



NIMF02

ABB Bailey INFI 90 Multi-Function Controller Termination Module

Product scope

- Extends multi-function controller termination for a redundant controller arrangement.
- Provides two RS-232-C ports and one control-station serial link.
- Draws a documented maximum of 160 mA from the +24 V DC supply.
- Uses one standard termination-mounting-unit slot without added cabinet cooling.

Manufacturer source

ABB Bailey instruction I-E96-413B

The exact product record precedes any retained manufacturer manual extracts. Only pages relevant to the current product identity and documented functions are included.

Request a fast quote	Product reference	
Email: info@apterpower.com Phone: +86 18106909650 apter.com/inquiry.php	NIMF02	

The enclosed manufacturer pages are reproduced without alteration to technical content. External interactive links and unrelated pages are excluded from this web-optimized copy.

NIMF02

ABB Bailey INFI 90 Multi-Function Controller Termination Module

Manufacturer-source product record

This page consolidates only model-specific facts verified in the manufacturer sources listed below. It is included to identify the exact ordering code before the retained manufacturer manual pages.

Module designation	NIMF02 Multi-Function Controller Termination Module
Redundancy role	Used with NIMF01 for redundant multi-function controller termination
Supply	+24 V DC
Current consumption	160 mA maximum; status LED 10 mA
Serial ports	Two RS-232-C ports
Station link	One serial link for control stations
Mounting	One slot in a standard termination mounting unit
Ambient temperature	0 to 70 deg C
Relative humidity	5 to 90%, noncondensing
Altitude	Up to 3 km

Official references

- ABB Bailey instruction I-E96-413B, NIMF01/NIMF02 termination modules.

No adjacent ordering option has been treated as part of this configuration. The complete label and installed-system requirements must be checked before replacement.

Function, operation and application

The following model-specific notes are limited to functions and operating relationships documented by the listed manufacturer sources.

Redundant-controller termination

NIMF02 is added to the NIMF01 termination arrangement when redundant multi-function controllers are used. Its purpose is to bring the second controller and the shared external communication paths into the documented redundant installation.

Communication routing

The module terminates two RS-232-C channels and the serial link used by control stations. These circuits provide the physical communication path; message handling and controller decisions remain functions of the connected multi-function controller.

Operating relationship

In a redundant application, the termination hardware preserves the specified cabling between both controller positions and the external serial devices. Correct cable identity and connector placement are essential because the termination module does not correct a crossed or incompatible serial connection.

Cabinet integration

NIMF02 occupies one standard termination-mounting-unit slot and uses +24 V DC at the documented current limit. ABB Bailey states that no additional cooling is required in the standard cabinet, provided the specified environmental limits and installation practices are maintained.

SECTION 1 - INTRODUCTION

OVERVIEW

The NIMF01 Multi-Function Controller Termination Module terminates two RS-232-C ports for the IMMFC03 Multi-Function Controller, INICT01 INFI-NET to Computer Transfer Module, INPPT01 Plant Loop to Plant Loop Transfer Module and INPCT01 Plant Loop to Computer Transfer Module. When terminating an IMMFC03 module, it enables the IMMFC03 module to communicate to a computer, terminal, printer or sequential events recorder through the serial ports (see Figure 1-1). It also provides a serial link for a NDCS03 Digital Control Station or IISAC01 Analog Control Station through a NICS01 Control I/O Termination Module. The IMMFC04 and IMMFC05 Multi-Function Controllers). use the NIMF01 termination mod-

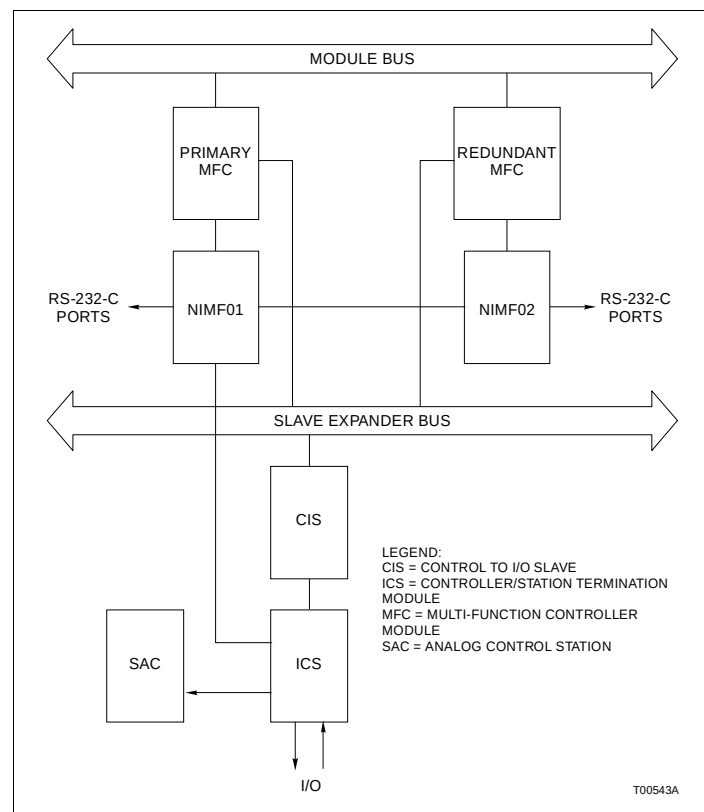


Figure 1-1. Example Redundant IMF Termination Module Application

INTRODUCTION



ule to terminate a station link and connect to a redundant controller.

The NIMF02 termination module is used in addition to the NIMF01 termination module when terminating redundant modules. Figure 1-1 shows an example redundant MFC application. Figure 1-2 shows an example Plant Loop to computer interface application. Figure 1-3 shows an example Plant Loop to Plant Loop interface application. The NIMF02 has on-board relays that allow one MFC module to communicate over the RS-232-C link during redundant operation.

INTENDED USER

System engineers and technicians should read this manual before installing and placing the multi-function controller termination module (IMF) into operation. **Do not** put the IMF module into operation until this instruction is read and understood.

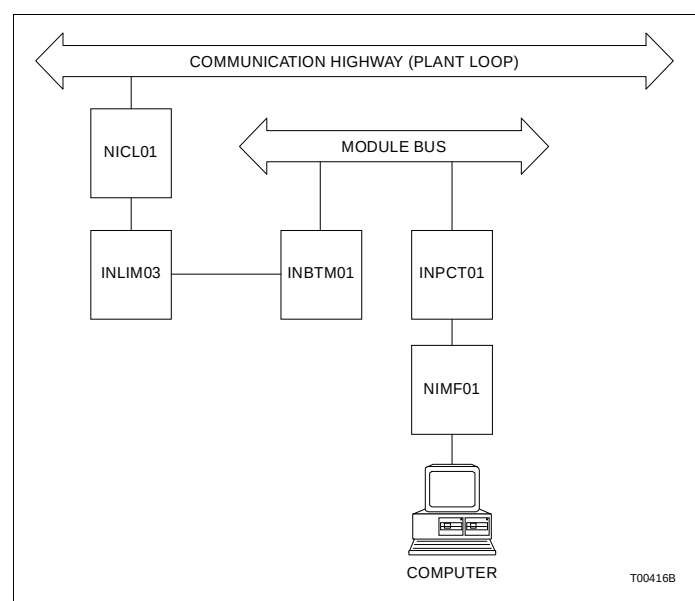


Figure 1-2. Example Plant Loop to Computer Interface Application

INTENDED USER

INTRODUCTION

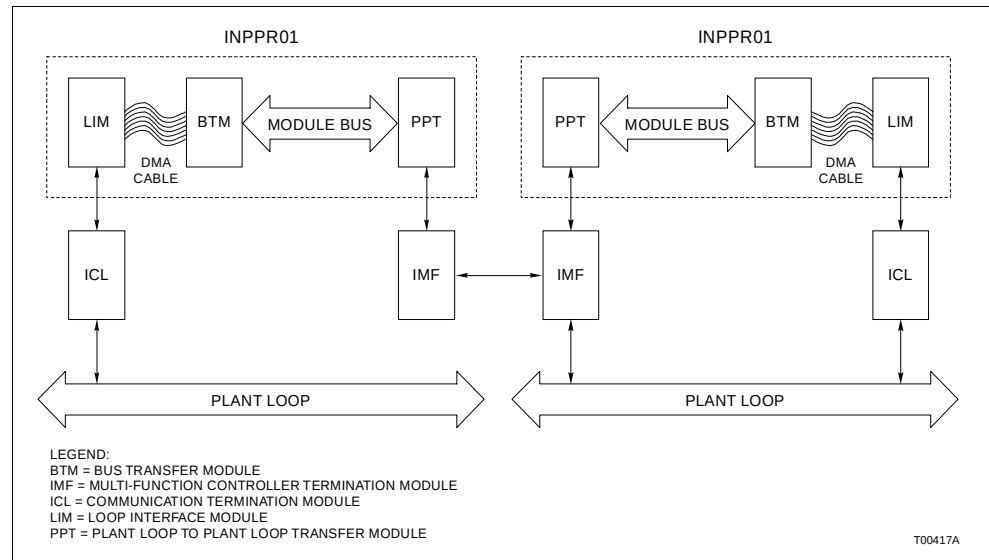


Figure 1-3. Example Plant Loop to Plant Loop Interface Application

MODULE DESCRIPTION

The IMF module is a single printed circuit board that uses one slot in an NTMU01 or NTMU02 Termination Mounting Unit (TMU). The board contains:

- Two DB-25 connectors.
- Relays (NIMF02 only).
- Connector sockets.
- Dipshunts.
- Light emitting diode (LED).
- Power terminals.
- Serial link terminals (NIMF01 only).

FEATURES

The IMF termination modules provide serial communication ports for modules. Dipshunts allow the termination module to be configured for operation as DTE or DCE. There is one serial link on the NIMF01 termination module that provides a communication link from a module to an analog control station or digital control station.

MODULE DESCRIPTION

I-E96-413B

1 - 3



INTRODUCTION

NOMENCLATURE

Table 1-3 is a list of related hardware. Hardware and cables with part numbers are listed in Table 1-4.

Table 1-3. Nomenclature

Nomenclature	Hardware
HCBL01	RS-232-C Cable
IISAC01	Analog control station
IMMFC03 IMMFC04 IMMFC05	Multi-function controller module
INICT01	INFI-NET to computer transfer module
NPCT01	Plant Loop to computer transfer module
INPPT01	Plant Loop to plant loop transfer module
NDCS03	Digital control station
NICS01	Control/station termination module
NIDS01	Digital station termination module
NKTM01	Termination module cable (ribbon)
NKTU02	Termination module cable (PVC)
NKTU12	Termination module cable (non-PVC)
NTMU01	Termination mounting unit (rear mount)
NTMU02	Termination mounting unit (front mount)

SPECIFICATIONS

Refer to Table 1-4 for the specifications of the NIMF01 and NIMF02 termination modules.

Table 1-4. Specifications

Property	Characteristic/Value
Power Requirements	+24 VDC 160 mA current consumption, maximum (the LED consumes 10 mA)
Communication	2 RS-232-C ports 1 serial link for stations
Cable Insulation Specifications	
PVC (UL Rating CL2)	80°C (176°F) at 300 V
Non-PVC (UL Rating PLTC)	90°C (194°F) at 300 V

NOMENCLATURE

INTRODUCTION

Table 1-4. Specifications (continued)

Property	Characteristic/Value
Mounting	Slides into a single slot in the termination mounting unit.
Electromagnetic Radio Frequency Interference	Values are not available at this time. Keep cabinet doors closed. Do not use communication equipment any closer than 2 meters from the cabinet.
Cooling Requirements	No cooling necessary when used in Bailey Controls cabinets and operated within stated environmental limits.
Operating Temperature	0°C to 70°C (32°F to 158°F)
Relative Humidity	5% to 90% up to 55°C (131°F) (noncondensing) 5% to 90% up to 70°C (158°F) (noncondensing)
Altitude	Sea level to 3 km (1.86 mi)
Air Quality	Bailey Controls equipment should be operated and stored in a noncorrosive environment.
Certification	All termination modules are CSA certified as process control equipment for use in an ordinary (nonhazardous) location.

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

SPECIFICATIONS

I-E96-413B

1 - 7



GLOBAL INDUSTRIAL AUTOMATION SOURCING

Ready to source this part?

Ask for availability, pricing and delivery options.

Request a fast quote

Include the product title and any required part number or quantity.

EMAIL

info@apterpower.com

PHONE

+86 18106909650

REQUEST A QUOTE

PRODUCT: NIMF02



SCAN TO CHAT ON WHATSAPP

Manufacturer pages are reproduced without alteration to technical content.

Apter Power is not an authorized distributor, reseller or representative of the products featured.