

## motrona BY-340

Supported Series: motrona BY-340

Website: <http://motrona.net/index.html>

### HMI Setting:

| Parameters   | Recommended    | Options         | Notes |
|--------------|----------------|-----------------|-------|
| PLC type     | motrona BY-340 |                 |       |
| PLC I/F      | RS232          |                 |       |
| Baud rate    | 9600           | 1200 ~ 38400    |       |
| Data bits    | 7              | 7,8             |       |
| Parity       | Even           | Even, Odd, None |       |
| Stop bits    | 1              | 1,2             |       |
| PLC sta. no. | 11             | 11 ~ 99         |       |

### Device Address:

| Bit/Word | Device type       | Format | Range | Note |
|----------|-------------------|--------|-------|------|
| B        | Reset             | D      | 0     |      |
| B        | Trim-             | D      | 0     |      |
| B        | Trim+             | D      | 0     |      |
| B        | Activate Data     | D      | 0     |      |
| B        | Integrator off    | D      | 0     |      |
| B        | Store EEPROM      | D      | 0     |      |
| B        | Scroll Display    | D      | 0     |      |
| B        | Keyboard Disable  | D      | 0     |      |
| B        | Clear Min. & Max. | D      | 0     |      |
| B        | Read front F1     | D      | 0     |      |
| B        | Stop Slave        | D      | 0     |      |
| B        | Index Slave       | D      | 0     |      |
| B        | Index Master      | D      | 0     |      |
| B        | Reset Ex          | D      | 0     |      |
| B        | Trim- Ex          | D      | 0     |      |
| B        | Trim+ Ex          | D      | 0     |      |
| B        | Integrator off Ex | D      | 0     |      |
| B        | Store EEPROM Ex   | D      | 0     |      |
| B        | Scroll Display Ex | D      | 0     |      |

| Bit/Word | Device type            | Format | Range | Note |
|----------|------------------------|--------|-------|------|
| B        | Keyboard Disable Ex    | D      | 0     |      |
| B        | Clear Min. & Max. Ex   | D      | 0     |      |
| B        | Read front F1 Ex       | D      | 0     |      |
| B        | Stop Slave Ex          | D      | 0     |      |
| B        | Index Slave Ex         | D      | 0     |      |
| B        | Index Master Ex        | D      | 0     |      |
| B        | Output Unit ready      | D      | 0     |      |
| B        | Output Led 1           | D      | 0     |      |
| B        | Output Led 2           | D      | 0     |      |
| B        | Output Status 4        | D      | 0     |      |
| B        | Output max. Frequency  | D      | 0     |      |
| B        | Output max. Correction | D      | 0     |      |
| B        | Output Alert 2         | D      | 0     |      |
| B        | Output Alert 1         | D      | 0     |      |
| DW       | Factor 1               | D      | 0     |      |
| DW       | Factor 2               | D      | 0     |      |
| W        | Operational Mode       | D      | 0     |      |
| W        | Trim Time              | D      | 0     |      |
| W        | Integration Time       | D      | 0     |      |
| W        | Correction Divider     | D      | 0     |      |
| DW       | Factor 1 Scaling       | D      | 0     |      |
| DW       | Factor 1 Minimum       | D      | 0     |      |
| DW       | Factor 1 Maximum       | D      | 0     |      |
| W        | Sampling Time          | D      | 0     |      |
| W        | Wait Time              | D      | 0     |      |
| DW       | Max.Master Frequency   | D      | 0     |      |
| W        | Ramp Time              | D      | 0     |      |
| W        | Stop-Ramp Time         | D      | 0     |      |
| W        | Alert 1                | D      | 0     |      |
| W        | Alert 2                | D      | 0     |      |
| DW       | Phase Offset           | D      | 0     |      |
| DW       | Slave Pulses Index     | D      | 0     |      |
| W        | Phase Adjust           | D      | 0     |      |
| W        | Master Index Divider   | D      | 0     |      |
| W        | Index Window           | D      | 0     |      |
| W        | Max. Index Correction  | D      | 0     |      |
| W        | M Encoder Properties   | D      | 0     |      |
| W        | M Edge Counting        | D      | 0     |      |

| Bit/Word | Device type               | Format | Range | Note |
|----------|---------------------------|--------|-------|------|
| W        | M Counting Direction      | D      | 0     |      |
| W        | M Speed Display Factor    | D      | 0     |      |
| W        | M Speed Display Divider   | D      | 0     |      |
| W        | M Speed Display Dec.Point | D      | 0     |      |
| W        | S Encoder Properties      | D      | 0     |      |
| W        | S Edge Counting           | D      | 0     |      |
| W        | S Counting Direction      | D      | 0     |      |
| W        | Analogue Format           | D      | 0     |      |
| W        | Offset Correction         | D      | 0     |      |
| W        | Gain Correction           | D      | 0     |      |
| W        | Max. Correction           | D      | 0     |      |
| W        | Offset Total              | D      | 0     |      |
| W        | Gain Total                | D      | 0     |      |
| W        | Key Up Funtion            | D      | 0     |      |
| W        | Key Down Function         | D      | 0     |      |
| W        | Key Enter Function        | D      | 0     |      |
| W        | Input 1 Configuration     | D      | 0     |      |
| W        | Input 1 Function          | D      | 0     |      |
| W        | Input 2 Configuration     | D      | 0     |      |
| W        | Input 2 Function          | D      | 0     |      |
| W        | Input 3 Configuration     | D      | 0     |      |
| W        | Input 3 Function          | D      | 0     |      |
| W        | Input 4 Configuration     | D      | 0     |      |
| W        | Input 4 Function          | D      | 0     |      |
| W        | Unit Number               | D      | 0     |      |
| W        | Serial Baud Rate          | D      | 0     |      |
| W        | Serial Format             | D      | 0     |      |
| W        | Input Filter              | D      | 0     |      |
| W        | Trigger Threshold 1       | D      | 0     |      |
| W        | Trigger Threshold 2       | D      | 0     |      |
| W        | Brightness                | D      | 0     |      |
| W        | Frequency Control         | D      | 0     |      |
| W        | Factor Store Config       | D      | 0     |      |
| W        | Display Time              | D      | 0     |      |
| W        | Default Display           | D      | 0     |      |
| DW       | Protect Group F01         | D      | 0     |      |
| DW       | Protect Group F02         | D      | 0     |      |
| DW       | Protect Group F03         | D      | 0     |      |

| Bit/Word | Device type          | Format | Range | Note |
|----------|----------------------|--------|-------|------|
| DW       | Protect Group F04    | D      | 0     |      |
| DW       | Protect Group F05    | D      | 0     |      |
| DW       | Protect Group F06    | D      | 0     |      |
| DW       | Protect Group F07    | D      | 0     |      |
| DW       | Protect Group F08    | D      | 0     |      |
| DW       | Protect Group F09    | D      | 0     |      |
| DW       | test value           | D      | 0     |      |
| DW       | Differential_Counter | D      | 0     |      |
| DW       | Diff_Counter_nodiv   | D      | 0     |      |
| DW       | ana_voltate          | D      | 0     |      |
| DW       | new_Counter_Master   | D      | 0     |      |
| DW       | new_Counter_Slave    | D      | 0     |      |
| DW       | frequency_a/10       | D      | 0     |      |
| DW       | scal_F1              | D      | 0     |      |
| DW       | Index_Buffer_Master  | D      | 0     |      |
| DW       | Index_Buffer_Slave   | D      | 0     |      |
| DW       | Index_Status         | D      | 0     |      |
| DW       | Counter_Master       | D      | 0     |      |
| DW       | Counter_Slave        | D      | 0     |      |
| DW       | Master_Index_Counter | D      | 0     |      |
| DW       | Phase_Counter_Slave  | D      | 0     |      |
| DW       | Phase_Corr_Buffer    | D      | 0     |      |
| DW       | Trim_Phase           | D      | 0     |      |
| DW       | Index_Pulses_Master  | D      | 0     |      |
| DW       | Index_Pulses_Slave   | D      | 0     |      |
| DW       | Loop_time            | D      | 0     |      |
| DW       | Test_Variable        | D      | 0     |      |
| DW       | Base_Ram             | D      | 0     |      |

## Wiring Diagram:

### Diagram 1

#### RS-232

The serial port pin assignments may vary between HMI models, please click the following link for more information.

