



MODEL EXI MIC1
INSTALLATION AND SERVICE INSTRUCTIONS
FOR FEDERAL MODEL EXI MIC1
INTRINSICALLY SAFE MICROPHONE

**INSTALLATION AND SERVICE INSTRUCTIONS
FOR
EXI MIC1 INTRINSICALLY SAFE MICROPHONE**

** SAFETY MESSAGE TO INSTALLERS, USERS
AND MAINTENANCE PERSONNEL**

It is important to follow all instructions shipped with this product. This device is to be installed by trained personnel who is thoroughly familiar with the country electric codes and will follow these guidelines as well as local codes.

The selection of mounting location for the device, its controls and the routing of the wiring is to be accomplished under the direction of the facilities engineer and the safety engineer. In addition, listed below are some other important safety instructions and precautions you should follow:

- Read and understand all instructions before installing or operating this equipment.
- Disconnect device from the power supply before any installation or maintenance is performed.
- After installation, test the unit to ensure that it is operating properly.
- After testing is complete, provide a copy of this instruction sheet to all operating personnel.
- Establish a procedure to routinely check the installation for integrity and proper operation.
- The product marking, which may contain cautionary or other information of importance to maintenance personnel, should not be obscured in any way.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death.

I. INSTALLATION.

A. Unpacking.

After unpacking the unit, examine it for damage that may have occurred in transit. If the equipment has been damaged, do not attempt to install or operate it. File a claim immediately with the carrier stating the extent of the damage. Carefully check all envelopes, shipping labels, and tags before removing or destroying them.

B. Mounting and Wiring.

The EXi MIC1 is designed for mounting on a flat vertical or horizontal surface.

Surface Mounting and Wiring Instructions.

1. Unit is to be mounted using user provided stainless steel screws through the three mounting holes located on the microphone base.



The appropriate grounding conductor must be grounded to earth to reduce the risk of electrostatic discharge.

2. Refer to the Typical Wiring Diagram, Section V, for wiring details.

II. MAINTENANCE.

SAFETY MESSAGE TO MAINTENANCE PERSONNEL

Listed below are some important safety instructions and precautions you should follow:

- Read and understand all instructions before operating this unit.
- Any maintenance to the unit must be performed by properly trained personnel.
- Any maintenance to the unit must be done with the power turned off.
- Do not service when a hazardous atmosphere is present.
- Never alter the unit in any manner. Safety may be endangered if alterations are made to the unit.
- Only factory provided service parts are to be used. Only these components have been verified and certified for use in hazardous areas.
- No repairs or modifications are to be made to the microphone element as this will invalidate the certification.
- The nameplate or markings, which contain cautionary or other information of importance to maintenance personnel, should not be obscured.
- After performing any maintenance, test the unit to ensure that it is operating properly.
- To reduce the risk of electrostatic discharge, wipe unit with a damp cloth only.

A. *Routine Checks.*

Ensure that the unit is maintained in line with the regulations in force and at regular intervals, at least once per year.

1. Check for external damage and corrosion and repair/replace as necessary.
2. Check for water or dust ingress and repair/replace as necessary.
3. Check all earth connections and verify continuity.

B. *Replacement Parts.*

Contact the factory for spare parts availability and part numbers.



III. CERTIFICATION.

Model: Exi MICI Microphone

Certified To: EN60079-0:2006 Electrical apparatus for explosive gas atmospheres
- Part 0: General requirements.



EN60079-11:2007 Explosive atmospheres - Part 11: Equipment
protection by intrinsic safety "i".

Certificate No: Baseefa07ATEX0105X

ATEX Coding:   1G

Protection: Ex ia IIC T6

Temperature: -35°C to +50°C

Where: -  indicates compliance with directive 94/9/EC
 hexagon symbol, the specific marking of explosion protection
1 indicates suitability for use in a Zone 0 area
G indicates suitability for use in the presence of gases
ia indicates intrinsically safe protection
IIC indicates gas group Acetylene & Hydrogen
T6 indicates a maximum surface temperature of 85°C (185°F)

Input Parameters:

Max Voltage (Ui) = 12 V
Max Current (Ii) = 26 mA
Max Capacitance (Ci) = 0
Max Inductance (Li) = 25.2 mH

Conditions of Safe Use:



This apparatus must be earthed to reduce risk of electrostatic charging.

IV. SERVICE.

The Federal Signal factory will service your equipment or provide technical assistance with any problems that cannot be handled locally.

Any units returned to Federal Signal for service, inspection, or repair must be accompanied by a Return Material Authorization. This R.M.A. can be obtained from a customer service representative at Federal Signal.

At this time a brief explanation of the service requested, or the nature of the malfunction, should be provided.

Address all communications and shipments to:

FEDERAL SIGNAL CORPORATION
Industrial Products
Service Department
2645 Federal Signal Drive
University Park, IL 60466-3195

V. TYPICAL WIRING DIAGRAM.

See figure 1.

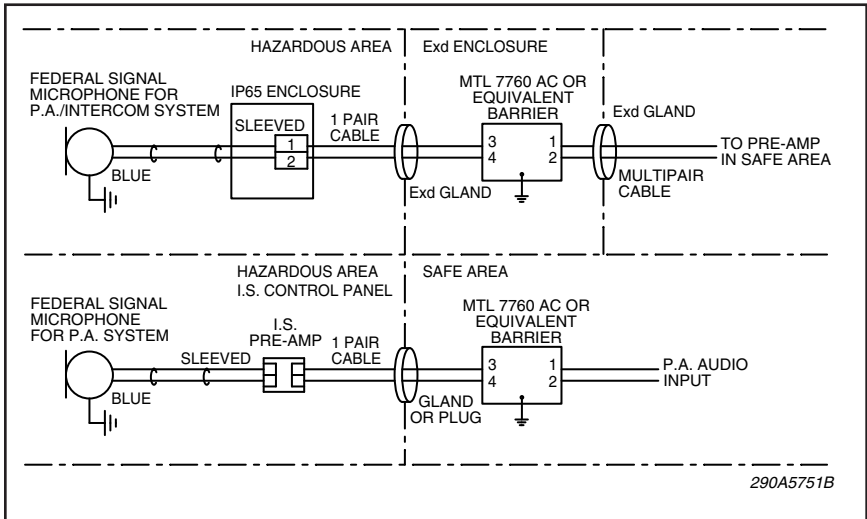


Figure 1.

