

# 2450CMG Series Ceramic Manual Reset Commercial Thermostats in Water Heater/Boiler Flame Rollout Control Applications

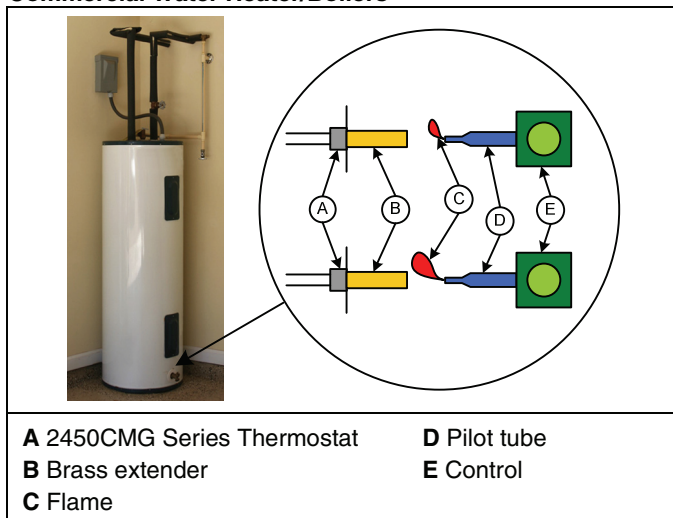
### BACKGROUND

Insufficient or contaminated air in a water heater/boiler's combustion system may cause a buildup of pressure, causing a flame rollout, where a flame actually comes out of the appliance. Flame rollout can create a serious fire hazard if flammable materials are stored near the appliance.

### SOLUTION

The 2450CMG Series Ceramic Manual Reset Commercial Thermostat (see Table 1) is designed to detect initial flame enlargement in the hot water heater/boiler and prevent its reoccurrence. If flame enlargement occurs, the thermostat opens, cutting the electrical supply to the water heater/boiler, which then cuts the fuel supply to the burner/heat exchanger (see Figure 1).

**Figure 1. 2450CMG Series in Flame Rollout Control in Commercial Water Heater/Boilers**



**Table 1. 2450CMG Series Ceramic Manual Reset Commercial Thermostat**

2450CMG Series
Features and Benefits
<ul style="list-style-type: none"> <li>• High temperature, ceramic manual reset thermostat withstands exposure temperatures up to 260 °C [500 °F]</li> <li>• Configurable operating point may be tailored to application requirements up to 232° C [450 °F]</li> <li>• WE-1 gold alloy cross point contacts designed for potential low voltage/low current applications</li> <li>• Preset temperature and tamper proof provides temperature accuracy within the preset temperature/tolerances</li> <li>• UL, CSA and VDE approved for use in global applications</li> <li>• Variety of mounting studs, brackets and terminals for application flexibility</li> </ul>

# 2450CMG Series in Flame Roll Out Control Application

## **WARNING**

### **PERSONAL INJURY**

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

## **WARRANTY/REMEDY**

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application. Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

## **WARNING**

### **MISUSE OF DOCUMENTATION**

- The information presented in this application note is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

**Failure to comply with these instructions could result in death or serious injury.**

## **SALES AND SERVICE**

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office or:

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008044-1-EN IL50 GLO Printed in USA  
March 2009  
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