



GENERAL MONITORS
Protection for life.

MODEL TA402A

Single-Channel Trip Amplifier Module



Features

- RS-485 Serial Communications
- Digital Display
- LED Status Indication
- Relay, Open Collector Alarm & Fault Outputs
- User Setup, Setup Check Modes
- Live Insertable into Rack
- Password Option

Benefits

- Remote set up and interrogation via General Monitors' Model CC02A communications module
- Provides visual indication of alarm status and setup cues
- Provides visual indication of fault status
- Multiple outputs for multi-function use
- Configuration easy to setup or change
- Ease of maintenance
- Tamper-proof operation

Description

The General Monitors Model TA402A is a single-channel trip amplifier module that has been designed for use with General Monitors' FL3100 series flame detectors. It is designed to monitor for the presence of fire and provide status indication and alarm outputs.

Microprocessor-based electronics allow all options to be user selectable through front panel interface (mode/select switch and digital display). A digital display on the TA402A indicates fault codes and set up options. Other features of the TA402A are LED indications of status, as well as both open collector and relay outputs for fault, low alarm and high alarm.

Each module has RS-485 serial communications providing an interface with a General Monitors Model CC02A MODBUS communications module. Fault and alarm status, as well as setup options, can be configured via the CC02A module.

The TA402A is part of the Zero Two Series Gas and Fire Detection System which is a flexible solution for various combustible, toxic gas and fire detection applications. All of the Zero Two Series system cards are completely compatible and can be

intermixed within the same rack if required. The Zero Two Series Rack includes options of 4, 8 or 16 channels and provides a bus of common terminals to each channel.

Applications

- Refineries
- Drilling Platforms and Rigs
- Fuel Loading Facilities
- Compressor Stations
- LNG/LPG Processing and Storage Facilities
- Chemical Plants
- Gas Collection and Distribution Facilities
- Gas and Oil Production Platforms
- Aircraft Hangars



MODEL TA402A

System Specifications

Front Panel Indicators:	A1 - Warning A2 - Alarm READY - Normal Operation FAULT - Malfunction SETUP - User Options/Check DISPLAY - 2x7 Segment
Test Features:	Power on - Electronic Integrity Card - Functionality & Alarm Ramp LED - Integrity of LED's & Display
Modes:	Setup, Setup Check & Inhibit outputs
Password:	Prevents unauthorized alteration of setup parameters (can be disabled)
Standards:	Complies with NFPA 72
Classification:	<i>TA402A</i> General purpose, non-hazardous areas <i>Detectors</i> Explosion-proof
Warranty:	Two years
Approvals:	CSA, CE Marking, GOST

Environmental Specifications

Operating Temperature Range:	<i>TA402A:</i> 0°F to +150°F (-18°C to +66°C) <i>FL3100/3101:</i> -40°F to +185°F (-40°C to +85°C) <i>FL3102:</i> -40°F to +167°F (-40°C to +75°C) <i>FL3112:</i> -58°F to +176°F (-50°C to +80°C)
Storage Temperature Range:	-40°F to +150°F (-40°C to +66°C)
Operating Humidity Range:	5% to 100% RH, non-condensing
EMC Susceptibility:	10V/m max.

Mechanical Specifications

Length:	9.9 inches (251mm)
Height:	6.8 inches (173mm)
Width:	1.0 inch (25mm)
Weight:	11.2 ounces (318 grams)

Electrical Specifications

Power:	20-36 VDC @ 425mA max., including Detector
Input Impedance:	30 ohms
Relay Ratings:	4A @ 250 VAC / 3A @ 30 VDC 30V RMS/42.4 peak, resistive max. A1, A2 - DPDT Fault - SPDT
Analog Signal:	0 - 20 mA (300 ohms max. load) Malfunction - 0mA Setup/Check - 1.5mA Ready - 4mA IR Radiation - 8mA (UV/IR) UV Radiation - 12mA (UV/IR) Warning - 16mA Alarm - 20mA
Open Collector Ratings:	100 mA @ 35 VDC max. A1, A2, Fault, LA1, LA2, CAL, FUA, UA
Cable Requirements:	3 wire shielded cable. Max. allowable distance between detector & TA402A @ 24 VDC nominal: 14AWG - 4500 ft. (1372m) Max. allowable distance for analog output (300 ohms loop resistance max. between AO+ and AO-): 14AWG - 9000 ft. (2740m)
Standard Configuration:	TA402A-1-6-1 Latch alarm, non-latch warn, de-energized 4 sec. delay

Specifications subject to change without notice.

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