

# What is a Plenum? Available Options To Heat A Plenum Space.



## WHAT IS A PLENUM?

In building construction Plenum is a separate space provided for air circulation for heating, ventilation, and air-conditioning, providing pathways for either heated/conditioned or return airflows, usually at greater than atmospheric pressure. It is commonly found in the space between the structural ceiling and a drop-down ceiling or under a raised floor. In commercial settings such as schools or office buildings, the plenum space is often used to house connecting communication cables and other mechanical systems as well.

Products installed in those air-handling spaces must conform to a higher safety standard.

King offers 2 unique heaters designed for use in concealed spaces of commercial buildings, sometimes referred to as plenum spaces.



CK and CKL Plenum Rated Unit Heaters are **ETL Certified to comply with the standard for Heating and Cooling Equipment ANSI/UL 1995** fourth edition, including the stringent standards established by the **city of Chicago** and are rated for plenum applications.

Specifically designed for high-rise and office buildings, schools, factories, auto body shops, food processing plants, plating shops and machine shops. These heaters may be installed in inaccessible areas such as between a concrete ceiling and a drop tile ceiling, in an open plenum or even a ducted system.

CK and CKL heaters are safety rated for Zero Clearance to any surface mounted to the sides, top and bottom of the cabinet and are designed to be mounted horizontally and suspended from above and can be rotated on its axis in any position needed.

CK and CKL Plenum Heaters can either be installed for free-air discharge or can be connected to existing duct work for building extensions – eliminates running duct work to HVAC saving money and time. Features high mass steel finned heat exchangers and high CFM from a dual inlet blower design, ensuring even air distribution, while producing cooler element operating temperatures which prolongs heater life.

The totally enclosed motor, filter racks and N.E.M.A. 12 Construction means CK and CKL are engineered to withstand dirty, dusty, moist or even mildly corrosive environments.

Since CK and CKL are typically installed in inaccessible areas, we offer a 24V control circuit that enables customer to use a standard low voltage thermostat or even connect to a Building Automation System, making operation simple and remote.

And let's not forget, the CK and CKL are proudly made right here in the USA.

Now That's Smart!

Before purchasing a plenum heater, always discuss with your HVAC specialist or installer to calculate the space's Balance Point and recommend the appropriate sized heater.

### **Choosing the right King Electric Plenum Heater**



#### **CK Plenum Heater**

Heating Range: 3.3kW to 33 kW Voltage Range: 208V, 240V and 480V Available in 1 or 3 Phase

#### Cabinet Size: 30-1/2"L x 18"W x 20"H

- High Mass Steel Fin Heat Exchanger
- Dual Inlet Blower
- Totally Enclosed motor
- N.E.M.A. 12 Construction
- Adjustable Louvers to Direct Air
- 18GA Steel Enclosure
- 24V Control
- Horizontal/Vertical Mount
- Can Be Ducted
- Proudly Made in USA
- 3-year warranty



#### **CKL Plenum Heater**

Heating Range: 30kW to 240 kW Voltage Range: 208V, 240V and 480V Available in 1 or 3 Phase

Cabinet Size: 72"L x 42"W x 33-14"H Exhaust Opening: 30" x 20" Filter Size: 20" x 30" x 2"

- High Mass Steel Fin Heat Exchanger
- Dual Inlet Blower
- Totally Enclosed Motor
- N.E.M.A. 12 Construction
- Filter Racks
- Fixed Louvers Hood
- 16GA Steel Enclosure
- Element Step Control
- 24V Control
- Can Be Ducted
- Proudly Made in USA
- 3-year warranty



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