



425 Hanley Industrial Court, St. Louis, MO 63144  
Phone: (314) 644-4300, Fax: (314) 644-5332  
www.indeeco.com

## INSTRUCTIONS “UCI” Series



### WARNING



When using electrical appliances, basic precautions should always be taken to reduce the risk of fire, electrical shock and injury, including the following.

**Read carefully** these instructions before installation, operation of the heater. Failure to adhere to the instructions could result in fire, electric shock, serious personal injury, and death or property damage. Review frequently for continuing safe operation and instruction of future users, if necessary.

## IMPORTANT INSTRUCTIONS

- 1- Read all instructions before installing or using this heater.
- 2- This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Keep combustible materials, like furniture, pillows, bedding, papers, clothes, and curtains at least 36 in. (915 mm) from the front of the heater.
- 3- Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
- 4- Do not operate any heater after it malfunctions. Disconnect power at service panel and have heater inspected by a reputable electrician before reusing.
- 5- Do not use outdoors.
- 6- To disconnect heater, rotate thermostat knob full counter-clockwise and turn off power to heater circuit at main disconnect panel (or operate internal disconnect switch if provided).
- 7- Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage the heater.
- 8- To prevent a possible fire, do not block air intakes or exhaust in any way whatsoever.
- 9- This heater has hot and arcing or sparking parts inside. Do not use it in areas where gasoline, paint, or flammable vapors or liquids are used or stored.
- 10- Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
- 11- The thermostat should not be considered an infallible device in cases where maintaining a temperature is considered critical. Examples: Hazardous material storage, computer server room, etc. In these particular cases, it is imperative to add a monitoring system to avoid the consequences of a thermostat failure.

## SAVE THESE INSTRUCTIONS

## OPERATING INSTRUCTIONS

- 1- The heater must be properly installed before it is used.
- 2- Turn the power on at the circuit breaker panel.
- 3- Electronic thermostat:  
Be sure to set it on the fan mode.
- 4- Built-in thermostat with control knob.  
To set thermostat at the desired temperature, follow these steps:
  - Set thermostat at maximum temperature (turn clockwise).
  - When the desired temperature is reached, turn the thermostat counter-clockwise slowly until you hear a click.
  - The thermostat will keep this room temperature.

### START UP

On a call for heat from either the remote thermostat or the unit mounted thermostat the elements and fan will be energized.

When the thermostat is satisfied the elements will be deenergized.

The fan will continue to run until the residual heat is removed from the heater. Then the fan will stop.

### OVERTEMPERATURE PROTECTION

- The motor and the electric heating elements are protected against overtemperature by automatic reset thermal high-limits.
- Cycling of either high-limit is an indication of abnormal operation and should be corrected at once.

### LUBRIFICATION OF MOTOR

The motor includes sealed lubrication-free bearings.

## MAINTENANCE INSTRUCTIONS

- 1- Once a year, remove the dust accumulation inside the heater using a vacuum cleaner or compressed air. Cleaning should be done while the heater is disconnected from the supply circuit.
- 2- Cleaning should be done while the heater is disconnected from the main service panel. Wait until the housing and heating element cool before performing maintenance.
- 3- Replace the front panel before energizing.
- 4- Any other servicing should be performed by a qualified technician.
- 5- The motor includes sealed lubrication-free bearings.

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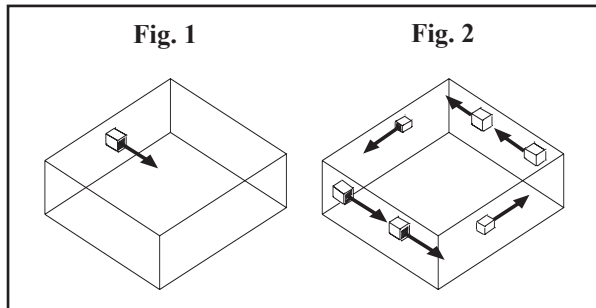
# INSTALLATION INSTRUCTIONS

## CAUTION

- High temperature, risk of fire, keep electrical cords, drapery, furnishings, and other combustibles at least 36 in. (915 mm) from the front of the heater. To reduce the risk of fire, do not store or use gasoline or other flammable vapors and liquids in the vicinity of the heater.
- Do not obstruct front of heater for at least 6 ft. (1.8 m).
- Not for residential use in the United States.
- Disconnect all power supplies before working on any circuit.
- Put all covers back on heater before testing.

## LOCATION OF HEATERS AND REMOTE THERMOSTATS

- 1- Direct discharge air streams:
  - Away from room occupants.
  - Away from columns, posts, machinery and partitions.
  - Parallel to outside walls.
  - Along the windward side of buildings exposed to prevailing winds.
- 2- Locate thermostats on interior partitions, walls or posts (insulate from cold steel posts). Install thermostats away from cold drafts, internal heat sources and from heater discharge.
- 3- Small rooms require only one unit heater. In large rooms, arrange multiple units to provide perimeter circulation as illustrated in fig. 1 and 2.



## OVERTEMPERATURE PROTECTION

The motor and the electric heating elements are protected against overtemperature by automatic reset thermal high-limits. Cycling of either high-limit is an indication of abnormal operation and should be corrected at once.

## LUBRIFICATION OF MOTOR

The motor includes sealed lubrication-free bearings.

## POWER SUPPLY CONNECTIONS

The power supply may be single or three phase as shown on the nameplate. The wiring diagram is on the inside of the terminal compartment cover. Wire heater in accordance with local and national codes.

## TEST

- To test the unit heater, temporarily set thermostat to maximum temperature.
- Make sure that the fan rotates in the correct direction; airflow should be in the direction of the arrow such as indicated on the fig. 4.

## INSTALLATION WITH A DIFFUSER CONE

- The louvers must be removed before the installation of the diffuser cone.
- The use of the diffuser cone is not allowed with horizontal mounting.

## CLEARANCE ACCORDING TO MOUNTING

### Vertical mounting (Down discharge) - Minimum clearance

	Without diffuser cone				With diffuser cone			
	Wall		Ceiling		Wall		Ceiling	
	in.	mm	in.	mm	in.	mm	in.	mm
2 to 10 kW	4	102	12	305	24	610	12	305
15 to 30 kW	6	152	12	305	24	610	12	305
40 to 60 kW	12	305	12	305	24	610	12	305

	Minimum height				Recommended maximum height			
	Canada		United States		Canada		United States	
	ft.	m	ft.	m	ft.	m	ft.	m
2 to 10 kW	6	1.8	6	1.8	8	2.4	8	2.4
15 to 30 kW	6	1.8	6	1.8	10	3.0	10	3.0
40 to 60 kW	8	2.4	8	2.4	15	4.5	15	4.5

### Horizontal mounting

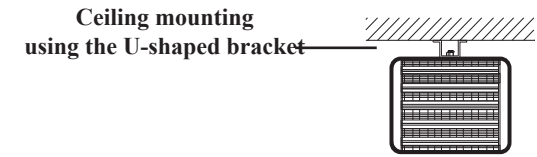
	Without diffuser cone <sup>1</sup>			
	Wall		Ceiling	
	in.	mm	in.	mm
2 to 10 kW	4	102	4 5/8	117
15 to 30 kW	6	152	4 5/8	117
40 to 60 kW	12	305	12	305

<sup>1</sup>The use of the diffuser cone is not allowed with horizontal mounting.

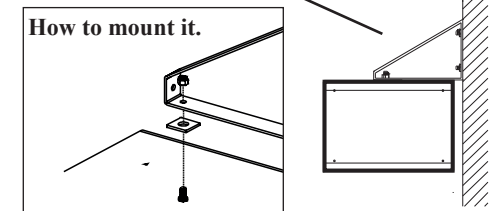
	Minimum height				Recommended maximum height			
	Canada		United States		Canada		United States	
	ft.	m	ft.	m	ft.	m	ft.	m
2 to 10 kW	2	0.61	6	1.8	8	2.4	8	2.4
15 to 30 kW	2	0.61	6	1.8	10	3.0	10	3.0
40 to 60 kW	8	2.4	8	2.4	15	4.5	15	4.5

**Fig. 3 - MOUNTING 2-30kW**

Horizontal wall or ceiling mounting using 1 of 2 supplied brackets which allow 360° rotation.



Wall mounting using the triangular bracket.



Vertical mounting using 4 threaded rods 1/2 in. - 13 UNC not included

Diffuser cone available

**Fig. 4 - MOUNTING 40-60kW**  
4 hooks of suspension supplied for 1/2 in. -13 UNC threaded rods not included

