

AF-20 3.1 Quick Guide



Product Description

Axial Fan Heaters mount directly to square axial fans. The AF-20 heater housing uses the same mounting holes and functions as a guard for both heaters and fans. These fans are ideal for drying, curing and warming applications. All AF-20 heaters are UL component recognized under E154979.

Optional High Limit Safety

Optional Thermostat

- A high limit safety device designed to protect against overheating
- Do not use for temperature regulation
- Thermostat will automatically reset when thermostat has cooled to 25°C below opening temperature.
- Opening temperature should be approximately 25°C above transient temperature seen in normal operation
- Thermostat is not suitable for DC applications

Optional Thermal Cut-Out (TCO)

- A high limit safety device designed to protect against overheating
- If opening temperature is reached TCO will open the circuit and the heater remains inoperable (one shot)
- TCO opening temperature should be at least 25°C above thermostat opening temperature (if used) or 25°C above transient temperature seen in normal operation
- If using DC: Max 5A and 24V for UL approval

CAUTION

Tutco-Farnam Custom Products recommends installation be performed by qualified personnel familiar with the National Electrical Code and all local codes and standards. It is the responsibility of the installer to verify the safety and suitability of the installation

Failure to follow Tutco-Farnam's recommendations could result in premature failure, serious equipment damage, injury or death

WARNING

DO NOT mount heaters in an atmosphere containing combustible gases, vapors, dusts or fibers



Hazardous voltages are present in this equipment. Disconnect power before working on this heater



Exterior of heater at exhaust is approximately the air temperature. Treat the exterior of the heater as a potential burn hazard

Typical causes for uneven airflow are structural components blocking air or mounting the heater too close to elbows or transitions

Set-up

If the high limit thermostat and/or TCO is included it is user's responsibility to determine the suitability by thorough testing to ensure that the unit will operate as intended. The user is solely responsible for the function of the end use product and/or application.

Troubleshooting your AF-20 3.1

If reduced heat output is suspected...

1. Disconnect power to the heater
2. Inspect the TCO (Thermal Cut-Out)
3. Check the resistance across the heater leads and ground—if there is a low resistance measured it indicates that the coil has shorted to ground
4. Check the resistance across the heater leads—If there is a very high/infinite resistance it indicates the heating element has a break in it
5. Contact Farnam Custom Products to replace the heater



CAUTION: Troubleshooting and repairs should only be attempted by qualified maintenance personnel



Operating your AF-20 3.1

To operate this heater, ensure the fan is running and energize the main supply disconnect. If using a controller, set the controlling device to the desired temperature.

During initial heating, it is recommended to slowly ramp up the process set point and inspect the heating system for problems

DO NOT operate the heater at voltages higher than the recommended use

DO NOT continue using a heater if there are signs of damage. Consult Farnam Custom Products

Mounting

The AF-20 3.1 will mount to most 80mm axial fans using the same mounting holes

Accessories



Compact Fans

- Mounts directly to AF20-3.1
- High performance and moderate pressure build-up
- Contact Farnam Custom Products for more information

Hardware Kit (KIT AF31)

- All the necessary hardware to attach the fan to your AF20-3.1