SECTION 1 - INTRODUCTION

The IMCPM02 Communication Port Module connects the CTT02 Configuration and Tuning Terminal and/or an engineering work station (EWS) to a single INFI 90 process control unit (PCU). The IMCPM02 Communication Port Module is directly compatible with existing Network 90® and INFI 90 IMSPM01 Serial Port Module and IMCPM01 Configuration Port Module. The IMCPM02 module provides all the functions of the IMSPM01 and IMCPM01 modules and can be installed in PCUs that use either Controlway or module bus.

This manual explains the purpose, operation and maintenance of the IMCPM02 module. It explains handling cautions and steps for installation. Figure 1-1 shows the INFI 90 communication levels and where the IMCPM02 module is within these levels. Refer to the **Configuration and Tuning Terminal Type CTT02** instruction manual for more details about the configuration tuning terminal (CTT).

GENERAL DESCRIPTION

The IMCPM02 module is a microprocessor based single slot wide INFI 90 interface module that provides a local (within the PCU) means for system configuration, tuning and diagnostics. It interfaces the CTT terminal and EWS station to the Controlway through faceplate connectors. The IMCPM02 module enables the user to configure, tune and monitor the master modules and their function blocks. It can communicate with master modules in the PCUs that use either module bus or Controlway.

The IMCPM02 module has one two-color (red/green) LED and eight red LEDs for module status indication. There are two eight pole dipswitches that set the Controlway or module bus address, select baud rate and enable diagnostic testing. A reset switch is available through the faceplate. The IMCPM02 faceplate has two connectors. A DB-25 connector for the EWS port and a round 5-pin connector for the CTT terminal. A jumper array selects DTE, DCE or loopback operating mode for the EWS port.

The IMCPM02 module occupies a single slot in a standard INFI 90 module mounting unit (MMU). An optional termination unit can be connected through a cable for permanent mounting.

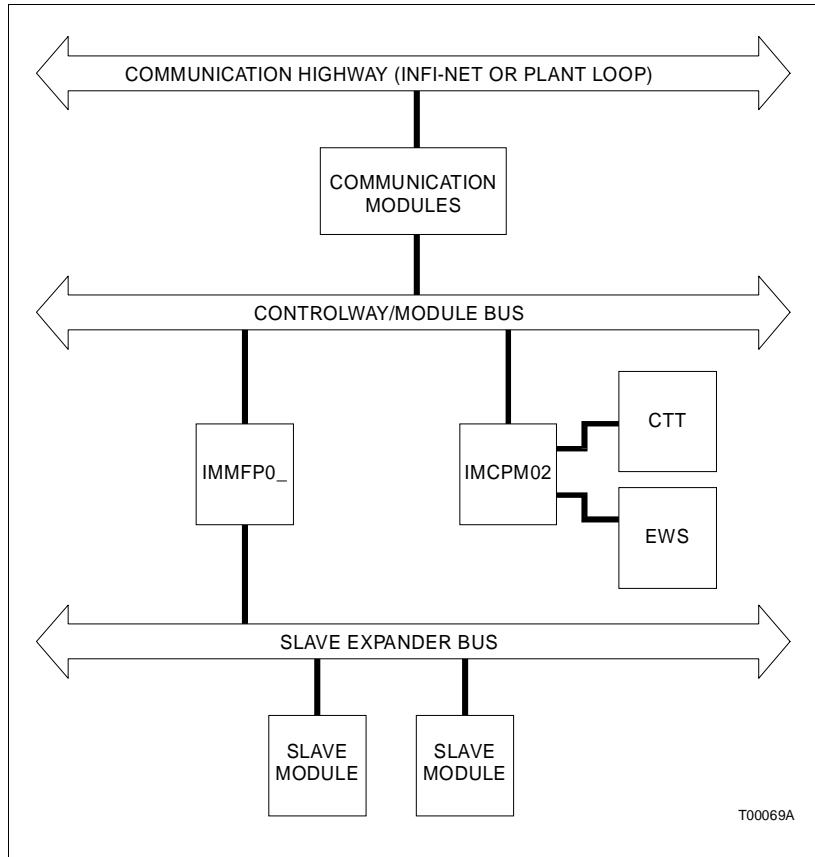® Network 90 is a registered trademark of Elsag Bailey Process Automation.

Figure 1-1. IMCPM02 Module Application Example

Faceplate

The faceplate measures 35.5 millimeters (1.4 inches) wide by 177.8 millimeters (7 inches) high. Two concentric screws lock the module assembly into the module mounting unit. A window on the faceplate shows the CPU LEDs during operation. Besides locking the module in place, the faceplate also protects the circuit components and creates a chimney for proper air flow within the cabinet.

The IMCPM02 module has two connectors on the faceplate. A CTT terminal plugs into the round connector and an RS-232-C cable from the EWS station plugs into the DB-25 connector.

Circuit Board

The circuit board features state-of-the-art circuitry. On the IMCPM02 circuit board are static random access memory (SRAM) and read only memory (ROM), a processor running at 16 megahertz, direct memory access (DMA) circuits, Bailey