

EXT SERIES

EXT-401 Explosion Proof Telephone



EXT-401
Explosion Proof
Telephone with
CE20 Explosion
Proof Ringer.

EXT SERIES OUTDOOR/INDOOR INDUSTRIAL ANALOG HAZARDOUS TELEPHONES

- EXT-401 - 8 VARIATIONS: 1. Base Model / 2. CE20 Ringer, Backplate / 3. RDR / 4. RDR, CE20, Backplate / 5. RDR, Headset / 6. Headset instead of Handset / 7. RDR, Headset, CE20, Ringer, Backplate / 8. Headset, CE20 Ringer, Backplate
- HS-EXT-401 HEADSET - Field replacement for standard handset on EXT-401 telephone

FEATURES and BENEFITS

- Over-sized buttons for gloves-on operation
- Corrosion and moisture resistant circuitry
- Intrinsically safe handset with heavy duty cord
- Field replaceable handset and fuse
- Explosion proof, no isolation barrier required
- Copper-free cast aluminum housing
- Temperature range -40°F to +140°F (-40° to +60°C)
- Alternate models available with volume control in lieu of Link and Redial

APPLICATIONS

These telephones are designed for use in locations with the highest hazardous area classifications such as:

- | | |
|------------------------|---------------------------------------|
| Chemical Plants | Defense & Aerospace Installations |
| Petrochemical Plants | Munitions Storage Depots |
| Offshore Drilling Rigs | Land-based Drilling Rigs |
| Missile Silos | Liquefied Natural Gas Terminals |
| Gas Plants | Tankers and Tanker Depots |
| Refineries | Oil & Gas Metering Facilities |
| Fueling Stations | Paint & Varnish Manufacturing Plants |
| Bulk Loading Stations | Grain Processing & Similar Industries |
| Fertilizer Plants | Breweries and Distilleries |
| and more . . . | |

EX RANGE OF TELEPHONES

Guardian's EX RANGE are explosion proof equipment intended for use in the highest area classifications. These products are designed and constructed to contain explosions within the equipment. This prevents an explosion from igniting the hazardous atmosphere outside the unit.

EXT SERIES OF TELEPHONES

Guardian's EXT Explosion Proof Phone SERIES provides safe and reliable communications for Class I Division 1 and Class 2 Division 1 areas deemed to be hazardous due to the presence of flammable gas, vapor and dust.

INSTALLATION and CONNECTABILITY

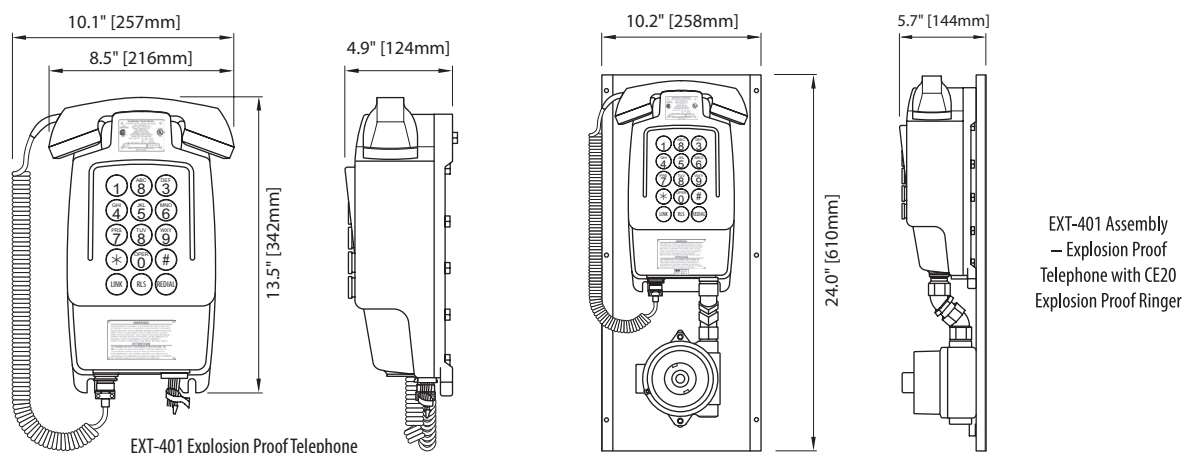
To provide flexibility and potential for growth, Guardian telephones are easily and economically connected to any telephone network by standard wiring and components. Voice quality is unaffected when phones are connected within 15,000 feet (~ 4,600 metres) of a main telephone switch accepting single line telephones. Maintaining safety standards may require use of special wiring conduits or other considerations. The phone can be factory set for either tone or pulse operation.



tough. trusted. true.



OVERALL DIMENSIONS



EXT-401 Explosion Proof Telephone

EXT-401 Assembly
— Explosion Proof
Telephone with CE20
Explosion Proof Ringer

ENGINEERING SPECIFICATIONS

ELECTRICAL PERFORMANCE

Audio Range Frequency Response	300 - 3400 Hz
Dialing method	DTMF or 40/60 Pulse @10 PPS
Transmit Objective Loudness Rating (TOLR)	Nominal -38 +/- 3 dB
Receiver Objective Loudness Rating (ROLR)	Nominal 50 +/- 3 dB
— receiver volume at maximum	41.9 +/- 3 dB
— receiver volume at minimum	55.4 +/- 3 dB
Side Tone Objective Loudness Rating (SOLR)	Nominal 8 +/- 4 dB
— receiver volume at maximum	7 +/- 4 dB
— receiver volume at minimum	14 +/- 4 dB
Ringer Equivalence Number-REN	0.4A w/o RDR, 0.8B c/w RDR
Flash	600 mSec Timed Disconnect
Redial	Maximum 13 Digits
CE20 Ringer Output	≥75 dB
Set Impedance	600 Ohms Nominal
Maximum Loop	15Kft (~ 4,600m) of 22 AWG Wire

ELECTRICAL REQUIREMENTS

Ringer Sensitivity	40 -100 V, 16 - 25 Hz
Line Voltage	24 - 56 VDC
Loop Current	20 - 120 mA
Connection Method	Sealed External Wire
Fuse (Externally Accessible)	0.25 Amp 2AG Fast Acting

MECHANICAL SPECIFICATIONS

Hook Switch (Cradle Switch) Life	>1 000 000 Operations
Body Construction	Cast Copper Free Aluminum
Finish	Hybrid Powder Coat Finish
Net Weight: EXT-401	21.0 lbs (9.6 kg)
EXT-401 Assembly	32.0 lbs (14.5 kg)
Shipping Weight: EXT-401	22.0 lbs (10 kg)
EXT-401 Assembly	33.0 lbs (15 kg)
Shipping Dimensions (L x W x D)	EXT-401 16.0" x 10.5" x 9.5" (407 x 267 x 242 mm)
EXT-401 Assembly	15.0" x 28.0" x 11.0" (381 x 711 x 280 mm)
Hand Set Construction	High Impact Polycarbonate
Hand Set Cord	10 ft (3m) Field Replaceable Low Temperature Polymer Jacket
Mounting	Vertical Wall
Microphone	Dynamic
Receiver	Hearing Aid Compatible
Hardware Material	Stainless Steel

ENVIRONMENTAL

Waterproof Enclosure	CSA Type 4
Temperature	-40° to +140°F (-40° to +60°C)
Humidity	0 - 95% RH Non-Condensing
Corrosion Resistant	Epoxy Coated Circuit Boards

COMPLIANCE

Industry Canada
CSA & UL



Models with Volume Control — 1012.6721 A
CSA 158194 & UL E117495

Class I, Div. 1, Groups B, C and D; Class II, Div. 1 and 2, Groups E, F and G
C22.2 No. 30 - M1986 / C22.2 No. 157 - 92
Intrinsically Safe and Non-incendive Equipment For Use in Hazardous
Locations, Gaseous Mines, NRCan Certificate No. 976X

ORDERING INFORMATION

Warranty: Five years parts and labor

Order No.	Description
The following models have LINK & REDIAL Buttons, they do not have Volume Control	
P4011	Base Model*
P1011	CE20 Line Powered Ringer / Backplate
P4021	Ring Detect Relay (RDR)*
P1021	Ring Detect Relay (RDR) / CE20 Line Powered Ringer / Backplate
P4022	Ring Detect Relay / Headset
P4023	Headset (in lieu of Handset)
P4036	Ring Detect Relay (RDR) / Headset / CE20 Line Powered Ringer / Backplate
P4038	Headset / CE20 Line Powered Ringer / Backplate
On the following models Volume Control Buttons replace LINK & REDIAL	
P4012	Base Model*
P4030	CE20 Line Powered Ringer / Backplate
P4031	Ring Detect Relay (RDR)*
P4032	Ring Detect Relay (RDR) / CE20 Line Powered Ringer / Backplate
P4033	Headset (in lieu of Handset)
P4034	Headset / CE20 Line Powered Ringer / Backplate
P4035	Headset / Ring Detect Relay (RDR)
P4037	Headset / Ring Detect Relay (RDR) / CE20 Line Powered Ringer / Backplate

Options

22AC-401	22" (0.6m) Armored Handset Cord in Lieu of Standard Curly Cord
P4042	Headset Kit (replaces handset)

* Note: Telephone Requires External Signaling Device

While the handset and fuse on the model EXT-401 is field replaceable, hazardous area equipment is not field serviceable. Please return equipment to the factory or an authorized depot for repairs.

Distributed by:



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