

Conventional Fire Alarms

Heat Detectors

280 Series



280B-PL Series heat detectors offer fixed temperature or combination rate-of-rise and fixed temperature detection.

A temperature increase at the sensor of 15°F (9°C) or more per minute activates the rate-of-rise feature, closing an alarm condition in the sensor to transmit the alarm condition to the fire alarm control panel. When the rate-of-rise element alone has been activated, the sensor is self-restoring.

If the temperature of the center disk rises to the sensor's rated temperature, the fixed temperature element activates, closing contacts in the sensor and transmits an alarm condition to the fire alarm control panel. The fixed temperature element is non-restorable and, when activated, the detector must be replaced. The need for replacement is indicated when the center disk has fallen free from the detector.

Edwards 280B series heat sensors come standard with a white plastic reversible mounting plate. The plate is designed for surface or flush mounting and installs directly to a standard North American 3 ½ or 4 inch octagon box. Once the mounting plate is fixed, a simple twist will lock the sensor in place. It can be removed using a screwdriver to release the tamper-resistant locking finger.

Features and Specifications

- UL listed for 50 ft. (15.2m) spacing
- Single pole — normally open contact
- Low profile with mounting plate
- Pure white finish
- Mounting flexibility with screw terminals
- Easy twist-on installation
- On-site testing of rate-of-rise feature
- Positive operating indication — for fixed temperature element
- Operating temperature range: -22°F to 100°F (-30°C to 37.8°C) (281B-PL and 283B-PL); -22°F to 150°F (-30°C to 65.6°C) (282B-PL and 284B-PL)

Ordering Information

Description	Cat. No.	Contact Ratings		Temperature		UL Recommended		FM Recommended Spacing
		Voltage	Amps	UL Rated	UL Max Ambient at Ceiling	Coverage ¹	Spacing	
Heat Detector - Rate of Rise and Fixed Temperature	281B-PL	6-125V AC	3.0	135°F (57°C)	100°F (38°C)	2500 ft. ² (232m ²)	50 ft. (15.2m)	30 ft. (9.14m)
		6-24V DC	1.0					
		125V DC	0.3					
	282B-PL	250V DC	0.1	194°F (90°C)	150°F (66°C)	2500 ft. ² (232 m ²)	50 ft. (15.2 m)	30 ft. (9.14m)
		6-125V AC	3.0					
		6-24V DC	1.0					
Heat Detector - Fixed Temperature	283B-PL	125V DC	0.3	135°F (57°C)	100°F (38°C)	2500 ft. ² (232m ²)	50 ft. (15.2m)	30 ft. (9.14m)
		250V DC	0.1					
		6-125V AC	3.0					
	284B-PL	6-24V DC	1.0	194°F (90°C)	150°F (66°C)	2500 ft. ² (232m ²)	50 ft. (15.2m)	30 ft. (9.14m)
		125V DC	0.3					
		250V DC	0.1					

¹Maximum detector coverage has been determined by UL to provide detection time equal to sprinkler devices spaced at 10 ft (3.05m) intervals on a smooth ceiling 15 feet 9 inches (4.8m) high. Higher ceilings may adversely affect detection time. Earlier detection may be obtained by reducing the spacing between sensors. (See NFPA 72, Chapter 5)



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Accessories

Description	Cat. No.
Reversible Mounting Plate	280A-PL ²

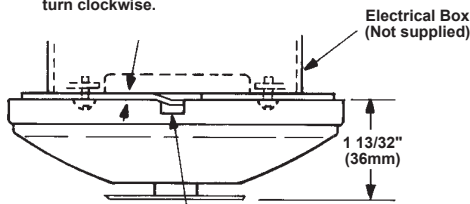
²Included with Heat Detectors

Weights and Dimensions

Cat. No.	Approx. Shipping Weight (lb.)
281B-PL	1.0
282B-PL	1.0
283B-PL	1.0
284B-PL	1.0

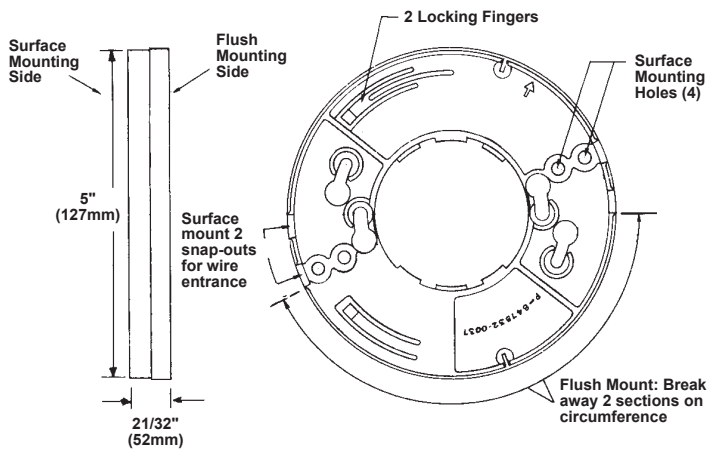
NOTE: The plastic mounting plate is molded to accommodate exposed wiring.

To Install Detector—
match arrows on detector and
mounting plate. Push up and
turn clockwise.

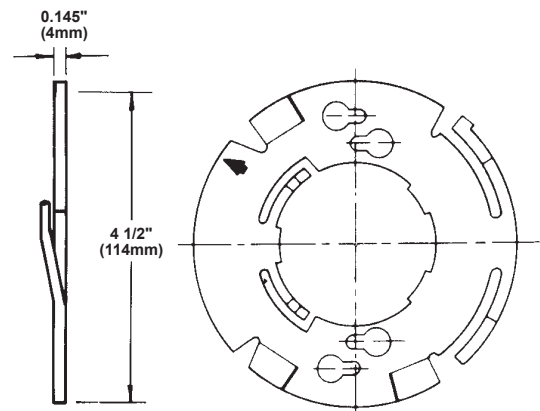


To Remove Detector—
Lift locking finger with screw
driver tip and turn detector
counter clockwise

**Flush Mount
Conduit Wiring**



Front View
Plastic Reversible Mounting Plate Cat. No. 280A-PL



Front View
Metal Mounting Plate P/N 280-MPL
(Order separately)