Mine Dial / Page Telephone

Models 491-204 and 495-001

GAI-TRONICS® HUBBELL

Features

- **Selective and All-Call Paging**
- **Private Conversations**
- **Can place and receive outside calls**
- **Each station allows simultaneous, independent conversations on each phone**
- **Emergency page function is automatically enabled if switchboard is out of order, or if power fails**
- **Flashing light designed for use in noisy areas where a ring might not be heard; light also improves ability to locate phone in dark areas**
- **For ease of installation, each interface cabinet supports up to 80 extensions**
- **8-hour battery backup**

The GAI-TRONICS Mine Dial/Page Phone system provides the convenience of a telephone station plus paging capabilities, in gaseous or dusty locations where standard telephone equipment is considered too hazardous. Mine Dial / Page Telephones are rated as "permissible" for use in coal mines by the Mine Safety and Health Administration (MSHA) of the United States Department of Labor (Approval 9B-221).

The System is used in conjunction with a public or private branch exchange (PBX). Each station in the system is made up of three components; (1) the Mine Dial/Page Phone station mounted at the point where needed, (2) a GAI-TRONICS interface card mounted outside the hazardous area and electrically connected between the station and the telephone exchange, and (3) an interface cabinet. The GAI-TRONICS Interface Cabinet houses MSHA approved safety barriers, interface cards, electronic switching, power source, and all the equipment necessary to interface the Mine Dial/Page Phone with the customer's plant telephone system.

Once installed, the Mine Dial station can place a call to any Mine Dial/Page Phone, generate a page to a specific Mine Dial/Page Phone, page all Mine Dial/Page Phones, or place a call to a standard telephone. For maximum safety, in the event of a power failure or if the switchboard is down for any reason, the Mine Dial/Page Phone can still generate pages and allow two-way communication.

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MODEL 491-204 MINE DIAL/PAGE PHONE

Line Voltage: ..... 12 V dc
Supervisory Current: ..... 20 mA DC, max.
Audio impedance, input: ..... 200 ohms, nominal
External controls (2): ..... Push-to-operate (in handset)
Emergency Page (on panel)
Internal Controls (2): ..... Speaker volume sidetone
Microphone: ..... Dynamic, noise-canceling
Speaker: ..... Dynamic, horn-loading
Power Supply: ..... Internal dry battery, 12 volts
Page/Indicator Lamp: ..... 66 Flashes per minute; 6.6% duty cycle
Approvals: ..... MSHA Permissible, Approval Number 9B-221

MODEL 495-001 INTERFACE CABINET

Number of Channels: ..... 80 Max.
Audio Impedance, switchboard: ..... 600-900 ohms
Metering: ..... Power supply voltage; load current;
Battery charging current
Transient Isolation - Telephone circuit to corresponding mine circuit: ..... 500 volts min.
Transient Limiter - across mine lines: ..... 25 volts, peak
Normal Power Requirements: ..... 120 volts, 50-60 Hz.
Standby Power Operation: ..... 8 hours, minimum via rechargeable battery

SWITCHBOARD REQUIREMENTS

Station Selection: ..... DTMF (Dual Tone Modulation Frequency) Operation
Ringing: ..... Bridged across line 85 volts nom., 20 Hz.
Open-circuit voltage: ..... 48 V dc nominal
Supervisory Current: ..... 50 mA., 20 mA min.
Auxiliary Requirements: .....
1. Page Audio: 0 dBm, 600-900 ohms
2. Page Control: "A" contact, normally open
3. Monitor: 48 V dc nom., 1200 ohms, max. source/line resistance

Distributor:

GAI-TRONICS®

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