PLX800 FireClass FC700 Series Loop Expansion Card
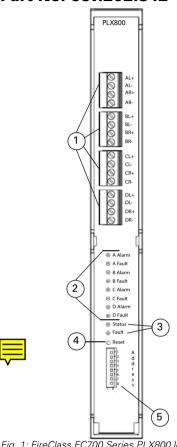## Part No. 557.202.842

Fig. 1: FireClass FC700 Series PLX800 loop expansion
slot card
1– Loop A, B,C,D connector plugs
2– Loop optical indicators
3– Slot card optical indicators
4– Reset button
5– DIP switch

Fig. 2: PLX800 terminals and jumpers
1– J1 - Boot mode jumper
2– XP2 - Debug port

Introduction

The PLX800 slot card is used to connect additional loops to a FireClass FC700 Series panel. When you configure the panel, you can configure the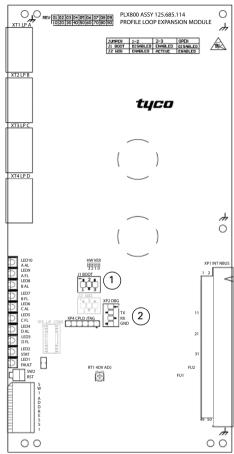 loop pair A,B typically as a single loop A, and the loop pair C,D typically as a single loop C. The PLX800 is suitable for use with the FC700 Series panels.

Cabling requirements

- Select all cables in accordance with local standards.
- Use cables with a maximum cross section of 2.5 mm^2.

■ Ensure that the polarity of signals is correct when you connect loops to the PLX800 card. For more information, refer to the FireClass FC700 Series Panel Installation Manual.

■ FireClass Loops are resilient to noise and approved for use without screened cables, however, screened cables may provide further resilience in harsher environments. If using screened cables, the screen or metal sheath must not be connected to the addressable loop conductors and must be floating relative to earth. It is not necessary to interconnect the screen or sheath between devices.

Installation

⚠️ **NOTICE**
Switch the panel off during the installation procedure.

To install the PLX800 card, complete these steps:

1 Set the J1 Boot Mode jumper to the position 1-2.

2 The PLX800 is pre-assembled. To mount it, line up the card against the side rails of the slot in the backplane cage. Slide the card backwards until it clicks and ensure that it fits firmly. For more information on slot cards, see the FireClass FC700 Series Panel Product Application and Design Information.

3 Connect the loop cables to the sub-loop connectors XT1, XT2, XT3, and XT4. Refer to Fig. 3.

Firmware update

If a PLX800 firmware update is required, refer to the steps in the relevant Technical Information Bulletin (TIB).

Slot card addressing

You can add PLX800 and PNI800 cards to the FireClass FC700 Series panel. Each card has its own configured system address which you set via the card address DIP switch. A maximum of 1 PLX800 slot card and 1 PNI800 slot card can be fitted. Refer to Table 1 for the slot card addresses.

Address	Type of card
001	PLX800
002	PNI800

Table 1: Slot card addressing

Optical Indicators

Check that all of the Alarm and Fault LED indicators are unlit. A lit loop Alarm (red) or Fault (yellow) LED indicates that there is an abnormal condition on that loop. The microprocessor status indicator is a green blinking LED when functioning normally. If the LED is on or off, it indicates that there is a fault. The card fault LED is yellow and on when functioning normally. Refer to Table 2 for more information on the microprocessor and the card indicators.

Optical Indicators	
Status (of microprocessor) [Green]	
ON:	Microprocessor failed
BLINK:	ON 0.5 / OFF 0.5:Normal function
	ON 0.1 / OFF 0.9:Firmware update mode
	ON 0.9 / OFF 0.1:Configuration mode
	ON 0.1 / OFF 0.1:Stand alone mode
OFF:	5V or 3.3V is missing
Fault (Card fault) [Yellow]	
ON:	PLX800 card fault
OFF:	No fault

Table 2: Optical indicators

Loop A left
Loop A right
Loop B left
Loop B right
Loop C left
Loop C right
Loop D left
Loop D right

REV

PLX800 ASSY 125.685.114
PROFILE LOOP EXPANSION MODULE

XT1 LP A
AL+
AL-
AR+
AR-

XT2 LP B
BL+
BL-
BR+
BR-

XT3 LP C
CL+
CL-
CR+
CR-

XT4 LP D
DL+
DL-
DR+
DR-

JUMPER
J1 BOOT
J2 BOOT

tyco

LED10
A AL
LED9
A FL
LED8
B AL
LED7
B FL
LED6
C AL
LED5
C FL
LED4
D AL
LED3
D FL
LED2
STAT
LED1
FAULT
SW2
RST

HW VER
3 2 1 0
J1 BOOT
1   2
3

XP2 DBG
TX
RX
GND

XP1 INT NBUS
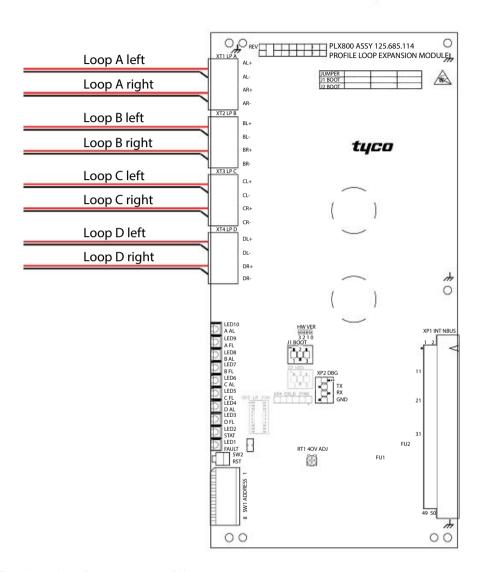1   2
11
21
31
FU2
FU1
49 50

RT1 4OV ADJ

SW1 ADDRESS 1
8

Fig. 3: Installation of loop cables to the PLX800

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