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Yaskawa MP2000iec Controller

Information Sheet for Crimson

Compatible Devices

- Yaskawa MP2xxxiec Controllers

Verified Device

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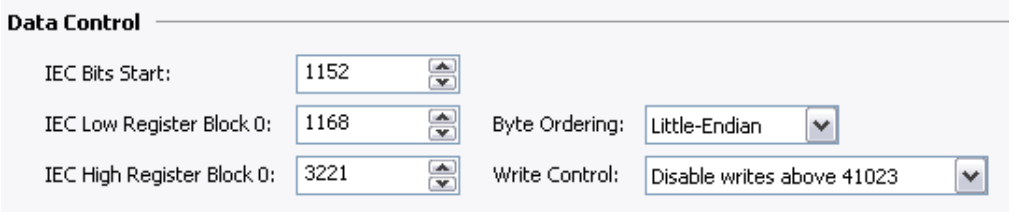
Device Options:

Select the appropriate Device Identification, and Protocol Options.
Data Control: Dialog box appears as below:



IEC Bits Start: The IEC address of IX that is mapped to Modbus register 00000. This is also the IEC address of QX that is mapped to Modbus Register 10000.

IEC Low Register Block 0: The IEC address that is mapped to Modbus register 30000 and 40000.

IEC High Register Block 0: The IEC address that is mapped to Modbus register 41024.

Byte Ordering: The default for the MP is Little Endian, that is, the lowest byte of a value is transmitted first. For controllers other than the MP, choose Big Endian if that controller sends the high byte first.

Write Control: The default for the MP is writes are allowed only to holding registers 40000 – 41023. For controllers other than the MP, the write range can be extended 42047.

Accessible Data

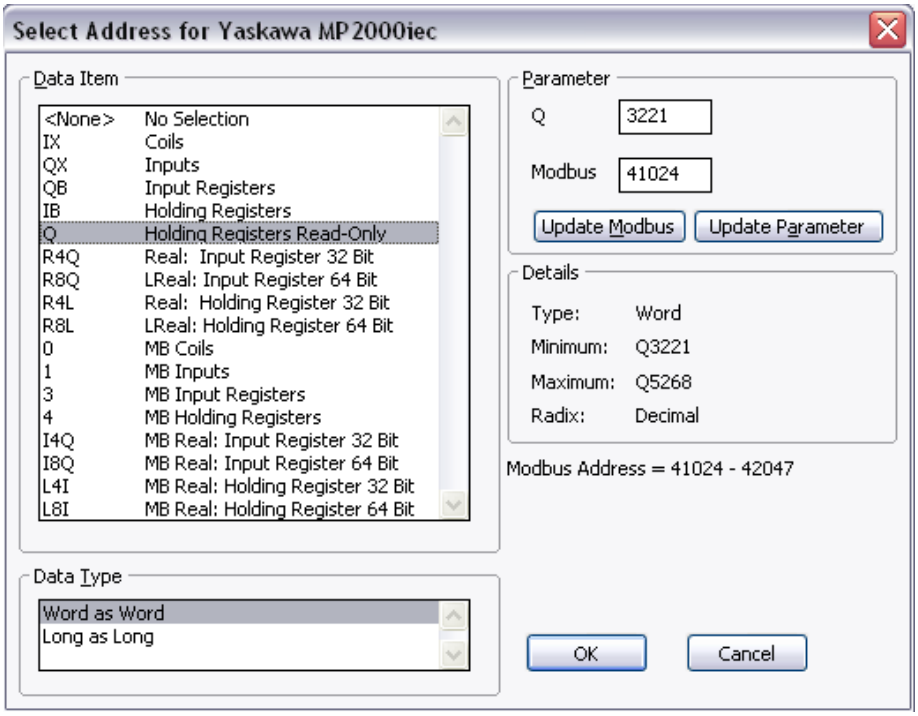
Prefix	Description	IEC Start	Maximum
IX	Coils	IEC Bits Start	IEC Bits Start + 127
QX	Inputs	IEC Bits Start	IEC Bits Start + 127
QB	Input Registers	IEC Low Block 0	IEC Low Block 0 + 1024
IB	Holding Registers	IEC Low Block 0	IEC Low Block 0 + 1024
Q	Holding Registers Read-Only	IEC High Block 0	IEC High Block 0 + 1024
R4Q	Real: Input Register 32 bit	IEC Low Block 0	IEC Low Block 0 + 2048
R8Q	LReal: Input Register 64 bit	IEC Low Block 0	IEC Low Block 0 + 2048
R4L	Real: Holding Register 32 bit	IEC Low Block 0	IEC Low Block 0 + 2048
R8L	LReal: Holding Register 64 bit	IEC Low Block 0	IEC Low Block 0 + 2048

Direct Modbus Access

0	Coils	0	9999
1	Inputs	0	9999
3	Input Registers	0	9999
4	Holding Registers	0	9999
I4Q	Real: Input Register 32 bit	0	9998
I8Q	LReal: Input Register 64 bit	0	9996
L4I	Real: Holding Register 32 bit	0	9998
L8I	LReal: Holding Register 64 bit	0	9996

NOTE: The I and Q designations reference the direction from the area the HMI accesses to the Controller. I.e. IX indicates a bit that is input to the Controller. QX indicates an output from the Controller to the HMI's memory area.

NOTE: The Direct Modbus Access selections permit the use of Modbus addresses directly. Note, however, 40001 in Standard Modbus is 40000 in this driver.



Parameter dialog box:
The upper line contains the prefix on the left. On the right is the IEC address if an IEC item is selected. If a Modbus item is selected, this field will contain the Modbus address.
The middle line contains the equivalent Modbus address in an entry box.
The lower line contains a button "Update Modbus" which will convert the upper address to the equivalent Modbus address in the middle. The "Update Parameter" button converts the middle Modbus address to the appropriate value for the upper field.
When "Update Parameter" is selected, if the Modbus value does not equate to a suitable value, the minimum will be selected, instead.
NOTE: For an IEC value in the upper field, a Word address must be an even number from the start of the IEC parameter selected. Modbus addresses are consecutive.

A Long, or 32 Bit Real must be a multiple of 4 from the start of the block. Modbus addresses are even numbers.

An LReal (64 Bit Real) must be a multiple of 8 from the start of the block. Modbus addresses are multiples of 4 from the start of the Modbus block.

Invalid choices will be set to the next lower valid value if an "Update" button is used. If OK is pressed on an invalid entry, the error message "Offset is badly aligned" is displayed.