

19HE SERIES BOILER

INSTALLATION AND OPERATING INSTRUCTIONS

BECKETT OIL BURNERS

Boiler Model	Beckett Burner Model Number	Spec Number	I=B=R Burner Input GPH	A.T.C.	Nozzle LO/Hi	Head Setting	Pump Pressure PSI LO/Hi	Air Adjustment		Insert Depth	Pitch	Burner Motor HP
								LO Fire/ Shutter	HI Fire/ Band			
19HE-S/W-3	CF500	SM1002	2.6	CF60KK	1.75	2.0	180	4.00	0.00	1-3/4	2	1/3
19HE-S/W-4	CF500	SM1001	3.6	CF60KK	3.00	5.0	140	8.00	0.00	1-3/4	2	1/3
19HE-S/W-5	CF800	SM3001	5.0	CF60KH	4.00	2.0	150	10.00	4.00	4	2	1/3
19HE-S/W-6	CF1400	SM3101	6.5	CF66KD	4.00	2.5	150/250	2.75	4.00	4	2	1/2
19HE-S/W-7	CF1400	SM3102	7.9	CF66KD	4.50	3.5	150/300	3.50	6.00	4	2	1/2
19HE-S/W-8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19HE-S/W-9	CF2300	SM3202	10.8	CF66KG	6.50	0	175/275	2.25	2.75	4	2	3/4
19HE-S/W-10	CF2300	SM3202	12.2	CF66KG	7.00	0	175/275	2.50	3.25	4	2	3/4
19HE-S/W-11	CF2500	SM3301	13.6	CF102KP	5.00/2.75	0	300/300	1.50	2.50	4-1/2	2	2
19HE-S/W-12	CF2500	SM3302	15.0	CF102KP	5.50/3.25	0	300/300	1.75	3.00	4-1/2	2	2

Nozzle: CF500 - 3 section 60ES Hago
 CF500 - 4 section 45B Delevan
 CF800 - 5 section 45B Delevan
 CF1400 - 6 & 7 section 45P Hago
 CF2300 - 9 & 10 section 45P Hago
 CF2500 - 11 section 45B Delevan
 CF2500 - 12 section 45P Hago

Motor Current: 1 phase, 115/230, 60 Hz

Option for: 3 phase, 208-230/460V, 60Hz (for CF1400 and above only)

THESE INSTRUCTIONS TO BE LEFT WITH THE BOILER FOR REFERENCE

Smith
 CAST IRON BOILERS

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BURNER FIRESIDES MUST BE CLEANED AT LEAST ANNUALLY

The following safety checks must be made at initial start-up and on an annual basis thereafter:

High Limit Operation (MR)	_____	Set at _____ °F
Operating Limit Operation	_____	Set at _____ °F
Low Water Cutoff	_____	
Backup Low Water Cutoff	_____	
Service Switches	_____	
All additional limits	_____	
Safety Valve Capacity*	_____ MBH (LBS/HR)	
Burner Motor Amps	_____	
Flame Failure	_____	
CO ₂	_____ %	
Smoke (oil)	_____	
Carbon Monoxide (CO)	_____ ppm	Boiler Room Draft
Draft in Smokehood	_____ in. wc	negative _____
Draft Overfire**	_____ in. wc	positive _____
Stack Temperature	_____ °F	balanced _____
Efficiency	_____ %	
Combustion Makeup Air***	_____	

* Safety valve capacity must be at least equal to gross output of boiler.

** Draft should be adjusted to .05" to .1" wc positive pressure in smokehood. If vent system is under positive pressure, it must be gas tight.

*** There must be at least 10 sq. in. of free area per gallon of oil burned. When louvers are used, double the figure listed above.

Proper operating and safety instructions must be given to boiler operator.