIVER (System): Error creating %s
[1208] DRIVER (System): Error seeking end of %s
[1210] DRIVER (System): Error writing to %s
[1214] DRIVER (System): Error deleting %s
[1300] PROTOCOL (Timeout): No answer
[1313] PROTOCOL (Timeout): No answer from meter after retrying with a Start Communications message
[1319] REPLY (Remote): Too many NAK BUSY or unexpected telegrams received
[1332] PROTOCOL (Remote): Invalid date received
[1333] PROTOCOL (Remote): Couldn't decode received date
[1334] PROTOCOL (Remote): Invalid time received
[1335] PROTOCOL (Remote): Invalid snapshot event code received
[1336] PROTOCOL (Remote): Invalid snapshot event sequence number received
[1337] PROTOCOL (Remote): Invalid control event sequence number received
[1338] PROTOCOL (Remote): Couldn't decode reference date
[1339] REPLY (Remote): No records available
[1340] REPLY (Remote): Invalid file-block sequence received
[1360] PROTOCOL (Remote): Error synchronizing device
[1421] PROTOCOL (Format): Negative acknowledge received from device
[2001] CONFIG (DataType): Analog outputs are not supported by this driver
[2002] CONFIG (DataType): Digital inputs are not supported by this driver
[2003] CONFIG (DataType): Digital outputs are not supported by this driver
[2178] CONFIG (NumValues): Too many values (max=1000)
[2311] CONFIG (List): Invalid format of item list
[2311] CONFIG (List): Invalid item format in item list
[2314] CONFIG (List): Invalid number of points in item list (1-999)
[3022] CONFIG (P0): Invalid device address (1-255)
[3508] CONFIG (P1): Invalid command
[3594] CONFIG (P1): Invalid synchronization mode
[4160] CONFIG (P2): Record number not available in slave
[8013] CONFIG (Remote): Acknowledge
[8034] CONFIG (Remote): Busy (rejected message)
[8138] CONFIG (Remote): Failure in associated device
[8168] CONFIG (Remote): Illegal data address
[8170] CONFIG (Remote): Illegal data value
[8172] CONFIG (Remote): Illegal function
[8347] CONFIG (Remote): Unknown error
[8488] CONFIG (Remote): Gateway paths not available
[8489] CONFIG (Remote): The targeted device failed to respond. The gateway generates this exception

## Supported devices

This driver can communicate with these devices, but is not necessarily limited to this list:

GE Multilin F650 Digital Bay Controller
GE F650 Serial
GE F650 Ethernet
GE F650 2.20

CPKSoft Engineering
Industrial communication drivers.
www.cpksoft.com
www.facebook.com/cpksoftengineering
cpksoftengineering@hotmail.com
phone: 54-911-45788354

1990-2013