



Premix Burner

aktemix



Wall Monuted Type

Aktemix - 40 - 50 - 70 - 90 - 100 - 150 - 200

Floor Standing Type

Aktemix - 250 - 300 - 400 - 600 - 800 - 900 - 1100 - 1250



LOW EMISSION



HIGH
EFFICIENCY



DURABLE
PRODUCT



QUALITY DOCUMENTS



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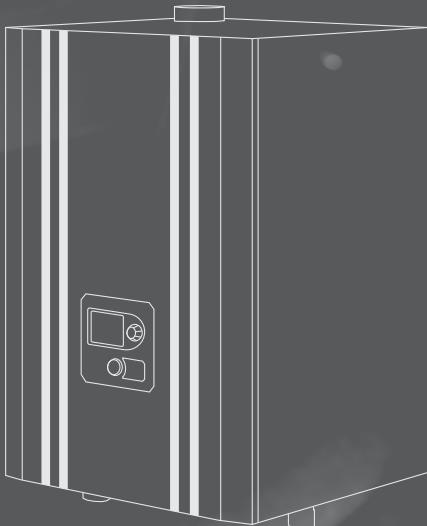
ISO
9001-2008
CERTIFIED QUALITY





Low Emission Environmentally Friendly

3S
Serial Spiral Coil



R

Patented Serial Spiral Coil Heat Exchanger

G

Calcification resistant stainless steel
exchanger design

V

Automatic heating temperature
adjustment according to room and
exterior weather conditions

C

According to TS EN 15502-2-1 + A1 at
50-30 C boiler temperature efficiency
value up to 109.3% (Aktemix-40)

L

Low emission value NOx class 6

F

Low flue gas temperature value 35,6 °C
Aktemix 100)

W

Remote control with internet connection



AKTES

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As Aktes ISI, we are a well-established company in the sector in the production of hot water boilers used in central system and individual heating systems since 1990, as well as industrial boilers used in high capacity industrial process. Aktes ISI, which produces on a total area of 12,500 m², including 7500 m² closed and 5000 m² open in Sivas, It produces solid, liquid and gas fuel powered hot water boilers in accordance with ISO 9001 standards and TS & EN standards. Company, we are aware of the importance of producing domestic and environmentally sensitive products in achieving the development goals of our rapidly growing country. Therefore, in addition to the steel boilers we produce, as a result of Long R & D studies, we produce aktemix series, condensing premix burner hot water boilers used in central heating systems. It is a source of pride that the patented aktemix series boilers with stainless steel heat exchanger, utility model certificate, which we produce with our employees who have many years of knowledge and experience in hot water boiler production are the first domestic production. As Aktes ISI, our vision and goal is to offer the most efficient and highest quality product to the customer at the most affordable price in the products produced for heating systems. We also export our condensing aktemix series boilers, which prove themselves with their sales in the domestic market, to abroad and increase their awareness abroad is one of our important goals. In this context, we are aware of the power of technology and we are strengthening our production capacity in line with this goal every year. Aktes ISI San.Tic. Ltd. Şti. it is also an OEM manufacturer.

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Why Aktemix

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aktemix• Boilers are high efficiency boilers operating with Premix system. Premix system is a technology that ensures complete combustion with the perfect mixture of gas and air in the fan before burning.



Aktemix, which developed as Aktes it is the first domestic and national stainless steel heat exchanger.

From this aspect, Aktes is a company that added value to our country .

- **aktemix**• Wall Mounted Type 32 kW – 56 kW– 69 kW–95 kW – 121 kW – 142 kW – 162 kW
- **aktemix**• Floor Standing Type 232 kW – 323 kW – 485 kW– 646 kW – 808 kW
969 kW – 1131 kW – 1292 kW
- SIEMENS control card controls hot water tank and zones, multiple heat groups, modulated pumps, solar energy system.
- High combustion efficiency with the latest technology metal fiber burner and modulated fan
- **AS**. Heat exchanger, all stainless steel, Aktes patented (utility model) system that informs calcification with serial - spiral - coil technology.
- Total power of 2592 kW with cascade system up to 16 boilers.
- Low modulation with modular design in floor standing type models, redundant operation and low cost spare parts supply.
- Easy service with openable front and side covers.
- Operating according to the time program
- Environmentally friendly with low NOx & CO values
- Compatible with natural gas and LPG
- Frost protection for the boiler and system
- Ideal compensation with external sensor
- CE certified according to TS-EN 15502-2-1 + A1
- 6 Bar operating pressure
- Low flue temperature 35.6 OC
- Low sound level 67.3 dB
- GAZMER approved
- NOx class 6

”





“ Wall Mounted Type ”

- Option according to need with stainless steel **SS** heat exchanger



Why stainless steel heat exchanger ?

- More resistant to thermal stresses
- More resistant to calcification
- Ergonomic structure
- Easy repair of possible punctured.

- It can be manufactured as a floor standing type according to the needs.



“ Premix system condensing technology ”

- Wide Product Range

/ Wall Mounted Type

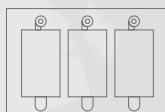
Aktemix - 40 / Aktemix - 50 / Aktemix - 70 / Aktemix - 90 /
Aktemix - 100 / Aktemix - 150 / Aktemix - 200

aktemix®



“ Floor Standing Type ”

Modular system with back up feature



Why Modular System ?

- Quieter operation.
- Possibility to operate with lower modulation.
- Back-up capability.
- Cheap spare parts cost.
- Other modules supply thermal need during repair



● Wide Product Range

/ Floor Standing Type

Aktemix - 250 / Aktemix - 300 / Aktemix - 400 / Aktemix - 600 /
Aktemix - 800 / Aktemix - 900 / Aktemix - 1100 / Aktemix - 1250 /

“ Modular System with great advantages ”

AKTES



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aktemix®

Components that
make a world brand

“

1 Heat Exchanger

2 Modulation Fan

3 Gas Valve

4 Venturi

5 Main Control Board

6 User Interface

7 Ignition Transformer

8 Ionisation Electrode

9 Ignition Electrode

10 Air Purger

11 Limit Thermostat

12 Pressure Sensor Outlet

13 Temperature Sensor

14 Safety Valve

15 Inlet Temperature Sensor

16 Flue Temperature Sensor

17 Chimney with flap

18 Cascade Kit



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QUALITY DOCUMENTS

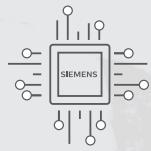


ISO
9001:2008
CERTIFIED
QUALITY



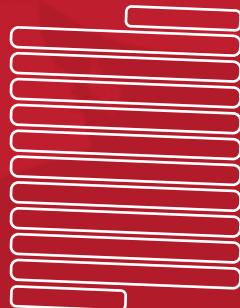
TURK LİDERLİĞİ
YÖNETİM SİSTEMİ





Main Board

- SIEMENS brand LMS14 main board
- Cascade up to 16 boilers and co-aging feature.
- Ability to control heating, solar energy applications
- Parameter loading with micro circuit board
- High efficiency with low modulation rate
- Additional circuit control with 3 expansion module connections
- Boiler, heat circuit and hot water tank pump connections
- Frequency controlled pump control
- External air, cascade, hot water tank sensor connection possibility
- 20 language menu display, date day time setting
- Vacation program
- 3 pieces of 230 V relay outputs
- Frost protection
- Pump blockade protection
- Lejyonella anti-bacterial property



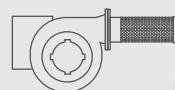
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Patented Product

3S Serial Spiral Coil

- Lime resistant
- All stainless steel
- High efficient
- Resistant to high flame shock
- Flexible structure resistant to mechanical stress

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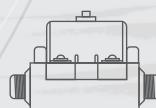
Condensing Premix Combustion Technology

- Thanks to the Premix Burner integrated in the boilers, provides full combustion and reaching the highest level of combustion in the module by mixing the gas and air at the best rate.



Fan Venturi Group

- For flame with modulating fan and venturi the necessary air-gas mixture is obtained. Automatic fan speed is adjusted according to the boiler power, thus low noise level and superior efficiency are provided.



Gas Valve

- 1: 1 Working with mixing method, the gas valve provides safe gas circulation in proportion to the amount of air according to the speed of the modulated fan.





Experience Cascade
technology with
Aktemix difference

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Akte.mix series boilers produced for the central system supply the heat requirements of the buildings in the most efficient way. It can be installed up to 16 boilers side by side and provides 15% condensation efficiency with superior power modulation rate.

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- Cascade is the way that multiple boilers work together in harmony in buildings where a single boiler system cannot supply their high-capacity heat requirements.
- The heat requirement is calculated automatically and the flame length is determined with fan modulation and high efficiency is achieved.
- Aktemix series floor standing type boilers are designed as modules that work with cascade. In this way, in case of failure in one module, other modules come into play and supply the heat requirement.
- With the co-aging feature, the lifespan of the boilers is equalized.
- Another advantage of the cascade is that a new boiler can be easily added to the system when increasing the heat capacity in the building.



QUALITY DOCUMENTS



Aktemix Control Panel

- Internet service with webserver
- Easy to use with one hand thanks to the Push-to-Turn button
- Latest version SIEMENS control panel Easy to use menu with 20 language option.



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- Heating comfort increases
- System losses are minimized
- It has been developed to provide the highest efficiency in all weather conditions.

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 **AKTES**



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Cascade Control Auxiliary Products

“ All the auxiliary products in the Cascade Control unit, the most compatible brands and models for Aktemix, we chose them as a result of long R&D studies, because there are long lasting and we care about your comfort. **”**



● SIEMENS OCI345.06

Cascade Module

It is the cascade module that should be present in each boiler in cascade systems.

● SIEMENS QAS36/101

Balance tank sensor

It is sensor used to transfer the balance tank temperature to the master boiler.

● SIEMENS QAC34/101

Outside Temperature Sensor

It is for operating the boilers according to the outside temperature. Required for every system.

● RECIRCULATION PUMP

3 Speed and Frequency Controlled Circulation Pump

It is used to ensure the water circulation between the boiler and the balance tank. It must be used in every boiler.

● SIEMENS AVS75.390

Three Way Valve Module

For systems that require three-way valves

● SIEMENS QAA55110/101

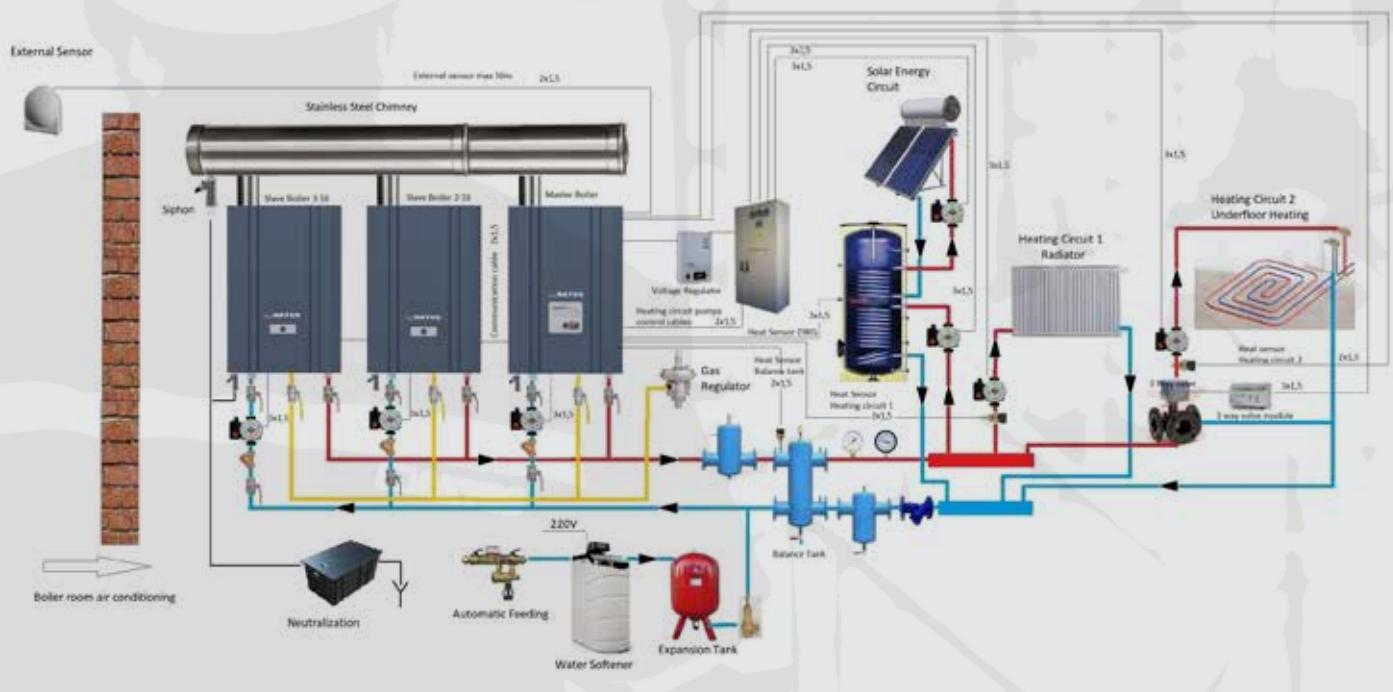
Modulating Room Thermostat

It is for the operation of the boilers according to the temperature of the room.

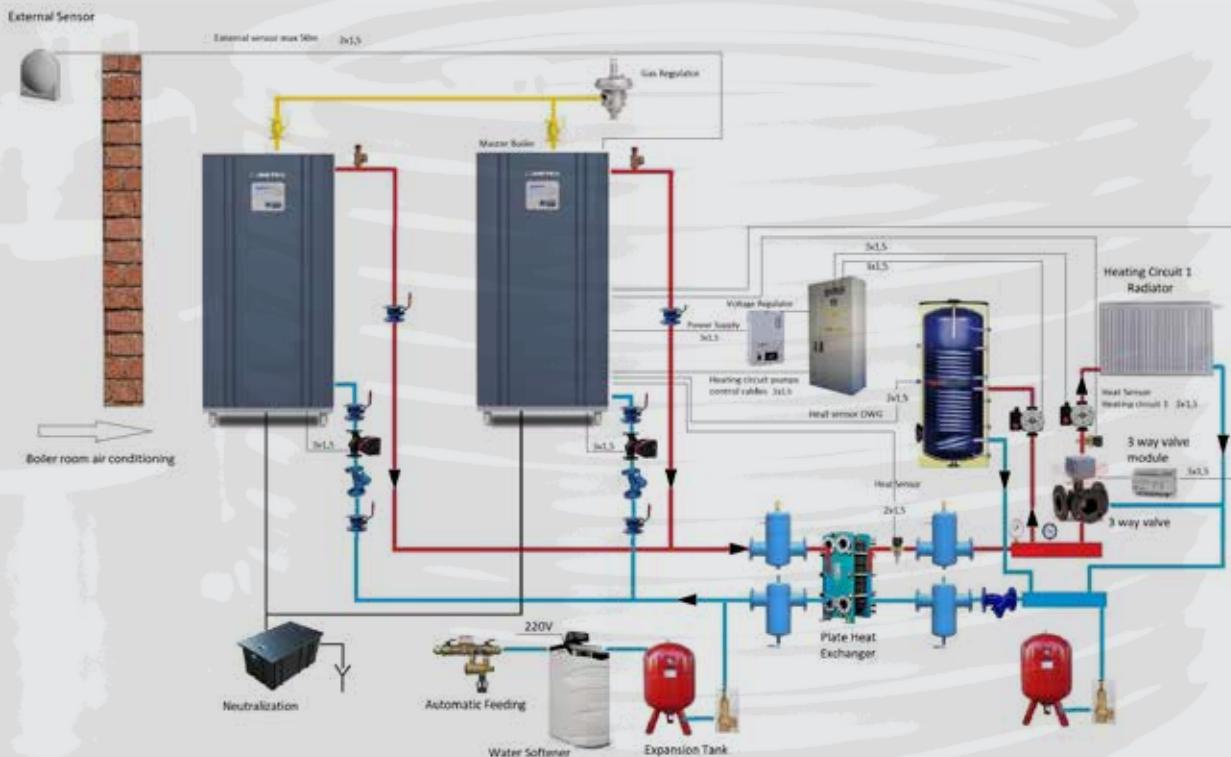


Aktemix Connection Diagram

Triple Wall Mounted Type Cascade Scheme



Double Floor Standing Type Cascade Scheme



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Technical Data Sheet

Aktemix Wall Mounted Models Technical Data Tables



aktemix®

	UNIT	AKTEMIX 40	AKTEMIX 50	AKTEMIX 70	AKTEMIX 90
Gas inlet pressure	mbar		20		
Fuel consumption (min. - max.)	m ³ /h	0,45 - 3,22	0,9 - 5,6	1,07 - 6,85	1,42 - 9,1
type of gas			Doğalgaz G20		
Flue pressure (min.-max.)	Pa	150-170	150-170	140-160	150-170
Flue gas flow (min.-max.)	g/s	12-17	22-24	27-29	37-40
Flue gas temp. (min.-max.) (80-60°C)	°C	62,1 - 74,2	58,0 - 77,1	57,3 - 77,4	59,7 - 80,2
Flue gas temp. (min.-max.) (50-30°C)	°C	35,3 - 57,7	35,2 - 58,6	34,0 - 62,6	36,8 - 54,7
Nox class	class		6		
Nox data	mg/kWh	23	25	23	32
Power - Efficiency data					
Nominal output power (80-60°C)	kW (min)	4	8	10	13
	(max)	29	52	64	87
Nominal outputpower (50-30°C)	kW (min)	5	9	11	15
	(max)	32	56	69	95
Heating efficiency (80-60°C)	% (min)	97,4	96,72	96,78	97,2
	(max)	97,6	97,3	97,13	97,0
Heating efficiency(50-30°C)	% (min)	109,3	107,3	107,0	107,87
	(max)	109,1	106	105,88	106,2
Heating efficiency (inlet water 30°C)	% (kısımlı)	109,2	107,87	107,46	107,9
Installation data					
Installation water volume	lt	15	15	15	21
Water operating pressure (max)	bar		6		
Working operating temp. Min.-max.)	°C		30-90		
Hydraulic loss	kPa	10,66	10,66	10,66	23,8
Gas inlet connection	inç		3/4		
Water inlet-outlet connection	inç		1 1/2		
Electrical data					
Electrical supply	VAC - Hz		220-230 V - 50 Hz		
Power consumption max.	W	140	140	140	140
Protection class			IP 20		
General data					
Dimension (width x length x height)	mm	610x560x735	610x560x735	610x560x735	610x560x885
weight (dry)	kg	35	35	35	55
chimney diameter	mm	100	100	100	100
Modulation ratio			1:6		
Type of fuel installation			B23		



QUALITY DOCUMENTS



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Technical Data Sheet

Aktemix Wall Mounted Models Technical Data Tables



aktemix®

	UNIT	AKTEMIX 100	AKTEMIX 150	AKTEMIX 200
Gas inlet pressure	mbar		20	
Fuel consumption (min. - max.)	m ³ /h	1,83 - 11,38	2,23 - 12,66	2,65 - 14,99
type of gas		Doğalgaz G20		
Flue pressure (min.-max.)	Pa	90-100	90-100	130-150
Flue gas flow (min.-max.)	g/s	46-51	52-59	62-69
Flue gas temp. (min.-max.) (80-60°C)	°C	59,5 - 80,7	56,2 - 79,6	54,4 - 79,2
Flue gas temp. (min.-max.) (50-30°C)	°C	35,6 - 54,3	34,2 - 53,8	35,9 - 55,0
Nox class	sınıf		6	
Nox data	mg/kWh	33	35	35
Power - Efficiency data				
Nominal output power (80-60°C)	kW (min)	17	21	24
	(max)	110	125	148
Nominal outputpower (50-30°C)	kW (min)	18	24	27
	(max)	121	142	162
Heating efficiency (80-60°C)	% (min)	97,18	95,3	97,02
	(max)	97,12	95,6	97,37
Heating efficiency (50-30°C)	% (min)	107,56	109,1	107,0
	(max)	106,71	108,5	106,06
Heating efficiency (inlet water 30°C)	% (kismi)	107,93	109,6	107,45
Installation data				
Installation water volume	lt	21	23	28
Water operating pressure (max)	bar		6	
Working operating temp. Min.-max.)	°C		30-90	
Hydraulic loss	kPa	23,8	48	52
Gas inlet connection	inc	3/4	3/4	3/4
Water inlet-outlet connection	inc	1 1/2	1 1/2	1 1/2
Electrical data				
Electrical supply	VAC - Hz	220-230 V - 50 Hz		
Power consumption max.	W	140	300	300
Protection class		IP 20		
General data				
Dimension (width x length x height)	mm	610x560x885	610x560x925	610x560x980
weight (dry)	kg	55	58	65
chimney diameter	mm	100	100	100
Modulation ratio			1:6	
Type of fuel installation		B23		



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Technical Data Sheet

Aktemix Floor Standing Models Technical Data Tables



aktemix®

	UNIT	AKTEMIX 250	AKTEMIX 300	AKTEMIX 400	AKTEMIX 600
Gas inlet pressure	mbar			20	
Fuel consumption (min. - max.)	m³/h	3,75 - 21,25	5,29 - 29,98	7,92 - 44,97	10,59 - 59,97
Type of gas			Doğalgaz G20		
Flue pressure (min.-max.)	Pa	130-150	140-160	150-170	150-170
Flue gas flow (min.-max.)	g/s	89-97	124-135	186-203	248-270
Flue gas temp. (min.-max.) (80-60°C)	°C	53,2 - 73,6	54,4 - 79,2	54,0 - 80,1	55,0 - 79,3
Flue gas temp. (min.-max.) (50-30°C)	°C	35,0 - 54,9	35,9 - 55,0	36,0 - 54,5	35,7 - 55,1
Nox class	class		6		
Nox data	mg/kWh	36	35	36	35
Power - Efficiency data					
Nominal output power (80-60°C)	kW (min)	35	49	73	97
	(max)	212	297	445	593
Nominal outputpower (50-30°C)	kW (min)	39	54	80	107
	(max)	232	323	485	646
Heating efficiency (80-60°C)	% (min)	98,1	97,02	97	97,02
	(max)	98,3	97,37	98,2	97,37
Heating efficiency (50-30°C)	% (min)	108,4	107	107,3	107
	(max)	107,5	106,06	106,08	106,06
Heating efficiency (inlet water 30°C)	% (kısıtlı)	108,73	107,45	107,4	107,45
Installation data					
Installation water volume	lt	46	56	84	112
Water operating pressure (max)	bar			6	
Working operating temp. Min.-max.)	°C		30-90		
Hydraulic loss	kPa	52	52	52	52
Gas inlet connection	inç	1 1/2	1 1/2	2	2
Water inlet-outlet connection	inç	2	2	2 1/2	3
Electrical data					
Electrical supply	VAC - Hz		220-230 V - 50 Hz		
Power consumption max.	W	600	600	900	1200
Protection class			IP 20		
General data					
Dimension (width x length x height)	mm	700x1300x1500	700x1300x1600	700x1730x1600	700x2210x1600
Weight (dry)	kg	130	130	195	260
Chimney diameter	mm	150	150	200	200
Modulation ratio			1:6		
Type of fuel installation			B23		



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Technical Data Sheet

Aktemix Floor Standing Models Technical Data Tables



aktemix®

	UNIT	AKTEMIX 800	AKTEMIX 900	AKTEMIX 1100	AKTEMIX 1250
Gas inlet pressure	mbar			20	
Fuel consumption (min. - max.)	m ³ /h	13,2 - 74,96	15,88 - 89,94	18,53 - 105,15	21,18 - 118,94
Type of gas			Doğalgaz G20		
Flue pressure (min.-max.)	Pa	140-160	140-160	150-170	150-170
Flue gas flow (min.-max.)	g/s	310-337	290-370	432-471	494-538
Flue gas temp. (min.-max.) (80-60°C)	°C	54,0 - 79,2	55,0 - 81,2	50,1 - 79,8	54,6 - 79,1
Flue gas temp. (min.-max.) (50-30°C)	°C	35,8 - 54,4	35,7 - 53,8	34,0 - 56,0	35,8 - 55,1
Nox class	class			6	
Nox data	mg/kWh	35	36	34	35
Power - Efficiency data					
Nominal output power (80-60°C)	kW (min)	121	146	170	194
	(max)	742	889	1038	1186
Nominal outputpower (50-30°C)	kW (min)	134	161	187	214
	(max)	808	969	1131	1292
Heating efficiency (80-60°C)	% (min)	97,0	97,2	97,1	97,02
	(max)	97,42	97,3	97,25	97,37
Heating efficiency (50-30°C)	% (min)	107,25	107,3	107,2	107
	(max)	106,12	106,1	106,0	106,06
Heating efficiency (inlet water 30°C)	% (kısımlı)	107,55	107,6	107,58	107,45
Installation data					
Installation water volume	lt	140	168	196	224
Water operating pressure (max)	bar			6	
Working operating temp. Min.-max.)	°C	30-90			
Hydraulic loss	kPa	57	57	57	57
Gas inlet connection	inç		2 1/2		
Water inlet-outlet connection	inç	4	4	5	5
Electrical data					
Electrical supply	VAC - Hz		220-230 V - 50 Hz		
Power consumption max.	W	1500	1800	2100	2400
Protection class			P 20		
General data					
Dimension (width x length x height)	mm	1110x1730x1600	1110x1730x1600	1110x2210x1600	1110x2210x1600
Weight (dry)	kg	325	390	455	520
Chimney diameter	mm	250	250	300	300
Modulation ratio			1:6		
Type of fuel installation			B23		





" kazancınız "

Wall Mounted Type

Aktemix - 40 - 50 - 70 - 90 - 100 - 150 - 200

Floor Standing Type

Aktemix - 250 - 300 - 400 - 600 - 800 - 900 - 1100 - 1250



Our Regional Directorates
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OUR SERVICES