

# FX N



## DESCRIPTION

Instantaneous reverse flame fire tube steam boiler, completely automatic and with high efficiency. Low water content and reduced dimensions make them the most suitable steam boiler for all small and medium installations.

## FEATURES

-  **Design pressure: 5 bar**
-  **Heat output: 31,7 ÷ 209,2 kW**
-  **Steam capacity: 50 ÷ 300 kg/h**
-  **Efficiency: > 91,0 %**

## ADVANTAGES

-  **High steam quality**  
At high load the internal separator prevents the entrainment of water droplets to the steam outlet, the steam produced is then always of high quality having a very high dryness fraction.
-  **Modular versions**  
The boiler is available as flexible modular sections dependant on the range of required power.
-  **Configurable to specific requirements**  
A wide range of optional accessories are available to customize the product to meet specific requirements.
-  **Maximum security**  
The generator has been designed in accordance with the strictest international safety regulations in force.
-  **Advanced management technology**  
The boiler can be equipped with programmable logic technology that allows complete compatibility with any data acquisition system, also allowing the adjustment of parameters through the display.
-  **Easy, fast and safe installation**  
The installation is very easy: you just need to connect the system to the electric, hydraulic, steam and discharge lines.

## Instantaneous fire tube steam boiler

### MODELS

The FX N model meets steam requirements between 50 and 150 kg/h.

The FX DUAL N model is provided in stacked boiler configuration and is capable of meeting steam demands between 100 and 300 kg/h. It is ideal for the installation in small-size heating plant rooms



**FX N (for CE countries)**  
(31,7 ÷ 104,6 kW)



**FX DUAL N (per paesi CE)**  
(63,4 ÷ 209,2 kW)

### AVAILABLE CERTIFICATIONS



### MAIN APPLICATIONS

- ⊕ Food and beverage industry
- ⊕ Distilleries
- ⊕ Wine farms
- ⊕ Hospitals

### TECHNICAL DATA

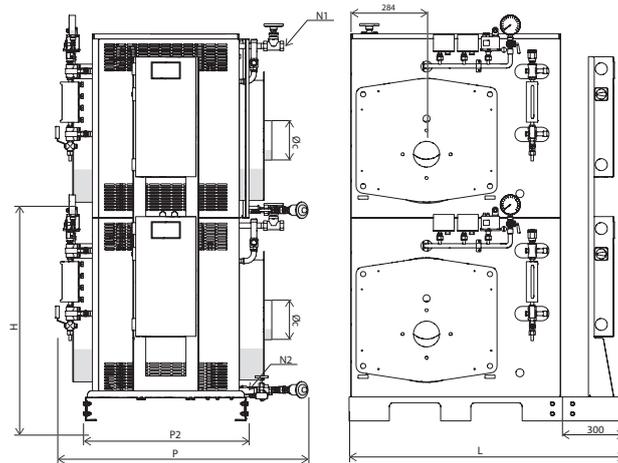
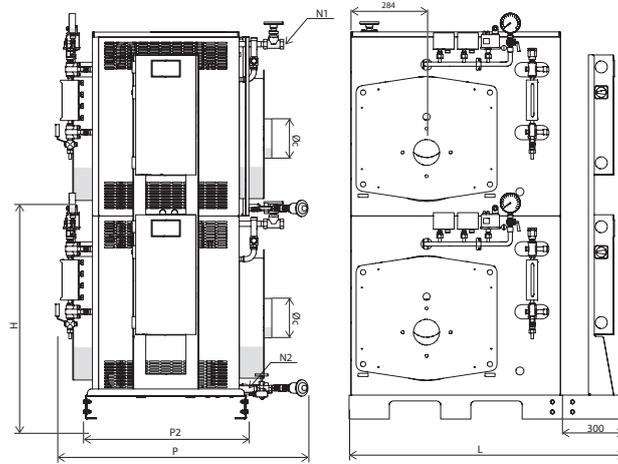
Model	Heat Output	Flow thermal	Steam capacity *:	Volume level H2O	Total volume H2O	Flue gas pressure drop	Gas consumption	Diesel fuel consumptio	Empty weight
FX	kW	kW	kg/h	lt	lt	mbar	Nm3/h	kg/h	kg
50	31,7	34,8	50	50	59	0,4	3,6	2,9	550
100	70,5	77,4	100	50	59	1,5	8,0	6,6	550
150	104,6	115,0	150	50	59	3,2	11,8	9,7	550

\* steam capacity with feed water at 80 ° C

Model	Heat Output	Flow thermal	Steam capacity *:	Volume level H2O	Total volume H2O	Flue gas pressure drop	Gas consumption	Diesel fuel consumption	Empty weight
FX DUAL	kW	kW	kg/h	lt	lt	mbar	Nm3/h	kg/h	kg
100 DUAL	63,4	69,6	100	100	59x2	0,4	7,1	5,9	990
200 DUAL	141	154,9	200	100	59x2	1,5	15,8	13,0	990
300 DUAL	209,2	230,0	300	100	59x2	3,2	23,6	19,4	990

\* steam capacity with feed water at 80 ° C

## DIMENSIONS



Model	H	L	P	P2	ØC	N1	N2
FX	mm	mm	mm	mm	mm	DN/in	DN/in
50	1130	1360	1280	800	200	3/4"	3/4"
100	1130	1360	1280	800	200	3/4"	3/4"
150	1130	1360	1280	800	200	3/4"	3/4"

Model	H	L	P	P2	ØC	N1	N2
FX DUAL	mm	mm	mm	mm	mm	DN/in	DN/in
100 DUAL	2030	1360	1280	800	200	3/4"	3/4"
200 DUAL	2030	1360	1280	800	200	3/4"	3/4"
300 DUAL	2030	1360	1280	800	200	3/4"	3/4"

## PRODUCT CODES

Model	Code
FX 100 DUAL N	86014113
FX 200 DUAL N	86014215
FX 300 DUAL N	86014315

## STANDARD EQUIPMENT

Accessories on the steam side, including:

- Steam outlet/crown valve
- Safety valve
- Reflex level indicator gauge
- Level indicator gauge drain and shut-off valve unit

Monitoring instrumentation, comprising:

- Pressure gauge with three-way test valve
- Regulation pressure switch
- Limit pressure switch
- Manual reset safety pressure pressure switch

Feed water delivery system containing:

- Centrifugal pump for water at 90°C
- Feed water shut-off valve
- Pump suction side filter
- Non-return valve

Blow down system comprising:

- Shut-off valve
- Pneumatically actuated boiler drain valve complete with solenoid valve

Automatic conductivity probe level control system comprising:

- Pump start and stop probes
- 1st and 2nd alarm and burner shut off probe for low level

Boiler control panel IP55 1/N ~ 230V 50 Hz

Steam accessory group for each generator, comprising:

- Steam outlet/crown valve
- Safety valve
- Reflex level indicator gauge
- Level indicator gauge drain and shut-off valve unit

Pressure monitoring instrumentation for each generator, comprising:

- Pressure gauge with three-way test valve
- Regulation pressure switch
- Limit pressure switch
- Manual reset safety pressure pressure switch

Water delivery system for each boiler, mounted on a support, containing:

- Centrifugal pump for water at 90°C
- Feed water shut-off valve
- Pump suction side filter
- Non-return valve

Automatic blow down system for each generator, composed of:

- Shut-off valve
- Pneumatically actuated boiler drain valve complete with solenoid valve

Automatic conductivity probe level regulator for each generator, composed of:

- Pump start and stop probes
- 1st and 2nd alarm and burner shut off probe for low level

No. 2 independent boiler control panels, IP 55 electrical protection, 230 V/1 + N/50 Hz.

## STANDARD EQUIPMENT

Code	Description	5 bar	
		FX N	FX DUAL N
96140101	Accessory kit for FX N and FX DUAL N boilers	■	■
96140200	Condensate separator kit for FX N and FX DUAL N boilers	■	■
96140060 *	Double safety valve kit for FX N and FX DUAL N boilers	■	■
96140092	Backup supply pump for FX N steam boiler (supplied wired)	■	
96140081	Backup supply pump for FX DUAL N steam boiler (supplied not wired)		■
96140050 **	Water delivery pre heating kit comprising of a solenoid valve and thermostat for FX N and FX DUAL N boilers	■	■
96140070 *	Double level indicator kit for FX N and FX DUAL N boilers	■	■
96140120 **	Condensate Collection Tank high temperature kit for FX N and FX DUAL N boilers	■	■
96140150	Steam header kit FX DUAL N		■

## COMPONENTS FOR HEATING PLANT ROOM COMPATIBLE WITH THE RANGE



BDV  
Blowdown vessel