

GAS FIRED

160kg/h–500kg/h

EB-N Series

Human- and Environment-Friendly,
Compact-Type Gas Fired Boiler

Features

- Space Saving Design suitable for the installation at narrow place
- Noise Absorbing Design and Silent Operation
- Stable Supply of High Quality Steam
- Simple Control and Operation Start by pressing one button



Gas
Fired

Multi-
boilers
installation

Once-
Through
Boiler

Item	Unit	EB-160N	EB-250N	EB-350N	EB-500N	EB-250PN	EB-350PN	EB-500PN	
Type of Boiler	—	Once-Through Boiler							
Max. Pressure	MPa(kgf/cm ²)	0.69(7)	0.98(10)						
Working Pressure Range	MPa	0.39~0.59		0.39~0.88					
Hydraulic Testing Pressure	MPa(kgf/cm ²)	1.58(10)							
Equivalent Evaporation	kg/h	160	250	350	500	250	350	500	
Heat Output	kW(kcal)	100(86,200)	157(135,000)	219(189,000)	313(270,000)	157(135,000)	219(189,000)	313(270,000)	
Boiler Efficiency	%	90			85	96			
Heating Surface Area	m ²	3.13	4.12	4.98	4.98	4.12	4.98	4.98	
Holding Water Volume	L	40	54	66	82	54	66	82	
Type of Burner	—	Blast							
Combustion Control	—	3-Position(High-Low-OFF)							
Feed Water Control	—	ON-OFF							
Ignition	—	AC Spark Ignition							
Flame Detection	—	Flame Rod							
Weight	kg	330	430	530	655	560	720	850	
Weight in Operation	kg	370	485	600	740	620	790	945	
External Dimensions	Width	mm	665	705	785	815	910	990	890
	Depth	mm	750	830	910	1,260	830	910	1,500
	Height	mm	1,845	1,941	1,995	1,955	1,941	1,995	1,955
Fuel Consumption	13A	m ³ (N)/h	9.9	15.4	21.6	32.7	14.5	20.3	29.0
	LPG	m ³ (N)/h	4.3	6.7	9.4	14.2	6.3	8.8	12.5
	Propane	kg/h	8.6	13.5	18.9	28.6	12.7	17.7	25.3
	LPG Butane	m ³ (N)/h	3.4	5.3	7.4	11.2	4.9	6.9	9.9
Supply gas pressure	13A	kPa	2.0±0.5(200±50)						
	LPG	(mmAq)	2.8±0.5(280±50)						
Power Supply	—	AC200V 3φ(50/60Hz)*							
Available Electricity	kW	Normal Temperature:0.6 High Temperature:0.8	Normal Temperature:1.0 High Temperature:1.0	Normal Temperature:1.35 High Temperature:1.35	Normal Temperature:1.70 High Temperature:1.70	Normal Temperature:1.0 High Temperature:1.0	Normal Temperature:1.35 High Temperature:1.35	Normal Temperature:1.70 High Temperature:1.70	
Total Electric Capacity	kVA	Normal Temperature:1.23 High Temperature:1.44	Normal Temperature:1.75 High Temperature:1.79	Normal Temperature:2.31 High Temperature:2.31	Normal Temperature:2.93 High Temperature:2.93	Normal Temperature:1.75 High Temperature:1.79	Normal Temperature:2.31 High Temperature:2.31	Normal Temperature:2.93 High Temperature:2.93	
Main Wire Size	mm ²	2							
Power Breaker Capacity	A	15							
Connection Dia.	Feed Water Inlet	Normal Temperature:15A High Temperature:20A		20A	Normal Temperature:15A High Temperature:20A		20A		
	Gas Inlet(13A)	25A		32A	25A		32A	40A	
	Gas Inlet(LPG)	25A		40A	25A		40A		
	Steam Outlet	25A		32A	25A		32A		
	Safety Valve Blow	20A	25A		32A	25A		32A	
	Boiler Water Blow	25A							
	Feed Water Tank Overflow	20A			25A	20A		25A	
	Economizer Drain	—					25A		
	Air Inlet	10A			15A	10A		15A	
	Chemical Inlet	15A							
Chimney	mm	φ120	φ150	φ200	φ250	φ150		φ250	

1. The above specifications are based on the following standard values in Japan.
 Steam pressure 0.49MPa(5kgf/cm²)
 Feed water temp. 15°C
 Feed air temp. 35°C
 Lower heating value 13A: 40.6 MJ/m³(N) [9,700 kcal/m³(N)]
 Propane: 93.7 MJ/m³(N) [22,380 kcal/m³(N)], 46.4 MJ/kg [11,080 kcal/kg]
 Butane: 118.9 MJ/m³(N) [28,400 kcal/m³(N)], 45.7 MJ/kg [10,920 kcal/kg]

2. Please always supply with gas at the stable pressure within standard range at anytime of boiler stop, boiler operation and other equipment operation.

3. The following allowance is considered as unavoidable measurement error :
 Measurement error in boiler efficiency ±1%
 Measurement error in combustion (input) ±3.5%
 4. Specifications are subject to change without prior notice.
 * 200-480V can be available by transformer.