SECTION 1 - INTRODUCTION

INTRODUCTION

The Communication Termination Unit (NTCL01) provides a termination point for a Network Interface Slave Module (INNIS01) or a Loop Interface Module (INLIM03). The TCL gives the option of using twinaxial or coaxial cable to connect the NIS to the INFI-NET communication network or the LIM to Plant Loop. Jumper settings on the TCL select the type communication cable. Figure 1-1 shows an example of the NTCL01 within a PCU on the INFI-NET communication network.

INTENDED USER

Technicians should read the manual before installing and operating the TCL. Do not put the TCL into operation until you read and understand this instruction.

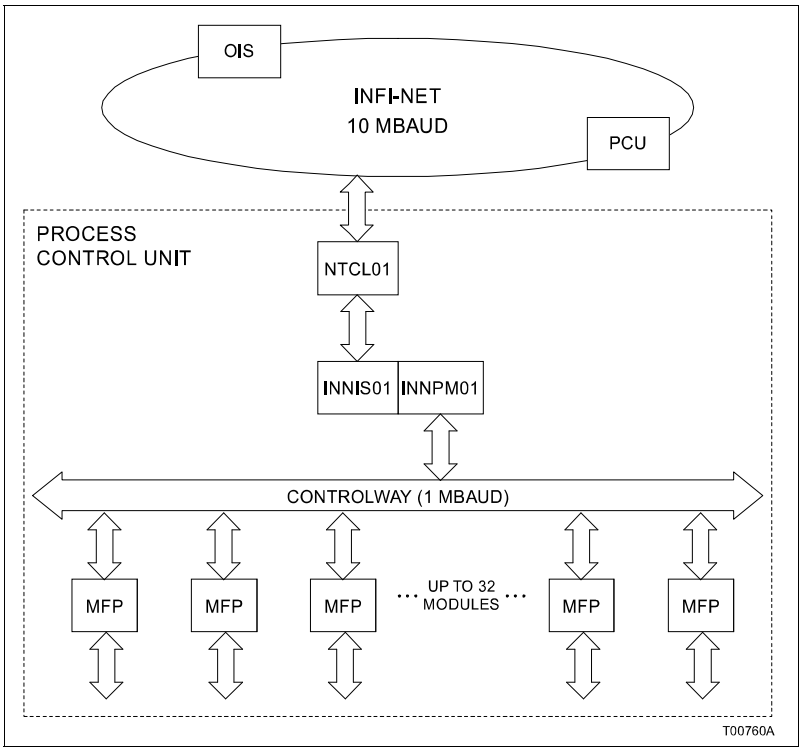

Figure 1-1. The NTCL01 within a PCU on INFI-NET

HARDWARE DESCRIPTION

The TCL attaches to a Field Termination Panel (NFTP01), inside the INFI 90® cabinet, with two mounting screws and one ground screw. It is a printed circuit board that consists of:

- Terminal strips
- BNC connectors
- Electronic components
- Jumpers
- Fuse

FEATURES

The NTCL01 provides connectors for both twinaxial cable and coaxial cable. Jumpers on the circuit board set the impedance to match the communication cable. The +24 VDC supplied to the board is fused, protecting the electronic circuitry on board.

INSTRUCTION CONTENT

This manual has five sections and two appendices.

Introduction — Provides an overview of the TCL.

Installation — Explains physical installation, wiring and cable requirements, jumper settings, etc.

Maintenance — Contains a maintenance schedule.

Repair/Replacement Procedures — Explains how to replace the fuse or the module.

Support Services — Explains training, documentation and how to order parts from Bailey Controls.

Appendices — Briefly discuss the modules that can use the TCL and provide a cross-reference of dipswitch and jumper settings for those modules.

HOW TO USE THIS MANUAL

Read this manual before installing the TCL. Do the installation steps in order. Do not operate the TCL until you complete all the steps in this section. Refer to the appendices for specific module and cable questions.

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GLOSSARY OF TERMS AND ABBREVIATIONS

Term	Definition
FTP	Field Termination Panel. A panel inside the INFI 90 cabinet on which to mount termination units.
TU	Termination Unit. Provides input/output connection between plant equipment and the INFI 90/Network 90 process modules.
Coaxial cable	A special type of communications cable that can transmit data at high speed.
Twinaxial cable	A cable composed of two insulated conductors that are twisted together and attached or bound with a common covering.

NOMENCLATURE

Hardware	Nomenclature
Network Interface Slave Module	INNIS01
Loop Interface Module	INLIM03
Cables	
Twinaxial Communication Cable	
(PVC, lugs at both ends)	NKPL01
(non-PVC, lugs at both ends)	NKPL02
TCL to INFI-NET Adapter Cable	NKTL01-3
Coaxial Communication Cable	
(PVC, BNC connectors)	NKCL01
(non-PVC, BNC connectors)	NKCL02
TCL to TCL Cable	NKTT01
TCL to LIM Cable	
(PVC)	NKLS03
(non-PVC)	NKLS13
TCL to NIS Cable	
(PVC)	NKLS01
(non-PVC)	NKLS11
Field Termination Panel	NFTP01

REFERENCE DOCUMENTS

Document No.	Document
I-E96-601	INFI-NET Communications Modules
I-E96-605	Bus Interface Module/Loop Interface Module

SPECIFICATIONS

Power Requirements	Voltage	24 VDC
	Current	19.7 mA maximum 15.8 mA typical
Mounting	Screw mounts to the field termination panel.	
Cooling Requirements	No cooling necessary when used in Bailey cabinets and operated within stated environmental limits.	
Operating Temperature	0^{o} to 70^{o}C (32^{o} to 158^{o}F).	
Relative Humidity	5% to 90% (± 5%) up to 55^{o}C (131^{o}F) noncondensing.	
	5% to 40% (± 5%) up to 70^{o}C (158^{o}F) noncondensing.	
Air Quality	Bailey equipment should be operated and stored in a noncorrosive environment.	
Certification	CSA certified as process control equipment for use in an ordinary (nonhazardous) location.	

Specifications are subject to change without notice.