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DF-50673 • F-850

## 302 Series Rate-Anticipation Heat Detectors

Section: Conventional Initiating Devices

### GENERAL

The **Thermotech 302 Series** rate-anticipation heat detectors operate within a controlled range of two to three degrees of their set points, regardless of the speed or rate of temperature rise. These detectors are available in either 135°F or 194°F ratings.

The 302 Series are normally-open devices designed especially for fire detection and alarm systems.



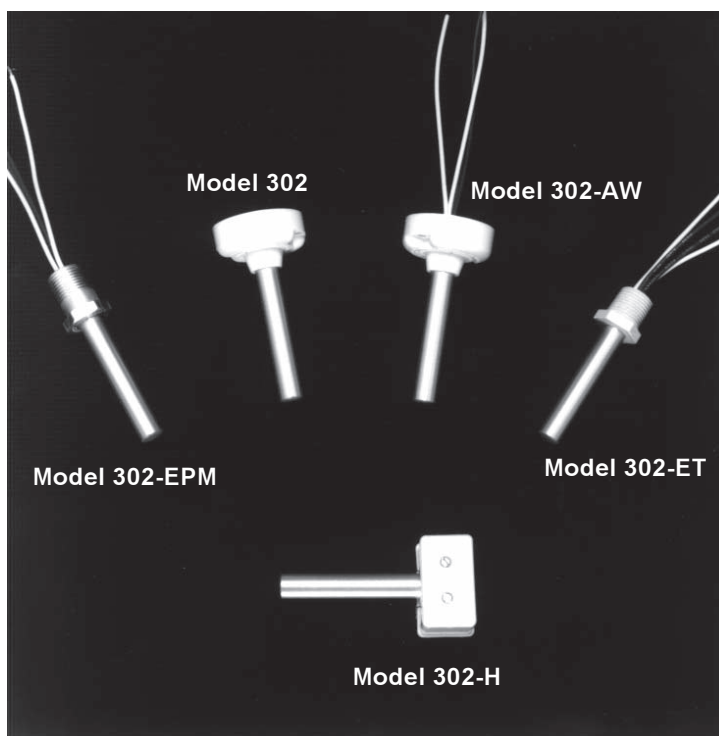
California  
State Fire  
Marshal  
7270-0021:001  
(All)

### FEATURES

- **Immediate response.** The 302 Series activate whenever ambient air temperature reaches a detector's setting, eliminating the thermal time lag inherent in conventional heat detectors.
- **Eliminates false alarms.** The 302 Series do not respond to momentary temperature fluctuations below the selected temperature.
- **Universal application.** The 302 Series can be used in all areas for any type of occupancy.
- **Self-restoring.**
- **Hermetically sealed,** shock resistant, corrosion resistant, and tamper-proof.

### PRINCIPLES OF OPERATION

The 302 Series rate-anticipation heat detectors respond and activate the fire alarm immediately whenever the ambient temperature reaches the preset temperature setting. Under rapid heat rise conditions, the rate-anticipation feature enables the detector to respond one to three degrees ahead of the setting. At the same time, however, it does not respond to momentary temperature fluctuations below the selected protection level, thus eliminating false alarms. When temperature drops back down below the protection level, the detector automatically resets itself.



### DIMENSIONS (Model 302)

Total overall length: 4-1/8"

Base diameter: 2"

### ELECTRICAL RATINGS

Voltage	Current
6-125 VAC	5 amps
6-25 VDC	1 amp
125 VDC	0.5 amp

### APPLICATION INFORMATION

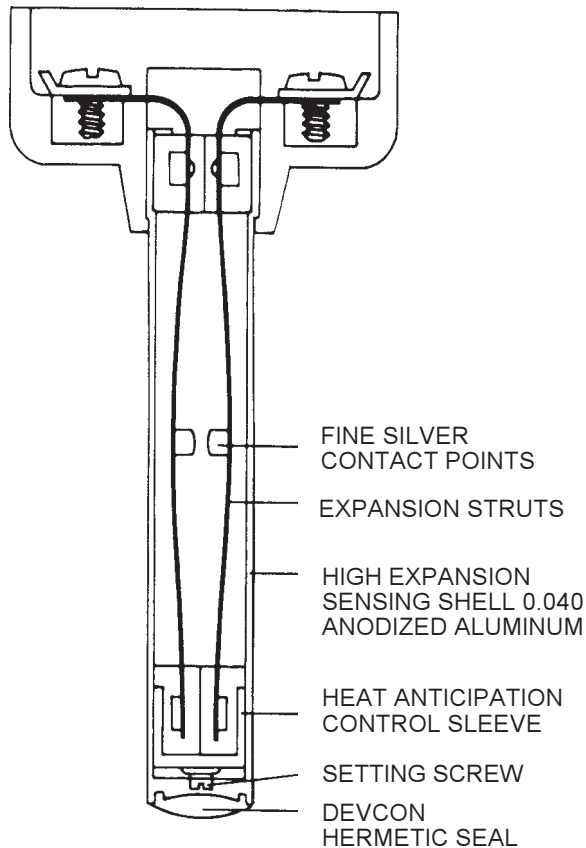
302 Series detectors have a smooth-ceiling UL rating of 50' x 50' (15.24 x 15.24 meters) and are the only type of heat detectors having such a rating on both fixed temperature and rate anticipation. The 302-H is designed for horizontal mounting and UL rated for 40' x 40' (12.19 x 12.19 meters).

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact **Fire-Lite Alarms**, One Fire-Lite Place, Northford, Connecticut 06472. Phone: (800) 627-3473, Toll Free FAX: (877) 699-4105, FAX Back: (888) 388-3299  
WEB: www.firelite.com

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## PRODUCT LINE INFORMATION

Thermotech Model 302 Series Rate-Anticipation Heat Detectors		
MODEL NUMBER	DESCRIPTION	REFER TO
302-135	135°F Interior Vertical Mounting, FM and UL.	Note 1 below.
302-194	194°F Interior Vertical Mounting, FM and UL.	
302-AW-135	135°F All-Weather Vertical Mounting, FM and UL.	Note 2 below.
302-AW-194	194°F All-Weather Vertical Mounting, FM and UL.	
302-ET-135	135°F All-Weather Vertical Mounting, FM and UL.	Note 3 below.
302-ET-194	194°F All-Weather Vertical Mounting, FM and UL.	
302-H-135	135°F Interior Horizontal Mounting, FM and UL.	Note 4 below.
302-H-194	194°F Interior Horizontal Mounting, FM and UL.	
302-EPM-135	135°F Explosion-Proof Mounting, UL..	Note 5 below.
302-EPM-194	194°F Explosion-Proof Mounting, UL.	
AP-P	Decorative white plastic adaptor plate for mounting 302 and 302-AW to 4" outlet box.	



*Cut-Away View, ACTUAL SIZE*

**Note 1:** For interior mounting in any atmosphere that is compatible with terminal screw type connections. UL rating 50' x 50' (15.24 x 15.24 meters).

**Note 2:** Humitically sealed for moisture-proof or dust-proof installations. Requires no special backbox when the all-weather leads are properly spliced to 'THW' or equivalent type wire.

**Note 3:** Humitically sealed for moisture-proof or dust-proof installations. Requires no special backbox. Has plastic hexagonal wrench grip bushing with 1/2" (1.27 cm) conduit threads for attachment to threaded hub cover, or any outlet box.

**Note 4:** Same as model 302 except designed for horizontal mounting. UL rating 40' x 40' (12.19 x 12.19 meters).

**Note 5:** Explosion-proof for installation in hazardous locations. Has hexagonal wrench grip bushing with 1/2" (1.27 cm) conduit threads for attachment to threaded hub cover of Series JL fixture fitting as manufactured by Killark Electric Co., or equal.