

# **Thermotech 302 Series**

Heat Detectors

#### Features

- · Hermetically sealed and explosion-proof options
- · Horizontal or vertical mounting ability
- · Select models available for indoor and outdoor use
- Aluminum tubing with silver contact points



## Description

Each model is a normally open device designed especially for fire detection and alarm systems. These rate compensation type detectors are available in either 135°F or 194°F ratings. All four basic models are self-restoring, hermetically sealed, shock and corrosion resistant, and are tamper-proof.

All models operate on the principles of a rate compensation detectors. The detector consists of a high expansion aluminum tube which encases two insulation struts with opposing open constant points. The high expansion sensing shell and the expansion struts have a different co-efficient of expansion. A slow rate of temperature rise allows the heat to penetrate the inner expansion struts. Therefore, the tubular shell and the struts expand slowly until the total device has been heated to its rated temperature level of 135°F or 194°F. At this point, the silver contact points close which initiates the alarm. When subjected to a rapid temperature rise there is not as much time for heat to penetrate the inner strut. The rapid lengthening of the shell allows the struts to come together at a lower level which compensates for thermal lag inherent in conventional fixed temperature detectors. When the surrounding air temperatures go below the rated temperature level, the shell contracts which forces contacts to open, which automatically resets the detector.

# **Technical Specifications**

Electrical Ratings		
Voltage	Current	
6-125VAC	5 Amps	
6-25VAC	1 Amp	
125VDC	0.5 Amps	
Temperature Ratings		
Device Temp Rating	Max. Ceiling Temp	
135°F	115°F	
194°F	155°F	

Detectors are not directionally affected, can be mounted horizontally or vertically. Detectors have a smooth ceiling UL rating of 50' x 50' (2500 sq. Ft.) on 8 to 10 ft. ceilings. Detectors, hub covers, or outlet boxes must never be installed in direct sunlight. Refer to NFPA Standard 72 for spacing and other considerations.

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# Thermotech 302 Series Heat Detectors

### **Model Descriptions**

#### Model 302

For interior mounting in any atmosphere that is compatible with terminal screw type connections.

#### Model 302-ET

Hermetically sealed for moisture proof or dust proof installations. Requires no special back box. Has plastic hexagonal grip bushing with 1/2" conduit threads hub cover for any outlet box. Must be hand tightened only. For indoor and outdoor use. Protect from sunlight and adverse conditions

#### Model 302-EPM

Explosion-proof for installation in hazardous locations. Has hexagonal grip bushing with 1/2" conduit threads for attachment to threaded hub cover of series JL fixture fitting as manufactured by Killark Electric Co., or equal. Must be hand tightened only. For interior use.

#### Model 302-AW

Hermetically sealed for moisture proof or dust proof installations. Requires no special back box. For indoor and outdoor use. Protect from direct sunlight and adverse weather conditions

# **WARNING**

- Installation must be performed by qualified personnel and in accordance with all national and local codes and ordinances.
- Shock hazard. Disconnect power source before servicing. Serious injury or death could result.
- Read all instructions carefully and understand them before starting installation. Save instructions for future use. Failure to read and understand instructions could result in improper operation of device resulting in serious injury or death.

### **Ordering Information**

Model Number	Ordering Part Number	Description
302-135	1430475	Heat Detector, 135 Deg., Vertical Mt., Interior
302-194	1430476	Heat Detector, 194 Deg., Vertical Mt., Interior
302-ET-135	1430477	Heat Detector, 135 Deg., Vertical Mt., Hex Bushing, All-Weather (may mount horizontal)
302-ET-194	1430478	Heat Detector, 194 Deg., Vertical Mt., Hex Bushing, All-Weather (may mount horizontal)
302AW-135	1430479	Heat Detector, 135 Deg., Vertical Mt., All-Weather
302AW-194	1430480	Heat Detector, 194 Deg., Vertical Mt., All-Weather
302EPM-135	1430481	Heat Detector, 135 Deg., Explosion Proof
302EPM-194	1430482	Heat Detector, 194 Deg., Explosion Proof
AP-P	1430483	Decorative White Plastic Adapter Plate for mounting 302, 302ET and 302AW to any 3" outlet box or 4" octagon outlet box