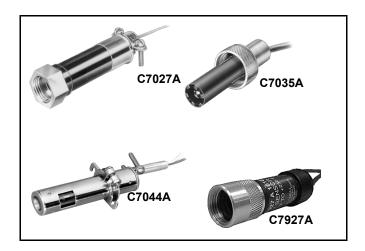
C7027A, C7035A, C7044A, C7927A Minipeeper[®] Ultraviolet Flame Detectors

PRODUCT DATA



APPLICATION

The C7027A, C7035A, C7044A and C7927A Minipeeper[®] Ultraviolet Flame Detectors detect the ultraviolet radiation emitted by combustion flames. The flame detectors are used with Honeywell flame safeguard controls to provide flame supervision for gas, oil, or combination gas-oil burners.

FEATURES

 C7027A, C7035A, and C7044A Flame Detectors are used with RA890G devices or R7249A, R7290A, R7749B and R7849A,B Amplifiers and the appropriate Honeywell controls.

- C7044A may also be used with the following 50 Hz Honeywell combustion controls/amplifiers:
 - R4341/R7323
 - R4343/R7323
 - R4344/R7323
- C7027A has an integral collar threaded (internal 1/2-14 NPSM) for mounting on a one-half-inch sight pipe.
- C7035A has an integral collar threaded (internal 1-11-1/2 NPSM) for mounting on a one-inch sight pipe.
- C7035A housing meets Underwriters Laboratories Inc. requirements for rain tightness and complies with NEMA enclosure standards, types 4 and 4X.
- C7044A mounts with a two screw bracket. The UV sensor tube is enclosed in a stainless steel housing.
- C7044A has the capability of side or end viewing in flame monitoring applications.
- Because of their compact size, the C7027A and C7044A are particularly suitable for blast tube mounting.
- Properly installed, the C7027A, C7035A and C7927 are pressure rated for 5 psi.
- C7035A ultraviolet radiation sensor tube is field replaceable.
- Two C7027A, C7035A or C7044A Flame Detectors can be wired in parallel for difficult flame sighting installations.
- C7927A is used with only the R7851B Flame Amplifier and the 7800 SERIES controls.
- C7927A has an integral collar threaded (internal 1/2-14 NPSM) for mounting on a one-half inch sight pipe.

Contents

Application	1
Features	1
Specifications	2
Ordering Information	
Wiring (All Models—Fig. 10)	8
Adjustments and Checkout	
Troubleshooting	12
Maintenance	



60-2026-12

SPECIFICATIONS

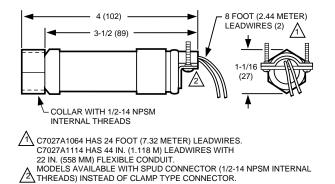


Fig. 1. Installation dimensions of C7027A in in. (mm).

C7027

C7027A Minipeeper® Ultraviolet Flame Detector:

Ambient Operating Temperature Ratings: 0°F to 215°F (-18°C to 102°C), or -40°F to 215°F [-40°C to +102°C), depending on model.

Maximum Pressure Rating: 5 psi (34.5 kPa).

Mounting: Collar with 1/2-14 NPSM internal threads for mounting on a 1/2 in. sight pipe.

Wiring Connections: Two 8 ft (2.44 m), color-coded, NEC Class 1 leadwires, rated for 221°F (105°C). (C7027A1064 has 24 ft [7.32 m] leadwires.) Rear of detector has a clamp type connector for 1/2 in. flexible metallic conduit. (Models are available with 1/2 in. internally threaded spud connector instead of the clamp). C7027A1114 has 44 in. (1.118 m) leadwires and 22 in. (558 mm) flexible conduit.

Dimensions: See Fig. 1.

Replacement Part: 129685 Flange Gasket.

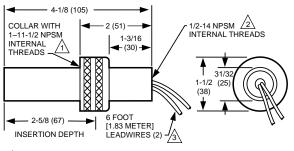
NOTE: The ultraviolet radiation sensing tube is not field

replaceable.

Accessory:

136733 Heat Block, laminated plastic, insulating the flame detector from sight pipe temperatures up to 266°F (130°C), 1/2-14 NPSM external threads on one end and 1/2-14 NPSM internal threads on the other end (see Fig. 8). Included with C7027A1080.

390427B Bushing, for mounting to 3/8 in. sight pipe. Included with C7027A1080.



DIN APPROVED C7035A1064 HAS 1-11 BSP.P1 INTERNAL MOUNTING THREADS.

DIN APPROVED C7035A1064 HAS 1/2-14 BSP-F INTERNAL MOUNTING THREADS.

3 C7035A1056 HAS 12 FOOT (3.66 METER) LEADWIRES.

C7035 M1945C

Fig. 2. Installation dimensions of C7035A in in. (mm).

ORDERING INFORMATION

When purchasing replacement and modernization products from your TRADELINE® wholesaler or distributor, refer to the TRADELINE® Catalog or price sheets for complete ordering number.

If you have additional questions, need further information, or would like to comment on our products or services, please write or phone:

- 1. Your local Honeywell Automation and Control Products Sales Office (check white pages of your phone directory).
- Honeywell Customer Care 1885 Douglas Drive North Minneapolis, Minnesota 55422-4386

In Canada—Honeywell Limited/Honeywell Limitée, 35 Dynamic Drive, Scarborough, Ontario M1V 4Z9. International Sales and Service Offices in all principal cities of the world. Manufacturing in Australia, Canada, Finland, France, Germany, Japan, Mexico, Netherlands, Spain, Taiwan, United Kingdom, U.S.A.

2

60-2026—12