AB-3PFBM SERIES



THREE PASS FIRETUBE COMPACT BOILERS

Inspected and registered

with the National Board of Boiler & Pressure Vessel Inspectors.

■ ALLIED WORK FORCE BOILERS ■

HEAVIEST DESIGNED BOILER IN ITS CLASS



"THROUGH THE DOOR DESIGN"

BILER

Capacities From 20 to 100 HP

670 to 3,348 MBTU/HR.

15 PSI Steam 30 PSI Water

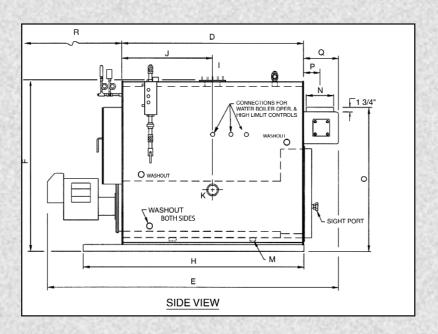
[60 PSI Water Optional]

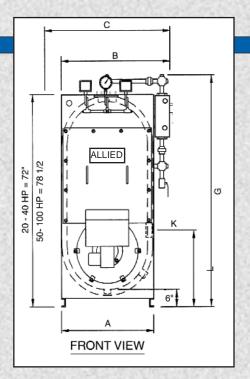
UL Approved Forced Draft Burners

Available in LOW NOx

Designed, constructed and stamped in accordance with the requirements of the ASME Boiler Codes.





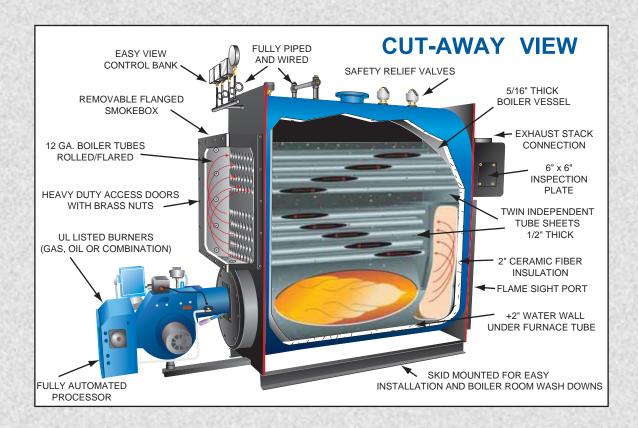


BOILER SPECIFICATIONS

(ALL DIMENSIONS ARE IN INCHES)

| BOILER HORSEPOWER | | | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 100 |
|---------------------------|-------------|--------|--------|---------|---------|--------|--------|--------|--------|--------|
| HEATING SURFACE | FIRESIDE | SQ.FT. | 100 | 132 1/2 | 165 1/2 | 200 | 246 | 291 | 336 | 400 |
| STEAM OUTPUT FROM & @212° | | LBS/HR | 690 | 1035 | 1380 | 1725 | 2070 | 2415 | 2760 | 3450 |
| МВН ОИТРИТ | | | 670 | 1004 | 1339 | 1674 | 2009 | 2343 | 2678 | 3348 |
| FIRING RATE, GAS | 1,000 BTU | CFH | 840 | 1260 | 1680 | 2100 | 2520 | 2940 | 3360 | 4200 |
| FIRING RATE, #2 OIL | 140,000 BTU | GPH | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 30 |
| WIDTH WITHOUT TRIM | | IN | 31 | 31 | 31 | 34 1/2 | 34 1/2 | 34 1/2 | 34 1/2 | 34 1/2 |
| WIDTH WITH TRIM | | IN | 38 | 38 | 38 | 42 | 42 | 42 | 42 | 42 |
| WIDTH WITH GAS TRAIN | | IN | 49 | 49 | 49 | 52 | 52 | 52 | 52 | 52 |
| BOILER LENGTH | | IN | 37 | 49 | 61 | 55 | 67 | 79 | 91 | 106 |
| OVERALL LENGTH | STD. BURNER | IN | 86 | 98 | 114 | 111 | 123 | 140 | 152 | 169 |
| SUPPLY HEIGHT | | IN | 71 1/2 | 71 1/2 | 71 1/2 | 76 5/8 | 76 5/8 | 76 5/8 | 76 5/8 | 76 5/8 |
| HEIGHT WITH TRIM | | IN | 79 | 79 | 79 | 86 | 86 | 86 | 86 | 86 |
| LENGTH OF SKID | | IN | 54 | 66 | 78 | 72 | 84 | 96 | 108 | 123 |
| SUPPLY SIZE | | IN | 4 | 4 | 4 | * 6 | * 6 | * 6 | * 6 | * 6 |
| SUPPLY LOCATION | | IN | 18 1/2 | 24 1/2 | 30 1/2 | 27 1/2 | 33 1/2 | 39 1/2 | 45 1/2 | 50 1/2 |
| RETURN SIZE | | IN | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| RETURN LOCATION | | IN | 27 1/4 | 27 1/4 | 27 1/4 | 32 | 32 | 32 | 32 | 32 |
| BOILER DRAIN SIZE | | IN | 1 | 1 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/2 | 1 1/2 | 1 1/2 |
| STACK DIAMETER, O.D. | | IN | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 |
| STACK HEIGHT | | IN | 60 1/4 | 60 1/4 | 60 1/4 | 67 1/4 | 67 1/4 | 67 1/4 | 67 1/4 | 67 1/4 |
| TO CENTER OF STACK | | IN | 6 7/8 | 6 7/8 | 6 7/8 | 8 1/4 | 8 1/4 | 8 1/4 | 8 1/4 | 9 1/4 |
| REAR SMOKEBOX DEPTH | | IN | 13 3/4 | 13 3/4 | 13 3/4 | 15 3/4 | 15 3/4 | 15 3/4 | 15 3/4 | 17 3/4 |
| TUBE PULL SPACE | | IN | 38 | 50 | 62 | 56 | 68 | 80 | 92 | 107 |
| SHIPPING WEIGHT | | LBS | 2952 | 3670 | 4332 | 4342 | 5046 | 5875 | 6597 | 7464 |
| WATER CONTENT - WATER | FLOODED | GALS | 141 | 191 | 245 | 255 | 313 | 394 | 434 | 508 |
| WATER CONTENT - STEAM | | GALS | 120 | 163 | 209 | 194 | 239 | 306 | 333 | 390 |
| BOILER HORSEPOWER | | | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 100 |

CONNECTIONS FOUR INCHES AND SMALLER ARE FEMALE THREAD, 6" CONNECTIONS ARE 150 LB. *STUDDING FLANGE.



STANDARD EQUIPMENT

BOILER: Three pass design for 15 psi steam or 30 psi water (optionally available for 60 psi water). Factory assembled with trim, tested, ASME code, UL, and CSD-1 standards.

STEAM TRIM: Kunkle safety relief valve, operating pressure control, high limit pressure control with manual reset, 4 1/2" steam pressure gauge with syphon and test cock, combination pump control and low water cut-off with gauge glass assembly and drain valve, auxiliary low water cut-off with manual reset.

<u>WATER BOILER TRIM</u>: Kunkle safety relief valve, operating temperature control, high limit temperature control with manual reset, 3 1/2" combination pressure & temperature gauge, M&M 750 low water cut-off control with manual reset.

BURNER: UL listed with pre-piped, wired and factory tested forced draft power burners for natural gas, propane (LP) gas, No. 2 (diesel) oil, or combination gas/oil.

ALLIED WORK FORCE BOILERS

- Factory Assembled, Prewired and Tested
- No Field Assembly Required
- UL Listed Burner Packages
- Complies with ASME, UL, CSD-1 and ASHRAE Standards
- High Efficiency, Low Stack Temperatures

AB-3PFBM BOILER FEATURES

Modified Scotch designed to fit through a standard 36" x 80" door opening Up to 100HP (3,348 mbh output).

The Allied AB-3PFBM Series boiler is America's most heavily designed and built boiler in its class.

Consider all the great features built into the Allied Work Force Boiler line and you will see why America chooses Allied first!

- A welded steel firetube boiler, the AB-3PFBM has extra-heavy 12-gauge tubes for extended life.
 All tubes are attached to the tube sheets by rolling and flaring. There are no welded tubes in the AB-3PFBM.
- 2. Thickest materials used in the industry . . .
 - A. Boiler shell is 5/16" thick boiler plate 20-40 HP / 3/8" 50-100 HP.
 - B. Twin boiler tube sheets are 1/2" thick boiler plate.
 - C. Insulation is 2" mineral wool and is lagged with 22-gauge boiler jacket.
 - D. Extra heavy 4" channel iron boiler skids.
- 3. Designed to last with special industrial grade features . . .
 - A. Couplings are 3,000 psi.
 - B. Flanged, detachable front and rear smoke boxes.
 - C. Brass nuts on front access panels, brass plugs in factory pre-piped crosses and tees on trim.

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The Spirit of Service

Represented by:

alliedboiler.com



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