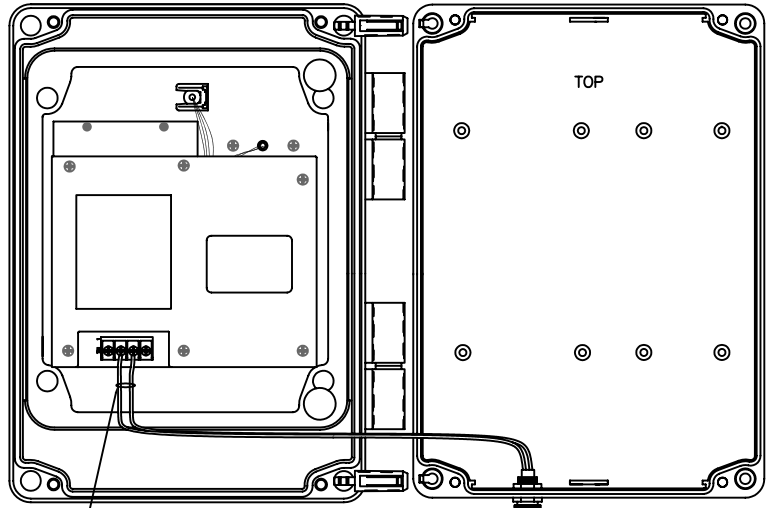


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REVISIONS				
REV.	DESCRIPTION	ENGR.	APVD.	DATE
A	INITIAL RELEASE, NEVER PRELIM. / RWD	AFB	JJP	1/17/06
B	REV. PER ECH #08-040 / AEX	AFB	RWD	2/21/06
C	REV. PER ECH #E07C052A / JJP	AFB	RWD	3/30/07



INTRINSICALLY SAFE WIRING TERMINATIONS SEE NOTE 2

FRONT VIEW (MID-SECTION SHOWN OPEN)

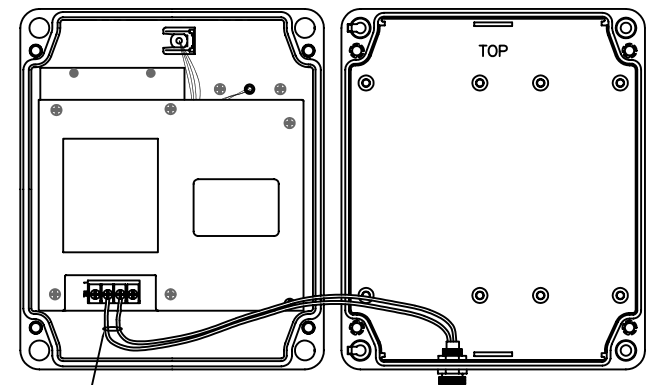
GLAND BUSHING PROVIDED

CONNECT TO EITHER MODEL 263 ISOLATION BARRIER UNIT OR TO MODEL 267 I.B.U. CARD RACK (SHEET 2 OF 2)

CUSTOMER INSTALLED INTRINSICALLY SAFE WIRING FOR HAZARDOUS AREA MUST NOT EXCEED (1) ONE MILE FOR CABLE RATED A MAXIMUM OF 60 pf/ft. FOR A MAXIMUM LENGTH OF 1-1/2 MILES, CUSTOMER MUST USE CABLE MANUFACTURED BY CLIFFORD, INC., TYPE REA SPEC PE-54 (RATED 0.083 uf/ml.) OR MANUFACTURED BY MADISON CABLE CORP. OR MONTRORSE PRODUCTS, TYPE TC (RATED 39.8 pf/r).

**MODEL 272-001
OUTDOOR I.S. PHONE**

HAZARDOUS AREA (CLASS I, GROUPS A,B,C,D; CLASS II, GROUPS E,F,G; CLASS III)



INTRINSICALLY SAFE WIRING TERMINATIONS SEE NOTE 2

FRONT VIEW (SHOWN OPEN)

GLAND BUSHING PROVIDED

CONNECT TO EITHER MODEL 263 ISOLATION BARRIER UNIT OR TO MODEL 267 I.B.U. CARD RACK (SHEET 2 OF 2)

CUSTOMER INSTALLED INTRINSICALLY SAFE WIRING FOR HAZARDOUS AREA MUST NOT EXCEED (1) ONE MILE FOR CABLE RATED A MAXIMUM OF 60 pf/ft. FOR A MAXIMUM LENGTH OF 1-1/2 MILES, CUSTOMER MUST USE CABLE MANUFACTURED BY CLIFFORD, INC., TYPE REA SPEC PE-54 (RATED 0.083 uf/ml.) OR MANUFACTURED BY MADISON CABLE CORP. OR MONTRORSE PRODUCTS, TYPE TC (RATED 39.8 pf/r).

**MODEL 262-001
INDOOR I.S. PHONE**

DO NOT CHANGE WITHOUT UL APPROVAL

PUB. 42004-380C

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE:		JOB DWG. No.		GAI-TRONICS CORPORATION READING, PA 19607 USA	
FRACTIONS DECIMALS ANGLES ± 1/64 ± .002 ± 1°		CONTRACT No.		MODEL 272-001 & 262-001 INTRINSICALLY SAFE PHONES CONTROL DRAWING	
MATERIAL	APPROVALS	DATE	SIZE / FSCM No.	DWG. No.	REV.
FINISH	DRAWN RWD	1/16/06	D	73242	C
DO NOT SCALE DRAWING	ENGR. AFB	1/17/06	SCALE 5/8		
	APVD. JJP	1/17/06			

WARNING - CUSTOMER MUST INSTALL #12 AWG WIRES FROM EACH I.S. GROUND TERMINAL TO THE EARTH GROUND BUS OF THE AC POWER SUPPLY FEEDER CIRCUIT. THE RESISTANCE BETWEEN THE I.S. GROUND TERMINALS AND AC EARTH GROUND BUS MUST BE LESS THAN 1 OHM.

INTRINSICALLY SAFE WIRING FROM I.S. PHONE (SHEET 1 OF 1)

WARNING: THE INTRINSICALLY SAFE TERMINATIONS FROM EACH MODEL 69189-002 SHUNT DIODE BARRIER MUST ONLY BE CONNECTED TO ONE MODEL 262-001 OR 272-001 I.S. TELEPHONE. MULTIPLE TELEPHONES SHALL NOT BE CONNECTED TO ONE SHUNT DIODE BARRIER. I.S. WIRING MUST BE MADE SECURE, AS SHOWN, AND SEPARATED FROM ALL NON - I.S. WIRING, IN ACCORDANCE WITH NEC ANSI/NFPA 70, ARTICLE 504.

CABLE SHIELD MUST BE CONNECTED TO I.S. GROUND TERMINAL VIA QUICK CONNECT TERMINAL (TYPICAL FOR EACH I/S PHONE WIRING)

CAPTIVE GROUND SCREW TO BE INSTALLED INTO REAR OF MODEL 266 POWER SUPPLY UNIT

CUSTOMER SUPPLIED, UL LISTED, AC CABLE (18 TO 14 AWG, MAX.) MUST BE MADE SECURE AND SEPARATED FROM I.S. CIRCUITS AND I.S. WIRING IN ACCORDANCE WITH NEC ANSI/ NFPA 70, ARTICLE 504.

CUSTOMER INSTALLED REDUNDANT EARTH GROUNDS #14 AWG WIRE MIN.

WARNING - CUSTOMER MUST INSTALL #14 AWG WIRES FROM EACH I.S. GROUND TERMINAL TO THE EARTH GROUND BUS OF THE AC POWER SUPPLY FEEDER CIRCUIT.

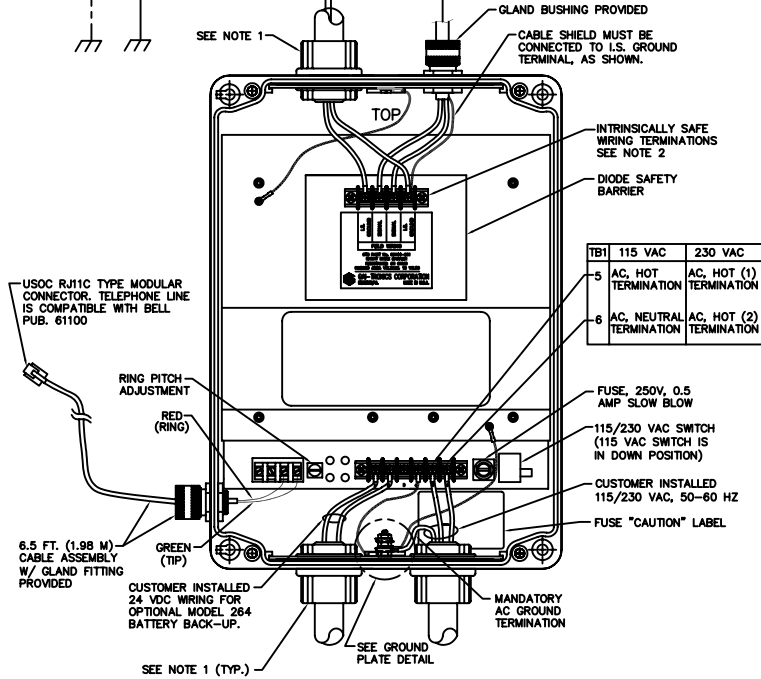
INTRINSICALLY SAFE WIRING TERMINATIONS TYP. (SEE NOTE 1)

DIODE SAFETY BARRIERS 1 REQUIRED PER EACH MODEL 265 I.B.U. LINE CARD AND I/S PHONE

MODEL 265 I.B.U. CARD (TYP.)

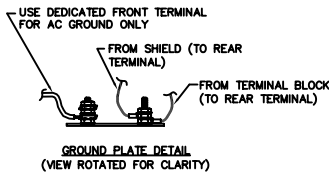
#14 AWG REDUNDANT GROUND HARNESS WIRES
REAR VIEW
SUB RACK ASSEMBLY W/ IBU

**MODEL 267
RACKMOUNT I.B.U.**



FRONT VIEW
ISOLATION BARRIER ENCLOSURE

**MODEL 263
ISOLATION BARRIER UNIT**



GROUND PLATE DETAIL
(VIEW ROTATED FOR CLARITY)

NON-HAZARDOUS AREA

- NOTES:
- CUSTOMER TO USE CHASSIS PUNCH OR HOLE SAW (RANGING FROM 1-1/8" TO 1-7/16") TO PROVIDE CONDUIT ENTRANCE WHERE REQUIRED. USE MYERS .75" SCRU-TITE HUBS SUITABLE FOR TYPE 3R ENCLOSURE RATING. USE REDUCERS FOR SMALLER CONDUIT SIZES.
 - INTRINSICALLY SAFE WIRING MUST BE INSTALLED IN ACCORDANCE WITH NEC ANSI/NFPA 70, ARTICLE 504. EACH I.S. CONDUCTOR MUST HAVE A MINIMUM INSULATION THICKNESS OF 0.01" (.254 mm).
 - WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY.
 - WARNING: TO INSURE INTRINSIC SAFETY, CONDUIT ENTRIES AND ALL WIRING SHALL BE LOCATED AND ROUTED AS SHOWN.
 - NEVER INSTALL TELEPHONE WIRING DURING A LIGHTNING STORM.
 - NEVER INSTALL TELEPHONE JACKS IN WET LOCATIONS UNLESS THE JACK IS SPECIFICALLY DESIGNED FOR WET LOCATIONS.
 - NEVER TOUCH UNINSULATED TELEPHONE WIRES OR TERMINALS UNLESS THE TELEPHONE LINE HAS BEEN DISCONNECTED AT THE NETWORK INTERFACE.
 - USE CAUTION WHEN INSTALLING OR MODIFYING TELEPHONE LINES.

PUB. 42004-380C

GAI-TRONICS CORPORATION
READING, PA 19607 USA

MODEL 272-001 & 262-001
INTRINSICALLY SAFE PHONES
CONTROL DRAWING

SIZE	FSCM NO.	DWG. NO.	REV.
D		73242	C
SCALE 5/8		SHEET 2 OF 2	