



## **Thermex Rigel**

Premix Condensing  
Combi Boiler

# THERMEX'S VISION

Thermex is one of the world's leading specialist manufacturers of boiler, electric storage water heater, thermo-boiler and instant water heater.

Thermex, since founding in 1949 has always improved its technology to higher levels and has reached to top quality level for electric water heaters field where Thermex is a specialist. However, not having been contended with its level, the Company pursues its activities by increasingly improving on technology, quality level and product development.

Thermex added its wall hung combination boiler manufacturing plant in Izmir, Turkey in the second half of 2019 to its already operating Russia, Ukraine and China plants, thus speeds forward to access its growth targets by accomplished the first step of its investment initiative in Turkey.

## Thermex is a World Brand!

**70 years**

of experience in water heating appliances



**60.000 m<sup>2</sup>**

production and warehouse area



**90%**

percentage of full automation in technologic processes



Thermex Plant, Izmir - Turkey



Thermex Russia Plant



Thermex China Plant

## Thermex Philosophy

Our philosophy is to produce environment friendly, economic and healthy appliances to provide hot water for both individual and industrial needs. Along with producing advanced and modern technologies we also offer various services to satisfy modern needs of people.

## Our Values

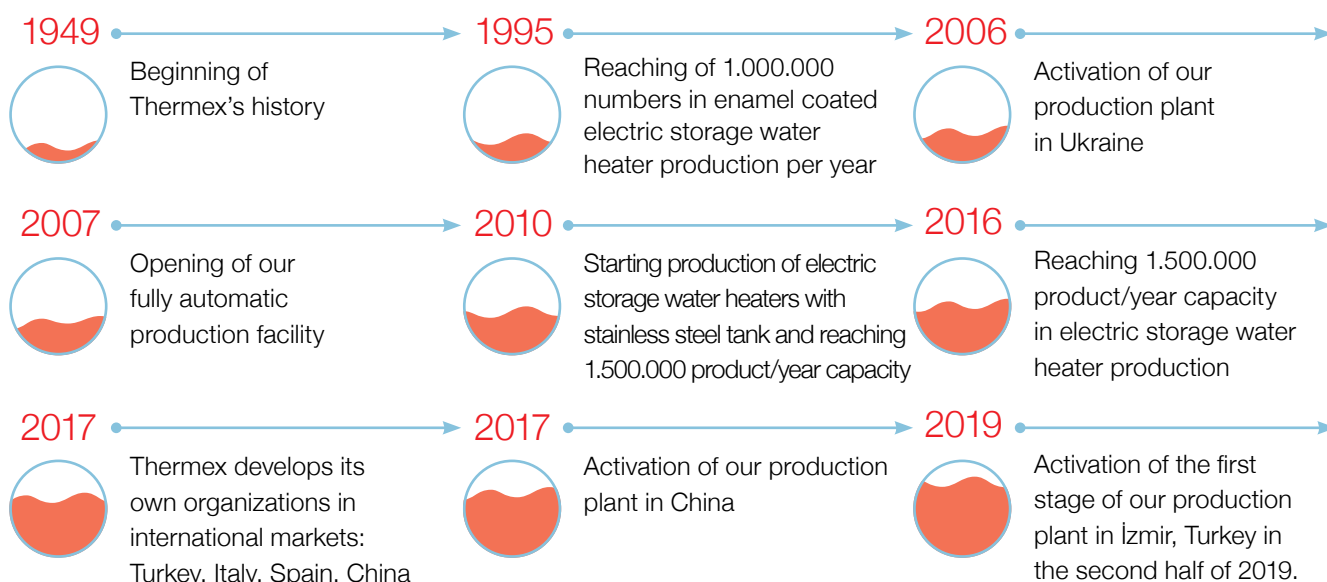
Developing, producing new and modern products we furnish your house with warm and comfort, and help to improve your living quality.

## Our Mission

To continue producing advanced, modern, compact and environment friendly products to satisfy the current and possible future needs and comforts of people.



## History and Achievements of Thermex



# Thermex Rigel

## Premix Condensing Combi Boiler

### General Common Features

- High efficiency with premix condensing technology,
- With 3 different capacity of 24 kW, 27,99 kW and 35 kW, possibility of using various areas and places,
- 4 star efficiency class (92/42/EEC),
- All components used in the product are top quality products in their field and supplied from European suppliers,
- High efficiency with premix combustion assembly consisting of integrated air/gas mixer, modulating fan, stainless steel burner and stainless steel heat exchanger,
- Modulating range between 21-100% with combined gas valve with wide modulating range,
- Eco-friendly with combustion efficiency and low gas emissions with stainless steel burner (Low NOx and CO emissions), NOx class 6,
- High DHW volume with stainless steel plate heat exchanger for hot water production,
- Electronic ignition system and microprocessor main board,
- Smart fault diagnostics, fault correction and warning system,
- Quite operating feature,
- Easy to use with specially designed control panel with ergonomic digital display,
- High safety standards with 14 different advanced safety system,
- High combustion efficiency in accordance with EN 15502-1, 15502-2-1 directives,
- Easy installation and space saving with compact dimensions,
- Possibility to connect room thermostats.

### Advance Safety Systems

- Ignition and ionization electrode,
- Flue/air safety system,
- Automatic air purge,
- Low/High voltage protection,
- Antifreeze protection,
- Pump anti- blocking protection,
- 3-way valve anti- blocking protection,
- 3-bar safety valve,
- Low water pressure switch,
- DHW temperature sensor,
- Central Heating circuit and DHW safety system,
- DHW flow turbine safety system,
- Filling tap,
- Ignition and flame safety.

MODERN AND  
AESTHETIC  
DESIGN





High Saving



Fault Diagnostics



Easy Installation



Digital Display



Quiet Operation



Compact Dimensions



Anti-Freezing

**Stainless Steel Premix Heat Exchanger:** High efficiency and long-lasting. Made of stainless steel.

**Premix Burner:** Consists of integrated air/gas mixer, modulating fan, and stainless steel burner. Stainless steel burner has high combustion efficiency and low gas emissions, is eco-friendly.

**Domestic Hot Water (DHW) Exchanger:** Stainless steel plate heat exchanger and brass hydraulic block are used to meet the sanitary hotter demands.

**High Efficiency:** Provides central heating efficiency up to 108,1%.

**User Friendly Digital Control Panel:** Ensures the user to see many operating parameters through LCD display, easy to use.

**Three-Stage Circulation Pump:** High efficiency and low power consumption.

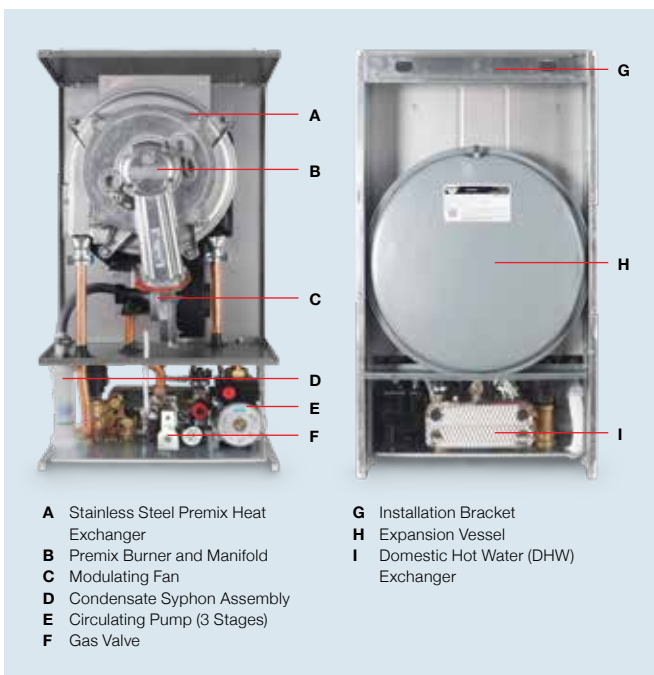
**Closed Expansion Vessel:** Compensates the expansion of the hot water circulated in the central heating circuit. All capacities use the same, 8 liter, closed expansion vessel.



### User Friendly Control Panels

Thermex Premix Condensing boilers use a user friendly control panel. The Control Panel has a 2.1" wide digital display where many data of the boiler can be monitored. Through with knobs on the control panel you can easily set central heating temperature and domestic hot water temperature and modify service parameters as well. The manometer located on the control panel allows you to monitor the central heating system water pressure. Further through the reset button you may reset your boiler if required.

### High Quality Product Components

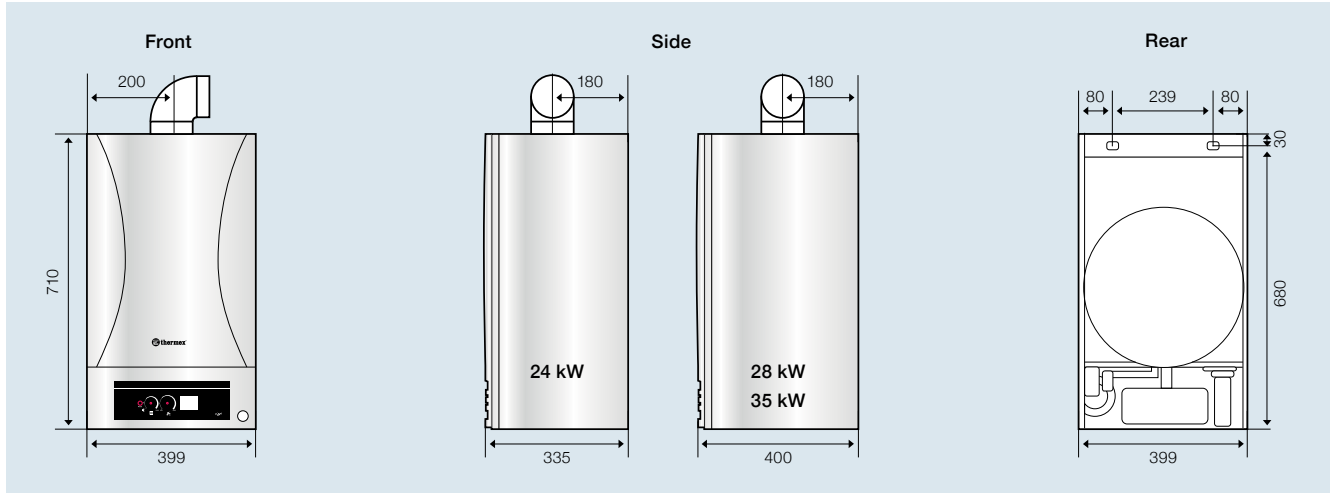


### Control Board

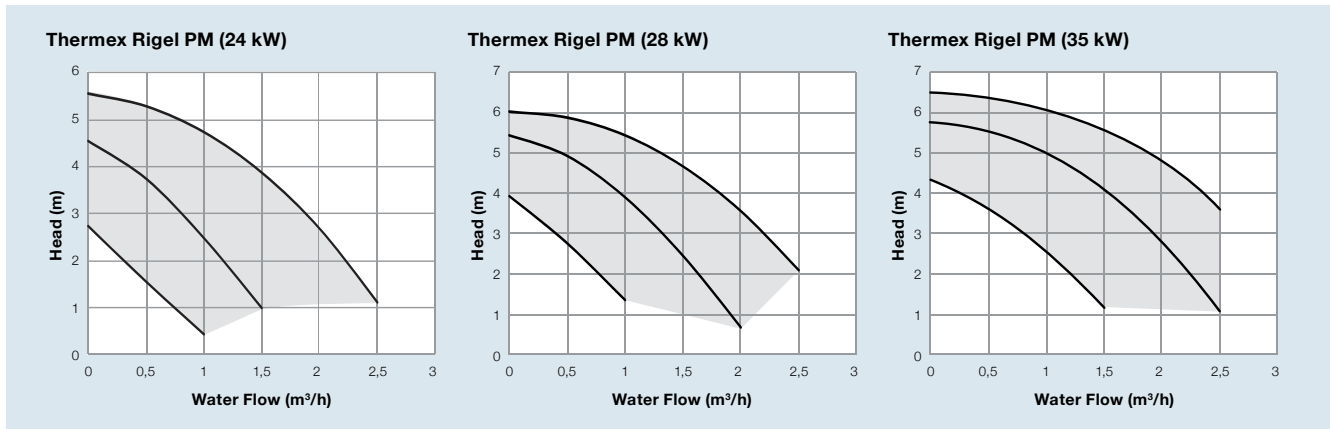




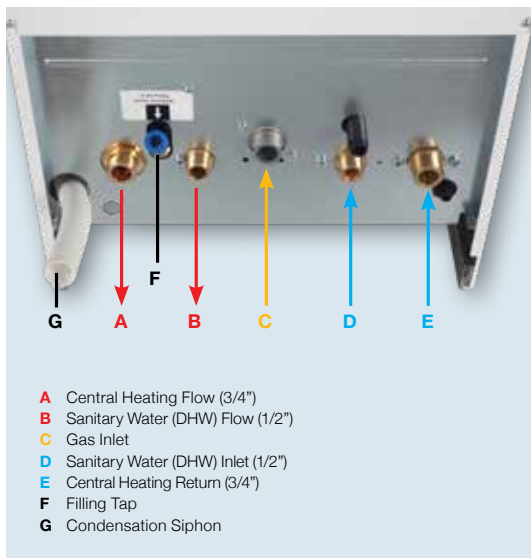
## Dimensions



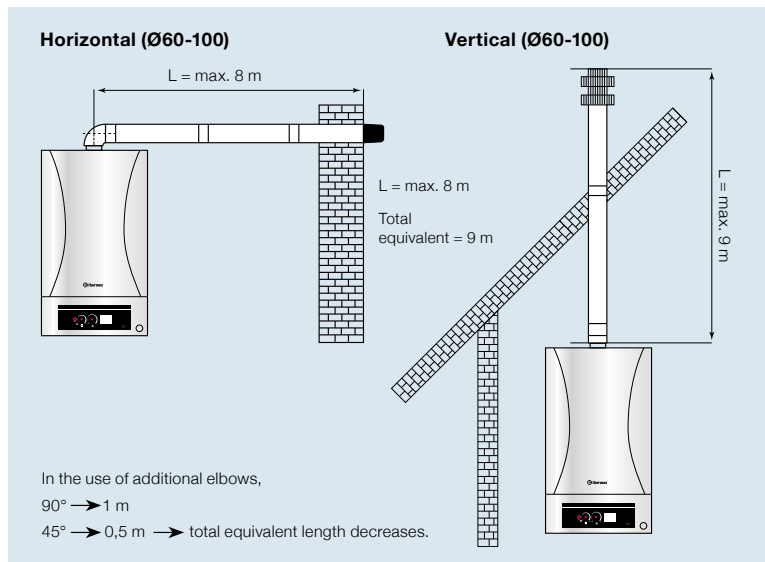
## Working Diagram of Pump



## Connections of Boiler



## Chimney Solutions



## Technical Specifications

Condensing Boiler Models	Unit	Thermex Rigel PM 24	Thermex Rigel PM 28	Thermex Rigel PM 35
Gas Type		G20	G20	G20
Gas Inlet Pressure (for G20)	mbar	20	20	20
Type		C13, C33	C13, C33	C13, C33
Category		I2H (G20=20 mbar)	I2H (G20=20 mbar)	I2H (G20=20 mbar)
<b>Central Heating System</b>				
Maximum Efficiency (Partial Load)	%	108	108,1	108
Efficiency Class (92/42/EEC)		★★★★	★★★★	★★★★
Central Heating Nominal Power (50-30°C)	kW	24	27,99	35
Central Heating Minimum Power (50-30°C)	kW	5,3	6,28	7,44
Central Heating Nominal Power (80-60°C)	kW	21,5	25,1	31,2
Central Heating Minimum Power (80-60°C)	kW	4,9	5,7	6,8
Maximum Nominal Input (Qi)	kW	22,6	25,9	32,3
Minimum Nominal Input (Qi)	kW	5,2	6,1	7,2
Central Heating Temperature Adjustment	°C	30-80	30-80	30-80
Central Heating Circuit Max. Pressure	bar	3	3	3
Central Heating Circuit Min. Pressure	bar	0,8	0,8	0,8
NOx Class		6	6	6
Gas Consumption - at Maximum Power	m³/h	2,38	2,74	3,42
Gas Consumption - at Minimum Power	m³/h	0,57	0,64	0,76
Expansion Vessel Capacity	Liter	8	8	8
Expansion Vessel Pre-charged Pressure	bar	1	1	1
<b>Domestic Hot Water (DHW) System</b>				
DHW Heating Power, Max	kW	21,5	27,5	32,2
DHW Heating Power, Min	kW	4,9	5,7	6,8
DHW Volume (ΔT = 30°C, Max)	l/min.	10,3	13,2	15,4
DHW Volume (ΔT = 25°C, Max)	l/min.	12,3	15,8	18,4
DHW Temperature Adjustment	°C	30-60	30-60	30-60
Maximum Operating Pressure	bar	9	9	9
Minimum Operating Pressure	bar	0,3	0,3	0,3
Annual Electric Power Consumption for DHW Production	GJ	16,4	16,5	16,7
<b>Electrical Specifications</b>				
Power Supply Voltage	VAC	230	230	230
Power Supply Frequency	Hz	50	50	50
Power Consumption	W	160	160	190
Electric System Protection Grade	-	IP X4D	IP X4D	IP X4D
<b>Connections to Installation</b>				
Gas Connection	inch	3/4	3/4	3/4
Central Heating Circuit Flow / Return	inch	3/4	3/4	3/4
HDW Inlet / Outlet	inch	1/2	1/2	1/2
<b>General Specifications</b>				
Sound Power	dB(A)	51	52	52
Flue Diameter - Ø	mm	60/100	60/100	60/100
Dimensions (Height x Width x Depth), Without Package	mm	710 x 399 x 335	710 x 399 x 400	710 x 399 x 400
Dimensions (Height x Width x Depth), With Package	mm	760 x 430 x 392	760 x 430 x 460	760 x 430 x 460
Weight (Without Package)	kg	33,6	36,6	37,8
Weight (With Package)	kg	35,6	39,2	40,4

# REMOTE CONTROL

With smart room thermostat you may control the temperature of your house with mobile applications from wherever you are on the world.

The **smart location** feature of HT 400 and HT 500 SET smart thermostats you may decrease the temperature of your house when you leave or increase when coming your house. Through mobile applications you may see in graphics the operating hours of your boiler, the temperature of your house and outside temperature and may get report towards the past.

You may select the best heating mode to manage the temperature of your house via 6 different modes of your Remote Controlled Digital Smart Thermostat.



## ROOM THERMOSTATS

Your room thermostats control the temperature in your living area effectively to provide a comfort living.



**HT 120 Digital Room Thermostat with Cable**

- Up to 30% Savings in Heating Costs
- High Comfort
- Digital LCD Display
- Easy Usage
- Sensitive Temperature Measuring
- On-Off Control
- Heating Calibration
- With Wire Options
- Supplied with Thermex Brand



**HT 150 Digital Room Thermostat with Cable**

- Up to 30% Savings in Heating Costs
- High Comfort
- Large LCD Display
- Battery Indicator
- Easy Usage
- Sensitive Temperature Measuring
- On-Off Control
- Heating Calibration
- With Wire Options
- Supplied with Thermex Brand



**HT 400 Remote Controlled Smart Digital Room Thermostat**

- Control with Mobile Application
- Control Your House Temperature With Location Mode
- Past Operating and Heat Data Reports
- Daily and Weekly Program
- Weather Forecast
- 6 Different Modes Options
- Manual Mode
- House Mode
- Outside Mode
- Sleep Mode
- Program Mode
- Position Mode



**HT 500 SET Remote Controlled Smart Digital Room Thermostat**

- Temperature Adjustment via Room Thermostat
- Digital LCD Display with Backlight
- Touch Buttons
- Outside Temperature Indicator
- Battery Indicator
- Daily and Weekly Program
- Smart or Normal Wireless Room Thermostat
- 6 Different Modes Options
- Manual Mode • House Mode
- Outside Mode • Sleep Mode
- Program Mode • Position Mode



**Thermex İklimlendirme ve Isıtma Sistemleri Sanayi Ltd. Şti.**

**Factory /Head Office:**

İzmir Pancar Organize Sanayi Bölgesi 7. Cadde No: 17/2 Pancar - Torbalı / İzmir - Turkey

**Phone:** +90 232 971 05 15 - 16 - 17 **Fax:** +90 232 971 05 18

**e-mail:** info@thermex.com.tr

**www.thermex.com.tr**

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DEALER'S STAMP

