



G U A R D I A N T E L E C O M

Product and Services Guide

Explosion Proof Ringers & Loudspeakers

Explosion Proof Ringers & Loudspeakers designed and manufactured to meet the rigorous demands of environments where ignitable concentrations of flammable gases, vapors or liquids can exist all of the time or some of the time under normal operating conditions while maintaining the appropriate safety standards.

Guardian
Telecom

CONNECTED. PROTECTED.

SECTION

21



Visit industrial sites around the world and you can find telephones and communication systems designed, manufactured, distributed and commissioned by Guardian Telecom. From certified and ruggedized telephone and paging endpoints, to loudspeakers & ringers, cable, accessories, acoustic booths and much more. Our product line is extensive and our knowledge in-depth.

Guardian manufactures and assembles at our modern, ISO certified, CSA, UL and ATEX approved facility located east of the Canadian Rockies in Calgary, Alberta, Canada.

Working closely with our customers has always been a cornerstone in our work ethic. It keeps us up to date on their evolving needs and requirements as they operate in a demanding and uncompromising industrial world.

Guardian Telecom has completed its initial VoIP telephone product launch. As the IP world continues to evolve and grow, we will continue to invest both time and resources in design and testing to meet the stringent requirements that clients demand.

The in-house channel-partner sales and technical teams are here to work directly with you or through our network of distributors and representatives, locally, nationally and globally. Take advantage of their practical experience and product knowledge to make informed decisions based on your communication needs, environmental factors, regulatory requirements, budget considerations, growth and scheduling.

From individual telephone units to complete systems, our focus on customers' distinct needs is also addressed by customizing products whenever practical. From features to colors, finishes to labels, graphics, parts, enclosures and more.

Guardian can help guide you through the product selection process no matter how complex it is. We invite you to contact us to discuss your needs and see if our products & services will be the right fit.



Toll free (North America) 1 800 363-8010 Tel 403 258-3100 Fax 403 253-4967 E-mail info@guardiantelecom.com

Guardian Telecom's Product and Services Guide Catalogue is a compilation of individual Category Sections. They include an in-depth selection of Product Data Sheets from our extensive product lines including Analog and VoIP Telephones, Page/Talk, Cable, Talk/Back, PA/GA equipment, Acoustic Booths, Loudspeakers & Ringers and Accessories at the date of publication.

Based on a policy of continuous improvement, Guardian is constantly evaluating and redesigning existing models, adding new features and introducing new products to the benefit of our customers. Additional information can be found on our website at www.guardiantelecom.com.

Explosion Proof Ringers & Loudspeakers



SR40 / SR60I

Guardian's SR40 Explosion Proof unit can be set up as a loud speaker for paging applications, loud ringer to signal incoming phone calls, or both functions can be combined in one device.



21-1



CE20 Ringer

Guardian's CE20 Explosion Proof Ringer is designed for use indoors and outdoors in hazardous areas where flammable gases, vapors or dust may be present.



21-1



CE20 Ringer with Horn

Increase sound output by up to 90 dB.



21-1



P-HS-15ExdFM(T)

The P-HS-15 ExdFM(T) is an explosion proof speaker for Class I, Division 1 areas.



21-3



Guardian Telecom manufactures, supplies and distributes a wide selection of **Explosion Proof, Hazardous Area, ATEX-IEC and General Area** Ringers and Loudspeakers from leading manufacturers around the world to meet the unique demands of Industrial Communication projects.

The Guardian Telecom website, www.guardiantelecom.com and catalogues present a selection of popular industrial grade Ringers or Loudspeakers and we have access to many more.

To discuss your present or future needs contact a Guardian Telecom representative at 403 258-300 (1-800-363-8010 in NA) or by e-mail at info@guardiantelecom.com.



Explosion Proof Ringers & Loudspeakers



CE20 Ringer

CE20 Ringer with Horn

SR40/SR60

FEATURES and BENEFITS

CE20 – Line Powered Explosion Proof Ringer

- Sound pressure level at one meter, on axis – up to 75 dB without horn (Up to 90 dB with horn)
- Threaded, weather proof enclosure
- Projection horn
- Copper-free aluminum body and cover
- Sintered bronze flame arrestor

SR40/SR60 – Explosion Proof Loudspeaker, Ringer, & Loudspeaker/Ringer

- Mounting allows directional adjustments
- Projection horn included
- Powder coated cast aluminum enclosure
- User selectable output power taps
- Threaded end cap for easy installation

APPLICATIONS

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

- Petroleum Refineries
- Power Generation Facilities
- Grain Handling Facilities
- Bulk Fuel Loading Facilities
- Paint or Solvent Manufacturing Plants
- Munitions Storage and Production
- Chemical Plants
- Drilling Rigs
- Gas Plants
- Mines
- Aerospace Sites and more . . .

INSTALLATION and CONNECTABILITY

CE20 – Line Powered Explosion Proof Ringer

Guardian's CE20 Explosion Proof Ringer utilizes telephone line power, and does not require a separate power source. Maintaining safety standards may require the use of special wiring conduits or other considerations. The CE20 can be ordered separately or as part of an integrated system.

SR40/SR60 – Explosion Proof Loudspeaker, Ringer, & Loudspeaker/Ringer

Guardian's SR40 and SR60 Explosion Proof units generate up to 110 dB. The SR40 can be ordered in ringer configurations of 12/24 or 120/230 volts AC and as a combination ringer/loudspeaker. The SR60 is a 60 watt loudspeaker used in high powered applications. Maintaining safety standards may require the use of special wiring conduits or other considerations.

Guardian's CE20 Explosion Proof Ringer is designed for use indoors and outdoors in hazardous areas where flammable gases, vapors or dust may be present.

Guardian's SR40 Explosion Proof unit can be set-up as a loudspeaker for paging applications, loud ringer to signal incoming phone calls, or both functions can be combined in one device.

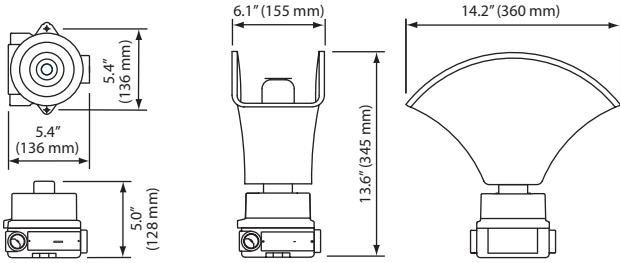
Guardian's SR60 Explosion Proof unit is a high power paging loudspeaker.

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ISO-9001:2008 Certification
Today's Quality Creates Our Future

OVERALL DIMENSIONS & ENGINEERING SPECIFICATIONS CE20 Line Powered Explosion Proof Ringer



ELECTRICAL REQUIREMENTS - Line Powered

Ringer Sensitivity 40 -100 V, 16 - 25 Hz
 Ringer Equivalence Number 04.A/0.8B

ELECTRICAL PERFORMANCE

CE20 Line Powered Ringer c/w Projection Horn 90 +/- 3 dB
 CE20 Line Powered Ringer w/o Projection Horn 75 +/- 3 dB

MECHANICAL SPECIFICATIONS

Body Construction Copper Free Cast Aluminum Cover and Base With Epoxy Powder Coat
 Flame Arrester Sintered Bronze

W/O Projection Horn

Net Weight 3.5 lbs (1.6 kg)
 Shipping Weight 4.0 lbs (1.68 kg)
 Shipping Dimensions (L x W x D) 9.0" x 6.0" x 5.5" (229 x 153 x 140 mm)

C/W Projection Horn

Net Weight 6.0 lbs (2.7 kg)
 Shipping Weight 7.5 lbs (3.4 kg)
 Shipping Dimensions (L x W x D) 16.0" x 10.5" x 9.5" (407 x 267 x 242 mm)

ENVIRONMENTAL

Enclosure Type see "COMPLIANCE" below
 Temperature -40° to +140°F (-40° to +60°C)
 Humidity 0 - 95% RH Non-Condensing

COMPLIANCE

CE20 c/w Projection Horn – P7021

CSA LR 65547-31
 Class 1, Division 1 Groups B, C, & D;
 Class I, Zone 1, Group IIB +H2;
 Class II Division 1, Groups E, F & G;
 Class III; T5. Type 4X Enclosure

UL File #: E214408
 Class 1, Division 1 Groups B, C, & D;
 Class I, Zone 1, Group IIB +H2;
 Type 4X

CE20 w/o Projection Horn – P7020

CSA LR 65547-31
 Class 1, Division 1 Groups B, C, & D;
 Class I, Zone 1, Group IIB +H2;
 Class II Division 2, Groups F & G;
 Class III; T5

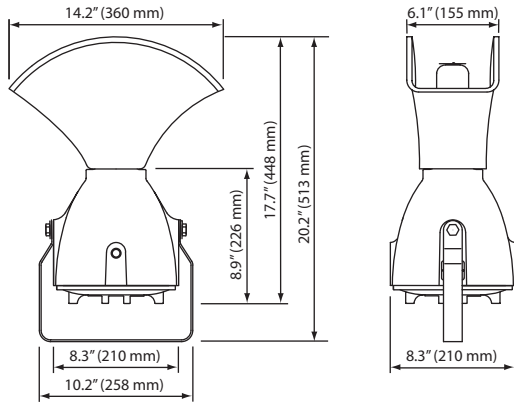
UL File #: E214408
 Class 1, Division 1 Groups B, C, & D;
 Class I, Zone 1, Group IIB +H2;

ORDERING INFORMATION

Warranty: One year parts and labor

Order No.	Description
P7020	CE20 Line Powered Ringer
P7021	CE20 Line Powered Ringer c/w Projection Horn

OVERALL DIMENSIONS & ENGINEERING SPECIFICATIONS SR40/60 Explosion Proof Speaker, Ringer, Speaker/Ringer



PERFORMANCE AS A SPEAKER

Frequency Response 250 - 7500 Hz
 Power Rating
 SR40 70V 30 W max
 SR40 70V and ringer 15 W max
 SR40 16 Ohm 40 W max
 SR60 70V 60 W max
 SR60 16 Ohm 60 W max
 Sound pressure level (SPL) 110 dB at 1.0 meter max

MECHANICAL SPECIFICATIONS

Body Construction Copper Free Cast Aluminum And Powder Coated
 Flame Arrester Sintered Bronze
 Projection Horn ABS
 Net Weight 20.0 lbs (9.0 kg)
 Shipping Weight 22.0 lbs (10.0 kg)
 Shipping Dimensions (L x W x D) 12.0" x 12.0" x 16.0" (305 x 305 x 407 mm)

ELECTRICAL

Input Voltage/Fuse Rating 12VAC/1A, 24VAC/.75A, 120VAC/.5A or 230VAC/.25A
 Duty Cycle 50%

ENVIRONMENTAL

Enclosure Type see "COMPLIANCE" below
 Temperature -40° to +140°F (-40° to +60°C)
 Humidity 0 - 95% RH Non-Condensing
 Dust Resistant Gasketed & Threaded Joints

COMPLIANCE

CSA LR 65547-27
 Class 1, Division 1 Groups B, C, & D;
 Class I, Zone 1, Group IIB +H2; Type 3R
 Class II Division 1, Groups E, F & G; Class III
 Temp Code: T5 for SR40 Models
 Temp Code: T3C for SR60 Models

UL E165888
 Class 1, Division 1 Groups B, C, & D;
 Class I, Zone 1, Group IIB +H2; Type 4X
 T6 (Exception T4 on 120 VAC & 230 VAC Models)
 TAMB: -40° to +104°F (-40° to +40°C)

ORDERING INFORMATION

Warranty: One year parts and labor

Order No.	Description
P7240	SR40, 24 VAC, Ringer
P7241	SR40, 24 VAC, 15 Watt Paging Loudspeaker/Ringer
P7243	SR40, 230 VAC, Ringer
P7244	SR40, 230 VAC, 15 Watt Paging Loudspeaker/Ringer
P7245	SR40, 30 Watt 70V Paging Loudspeaker
P7246	SR40, 30 Watt, 70V Paging Loudspeaker with DC Filter Circuit for monitoring line integrity
P7247	SR40, 30 Watt, 16 Ohm Paging Loudspeaker
P7248	SR40, 12 VAC, Ringer
P7249	SR40, 12 VAC, 15 Watt Paging Loudspeaker/Ringer
P7250	SR40, 120 VAC, Ringer
P7251	SR40, 120 VAC, 15 Watt Paging Loudspeaker/Ringer
P7260	SR60, 60 watt, 70V Paging Loudspeaker
P7262	SR60, 60 watt, 16 Ohm Paging Loudspeaker

Distributed by:



ISO-9001:2008 Certification
 Today's Quality Creates Our Future

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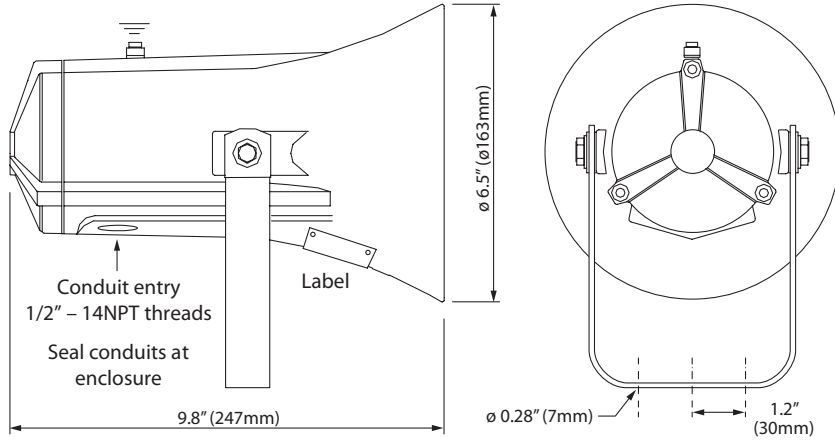


EX and non Ex Cert

FM

P-HS-15 ExdFM(T)

Bracket and all outside nuts and bolts in stainless steel.

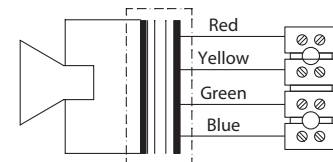


Primary nominal tapings:

1:2	15.0 W	1:3	2.7 W
2:3	7.5 W	2:4	1.3 W
3:4	3.5 W	1:4	0.8 W

8 ohm version available

Circuit Diagram



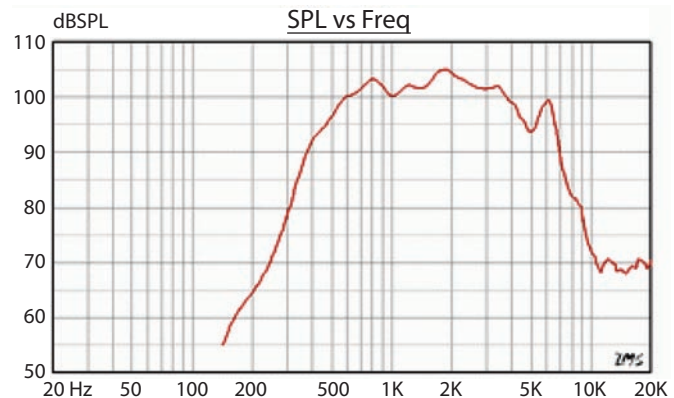
Certified by / Certification code: Factory Mutual approved – Class I, Division 1, Groups B, C and D
IP-67 (Not including acidic atmospheres)



Specifications

Material / Color	Aluminum alloy / RAL 7035
Mounting	Bracket
Termination	Screw terminals
Weight	6.2 lbs (2.8 kg)
IP-rating (UL Equivalent)	67
Max. / min. ambient temperature	104°F / -4°F (40°C / -20°C)
Rated / max. power	15 W / 15 W
SPL 1W/1m	105 dB
SPL rated power	116 dB
Effective freq. range	410 – 7000 Hz
Dispersion (-6dB) 1kHz / 4kHz	140° / 40°
Options	Impedances, colors, labels

Sound pressure levels at different frequencies at 1W/1m



Installation, Operation and Maintenance Procedures

- Fasten the bracket with 1-3 screws and be sure to use all washers in the same position that the loudspeaker is delivered with. (To isolate the main body from the bracket).
- To change the position of the loudspeaker adjust the bracket (by loosening/tightening the screws) as required.
- For optimum performance, always use the correct voltage/ power and operate within the frequency limits as stated.
- Use only certified/specified cable glands and blanking plugs.
- **Do not** open loudspeaker when energized.
- The aluminum surface of the loudspeaker should be regularly treated with paint at the same interval as with other similar outdoor equipment.
- Fasten lid with a torque of 2 - 3 Nm.
- If the Ex-loudspeaker is to be earthed, it must be done correctly using the specially marked screws.
- This loudspeaker is supplied with a 2 year warranty against defective workmanship.



The Manufacturer reserves the right to alter specifications without notice.

Sections

Guardian Telecom's Product and Services Guide Catalogue is a compilation of individual Category Section Publications

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 - More Choices, Selections and Services
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 - Options & Accessories
 - Product and Project Consultation
 - Commissioning Services
 - Sound Studies
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 - Maintenance, Cleaning, Trouble Shooting & Refurbishment
 - Custom Design
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¹ Page/Party® is a registered trademark of GAI-Tronics Inc. Use does not imply endorsement.

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Guardian represents DNH, E2S, Federal Signal, MEDC and TOA, and has access to an extensive range of other world class leading manufacturers. Visit www.guardiantelecom.com for additional information on Explosion Proof, Hazardous Area, ATEX-IEC and General Area Loudspeakers & Ringers.

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