Chapter 2 – Overview

This chapter describes the NMBP-01 Module, and gives the Warranty and Liability information of the Manufacturer.

Overview

The NMBP-01 Modbus Plus Adapter Module is for connecting the ABB drive directly to the Modicon Modbus Plus network.

The NMBP-01 supports read and write access to the drive parameters and data sets, as well as receiving and sending global data for critical drive control and feedback values.

The NMBP-01 Modbus Plus Adapter Module

The NMBP-01 Modbus Plus Adapter Module is an optional device for ABB drives which enables the connection of the drive to a Modbus Plus system. The drive acts like a Modicon PLC on the network. Through the NMBP-01 Modbus Plus Adapter Module it is possible to:

- Give control commands to the drive (Start, Stop, Run enable, etc.)
- Feed a motor speed or torque reference to the drive
- Give a process actual value or a process reference to the PID controller of the drive
- Read status information and actual values from the drive
- Change drive parameter values
- Reset a drive fault

The Modbus Plus commands and services supported by the NMBP-01 Adapter Module are discussed in Chapter 6. Please refer to the user documentation of the drive as to which commands are supported by the drive.

The adapter module is mounted onto a standard mounting rail inside or outside the drive unit, depending on drive type and configuration. See the user's manual of the drive for module placement options.

The NMBP-01 module has multiple connectors on its front plate. These are shown in 'Figure 2-1" on page 2-3.
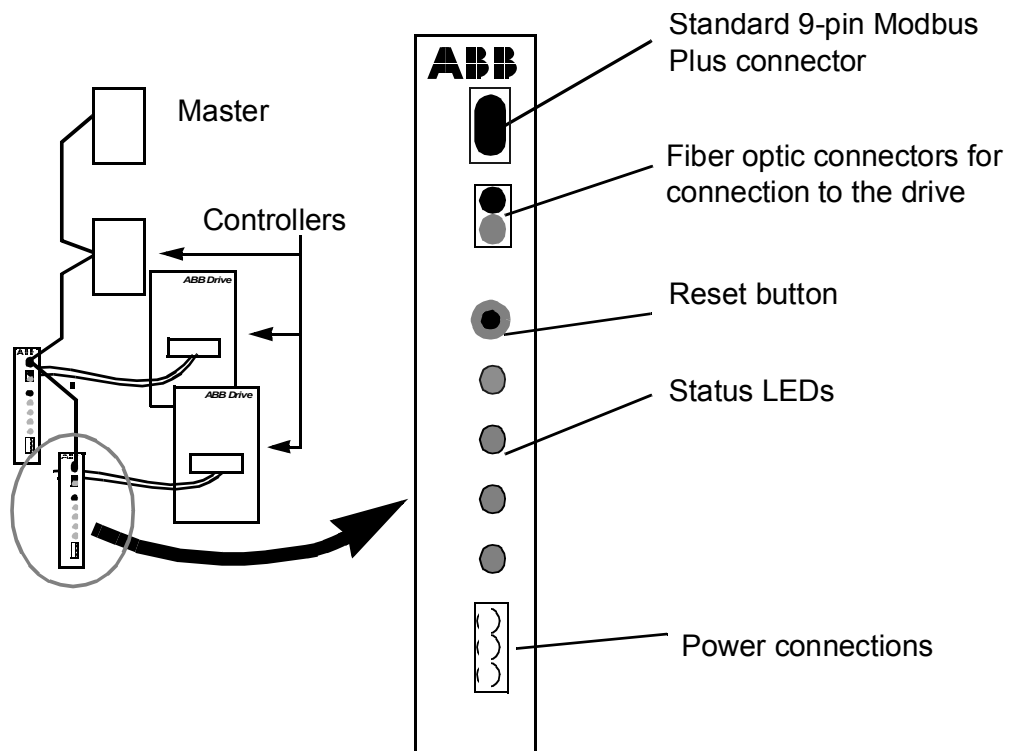
Standard 9-pin Modbus Plus connector

Fiber optic connectors for connection to the drive

Reset button

Status LEDs

Power connections

Master

Controllers

Figure 2-1 NMBP-01 Front Connections

Compatibility

The NMBP-01 has been tested and approved by Modicon as a part of the ModConnect program acceptance.

The NMBP-01 is compatible with:

- ACS 400
- ACS 600 SingleDrive
- ACS 600 MultiDrive
- ACS 600 MotionControl (ACP 600)
- ACS 600 CraneDrive (ACC 600)
- ACS 600 Pump and Fan Drive (ACF 600)
- DCS 500 (software version 21 x 226 or later)