



**TEMPEST III BURNERS FEATURE:**

**HIGH VELOCITY** - Comparable to Continental Thermal's renowned 442 gas burner

**DUAL-FUEL**-Natural gas and/or light oil.

**WIDE STABILITY RANGE**-From 15% excess fuel to 400% excess air.

**UNIT CONSTRUCTION**-The high temperature tile is secured in the main body section-no extra support is required

**USEFUL CAPACITY RANGES**-Ratings from 130 000 to 1 600 000 Btu/hr.

**EASY INSPECTION/SERVICE**-Air and gas piping need not be removed for complete access to internals.

**PREHEATED AIR CAPABILITY**-To 800F main air temperature at the burner.



**635 Burner**

**TABLE 1. Main and Atomizing Air capacities scfh\***

(for Btu/hr, multiply by 100)

Burner	fuel	Main air					Atomizing Air (with 16 osi Main Air)		Flame lengths 16 osi Main Air
		0.2	1	4	9	16	8 osi (gas)	30 osi (oil)	
635-1	gas	65	240	545	870	1220	75	180	9"
	oil	85	232	545	865	1200			
635-2	gas	170	500	1090	1660	2280	30	140	8"
	oil	165	430	1070	1660	2280			
635-3	gas	235	680	1530	2490	3420	70	180	12"
	oil	300	665	1430	2320	3180			
635-4	gas	545	1270	2830	4350	6050	160	390	20"
	oil	665	1240	2750	4310	5850			
635-5	gas	895	2060	4460	6950	9500	400 @ 16 osi	585	22"
	oil	895	2110	4760	7450	10000			
635-6	gas	1000	3500	7100	11300	15200	380 @ 16 osi	470	38"
	oil	1200	3600	7400	11200	15000			

\*burning on stoichiometric ratio

**TABLE 2. Main and Atomising Air capacities not burning scfh**

(use to size blowers)

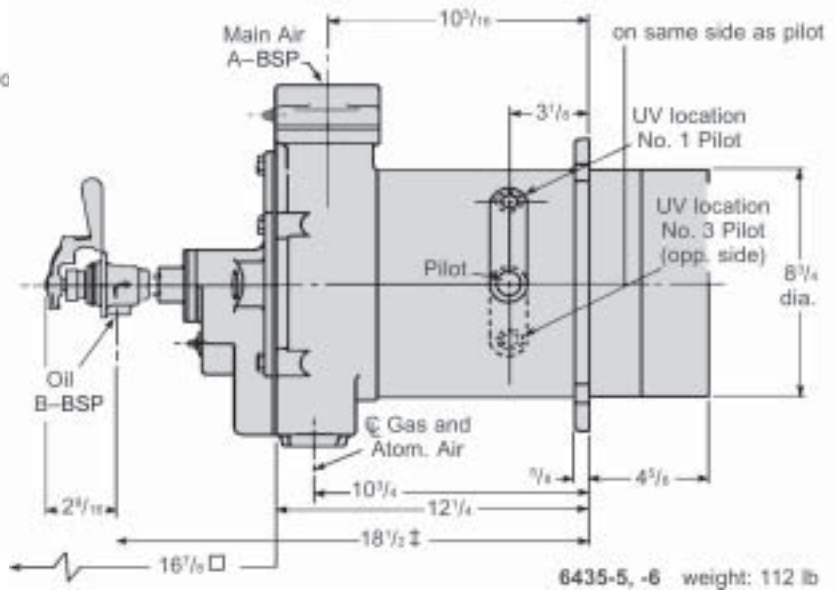
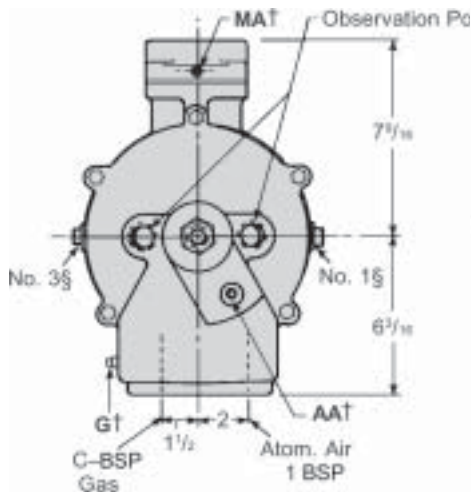
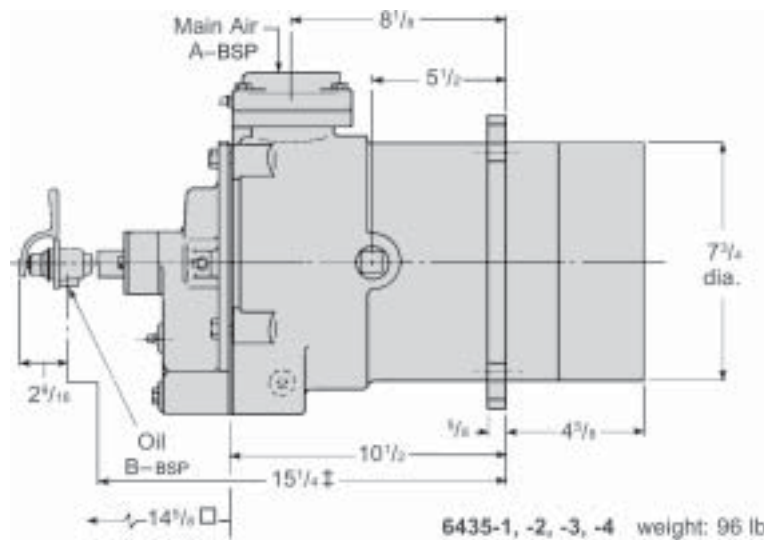
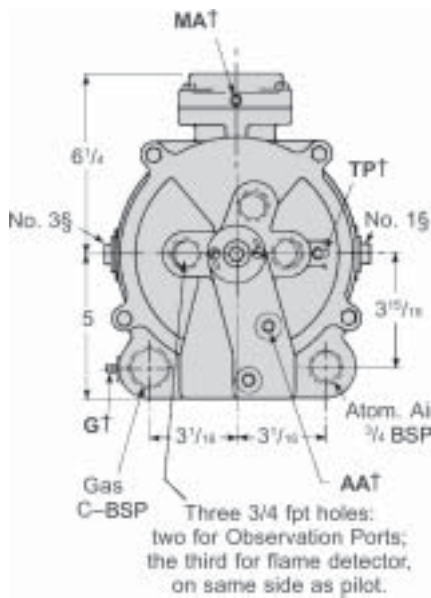
Burner	Main air at 16 osi	Atomizing Air (with 16 osi Main Air)	
635-1	1350	90	180
635-2	3000	90	190
635-3	4120	100	200
635-4	7240	240	460
635-5	12100	430 @ 16 osi	590
635-6	17500	430 @ 16 osi	590

**TABLE 3. Maximum %XS Air (16 osi Main Air)**

Fuel	Burner size					
	-1	-2	-3	-4	-5	-6
Natural Gas	400	400	400	350	350	600
#2 Oil	200	300	400	300	350	600

## DIMENSIONS

in inches



Recommended Pilot Tip 421-12

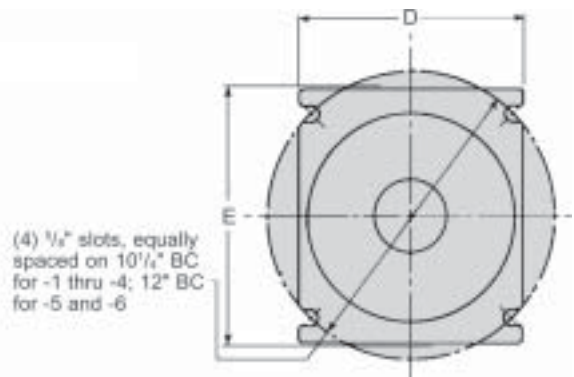
Dimension assumes close nipple between burner and Microtrol Oil Valve.

For sizes-1 through-4 with flame supervision, Microtrol valve cannot be close connected because of interference with handle.

Minimum for removal of intervals including Microtrol Valve.

1/8 BSP Pressure Taps: MA-Main Air, G-Gas, AA- Atomizing Air, TP-Tile

635	A	B	C	D	E	tile exit hole diameter	Microtrol Oil Valve
-1	1	1/4	1	8 3/8	9 1/8	1 9/64	183-03
-2	1 1/4	1/4	1	8 3/8	9 1/8	1 1/4	183-03
-3	1 1/2	1/4	1	8 3/8	9 1/8	1 1/2	183-03
-4	2	3/8	1	8 3/8	9 1/8	1 16/16	183-02-A
-5	2 1/2	3/8	1 1/4	9 1/2	10 1/8	2 1/2	183-02-A
-6	3	3/8	1 1/2	9 1/2	10 3/4	3	183-02-B



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