



CFA Series

Direct-Fired Gas Vertical Heaters

Standard Features

Casing

- internal tubular frame
- double wall doors
- rear doors on CFA22 & larger
- G-90 galvanized steel
- weatherproof construction
- hinged service doors with flush-mount latches
- six discharge options

Blower

- FC-DWDI centrifugal blower assembly
- v-belt drive
- 100,000 hour greasable bearings (CFA 18-236)
- permanent lubricated bearings (CFA 10-15)
- solid steel shaft
- split shafts with couplings on twin units

Burner

- wide-range, high capacity line burner
- up to 30:1 turndown ratio
- electric-pilot spark ignition

Burner-Observation Port

Manifold Controls Vestibule

- weatherproof enclosure
- easy-access to manifold and controls
- manifold built to required codes

Electrical Controls Vestibule

- weatherproof enclosure
- easy-access to manifold and controls
- exhaust-interlock terminals
- terminal strip for quick service check
- burner and blower service switches

Gas Connection

Motor

- standard, high E, open-drip proof with adjustable motor mount
- v-belt drive
- adjustable drive up to and including 25 HP
- starter with burner interlock

Lifting Eyes

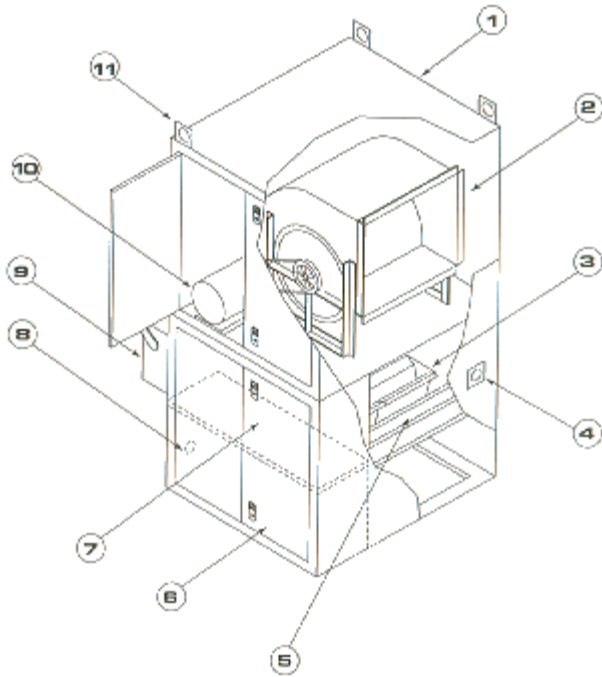
- standard heavy-duty lifting lugs

Controls

- electronic flame safety controls
- ignition transformer
- airflow proving control
- high-temperature safety controls
- burner and blower service switches

Remote Control Panel

- Summer-Off-Winter switch
- "Blower on" light
- "Burner on" light
- Other lights available



1. Casing
2. Blower
3. Burner
4. Flame Observation Port
5. Burner Profile
6. Manifold Controls Vestibule
7. Electrical Controls Vestibule
8. Gas Connection
9. Main Fused Disconnect
10. Motor
11. Lifting Eyes

Factory assembled, wired, and flame tested

Accessories

Discharge damper, two-position motor and interlock:

motor-operated parallel blade damper that prevents warm air from escaping the building through the unit. The motor-damper end switch energizes the starter circuit when the damper is in the full-open position, and returns to a closed position during shutdown.

Discharge louvers with air diffuser:

discharges air in four directions with vertical and horizontal blades, and is field-installed. The blades can be manually adjusted to set direction of airflow.

Filter section:

removable, hinged access door, with a 2-inch washable, aluminum-mesh filter, or a 2-inch pleated filter. Also available with 1-inch, 1.5 lb density insulation.

Inlet screen:

prevents material from entering unit. A 1-inch mesh screen fastens to unit's fresh-air intake.

Inlet damper, two-position motor and interlock:

motor-operated parallel blade damper that prevents outside air from entering the building through the unit. The motor damper end switch energizes the starter circuit when the damper is in the full-open position, and returns to a closed position during shutdown.

Return-air filter, 80/20 units:

1-inch or 2-inch deep, aluminum mesh, or 2-inch deep, 30% efficient, pleated type; v-bank, filter section shipped loose for field mounting to the return-air connection.

Options

Adjustable drives:

fixed-pitched sheaves are standard on motors 30hp and larger. An adjustable-pitch motor sheave is provided in lieu of the standard fixed-pitch sheave.

Casing insulation:

adds 1", 1.5 lb density insulation, that is glued and pinned to inner surface of unit's walls and ceiling, casing liners are standard with this option.

Casing liners with insulation:

prevents insulation fibers from being drawn into air stream and discharged into conditioned space, and prevents physical abuse and moisture damage to insulation. Made of galvanized steel.

Extended grease lines:

lubrication lines from blower bearings to a common point on the unit's exterior. Units with permanently lubricated bearings to be changed to pillow block-type.

Painted casings:

one coat of beige air-dried enamel over a vinyl wash primer.

Pillow-block bearings, 100,000 hr:

standard on all units ordered with an industrial blower, and are rated at 100,000 to 200,000 hours; available on smaller units with standard, permanently lubricated ball bearings.

Spring-isolated blower and motor:

mounted on a 1" deflection spring isolated base. A flexible duct connects the fan outlet to the unit's casing.

Two-speed damper package:

provides burner-profile dampers that automatically maintain the correct burner velocity. Also dual airflow switches and rate-limiting control are included to prevent over-firing on low speed.