Tech-note

Connecting UniOP to Moeller Easy800

This Technical Note contains all the information required to connect the UniOP panels to a Moeller Easy800 controller.

Sitek S.p.A.
Tn189
Ver. 1.01

Contents

1 Introduction

To create a Designer project for Moeller Easy800, select the driver “Moeller easy800” from the list of available communication drivers in the “Select Controller” dialog box. The Moeller Easy800 driver is associated to the Designer file D32uplc193.dll.

***Note**: In case the Moeller Easy 800 is not shown in the list, make sure that the file D32uplc193.dll is present in the Designer folder and then press the Refresh button.*

Starting from the version 5.07 – 4.07 the Moeller Easy 800 communication driver supports also access to HW - 7 Day Time switch and HY - Year Time switch.

2 Setting-up the Communication with Designer

Communication parameters for serial communication can be adjusted by clicking the “PLC Comm...” button. The default communication parameters are set to 19200, N, 8, 1.

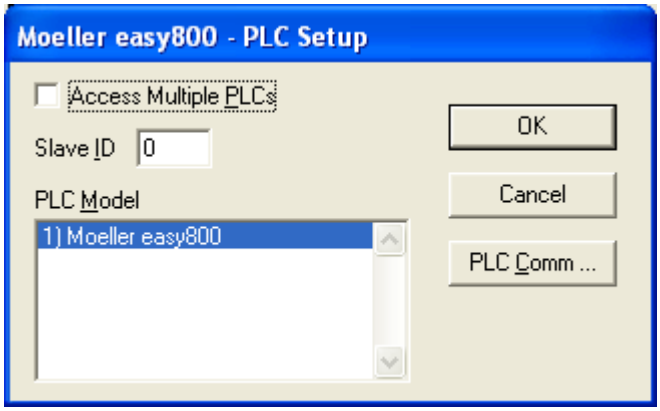

Figure 1 – Controller Setup Dialog Box

Access Multiple PLC’s — The protocol allows the connection of multiple controllers to one operator panel. To set-up multiple connections, check “Access Multiple PLC’s” checkbox and enter Slave ID Address for all controllers.

Slave ID — Slave ID is the node of the PLC and allows the protocol to reads variable in a sub-network. Note that if Stand alone mode is set in controller the Slave ID is 0

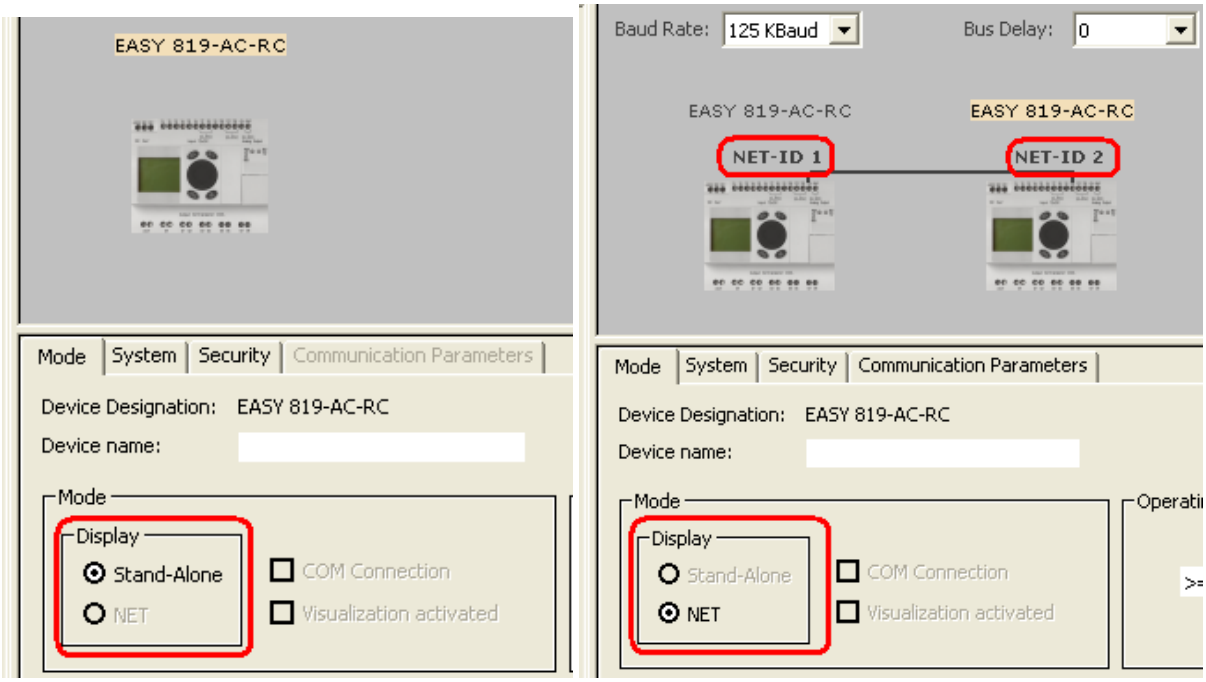

Figure 2 - EASY SOFT

3 Data Field Properties

The Data Field Properties dialog box is shown in Figure 3 below.
The “Object” combo box contains all the objects in the controller’s memory available for use with the HMI panel.

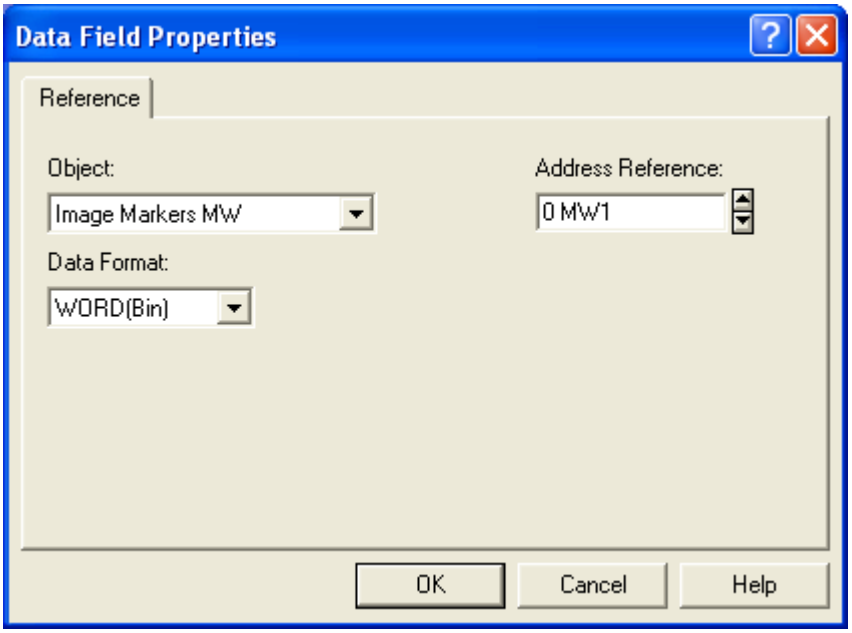

Figure 3 - Data Field Properties Dialog Box

3.1 HW - 7 Day Time Switch and HY - Year Time Switch

***Note**: Version 5.07 – 4.07 or higher of the communication driver is required to access the controller data described in this chapter.*

The Data Field Properties dialog box is shown in Figure 3 below.
Select “7 Day Switch FB HW” or “Year Time switch FB HY”.
The “FB Field” combo box contains all the objects in the controller’s memory available for use with the HMI panel.

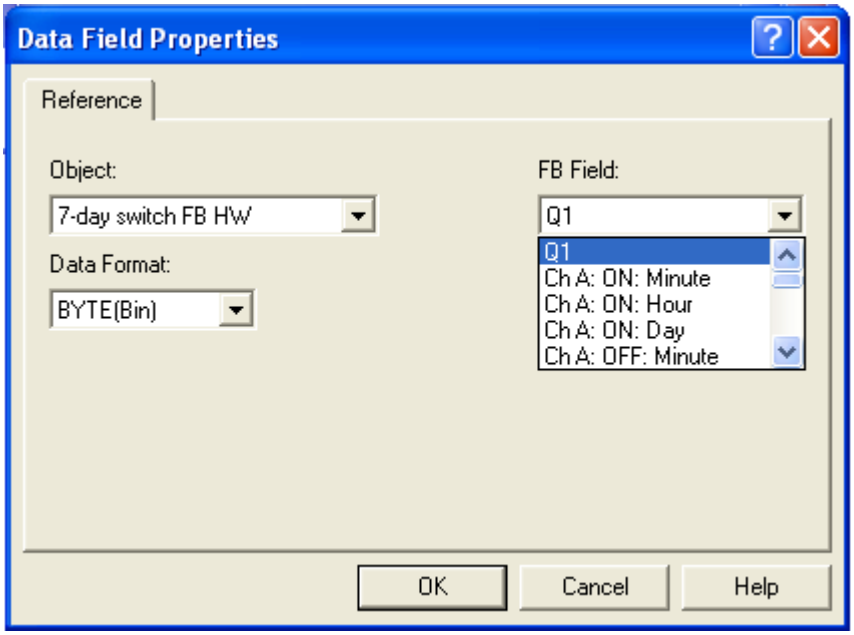

Figure 4 - Data Field Properties Dialog Box related to 7 Day Switch FB HW

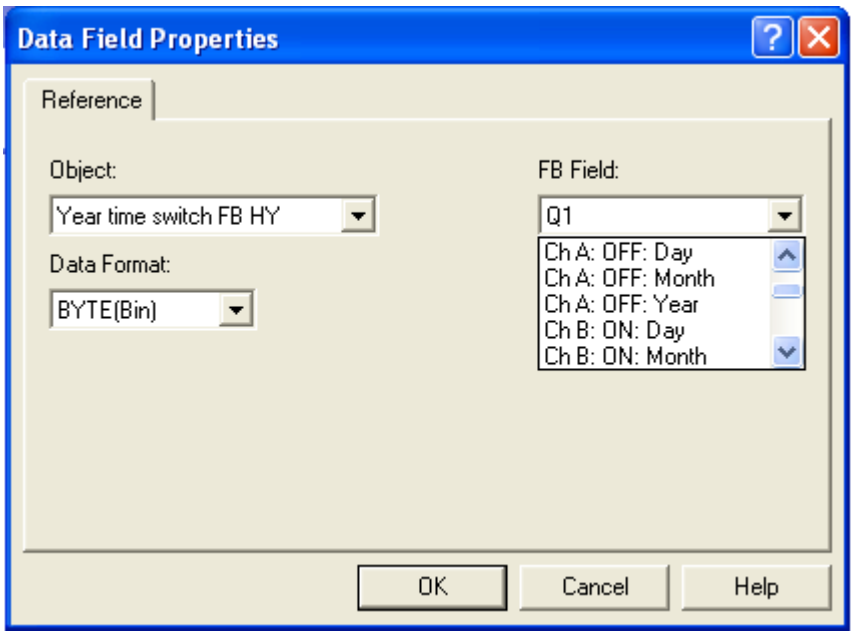

Figure 5 - Data Field Properties Dialog Box related to Year Time Switch HY

The access to the Channels depends on the configuration stored in the controller. The HMI panel cannot access to Channels that have not been defined in the controller memory. A *Write operation* targeting a Channel not defined in the controller memory will not be acknowledged by the controller itself and HMI will report a communication error code 04 in System Menu.

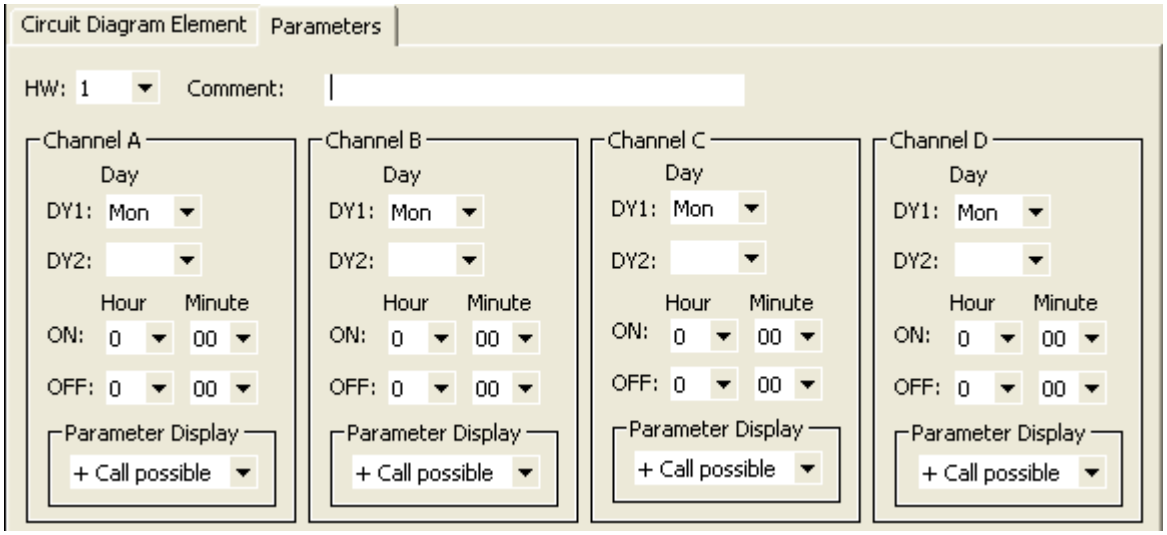

Figure 6 - HW 7 Day Switch

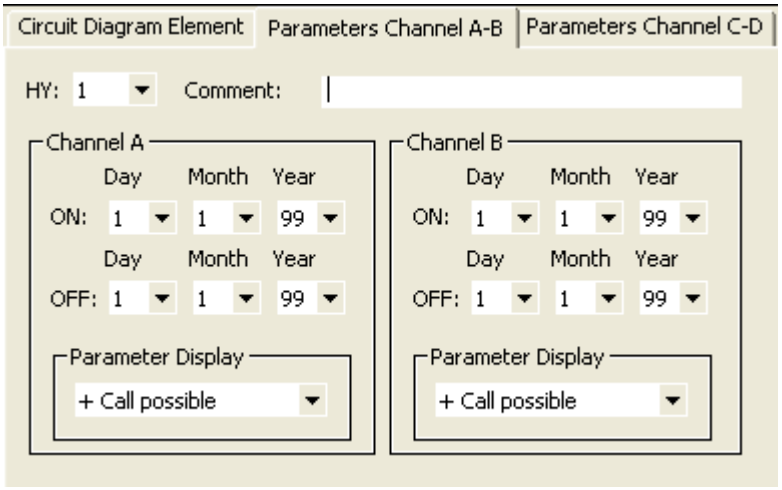

Figure 7 – HY Year Time switch

Appendix A. - Communication Status Codes

The System Menu shows the current communication status of the panel.
A message and a numeric error code report the communication status.
The message describes the current communication status. The number shows the code of the current communication error or, if the communication is correct, the code of the last error encountered. When the error code 0 is shown, it means there have been no communication errors since this system start-up.

Code	Description	Notes
00	No error	There are no communication errors and there have been no errors since start-up.
04	Response error	PLC's frame is illegally formed, or PLC returned a NAK response.
05	Timeout error	Indicates a Time Out in communication. The communication line has been broken or the modem has had a power fail.
06	Reception buffer overrun	UniOP has received a frame whose length exceeds UniOP's reception buffer size.
07	Internal failure	This should never happen. It indicates a hardware problem or software low-level problem.
11	Line error	Indicates that communication parameters settings are not matching on UniOP's side and modem's side.
12	Checksum error	Indicates that the checksum received in PLC's response frame does not match checksum calculated from received data.

Appendix B. Technical Data and Connection Information

Default transmission parameters are set as follows:

Transmission speed: 19200
Start bits: 1
Data length: 8
Parity: no
Stop bits: 1
Flow Control: none

When operating a PLC network, the HMI panel is connected to only one PLC using a RS-232 link. All other PLCs in the network are daisy-chained using the EasyNet network. Please, refer to the manufacturer's documentation for details on the operation of the EasyNet network.