PRODUCT CATALOGUE



CZECH BOILER MANUFACTURER

Thermona®

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Division of THERM boilers

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Heating power (kW)	With flow heating of water	With connection to an external storage tank	With an integrated storage tank for DHW
5,0 - 14,0		THERM PRO 14 XZ.A	THERM PRO 14 KX.A (55 l, stainless)
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12,0 - 28,0	THERM 28 CXE.AA	THERM 28 LXZE.A	

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Heating power (kW)	For heating with the option for connection to an external storage tank	Heating power (kW)	For heating with the option for connection to an external storage tank	Heating power (kW)	For heating with the option for connection to an external storage tank
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		5,0 - 45,0	THERM EL 45		

LEGEND

DHW Domestic hot water

* With the use of additional accessories, all boilers listed in the "Only for heating" column can be connected to an external storage tank

** It is a stationary gas boiler with integrated storage tank

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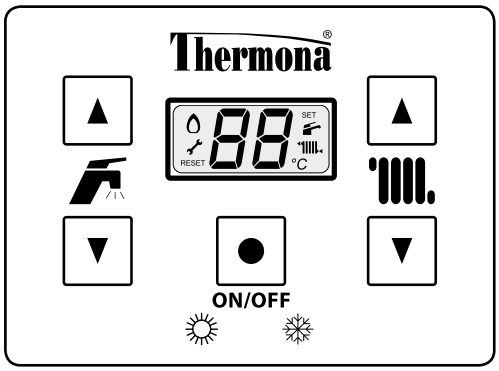
THERM BOILERS condensing boiler for heating

THERM 24 KDN

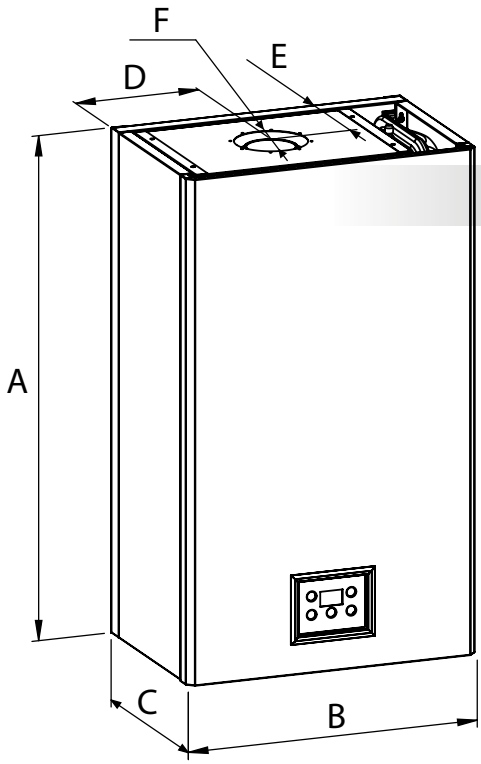
A

The boilers are designed for heating the heating system. These boilers are recommended in cases where heating the water is resolved by an electric reservoir. Additionally, these boilers can be completed by heating the water in an indirect heating reservoir by using an additional three-way valve accessory.

- Energy saving pump with electronic control
- Micro processor automatic control system
- Stainless condensing exchanger
- Fluent regulation of boiler output
- There is also the option to heat water in an external reservoir and fitting with a three-way valve
- Option of regulation according to the spatial or outdoor temperature (equithermal regulation)
- High efficiency with the use of the principle of condensing water steam from burnt gases
- Boiler communication via OpenTherm+ protocol
- Display of parameters via LCD display
- Suitable combination with the floor heating system
- Reliability and long service life



Control panel



DIMENSIONS OF BOILER

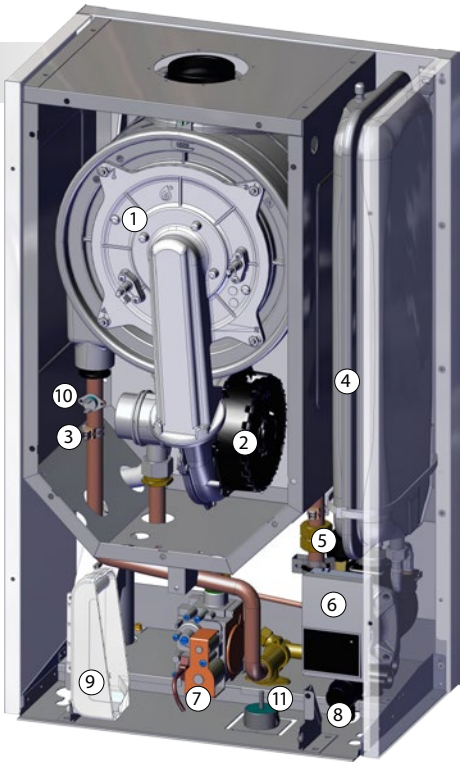
DIMENSIONS OF BOILER (mm)	BOILER MODEL
	24 KDN
A	725
B	430
C	285
D	182
E	135
F	60/100

THERM BOILERS condensing boiler for heating

NEW

SET OF BOILER

1 - Condensing body
2 - Ventilator
3 - Heating temperature probe
4 - Expansion heating vessel
5 - Pressure sensor
6 - Circulation pump
7 - Gas valve
8 - Safety valve
9 - Control panel
10 - Emergency thermostat
11 - Manometer



New type of condensation body

Technical data	Unit	THERM 24 KDN
Nominal thermal input power	kW	20,6
Min. – max. thermal output for heating	kW	4,9 – 20,7
Gas consumption - natural gas	m^3/h	0,48 – 2,04
Gas consumption – propane	m^3/h	0,20 – 0,80
Min. – max. overpressure of heating system	bar	0,8 – 3,0
Maximum input pressure of heating water	°C	80
Boiler efficiency	%	99 – 107
Volume of expansion unit	l	7
Nominal supply voltage / frequency	V/Hz	230/50 ~
Auxiliary electricity at rated heat input	W	66,0
Level of coverage of electrical part	-	IP 41 (D)
Diameter of smoke flue	mm	60/100, 80/125, 2x 80
Dimensions: height/width/depth	mm	725/430/285
Weight of boiler	kg	32
Class of seasonal energy efficiency of heating	-	A
Order number	-	1093

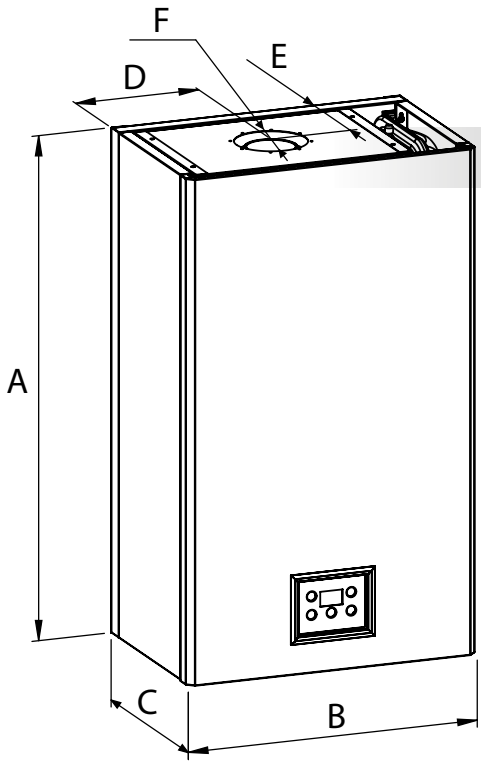
THERM BOILERS condensing boiler with connection to an external DHW storage tank

THERM 24 KDZN

A

The boilers are designed for heating the heating system and heating water in an indirect heating external reservoir. The water is heated using the built-in three-way valve, which is part of the boiler. The advantage of this solution for heating water is a fast and comfort supply of hot water.

- The built-in three-way valve has the option to heat the water in an external storage tank
- Energy saving pump with electronic control
- Micro processor automatic control system
- Stainless condensing exchanger
- Fluent regulation of boiler output
- Option of regulation according to the spatial or outdoor temperature (equithermal regulation)
- High efficiency with the use of the principle of condensing water steam from burnt gases
- Boiler communication via OpenTherm+ protocol
- Display of parameters via LCD display
- Suitable combination with the floor heating system
- Reliability and long service life



DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL
	24 KDZN
A	725
B	430
C	285
D	182
E	135
F	60/100

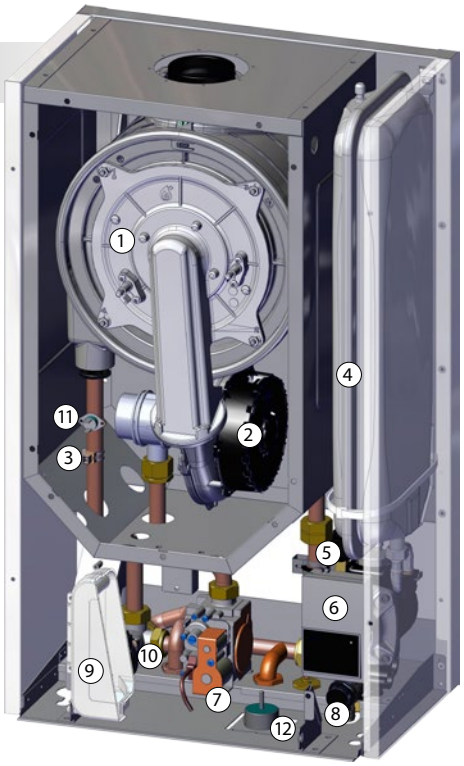
THERM BOILERS

NEW

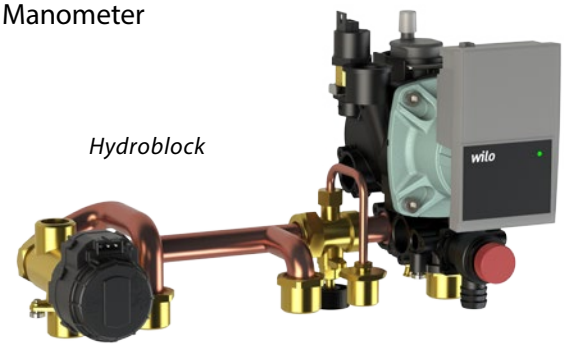
condensing boiler with connection to an external DHW storage tank

SET OF BOILER

1 - Condensing body
2 - Ventilator
3 - Heating temperature probe
4 - Expansion heating vessel
5 - Pressure sensor
6 - Circulation pump
7 - Gas valve
8 - Safety valve
9 - Control panel
10 - Three-way valve
11 - Emergency thermostat
12 - Manometer



Hydroblock



Technical data	Unit	THERM 24 KDZN
Nominal thermal input power	kW	20,6
Min. – max. thermal output for heating	kW	4,9 – 20,7
Nominal thermal output for DHW	kW	24,0
Gas consumption - natural gas	m^3/h	0,48 – 2,04
Gas consumption – propane	m^3/h	0,20 – 0,80
Min. – max. overpressure of heating system	bar	0,8 – 3,0
Maximum input pressure of heating water	°C	80
Boiler efficiency	%	99 – 107
Volume of expansion unit	l	7
Nominal supply voltage / frequency	V/Hz	230/50 ~
Auxiliary electricity at rated heat input	W	66,0
Level of coverage of electrical part	-	IP 41 (D)
Diameter of smoke flue	mm	60/100, 80/125, 2x 80
Dimensions: height/width/depth	mm	725/430/285
Weight of boiler	kg	33
Class of seasonal energy efficiency of heating	-	A
Order number	-	1092

BOILER	The time for heating water in the storage tank from 10 to 60 °C in minutes					
	OKH 100 NTR/HV	OKH 125 NTR/HV	OKC 100 NTR	OKC 125 NTR	OKC 160 NTR	OKC 200 NTR
THERM 24 KDZN	16	19	16	19	24	33

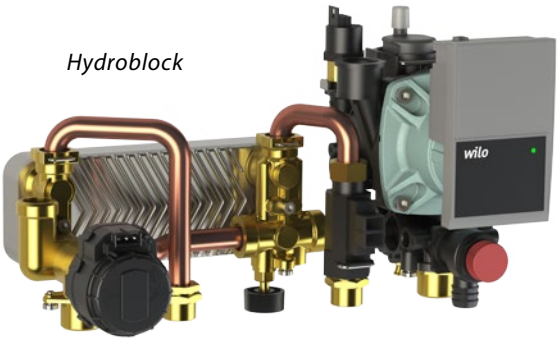
THERM BOILERS condensing boilers with flow heating of water

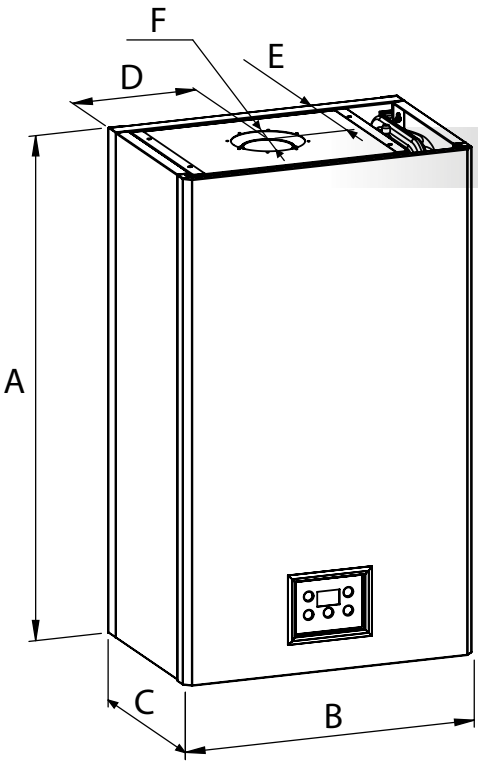
THERM 24 KDCN

The boilers are designed for heating the heating system and heating running utility water. The water is heated using a secondary plate exchanger, which is part of the boiler. The advantages of this solution for heating utility water are the compact dimensions for small spaces and the low acquisition price of the device.

- Heating running utility water in the secondary plate exchanger
- Energy saving pump with electronic control
- Micro processor automatic control system
- Stainless condensing exchanger
- The COMFORT function - more flexible heating of water
- Fluent regulation of boiler output
- Option of regulation according to the spatial or outdoor temperature (equithermal regulation)
- High efficiency with the use of the principle of condensing water steam from burnt gases
- Boiler communication via OpenTherm+ protocol
- Display of parameters via LCD display
- Suitable combination with the floor heating system
- Reliability and long service life

Hydroblock





DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL
	24 KDCN
A	725
B	430
C	285
D	182
E	135
F	60/100

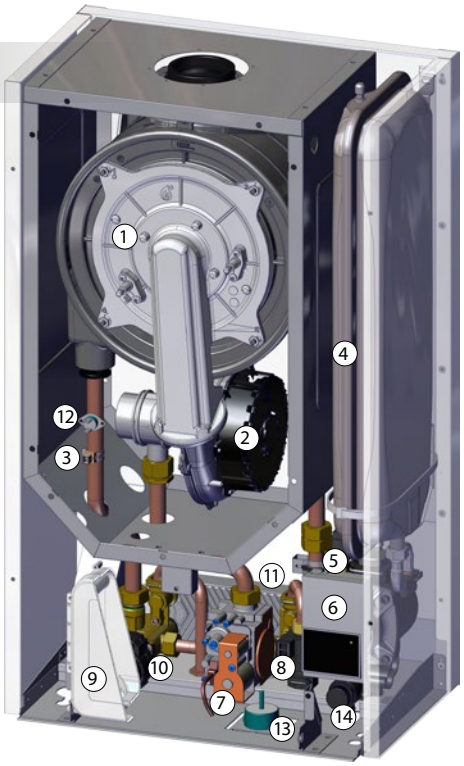
THERM BOILERS

NEW

condensing boilers with flow heating of water

SET OF BOILER

1 - Condensing body
2 - Ventilator
3 - Heating temperature probe
4 - Expansion heating vessel
5 - Pressure sensor
6 - Circulation pump
7 - Gas valve
8 - Flow switch
9 - Control panel
10 - Three-way valve
11 - Plate exchanger
12 - Emergency thermostat
13 - Manometer
14 - Safety valve



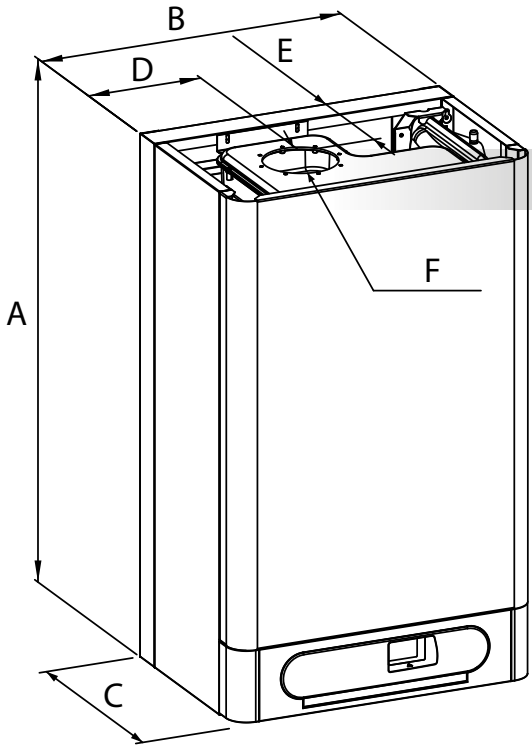
Technical data	Unit	THERM 24 KDCN
Nominal thermal input power	kW	20,6
Min. – max. thermal output for heating	kW	4,9 – 20,7
Nominal thermal output for DHW	kW	24,0
Gas consumption - natural gas	m^3/h	0,48 – 2,04
Gas consumption – propane	m^3/h	0,20 – 0,80
Min. – max. overpressure of heating system	bar	0,8 – 3,0
Maximum input pressure of heating water	°C	80
Boiler efficiency	%	99 – 107
Volume of expansion unit	l	7
Nominal supply voltage / frequency	V/Hz	230/50 ~
Auxiliary electricity at rated heat input	W	66,0
Level of coverage of electrical part	-	IP 41 (D)
Diameter of smoke flue	mm	60/100, 80/125, 2x 80
Dimensions: height/width/depth	mm	725/430/285
Weight of boiler	kg	34
Class of seasonal energy efficiency of heating	-	A
Energy efficiency class of water heating	-	A
Declared loading profile	-	L
Order number	-	1091

THERM BOILERS condensing boiler for heating

THERM 14 KD.A A
THERM 17 KD.A A
THERM 28 KD.A A

Suspended KD.A condensing boilers are only designed only for heating. These boilers are recommended in cases where the water is heated by an electric reservoir. Additionally, these boilers can be completed by heating the water in an indirect heating reservoir by using an additional three-way valve accessory.
The output range of the boiler is adapted for use in buildings with low heat loss. The boilers are fitted with an energy saving circulation pump and the consumption of electric energy is lower by up to 50 % than for similar circulation pumps.

- Energy saving pump - savings of electric energy up to 50 %
- Use of new HDIMS 20-TH20 automatic control system
- There is also the option to hot water in an external reservoir and fit a three-way valve.
- Option of regulation according to the spatial or outdoor temperature (equithermal regulation)
- Fluent regulation of boiler output
- High ecological operation
- Suitable combination with the floor heating system



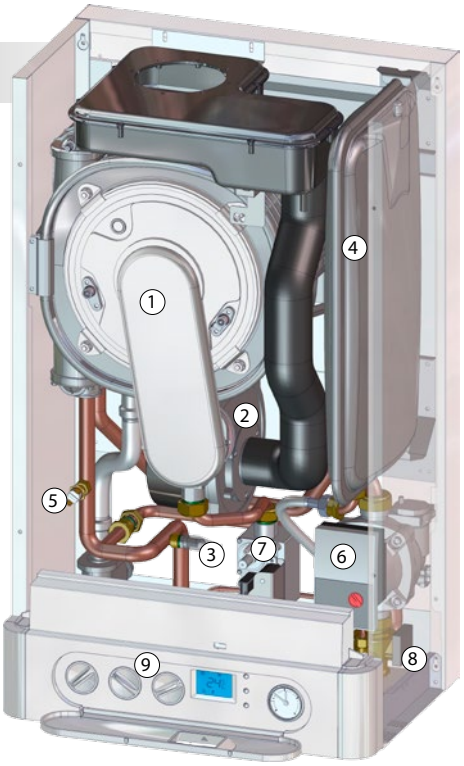
DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL		
	14 KD.A	17 KD.A	28 KD.A
A	725	725	800
B	430	430	430
C	300	300	325
D	160	160	160
E	150	177	145
F	60/100	60/100	60/100

THERM BOILERS condensing boiler for heating

SET OF BOILER

1 - Condensing chamber
2 - Ventilator
3 - Heating temperature probe
4 - Expansion heating vessel
5 - Pressure switch
6 - Energy saving pump
7 - Gas valve
8 - Flow switch
9 - Control panel



Energy saving pump

Technical data	Unit	THERM 14 KD.A	THERM 17 KD.A	THERM 28 KD.A
Nominal thermal input power	kW	13.8	16.0	26.4
Min. – max. thermal output for heating	kW	2.4 – 14.6	3.5 – 17.0	6.6 – 28.0
Gas consumption - natural gas	m^3/h	0.26 – 1.46	0.35 – 1.70	0.68 – 2.85
Gas consumption – propane	m^3/h	-	-	0.24 – 0.93
Min. – max. overpressure of heating system	bar	0.8 – 3.0	0.8 – 3.0	0.8 – 3.0
Maximum input pressure of heating water	°C	80	80	80
Boiler efficiency	%	98 – 106	98 – 106	98 – 106
Volume of expansion unit	l	6	6	7
Nominal supply voltage / frequency	V/Hz	230/50 ~	230/50 ~	230/50 ~
Auxiliary electricity at rated heat input	W	63	63.7	66.1
Level of coverage of electrical part	-	IP 41 (D)	IP 41 (D)	IP 41 (D)
Diameter of smoke flue	mm	60/100, 80/125, 2x 80	60/100, 80/125, 2x 80	60/100, 80/125, 2x 80
Dimensions: height/width/depth	mm	725/430/300	725/430/300	800/430/325
Weight of boiler	kg	32	38	45
Class of seasonal energy efficiency of heating	-	A	A	A
Order number	-	1080	1066.7	1030.7

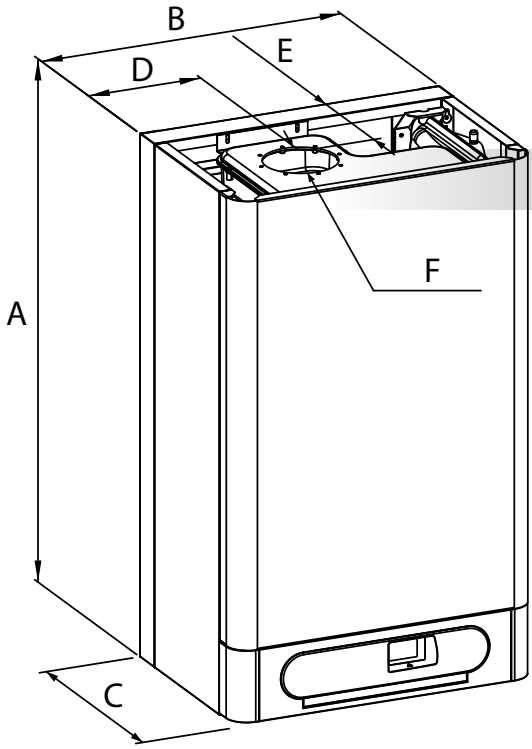
THERM BOILERS

condensing boiler with connection to an external DHW storage tank

THERM 14 KDZ.A
THERM 17 KDZ.A
THERM 28 KDZ.A

The series of KDZ.A suspended condensing boilers is designed for heating the heating system and heating water for the indirect flow storage tank. The water is heated using the plate exchangers that are part of the boiler. Alternatively, it can heat the heating system or storage tank, if necessary. This solution is not only economical and means savings but is also a comfortable solution to the heating of water.
The advantage of the water heating in an indirect heating storage tank is the immediate supply of hot water and the ability to supply more consumption points in real time. The boiler operates in the summer and winter regimes. Only the storage tank is heated in the summer regime.

- Energy saving pump - savings of electric energy up to 50 %
- Use of new HDIMS 20-TH20 automatic control system
- The built-in three-way valve for the option of water heating in an external storage tank
- Option of regulation according to the spatial or outdoor temperature (equithermal regulation)
- Fluent regulation of boiler output
- High ecological operation
- Boilers are also used for heating solar systems
- Suitable combination with the floor heating system



DIMENSIONS OF BOILER

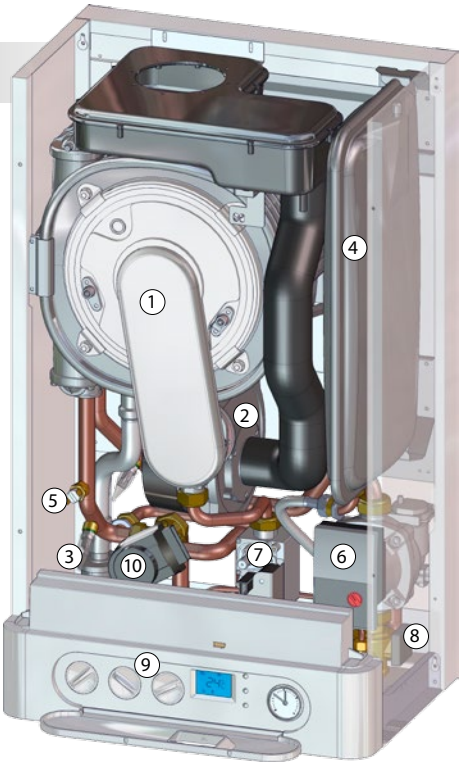
DIMENSIONS OF BOILER (mm)	BOILER MODEL		
	14 KDZ.A	17 KDZ.A	28 KDZ.A
A	725	725	800
B	430	430	430
C	300	300	325
D	160	160	160
E	150	177	145
F	60/100	60/100	60/100

THERM BOILERS

condensing boiler with connection to an external DHW storage tank

SET OF BOILER

1 - Condensing chamber
2 - Ventilator
3 - Heating temperature probe
4 - Expansion heating vessel
5 - Pressure switch
6 - Energy saving pump
7 - Gas valve
8 - Flow switch
9 - Control panel
10 - Three-way valve



Built-in three-way valve

Technical data	Unit	THERM 14 KDZ.A	THERM 17 KDZ.A	THERM 28 KDZ.A
Nominal thermal input power	kW	13.8	16.0	26.4
Min. – max. thermal output for heating	kW	2.4 – 14.6	3.5 – 17.0	6.6 – 28.0
Gas consumption - natural gas	m^3/h	0.26 – 1.46	0.35 – 1.70	0.68 – 2.85
Gas consumption – propane	m^3/h	-	-	0.24 – 0.93
Min. – max. overpressure of heating system	bar	0.8 – 3.0	0.8 – 3.0	0.8 – 3.0
Maximum input pressure of heating water	°C	80	80	80
Boiler efficiency	%	98 – 106	98 – 106	98 – 106
Volume of expansion unit	l	6	6	7
Nominal supply voltage / frequency	V/Hz	230/50 ~	230/50 ~	230/50 ~
Auxiliary electricity at rated heat input	W	63	63.7	66.1
Level of coverage of electrical part	-	IP 41 (D)	IP 41 (D)	IP 41 (D)
Diameter of smoke flue	mm	60/100, 80/125, 2x 80	60/100, 80/125, 2x 80	60/100, 80/125, 2x 80
Dimensions: height/width/depth	mm	725/430/300	725/430/300	800/430/325
Weight of boiler	kg	33	39	46
Class of seasonal energy efficiency of heating	-	A	A	A
Order number	-	1081	1067.7	1032.7

BOILER	The time for heating water in the storage tank from 10 to 60 °C in minutes					
	OKH 100 NTR/HV	OKH 125 NTR/HV	OKC 100 NTR	OKC 125 NTR	OKC 160 NTR	OKC 200 NTR
THERM 14 KDZ.A	25	30	25	30	38	53
THERM 17 KDZ.A	21	26	21	26	33	44
THERM 28 KDZ.A	14	17	14	17	22	28

THERM BOILERS condensing boiler with integrated storage tank for DHW

THERM 14 KDZ5.A

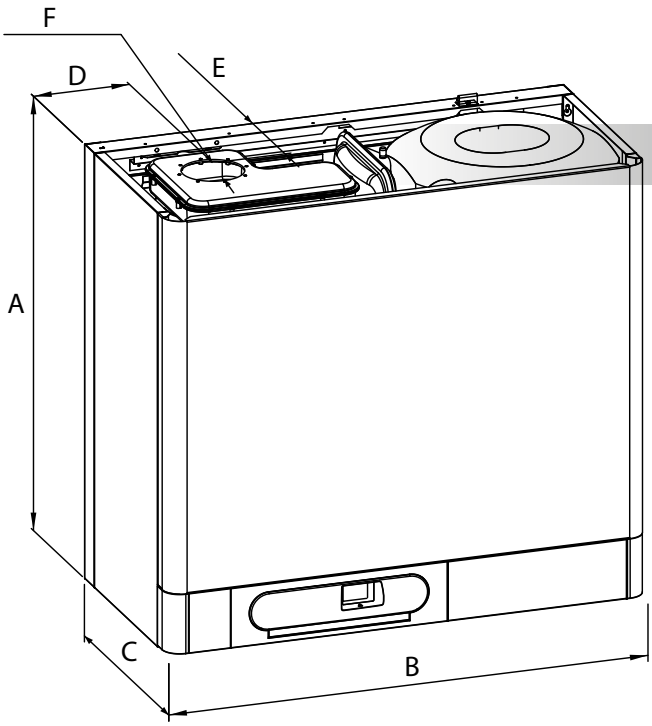
THERM 17 KDZ5.A

THERM 28 KDZ5.A

(with built in 55 l storage tank)

The series of KDZ5.A suspended condensing boilers is designed for heating the heating system and heating the water for an indirect flow storage tank. The water is heated in the same manner as for a combination of a boiler and an external indirect heating storage tank. The difference is only in the fact that for the type with a built-in storage tank, the storage tank is covered under the classification of the boiler. They are used everywhere where there is no technical room and the boiler is located in the interior of a house or flat.
The advantage is that there are no interconnections between the boiler and the storage tank.

- Energy saving pump - savings of electric energy up to 50 %
- Use of new HDIMS 20-TH20 automatic control system
- The boiler includes a stainless indirect heating storage tank with a volume of 55 l (stainless)
- Fluent regulation of boiler output
- Option of regulation according to the spatial or outdoor temperature (equithermal regulation)
- High ecological operation
- Suitable combination with the floor heating system



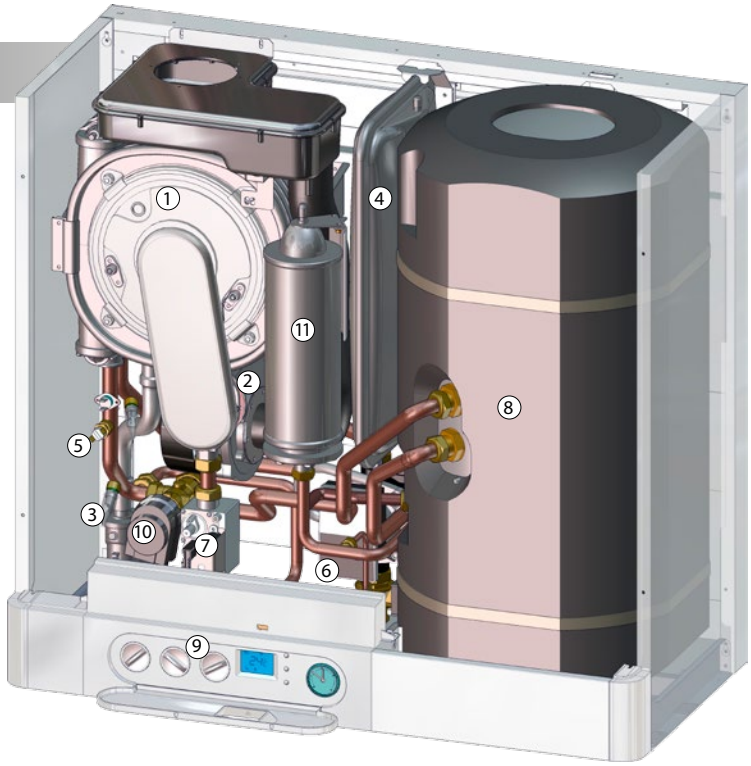
DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL		
	14 KDZ5.A	17 KDZ5.A	28 KDZ5.A
A	725	725	800
B	800	800	800
C	390	390	390
D	160	160	160
E	150	177	145
F	60/100	60/100	60/100

THERM BOILERS condensing boiler with integrated storage tank for DHW

SET OF BOILER

1 - Condensing chamber
2 - Ventilator
3 - Heating temperature probe
4 - Expansion heating vessel
5 - Pressure switch
6 - Energy saving pump
7 - Gas valve
8 - Tank DHW
9 - Control panel
10 - Three-way valve
11 - Expansion tank DHW



Technical data	Unit	THERM 14 KDZ5.A	THERM 17 KDZ5.A	THERM 28 KDZ5.A
Nominal thermal input power	kW	13.8	16.0	26.4
Min. – max. thermal output for heating	kW	2.4 – 14.6	3.5 – 17.0	6.6 – 28.0
Gas consumption - natural gas	m^3/h	0.26 – 1.46	0.35 – 1.70	0.68 – 2.85
Gas consumption – propane	m^3/h	-	-	0.24 – 0.93
Min. – max. overpressure of heating system	bar	0.8 – 3.0	0.8 – 3.0	0.8 – 3.0
Maximum input pressure of heating water	°C	80	80	80
Boiler efficiency	%	98 – 106	98 – 106	98 – 106
Volume of the expansion tank for heating water	l	6	6	7
Volume of the integrated tank	l	55 (stainless)	55 (stainless)	55 (stainless)
Volume of expansion unit of DHW	l	2	2	2
Nominal supply voltage / frequency	V/Hz	230/50 ~	230/50 ~	230/50 ~
Auxiliary electricity at rated heat input	W	63	63.7	66.1
Level of coverage of electrical part	-	IP 41 (D)	IP 41 (D)	IP 41 (D)
Diameter of smoke flue	mm	60/100, 80/125, 2x 80	60/100, 80/125, 2x 80	60/100, 80/125, 2x 80
Dimensions: height/width/depth	mm	725/800/390	725/800/390	800/800/390
Weight of boiler	kg	55	61	67
Class of seasonal energy efficiency of heating	-	A	A	A
Energy efficiency class of water heating	-	A	A	A
Declared loading profile	-	XL	XL	XL
Order number	-	1082	1068.7	1058.7

THERM BOILERS condensing boiler with integrated storage tank for DHW

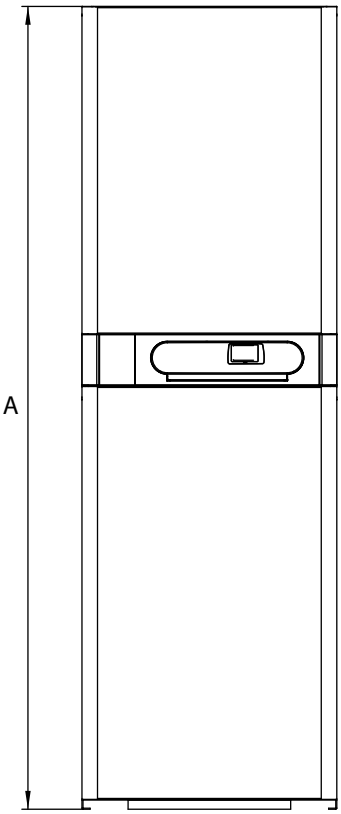
THERM 17 KDZ10.A

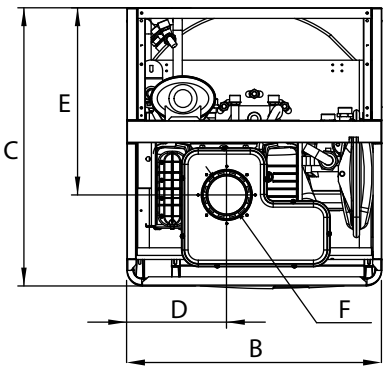
THERM 28 KDZ10.A

(with built in 100 l storage tank)

The series of KDZ10.A condensing boilers is designed for heating the heating system and heating the water for an indirect flow storage tank. The water is heated in the same manner as for a combination of a boiler and an external indirect heating storage tank. The difference is only in the fact that for the type with a built-in storage tank, the storage tank is covered under the classification of the boiler. They are used everywhere where there is no technical room and the boiler is located in the interior of a house or flat. The advantage is that there are no interconnections between the boiler and the storage tank.

- Energy saving pump - savings of electric energy up to 50 %
- Use of new HDIMS 20-TH20 automatic control system
- The boiler includes a stainless indirect heating storage tank with the volume of 100 l (enamel)
- Fluent regulation of boiler output
- Option of regulation according to the spatial or outdoor temperature (equithermal regulation)
- High ecological operation
- Suitable combination with the floor heating system





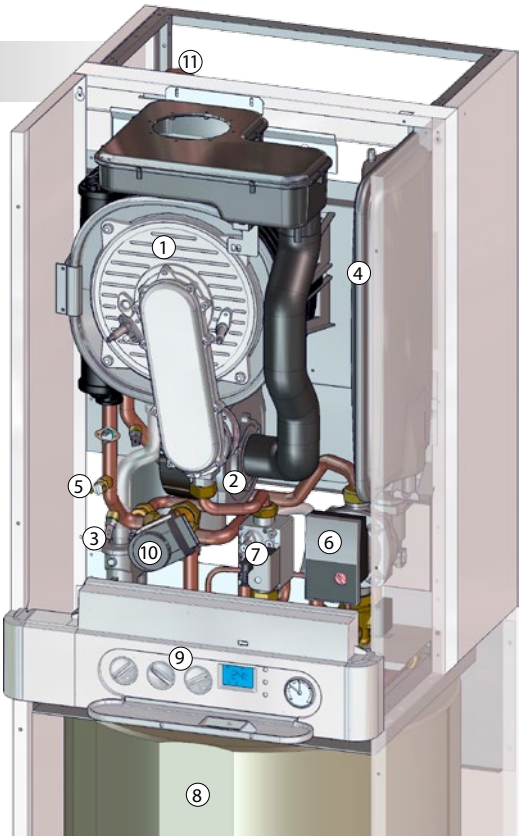
DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL	
	17 KDZ10.A	28 KDZ10.A
A	1575	1575
B	500	500
C	535	535
D	195	195
E	400	366
F	60/100	60/100

THERM BOILERS condensing boiler with integrated storage tank for DHW

SET OF BOILER

1 - Condensing chamber
2 - Ventilator
3 - Heating temperature probe
4 - Expansion heating vessel
5 - Pressure switch
6 - Energy saving pump
7 - Gas valve
8 - Tank DHW
9 - Control panel
10 - Three-way valve
11 - Expansion tank DHW



Technical data	Unit	THERM 17 KDZ10.A	THERM 28 KDZ10.A
Nominal thermal input power	kW	16.0	26.4
Min. – max. thermal output for heating	kW	3.5 – 17.0	6.6 – 28.0
Gas consumption - natural gas	m^3/h	0.35 – 1.70	0.68 – 2.85
Gas consumption – propane	m^3/h	-	0.24 – 0.93
Min. – max. overpressure of heating system	bar	0.8 – 3.0	0.8 – 3.0
Maximum input pressure of heating water	°C	80	80
Boiler efficiency	%	98 – 106	98 – 106
Volume of the expansion tank for heating water	l	6	7
Volume of the integrated tank	l	100 l (enamel)	100 l (enamel)
Volume of expansion unit of DHW	l	4	4
Nominal supply voltage / frequency	V/Hz	230/50 ~	230/50 ~
Auxiliary electricity at rated heat input	W	63.7	66.17
Level of coverage of electrical part	-	IP 41 (D)	IP 41 (D)
Diameter of smoke flue	mm	60/100, 80/125, 2x 80	60/100, 80/125, 2x 80
Dimensions: height/width/depth	mm	1575/500/535	1575/500/535
Weight of boiler	kg	103	102
Class of seasonal energy efficiency of heating	-	A	A
Energy efficiency class of water heating	-	A	A
Declared loading profile	-	XL	XL
Order number	-	1071.7	1059.7

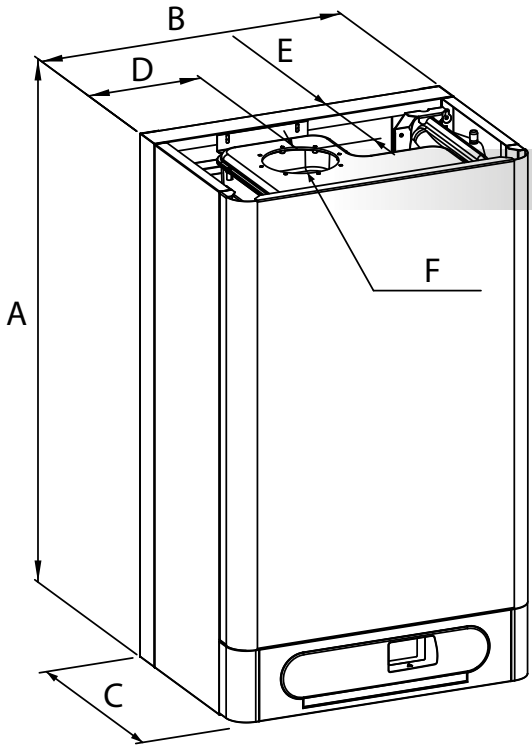
THERM BOILERS condensing boilers with flow heating of water

THERM 28 KDC.A

The series of KDC.A condensing boilers is designed for heating the heating system and fluid water heating. The water is heated using the plate exchangers, which are part of the boiler. The advantage of this solution for heating water is the low acquisition price of the equipment.

- Energy saving pump - savings of electric energy up to 50 %
- Use of new HDIMS 20-TH20 automatic control system
- The boiler includes a plate exchanger for the preparation of hot water
- Option of regulation according to the spatial or outdoor temperature (equithermal regulation)
- Fluent regulation of boiler output
- High ecological operation
- Suitable combination with the floor heating system

Plate exchanger



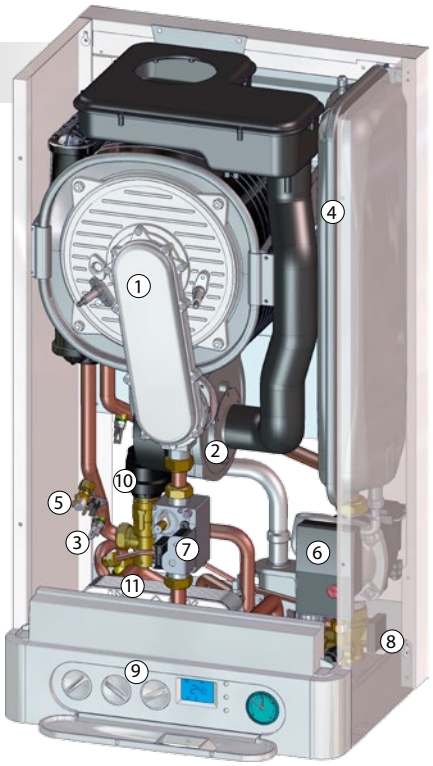
DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL
	28 KDC.A
A	800
B	430
C	325
D	160
E	145
F	60/100

THERM BOILERS condensing boilers with flow heating of water

SET OF BOILER

1 - Condensing chamber
2 - Ventilator
3 - Heating temperature probe
4 - Expansion heating vessel
5 - Pressure switch
6 - Energy saving pump
7 - Gas valve
8 - Flow switch
9 - Control panel
10 - Three-way valve
11 - Plate exchanger



Technical data	Unit	THERM 28 KDC.A
Nominal thermal input power	kW	26.4
Min. – max. thermal output for heating	kW	6.6 – 28.0
Gas consumption - natural gas	m^3/h	0.68 – 2.85
Gas consumption – propane	m^3/h	0.24 – 0.93
Min. – max. overpressure of heating system	bar	0.8 – 3.0
Maximum input pressure of heating water	°C	80
Boiler efficiency	%	98 – 106
Volume of expansion unit	l	7
Nominal supply voltage / frequency	V/Hz	230/50 ~
Auxiliary electricity at rated heat input	W	66.1
Level of coverage of electrical part	-	IP 41 (D)
Diameter of smoke flue	mm	60/100, 80/125, 2x 80
Dimensions: height/width/depth	mm	800/430/325
Weight of boiler	kg	47
Class of seasonal energy efficiency of heating	-	A
Energy efficiency class of water heating	-	A
Declared loading profile	-	XL
Order number	-	1031.7

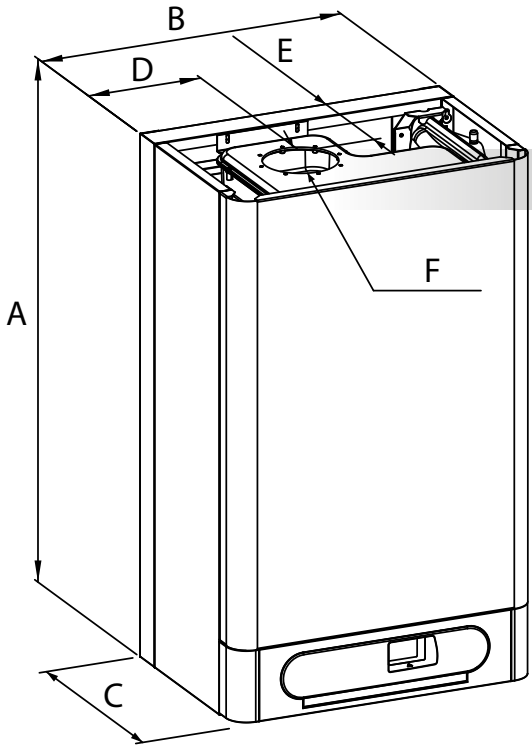
THERM BOILERS condensing boiler for heating

THERM 45 KD.A

A

Suspended KD.A condensing boilers are only designed only for heating. These boilers are recommended in cases where the water is heated by an electric reservoir. Additionally, these boilers can be completed by heating the water in an indirect heating reservoir by using an additional three-way valve accessory.

- Energy saving pump - savings of electric energy up to 50 %
- Use of new HDIMS 20-TH20 automatic control system
- There is also the option to hot water in an external reservoir and fit a three-way valve.
- Option of regulation according to the spatial or outdoor temperature (equithermal regulation)
- Fluent regulation of boiler output
- High ecological operation
- Suitable combination with the floor heating system
- Option of connection into cascade boiler rooms in order to increase heating power



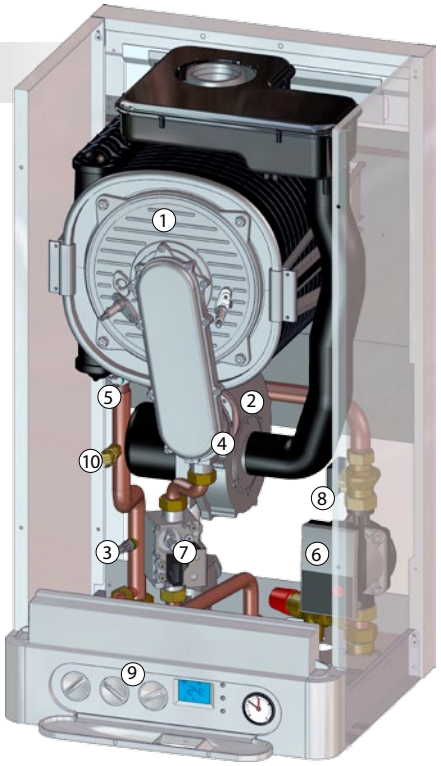
DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL
	45 KD.A
A	800
B	430
C	370
D	200
E	145
F	80/125

THERM BOILERS condensing boiler for heating

SET OF BOILER

1 - Condensing chamber
2 - Ventilator
3 - Heating temperature probe
4 - Mixer
5 - Emergency thermostat
6 - Energy saving pump
7 - Gas valve
8 - Flow switch
9 - Control panel
10 - Pressure switch

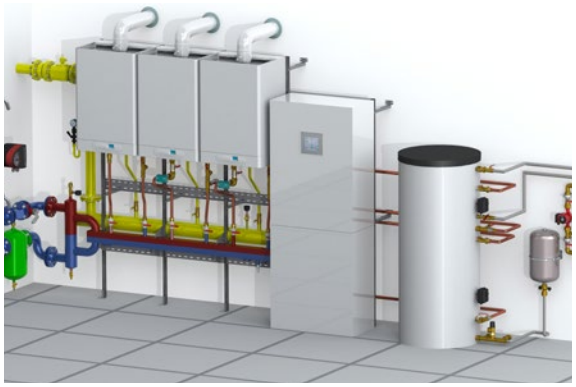


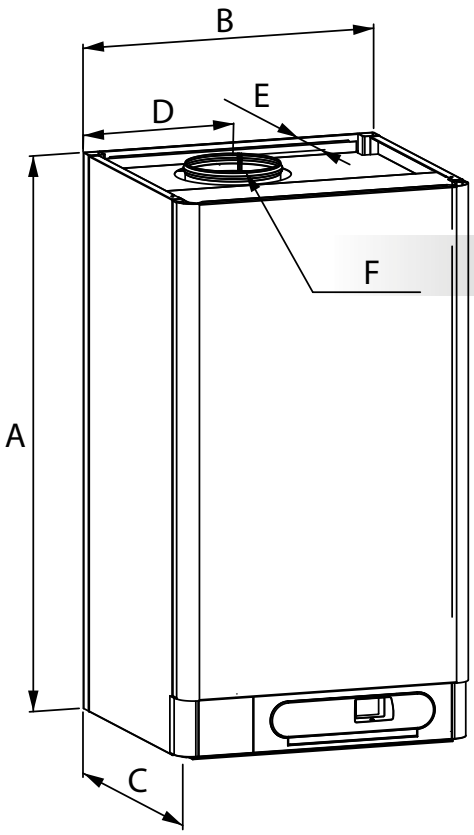
Technical data	Unit	THERM 45 KD.A
Nominal thermal input power	kW	42.5
Min. – max. thermal output for heating	kW	13.0 – 45.0
Gas consumption - natural gas	m^3/h	1.28 – 4.52
Gas consumption – propane	m^3/h	-
Min. – max. overpressure of heating system	bar	0.8 – 3.0
Maximum input pressure of heating water	°C	80
Boiler efficiency	%	98 – 106
Volume of expansion unit	l	-
Nominal supply voltage / frequency	V/Hz	230/50 ~
Auxiliary electricity at rated heat input	W	141.4
Level of coverage of electrical part	-	IP 41 (D)
Diameter of smoke flue	mm	80/125, 2x 80
Dimensions: height/width/depth	mm	800/430/370
Weight of boiler	kg	45
Class of seasonal energy efficiency of heating	-	A
Order number	-	1065.7

THERM 90 KD.A

Suspended boilers are designed for heating buildings with heat losses of up to 90 kW. Heating buildings with a higher heat loss (up to 1520 kW) can be ensured with the advantage of using cascade boilers. The boiler can also be used for heating water in an external indirect storage tank. In this case, the boiler must be fitted with a three-way valve accessory.

- Energy saving pump - savings of electric energy up to 50 %
- HDIMS automatic steel Microprocessor system
- Stainless condensing body
- Option of regulation according to the spatial or outdoor temperature (equithermal regulation)
- Fluent regulation of boiler output
- High efficiency using the principle of condensing water steam from burnt gases
- Display of parameters using an LCD display
- Suitable combination with the floor heating system
- Option of connection into cascade boiler rooms in order to increase heating power





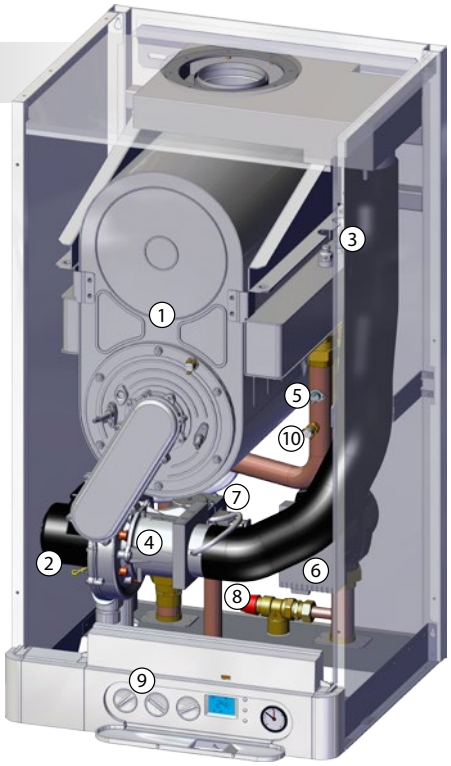
DIMENSIONS OF BOILER

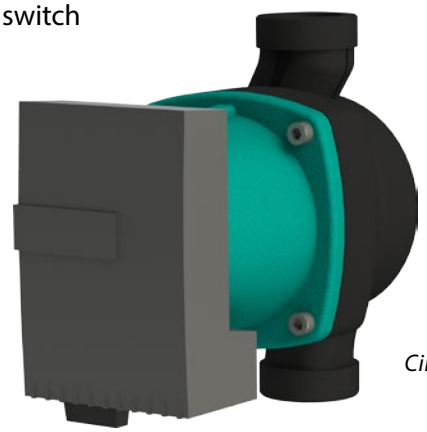
DIMENSIONS OF BOILER (mm)	BOILER MODEL
	90 KD.A
A	970
B	530
C	500
D	230
E	120
F	110/160

THERM BOILERS condensing boiler for heating

SET OF BOILER

1 - Condensing chamber
2 - Ventilator
3 - Heating temperature probe
4 - Mixer
5 - Emergency thermostat
6 - Circulation pump
7 - Gas valve
8 - Safety valve
9 - Control panel
10 - Pressure switch





Circulation pump

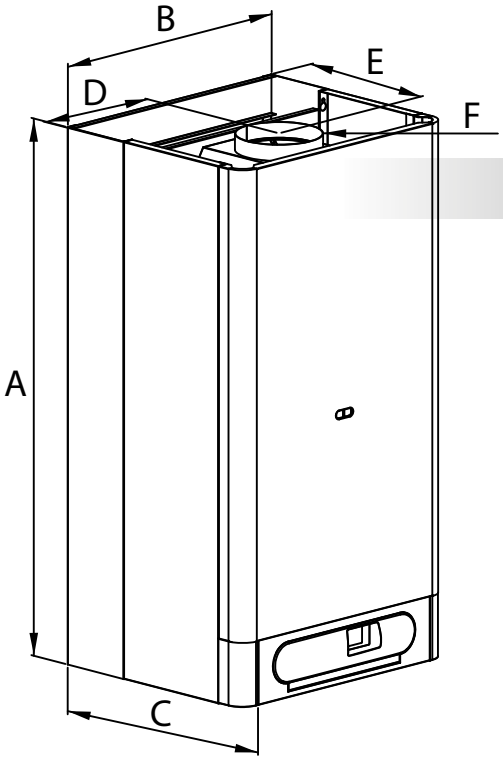
Technical data	Unit	THERM 90 KD.A
Nominal thermal input power	kW	89.7
Min. – max. thermal output for heating	kW	25.0 – 95.0
Gas consumption - natural gas	m^3/h	2.46 – 9.53
Gas consumption – propane	m^3/h	-
Min. – max. overpressure of heating system	bar	0.8 – 4.0
Maximum input pressure of heating water	°C	80
Boiler efficiency	%	98 – 106
Volume of expansion unit	l	-
Nominal supply voltage / frequency	V/Hz	230/50 ~
Auxiliary electricity at rated heat input	W	288.0
Level of coverage of electrical part	-	IP 41 (D)
Diameter of smoke flue	mm	110/160, 2x 110
Dimensions: height/width/depth	mm	970/530/500
Weight of boiler	kg	71
Class of seasonal energy efficiency of heating	-	-
Order number	-	1090

THERM BOILERS for heating and preparation of DHW in an external storage tank

THERM PRO 14 XZ.A C
THERM 20 LXZE.A C
THERM 28 LXZE.A C

Boilers with the option for heating water in an external storage tank operate in the same manner as the series of boilers only designed for heating. In addition, these boilers are completed with a three-way valve enabling the heating of hot water storage tanks. Due to wide range of models and volumes of storage tanks, this type of boiler enables to produce a relatively high volume of hot water and to satisfy both common household and those demanding clients who require a high level of comfort.

- Wall-mounted boilers with connection to indirect hot water storage tank
- The boiler contains a three-way valve for alternative heating of the heating system and the hot water storage tank
- Water cooled low-emission burner
- Simple and intuitive control
- Fluent regulation of boiler output
- Option of regulation according to the spatial or outdoor temperature (equithermal regulation)
- High efficiency and low gas consumption
- Suitable combination with the floor heating system
- Option to control by room thermostat or intelligent room regulator using OpenTherm+
- The boilers are fitted with a low-emission burner with very low emissions of CO and NOx



DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL		
	PRO 14 XZ.A	20 LXZE.A	28 LXZE.A
A	800	725	830
B	430	430	500
C	275	300	367
D	255	186	250
E	140	120	225
F	110	120	130

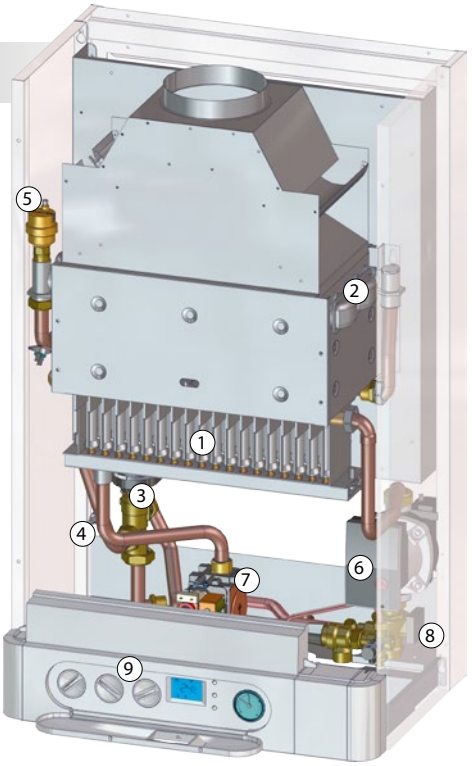
THERM BOILERS

NEW

for heating and preparation of DHW in an external storage tank

SET OF BOILER

1 - Lownox burner
2 - Exchangers (burnt gases - water)
3 - Three-way valve
4 - Heating temperature probe
5 - Automatic de-aerating valve
6 - Energy saving pump
7 - Gas valve
8 - Flow switch
9 - Control panel



Built-in three-way valve

Technical data	Unit	THERM PRO 14 XZ.A	THERM 20 LXZE.A	THERM 28 LXZE.A
Max. thermal input power	kW	15.25	22.2	31.0
Min. – max. thermal output for heating	kW	5 – 14	8 – 20	12 – 28
Gas consumption - natural gas	m^3/h	0.58 – 1.62	0.90 – 2.30	1.40 – 3.25
Gas consumption – propane	m^3/h	0.21 – 0.59	0.34 – 0.85	0.50 – 1.20
Min. – max. overpressure of heating system	bar	0.8 – 3.0	0.8 – 3.0	0.8 – 3.0
Maximum input pressure of heating water	°C	80	80	80
Boiler efficiency	%	92	92	92
Volume of expansion unit	l	7	8	10
Nominal supply voltage / frequency	V/Hz	230/50 ~	230/50 ~	230/50 ~
Auxiliary electricity at rated heat input	W	60	65	65
Level of coverage of electrical part	-	IP 44 (D)	IP 44	IP 44
Diameter of smoke flue	mm	110	120	130
Dimensions: height/width/depth	mm	800/430/275	725/430/300	830/500/367
Weight of boiler	kg	30	37	41
Class of seasonal energy efficiency of heating	-	C	C	C
Order number	-	1014.9	1039.9	1045.9

BOILER	The time for heating water in the storage tank from 10 to 60 °C in minutes					
	OKH 100 NTR/HV	OKH 125 NTR/HV	OKC 100 NTR	OKC 125 NTR	OKC 160 NTR	OKC 200 NTR
THERM PRO 14 XZ.A	25	30	25	30	38	53
THERM 20 LXZE.A	17	20	17	20	27	35
THERM 28 LXZE.A	14	17	14	17	22	28

THERM BOILERS for heating and preparation of DHW in built-in storage tank

THERM PRO 14 KX.A

C
B

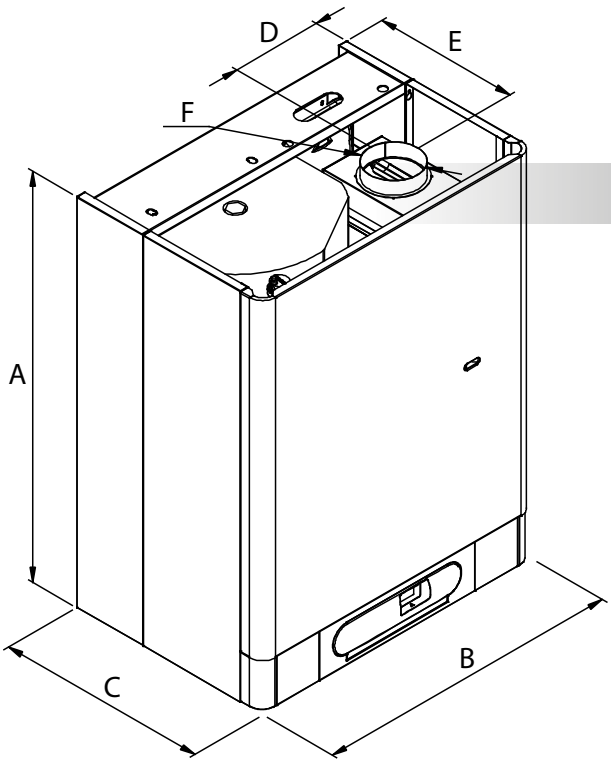
THERM 20 LXZE.A 5

C
A

(with built in 55 l storage tank)

Boilers with built-in storage tanks are recommended for heating hot water in small-sized and medium-sized flats with insufficient space for the location of the boiler and the storage tank. The boiler is adapted for location in the interior. The advantage is that there are no interconnections between the boiler and the storage tank.

- Wall-mounted boilers with built-in storage tank
- The boiler includes a stainless indirect heating storage tank with a volume of 55 l (stainless)
- The boiler contains a three-way valve for alternative heating of the heating system and the storage tank
- Water cooled low-emission burner
- Option of regulation according to the spatial or outdoor temperature (equithermal regulation)
- Simple and intuitive control
- Fluent regulation of boiler output
- High efficiency and low gas consumption
- Suitable combination with the floor heating system
- Option to control by room thermostat or intelligent room regulator using OpenTherm+
- Boilers are delivered as standard with white cladding



DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL
	PRO 14 KX.A
A	830
B	630
C	435
D	142
E	250
F	110

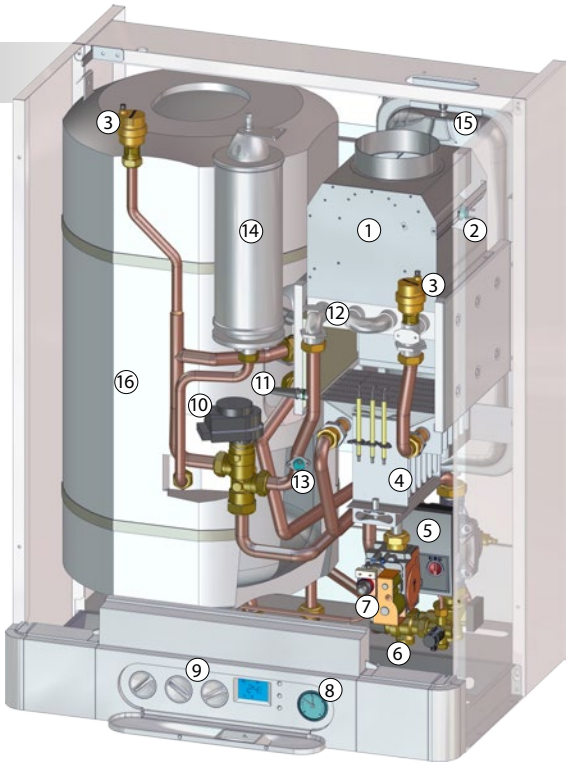
THERM BOILERS

NEW

for heating and preparation of DHW in built-in storage tank

SET OF BOILER

1 - Draught interrupting unit
2 - Burnt gases thermostat
3 - De-aerating valve*
4 - Lownox burners
5 - Circulation pump
6 - Safety valve
7 - Gas valve
8 - Manometer
9 - Control panel
10 - Three-way valve
11 - Heating temperature probe
12 - Exchangers (burnt gases - water)
13 - Emergency thermostat
14 - Expansion tank DHW
15 - Expansion heating vessel
16 - Tank DHW



Technical data	Unit	THERM PRO 14 KX.A	THERM 20 LXZE.A 5
Max. thermal input power	kW	15.25	22.2
Min. – max. thermal output for heating	kW	5 – 14	8 – 20
Gas consumption - natural gas	m^3/h	0.58 – 1.62	0.90 – 2.30
Gas consumption – propane	m^3/h	0.21 – 0.59	0.34 – 0.85
Min. – max. overpressure of heating system	bar	0.8 – 3.0	0.8 – 3.0
Maximum input pressure of heating water	°C	80	80
Boiler efficiency	%	92	92
Volume of expansion unit	l	7	10
Volume of storage tank for water	l	55 (stainless)	55 (stainless)
Volume of expansion unit of DHW	l	2	2
Nominal supply voltage / frequency	V/Hz	230/50 ~	230/50 ~
Auxiliary electricity at rated heat input	W	60	65
Level of coverage of electrical part	-	IP 44 (D)	IP 44
Diameter of smoke flue	mm	110	120
Dimensions: height/width/depth	mm	830/630/435	830/800/390
Weight of boiler	kg	70	62
Class of seasonal energy efficiency of heating	-	C	C
Energy efficiency class of water heating	-	B	A
Declared loading profile	-	L	L
Order number	-	1019.10	1076.9

THERM BOILERS with flow heating of water

THERM 20 CXE.AA

C
A

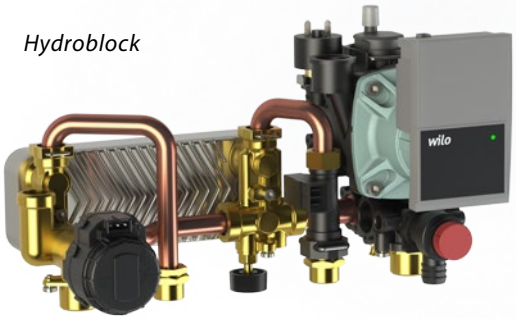
THERM 28 CXE.AA

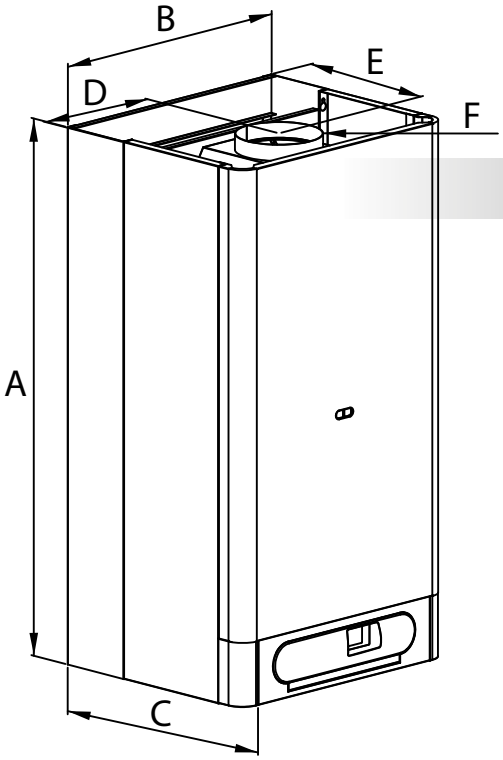
C
B

The boiler is designed for heating family houses, flats and other small buildings. The flow heating of the water is integrated in the boiler, which ensures the consumption of hot water. The advantage of the flow heating is the simple construction and the resulting low price of the equipment. For higher consumption of hot water, the connection of a gas boiler and the storage tank is recommended.

- Wall-mounted boilers with flow heating of water
- Water cooled low-emission burner
- Simple and intuitive control
- Fluent regulation of boiler output
- Option of regulation according to the spatial or outdoor temperature (equithermal regulation)
- High efficiency and low gas consumption
- Suitable combination with the floor heating system
- Option to control by room thermostat or intelligent room regulator using OpenTherm+
- Boilers are delivered as standard with white cladding

Hydroblock





DIMENSIONS OF BOILER

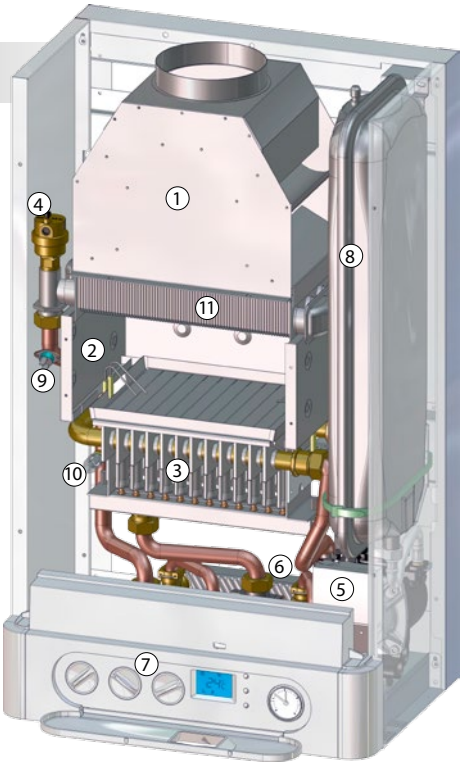
DIMENSIONS OF BOILER (mm)	BOILER MODEL	
	20 CXE.AA	28 CXE.AA
A	725	830
B	430	500
C	300	367
D	186	250
E	120	225
F	120	130

THERM BOILERS with flow heating of water

NEW

SET OF BOILER

1 - Burnt gases draught interrupting unit
2 - Combustion chamber
3 - Lownox burners
4 - De-aerating valve*
5 - Circulation pump
6 - Plate exchanger
7 - Control panel
8 - Expansion vessel
9 - Emergency thermostat
10 - Heating temperature probe
11 - Exchanger

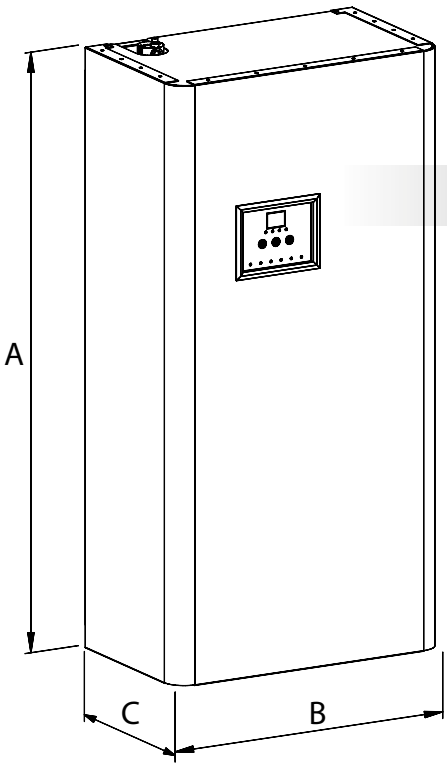


Technical data	Unit	THERM 20 CXE.AA	THERM 28 CXE.AA
Max. thermal input power	kW	22.2	31.0
Min. – max. thermal output for heating	kW	8 – 20	12 – 28
Gas consumption - natural gas	m^3/h	0.90 – 2.30	1.40 – 3.25
Gas consumption – propane	m^3/h	0.34 – 0.85	0.50 – 1.20
Flow of DHW at Δt = 25 °C	l/min.	11.5	16.1
Flow of DHW at Δt = 35 °C	l/min.	8.2	11.4
Maximum input pressure of cold water	bar	6	6
Min. – max. overpressure of heating system	bar	0.8 – 3.0	0.8 – 3.0
Maximum input pressure of heating water	°C	80	80
Boiler efficiency	%	92	92
Volume of expansion unit	l	7	10
Nominal supply voltage / frequency	V/Hz	230/50 ~	230/50 ~
Auxiliary electricity at rated heat input	W	65	65
Level of coverage of electrical part	-	IP 44	IP 44
Diameter of smoke flue	mm	120	130
Dimensions: height/width/depth	mm	725/430/300	830/500/367
Weight of boiler	kg	39	43
Class of seasonal energy efficiency of heating	-	C	C
Energy efficiency class of water heating	-	A	B
Declared loading profile	-	L	XL
Order number	-	1038.9	1044.9

THERM ELN 8, 15 D

Electric boilers can be used as a universal heat source for heating in flats, family houses, recreational and industrial buildings, etc. The boilers can also be used for heating water in an external storage tank. In this case, the boiler must be fitted with accessories. The indisputable advantage of a heating system with electric boilers is the low acquisition costs - there is no need for an expensive gas or chimney connection.

- Energy saving pump
- Very quiet operation due to selected switching relays
- Fluent regulation in low steps by 2.5 kW (5 kW for the boiler ELN 15)
- Minimum output of the boiler 2.5 kW (THERM ELN 8) or 5 kW (THERM ELN 15)
- Easy-to-orientate two-digit LED display
- Safety switch contactor
- Option to control output temperature by 0 - 10 V signal
- There is also the option to hot water in an external reservoir and fitting with a three-way valve.
- HDO communication - remote switching of the operation at low rate by the electricity supplier



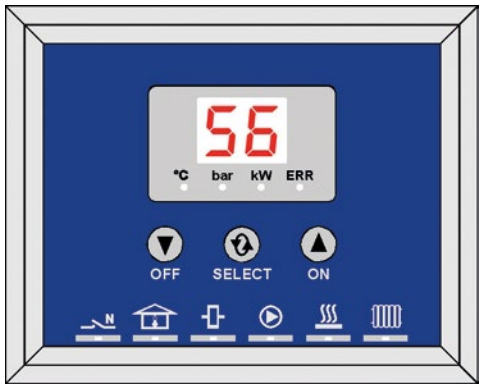
DIMENSIONS OF BOILER

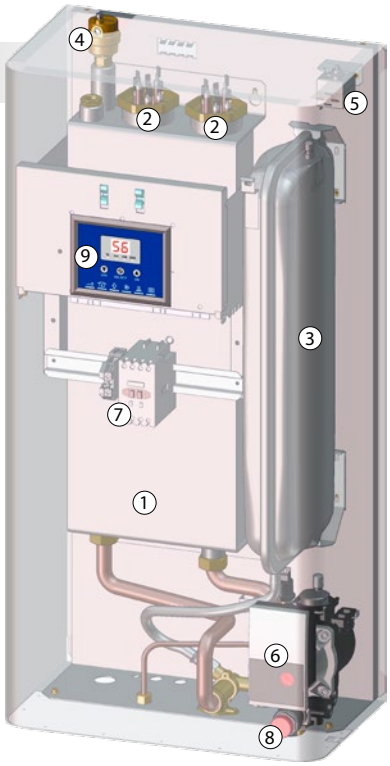
DIMENSIONS OF BOILER (mm)	BOILER MODEL	
	ELN 8	ELN 15
A	805	805
B	400	400
C	235	235

THERM BOILERS electric - economic series

SET OF BOILER

1 - Boiler exchanger
2 - Heating body
3 - Expansion heating vessel
4 - Automatic de-aerating valve
5 - Emergency thermostat
6 - Energy saving pump
7 - Safety switch contactor
8 - Safety valve
9 - Control panel





Technical data	Unit	THERM ELN 8	THERM ELN 15
Nominal heat output	kW	7.5	15
Minimum regulation level of the output	W	2500	5000
Rated current (single-phase connection)	A	11 (33)	22
Level of electric coverage	IP	40	40
Supply voltage / frequency	V/Hz	3 x 400/230 + N + PE/50 ~	3 x 400 + N + PE/50 ~
Maximum rated current	A	3 x 12 (1 x 36)	3 x 24
Main circuit breaker for electric installation	A	16 (40)	25
Rated current of the control circuit breaker	A	1.25	1.25
Electric service life of relay	-	1.10^5 cycles (16 A, 250 V/50 Hz)	1.10^5 cycles (16 A, 250 V/50 Hz)
Mechanical service life of relay	-	10.10^6 cycles	10.10^6 cycles
Input - output of heating water	-	G 3/4" outer	G 3/4" outer
Min. – maximum working overpressure of heating system	bar	0.5 – 3.0	0.5 – 3.0
Maximum temperature of heating water	°C	80	80
Water volume of the boiler	l	6.8	9.6
Efficiency at the rated power	%	99.5	99.5
Volume of expansion tank	l	7	7
Dimensions: height/width/depth	mm	805/400/235	805/400/235
Weight of the boiler without water	kg	31	33
Class of seasonal energy efficiency of heating	-	D	D
Order number	-	1611.1	1612.1

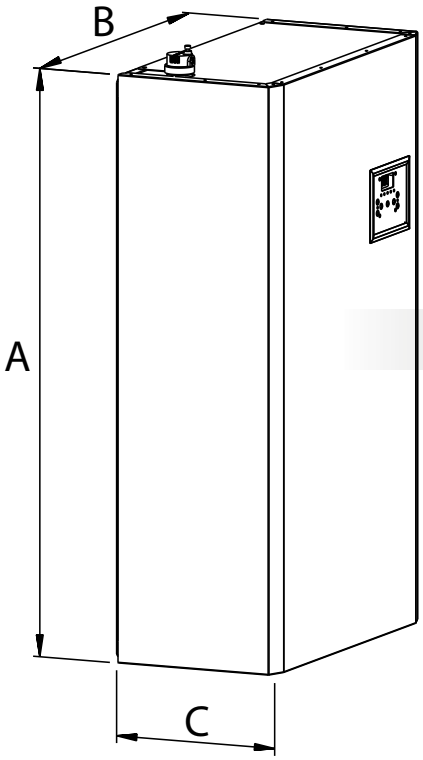
THERM EL 8, 15, 23, 30, 38, 45

D

The electric boiler operates in a hot-water heating system in the same manner as gas boilers with burners. Very similar regulation. Even the regulators that are used for regulating boilers and heating are the same. An electric boiler can be used as a universal heat source in flats, small family houses and recreational buildings. It is also used as additional source for new methods of heating, such as a thermal pump or solar thermal collectors. In cool periods when the primary source does not heat the building to the thermal comfort, the electric boiler is also connected. The indisputable advantage of electric boilers is the very low cost - there is not need for expensive gas or chimney connections.

- Energy saving pump
- Very quiet operation due to selected switching relays
- Fluent regulation in low steps by 2.5 kW (5 kW for the boilers from 30 kW)
- Minimum output of the boiler 2.5 kW (THERM EL 8, 15, 23), or 5 kW (THERM EL 30, 38, 45)
- Option to connect the regulator with OpenTherm+ communication
- Option of regulation according to the spatial or outdoor temperature - equithermal regulation

- There is also the option to hot water in an external reservoir and fitting with a three-way valve.
- Option of remote boiler control through SMS messages after fitting with the SMS module
- HDO communication - remote switching of the operation at low rate by the electricity supplier
- Option to add monitoring of the current maximum to prevent overloading of the electricity network in the building
- Option to connect up to 32 boilers to intelligent cascade boiler rooms in order to increase heating power



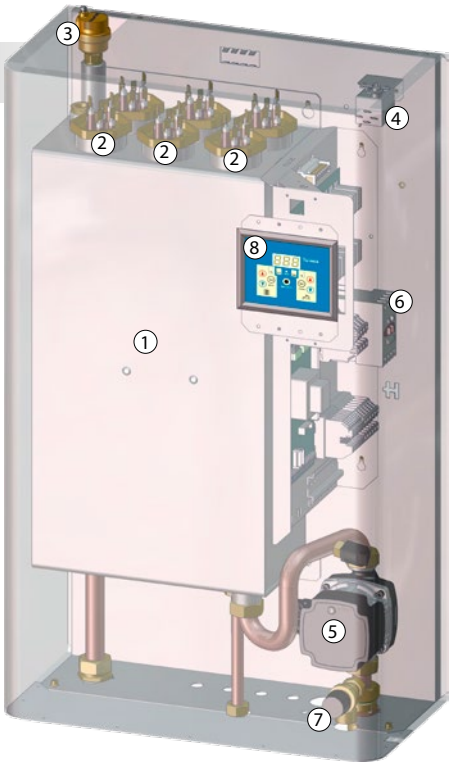
DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL					
	EL 8	EL 15	EL 23	EL 30	EL 38	EL 45
A	820	820	820	805	805	805
B	475	475	475	475	475	475
C	238	238	238	238	238	238

THERM BOILERS electric - standard series

SET OF BOILER

1 - Boiler exchanger
2 - Heating body
3 - Automatic de-aerating valve
4 - Emergency thermostat
5 - Energy saving pump
6 - Safety switch contactor
7 - Safety valve
8 - Control display



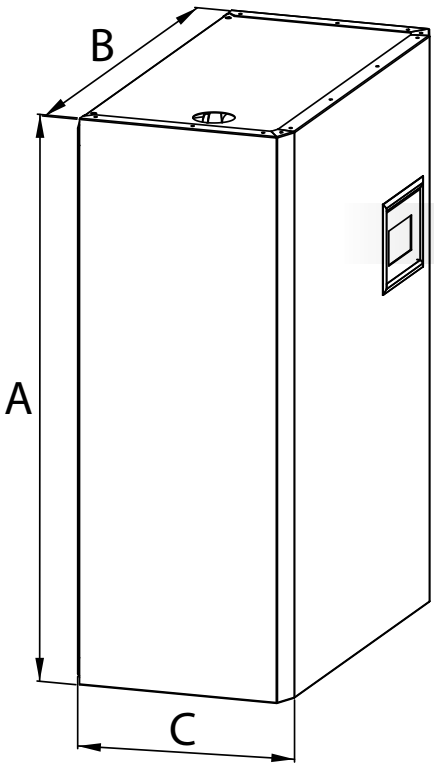
Technical data	Unit	THERM EL 8	THERM EL 15	THERM EL 23	THERM EL 30	THERM EL 38	THERM EL 45
Nominal heat output	kW	7.5	15.0	22.5	30.0	37.5	45.0
Minimum regulation level of the output	W	2500	2500	2500	2500/5000	2500/5000	2500/5000
Rated current (single-phase connection)	A	11 (33)	22 (66)	33	44	55	66
Level of electric coverage	IP	40	40	40	40	40	40
Supply voltage / frequency	V/Hz	3 x 400/230 + N + PE/50 ~		3 x 400 + N + PE/50 ~			
Maximum rated current	A	3 x 12 (1 x 36)	3 x 24	3 x 36	3 x 48	3 x 60	3 x 72
Main circuit breaker for electric installation	A	16 (40)	25 (80)	40	50	63	80
Rated current of the control circuit breaker	A	1.25	1.25	1.25	1.25	1.25	1.25
Electric service life of relay	-	1.10^5 cycles (16 A, 250 V/50 Hz)					
Mechanical service life of relay	-	10.10^6 cycles					
Input - output of heating water	-	G 3/4" outer			G 1" outer		
Min. – maximum working overpressure of heating system	bar	0.5 – 3.0	0.5 – 3.0	0.5 – 3.0	0.5 – 3.0	0.5 – 3.0	0.5 – 3.0
Maximum temperature of heating water	°C	80	80	80	80	80	80
Water volume of the boiler	l	14.5	14.5	14.5	28.0	28.0	28.0
Efficiency at the rated power	%	99.5	99.5	99.5	99.5	99.5	99.5
Volume of expansion tank	l	7	7	7	order based (location outside the boiler)		
Dimensions: height/width/depth	mm	820/475/238			805/475/238		
Weight of the boiler without water	kg	37	38	39	43	44	45
Class of seasonal energy efficiency of heating	-	D	D	D	D	D	D
Order number	-	1601.1	1602.1	1603.1	1604.1	1605.1	1606.1

THERM BOILERS electric - with touch display

THERM EL 5, 9, 14 D

THERM electric boilers are characterized by simple servicing. THERM EL 5, 9 and 14 electric boilers are fitted as standard with a touch display. This control is very user-friendly, the parameters are displayed verbally and various language versions can be selected. Due to the low minimum performance and the modulation option, these boilers are recommended for low-energy houses.

- Energy saving pump
- Very quiet operation due to selected switching relays
- The simple and intuitive control is due to the easy-to-orientate touch display
- Fluent regulation in low steps by 500 W (THERM EL 5), by 1000 W (THERM EL 9), 1500 W (THERM EL 14)
- Minimum output of the boiler 500 W (THERM EL 5), 1000 W (THERM EL 9), 1500 W (THERM EL 14)
- Option to connect the regulator with OpenTherm+ communication
- Option of regulation according to the spatial or outdoor temperature (equithermal regulation)
- There is also the option to hot water in an external reservoir and fitting with a three-way valve.
- Option of remote boiler control through SMS messages after fitting with the SMS module
- HDO communication - remote switching of the operation at low rate by the electricity supplier
- Option to add monitoring of the current maximum to prevent overloading of the electricity network in the building
- Recommended for low-energy and passive houses (low minimum power)



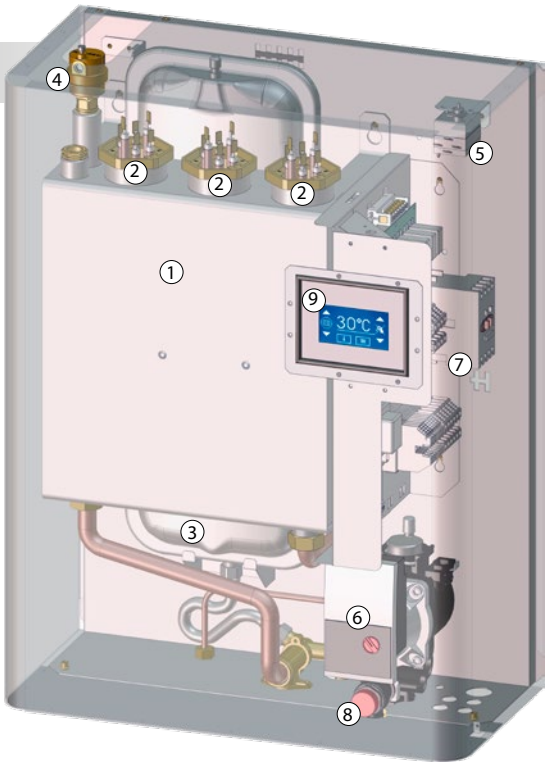
DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL		
	EL 5	EL 9	EL 14
A	638	638	638
B	475	475	475
C	238	238	238

THERM BOILERS electric - with touch display

SET OF BOILER

1 - Boiler exchanger
2 - Heating body
3 - Expansion heating vessel
4 - Automatic de-aerating valve
5 - Emergency thermostat
6 - Energy saving pump
7 - Safety switch contactor
8 - Safety valve
9 - Control touch display



Technical data	Unit	THERM EL 5	THERM EL 9	THERM EL 14
Nominal heat output	kW	4.5	9.0	13.5
Minimum regulation level of the output	W	500	1000	1500
Rated current (single-phase connection)	A	7 (21)	13 (39)	20 (60)
Level of electric coverage	IP	40	40	40
Supply voltage / frequency	V/Hz	3 x 400/230 + N + PE/50 ~		
Maximum rated current	A	3 x 8 (1 x 24)	3 x 14 (1 x 42)	3 x 21 (1 x 63)
Main circuit breaker for electric installation	A	10 (25)	16 (50)	25 (80)
Rated current of the control circuit breaker	A	1.25	1.25	1.25
Electric service life of relay	-	1.10^5 cycles (16 A, 250 V/50 Hz)		
Mechanical service life of relay	-	10.10^6 cycles	10.10^6 cycles	10.10^6 cycles
Input - output of heating water	-	G 3/4" outer	G 3/4" outer	G 3/4" outer
Min. – maximum working overpressure of heating system	bar	0.5 – 3.0	0.5 – 3.0	0.5 – 3.0
Maximum temperature of heating water	°C	80	80	80
Water volume of the boiler	l	6.0	6.0	6.0
Efficiency at the rated power	%	99.5	99.5	99.5
Volume of expansion tank	l	7	7	7
Dimensions: height/width/depth	mm	638/475/238	638/475/238	638/475/238
Weight of the boiler without water	kg	27	27	27
Class of seasonal energy efficiency of heating	-	D	D	D
Order number	-	1607.1	1608.1	1609.1

THERM STORAGE TANKS

THERM DESIGNED STORAGE TANKS

Through their construction and the number of versions available, THERM storage tank water heaters provide economical preparation of water using energy from an external source. They are recommended for installation in interiors.

Type	Unit	THERM 60/Z	THERM 55/Z, Nerez	THERM 60/S
Volume	l	55	55	55
Output	kW	24	25	24
Height / width / depth	mm	830 / 400 / 395	830 / 400 / 395	830 / 400 / 395
Material	-	enamel	stainless	enamel
Class of energy efficiency	-	B	C	B
Order number	-	14129.A	14128.A	14130.A

THERM OKCE, OKH STORAGE TANKS

The series of THERM OKC, OKH storage tank water heaters, through the construction and the number of versions available, provide economical preparation of water using energy from a hot-water source. The heater is fitted with the regulation of the water temperature, a safety valve and a circulation outlet. NTR/HV storage tanks have a simple connection to the boiler outlets in the upper part.

OKC 125 NTR

OKH 100 NTR/HV

Storage tanks of NTR and NTRR type

In NTR storage tanks, there is one exchanger for the conversion of energy from heating water to hot water. In NTRR storage tanks with large volumes, two exchanges are used. This enables to hot water from a source with a higher output or to connect two various heat sources to each exchanger.

Type	Unit	OKC 100 NTR	OKC 100 NTR/HV	OKH 100 NTR/HV	OKC 125 NTR	OKC 125 NTR/HV	OKH 125 NTR/HV	OKC 160 NTR	OKC 160 NTR/HV
Volume	l	95	95	95	115	120	120	145	160
Weight	kg	57	56	56	69	70	70	77	78
Exchanger power	kW	24	24	24	32	32	32	32	32
Height	mm	885	885	887	1050	1049	1052	1236	1092
Width	mm	524	524	520	524	524	520	524	584
Class of energy efficiency	-	B	B	B	C	C	B	C	C
Order number	-	14311	14373	14355	14312	14382	14356	14313	14440

STORAGE TANKS for indirect heating of water

Type	Unit	OKC 200 NTR	OKC 200 NTRR	OKC 300 NTRR	OKC 400 NTRR	OKC 500 NTRR	OKC 750 NTRR	OKC 1000 NTRR
Volume	l	210	200	295	380	470	750	995
weight	kg	95	108	124	144	183	245	315
Exchanger power	kW	32	24/24	48/26	57/31	65/40	60/33	76/32
Height	mm	1398	1398	1581	1631	1961	1998	2025
Width	mm	585	585	670	700	700	910	1010
Class of energy efficiency	-	C	C	C	D	D	-	-
Order number	-	14314	14315	14333	14334	14335	14336	14337

THERM OKCE STORAGE TANKS

The series of THERM OKCE stationary storage tanks provides a standard option for additional heating of water by electric energy due to the body in the lower part of the storage tank.

Type	Unit	OKCE 100 NTR / 2.2 kW	OKCE 125 NTR / 2.2 kW	OKCE 160 NTR / 2.2 kW	OKCE 200 NTR / 2.2 kW	OKCE 200 NTRR / 2.2 kW	OKCE 250 NTR / 2.2 kW
Volume	l	96	115	155	200	195	250
weight	kg	59	71	80	95	106	106
Exchanger power	kW	24	32	32	32	24/24	32
Height	mm	885	1050	1047	1356	1356	1536
Width	mm	524	524	584	584	584	584
Class of energy efficiency	-	B	C	C	D	D	D
Order number	-	14339	14340	14341	14342	14345	14343

Type	Unit	OKCE 250 NTRR / 2.2 kW	OKCE 300 NTR / 2.2 kW	OKCE 300 NTRR / 2.2 kW	OKCE 300 NTR / 3 - 6 kW	OKCE 300 NTRR / 3 - 6 kW
Volume	l	245	300	295	300	295
weight	kg	116	116	132	122	138
Exchanger power	kW	24/24	35	35/27	35	35/27
Height	mm	1536	1579	1579	1579	1597
Width	mm	584	670	670	670	670
Class of energy efficiency	-	D	C	C	C	C
Order number	-	14346	14344	14347	14348	14349

SETS OF BOILER + STORAGE TANK

- Heating water in an external indirect heating storage tank
- A three-way valve for heating the storage tank is part of the boiler
- Permanent delivery of hot water for further consumption points
- Simple interconnection of the boiler and the storage tank

SET OF BOILER + STORAGE TANK	Order number	Class of seasonal energy efficiency of heating sets
THERM 14 KDZ.A + OKH 100 NTR/HV	1081/100	A
THERM 17 KDZ.A + OKH 100 NTR/HV	1067/100	A
THERM 17 KDZ.A + OKH 125 NTR/HV	1067/125	A
THERM 28 KDZ.A + OKH 100 NTR/HV	1032/100	A
THERM 28 KDZ.A + OKH 125 NTR/HV	1032/125	A

The set does not contain the parts required for the interconnection of the boiler and the storage tank!

THERMONA solar systems

Name		Set HOME 0 *	Set HOME 1 *	Set HOME 2 *	Set HOME 3 *
Boiler	Order number	**without boiler**	**THERM 17 KDZ.A**	**THERM 28 KDZ.A**	**THERM EL 14**
Regulation of boiler	43559	no	Equithermal set CR 04	Equithermal set CR 04	Equithermal set CR 04
Type of storage tank	14367	OKC 300 NTRR/SOL	OKC 300 NTRR/SOL	OKC 300 NTRR/SOL	OKC 300 NTRR/SOL
Regulation	210604	SRS 3	SRS 3	SRS 3	SRS 3
Pump unit		Type S1	Type S1	Type S1	Type S1
Collectors (2 pcs)	210646	KPS 11	KPS 11	KPS 11	KPS 11
Expansion tank 18 l	213721	R8 018 - 18 l	R8 018 - 18 l	R8 018 - 18 l	R8 018 - 18 l
Expansion tank holder	27766	yes	yes	yes	yes
Solar liquid 10 l	210110	Solarten Super 2 pcs	Solarten Super 2 pcs	Solarten Super 2 pcs	Solarten Super 2 pcs
Connecting set	27710	yes	yes	yes	yes
Fixation set	28281	yes	yes	yes	yes
Ball valve 3/8"	27250	yes	yes	yes	yes
De-aerating valve 3/8"	26118	yes	yes	yes	yes
Air separator	211591	yes	yes	yes	yes
Thermo-static mixing valve	211057	yes	yes	yes	yes

* *Necessary specification of individual parts and completion of fixation according to the type of roof!*

REGULATION

Regulation of gas boilers and electric boilers

All types of boilers produced by Thermona are fitted with by modern regulation elements. Each boiler can be regulated either on the basis of the temperature in the indoor area – a thermostat, or on the basis of the temperature in the outdoor environment using built-in equithermal regulation within the boiler after installing the outdoor sensor. The equithermal regulation can be completed by the intelligent regulator, which is located in the reference room and which controls the heating on the basis of the temperature in the outdoor environment and makes corrections and on the basis of the temperature in the indoor area (mixed regulation). These regulators communicate with the boiler on the basis of OpenTherm+ protocol; they take this from information and on the basis of this adjust the heating process according to the program set by the user.

Room thermostats

PT 22 (43531) - standard room thermostat with option to set weekly programme. Keep the set value with the precision 0.5 °C and display the temperature on the large display. It is recommended for all types of THERM boilers.

CMR 707 (43594) - programmable room thermostat with weekly heating programme and four daily temperature regimes. The advantage is the built-in memory, which saves the user program for an unlimited time. It is recommended for all types of THERM boilers.

BPT 013 (43509) - the simplest wireless rooms thermostat. Setting the temperature by a simple roll regulates the temperature to the precision of 1 °C. After pressing the NOC button, the temperature is reduced by 3 °C over 8 hours. It can be used for all types of THERM boilers.

CMR 727 (43595) - modern programmable wireless room thermostat with PID regulation, weekly heating regime and four daily temperature regimes. The built-in memory stores the user program for an unlimited time without the supply. The communication radius is about 30 m. It is used for all types of THERM boilers.

Intelligent regulators for 1 heating circuit

CR 04 (43452) - intelligent regulator, which is located in the reference room and which controls the heating on the basis of the temperature of the outdoor environment and makes corrections on the basis of the temperature in the indoor area (mixed regulation). It enables to control the heat source with OpenTherm+ communication (data communication system between the boiler and the regulator). The regulator can be used to control the cascade boiler room.

VI Class of temperature regulator according to the requirements of Commission Directive EC No. 811/2013

REGULATION

VI

PT 59 (43507) - intelligent regulator, which is located in the reference room and which controls the heating on the basis of the temperature of the outdoor environment and makes corrections on the basis of the temperature in the indoor area (mixed regulation). It enables to control the heat source with OpenTherm+ communication (= data communication system between the boiler and the regulator). The advantage is the backlit display, easy control and programming, display in the Czech language. The regulator can be used to control the cascade boiler room.

PT 59 X (43506) - intelligent regulator with OpenTherm+ communication. Adds-in PT 59 with identical functions. In addition, this regulator completes the external GST modules for sending SMS messages and the MS module for external signalling of errors.

VI

Modul GSM - GST 1 (43460) - additional SMS module for PT 59 X regulators. The module disconnects the heating, regulates the temperature and in the case of connection to PT 59 X, also obtains information about the condition and failures of the boiler.

Signalling module MS 2 (43570) - additional module for signalling failures in the cascade boiler room with the boiler. It is connected to the PT 59 X. In the case of failure, lighting or sound signalling is activated.

VI

Equithermal set CR 04 (43559) - set of equithermal regulation consisting of regulator CR 04 and an outdoor temperature sensor.

Equithermal set PT 59 (43513) - set of equithermal regulation consisting of regulator PT 59 and an outdoor temperature sensor.

VI

Accessories

Outdoor temperature sensor (40579.1), which is used for equithermal regulation of boilers and cascade boiler rooms depending on the value of the outdoor temperature. It is recommended for all types of THERM boilers.

INTERFACE IU 04.10 (40068) - communication interface to the control gas boiler in the cascade.

INTERFACE IU 05 (40922) - communication interface to the control gas boiler in the cascade.

VI Class of temperature regulator according to the requirements of Commission Directive EC No. 811/2013

REGULATION

HJ103T (43518) - releasing relay (restriction of current). The relay controls the electric voltage in the whole house (flat) and in the case of exceeding the permitted values of the electric current it reduces the input power of THERM electric boiler.

REKGSM 01 (43505) - additional SMS module for THERM electric boilers. Using SMS messages, the module activates and deactivates the heating, regulates temperature, obtains information about the condition of the boiler and any errors. Due to this module, it is possible to check the temperature in a flat, a house or a cottage at any time.

INTERFACE REKAS 1 (42188) - communication interface for cascade connection up to 32 electric boilers. In each boiler is one interface; individual interfaces are interconnected in parallel by a 3-core conductor. All parameters and data are set on one control boiler; the other controlled boilers in the cascade work according to information stated by the control boiler.

Leakage detector CO Honeywell XC70-CS (43696) - it can detect the presence of carbon monoxide in the air from the value 43 ppm. It is installed in rooms in which gas consumer appliances are installed - potential sources of CO.

Temperature probe with cable SO 10001 (23657)

Outdoor temperature sensor CT01-10K (metal) (43469)

Indoor temperature sensor CT02-10K (plastic) (43556)

Zone regulation

THERM VPT regulator for 1 – 4 heating circuits

VIII

- Regulation according to outdoor temperature and room temperature
- Option to select from two versions
  - VPT/R - on DIN bar into the switchboard
  - VPT/I - on the wall in the interior
- Option to control the servo drives by 24 V or 230 V voltage
- Option for automatic filling of the heating system
  - VPTADS module
- Remote control option
  - LAN module
  - WiFi module
  - GSM module
- Possibility of signalling errors
  - VPTPSK module

VIII Class of temperature regulator according to the requirements of Commission Directive EC No. 811/2013

REGULATION

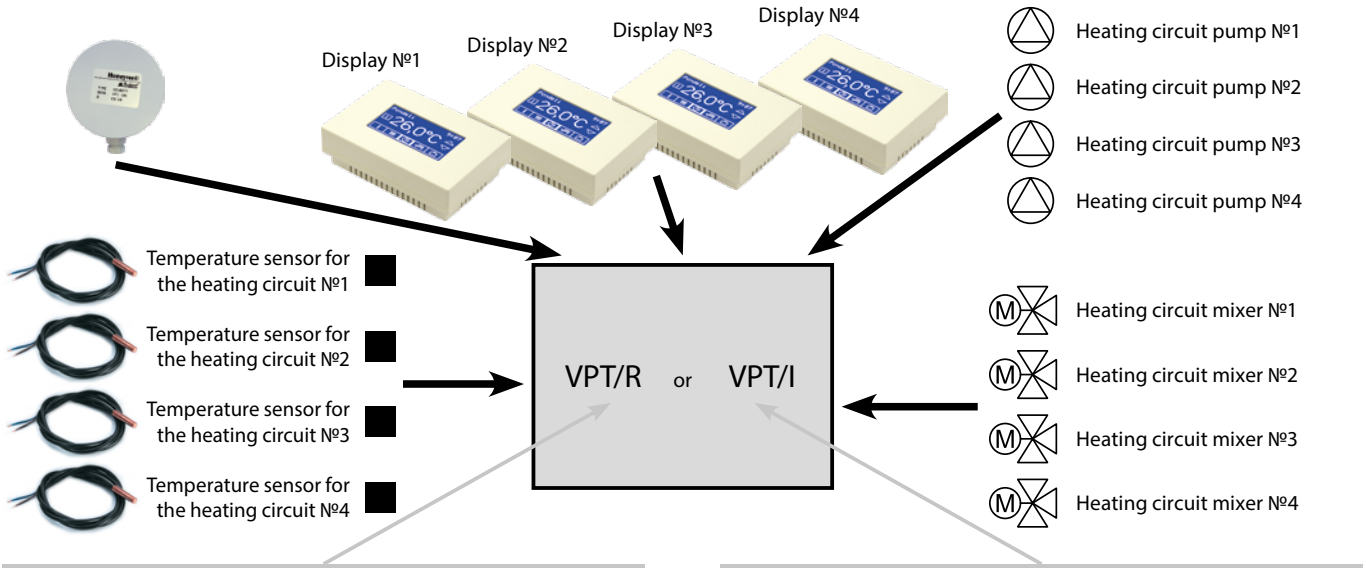
The THERM VPT regulator is designed for controlling the system with up to four mixing (or only pumping) circuits with the boiler or a cascade of boilers in possible combination with securing and automatically charging the heating system. Each circuit is regulated independently according to the outdoor temperature (equithermal regulation) or according to the temperature of the reference room or for the constant temperature of hearing water. The advantage of the simple setting and the touch screen control is the comparison of individual parameters in several language versions, which enables easy user orientation in the menu for the device and simple changes to the heating parameters.

SWITCHBOARD SET - for regulation of the respective number of circuits with analogue servo drives 0 - 10 V contains an outdoor sensor and the respective number of sensors for regulation of the requested number of heating circuits including the control display. It must be completed by the supply source.

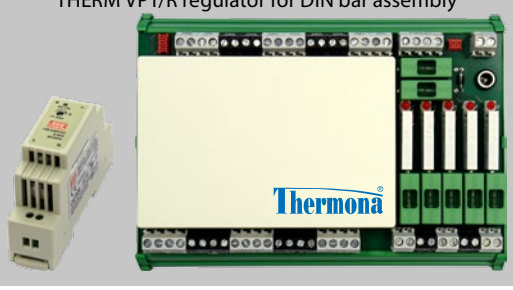
Order number	Sign	Item
42731	SET VPT/R - 1	Set switchboard - 1 circuit
42732	SET VPT/R - 2	Set switchboard - 2 circuits
42733	SET VPT/R - 3	Set switchboard - 3 circuits
42734	SET VPT/R - 4	Set switchboard - 4 circuits
42736		Supply 24 V / 0.63 A

INTERIOR SETS - for regulation of the respective number of circuits with analogue servo drives 0 - 10 V contains an outdoor sensor and the respective number of sensors for regulation of the requested number of heating circuits, including the control display. It must be completed by the supply source.

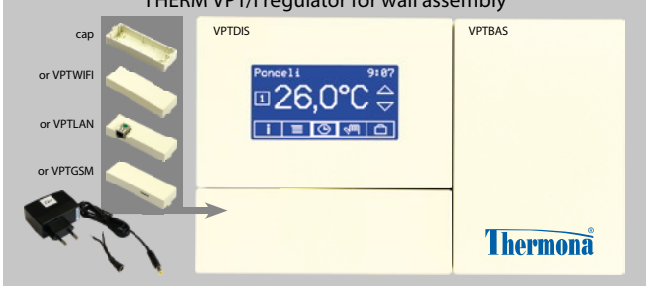
Order number	Sign	Item
42741	SET VPT/I - 1	Interior set - 1 circuit
42742	SET VPT/I - 2	Interior set - 2 circuits
42743	SET VPT/I - 3	Interior set - 3 circuits
42744	SET VPT/I - 4	Interior set - 4 circuits
42739		Supply 24 V / 0.5 A



THERM VPT/R regulator for DIN bar assembly



THERM VPT/I regulator for wall assembly



Further components of THERM VPT regulation, including LAN, WiFi, GSM communication modules can be found at www.thermona.cz.

REGULATION

THERM VPT PSK ADS (with automatic charging) regulation switchboard **(43800)**
THERM VPT PSK (without automatic charging) regulation switchboard **(43801)**

In addition to the automatic modules for the VPT system, we offer a fully equipped, connected and tested switchboard with the piece test protocol, which contains all the necessary elements for the connection and activity of the boiler.

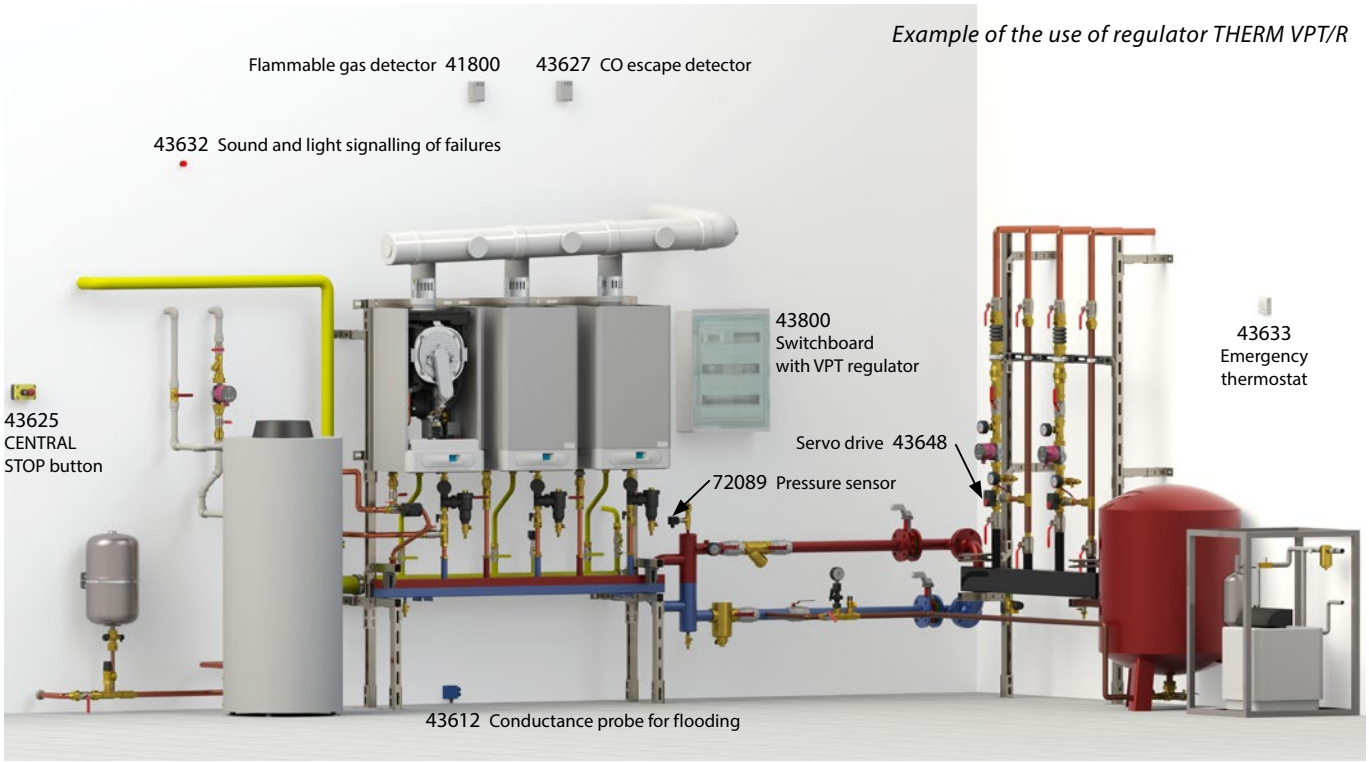
The switchboard includes

- Main circuit breaker 16 A
- Circuit breaker for regulation 10 A
- Circuit breaker for boiler sockets 10 A
- Circuit breaker for feeding - network pumps 10 A
- Circuit breaker for sockets in the boiler room 10 A
- Circuit breaker for boiler rooms 10 A
- THERM VPT regulator with display and 24 V DC source
- THERM VPTPSK module for securing the boiler room
- VPTADS module for automatically charging the system
- DZ4 monitoring flooding of the boiler room
- Contactor for boiler supply (AUT-ON-OFF)
- 2 contactors for feeding - network pumps (AUT-ON-OFF)
- Electrical connection diagram and piece test protocol

THERM VPT PSK ADS

For applications for which it is necessary to automatically charge the system, it is possible to use the version of the THERM VPT PSK (43801) switchboard, which is not fitted with the VPTADS module. This switchboard is prepared for simple charging of the VPTADS module.

Example of the use of regulator THERM VPT/R



REGULATION

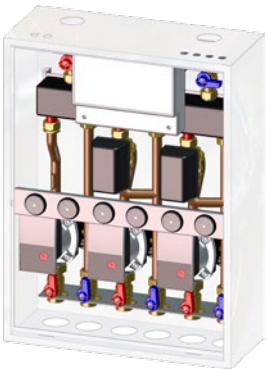
Zone hydraulic units SIM 3Z.H-21, SIM 2Z.H-20, SIM 2Z.H-11

The zone hydraulic unit ensures simple and elegant interconnection of the heat source with heating circuits. The built-in automatic regulation system ensures problem-free operation of a multi-circuit heating system. It is mainly used in the case of combining circuits with heating bodies and floor heating, which is a requirement of most modern heating systems.

- Control of up to three independent heating circuits
- Energy saving pumps
- Option to control the floor heating circuit in combination with the radiator circuit
- Option for the connection of gas or electric boilers up to an output of 30 kW
- Compact construction and dimensions - hydraulic and regulation elements integrated in the unit
- Version with built-in zone regulation unit SZ 10004
- Built-in equithermal regulation
- Connection to the boiler by OpenTherm+ communication protocol

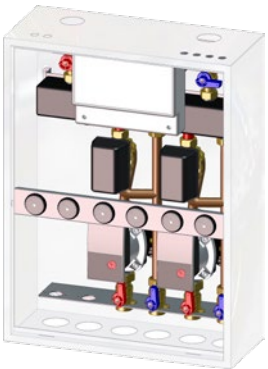
SIM 3Z.H-21 - two mixed circuits + one non-mixed unit

Unit SIM 3Z.H-21 enables to regulate three independent heating zones (2x mixed + 1x not mixed). Each zone can be controlled by the room regulator.



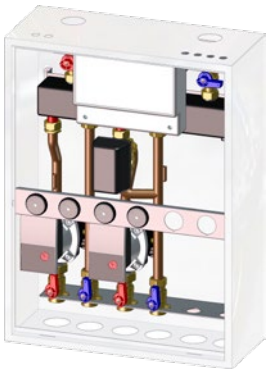
SIM 2Z.H-20 - two mixed circuits

Unit SIM 2Z.H-20 enables to regulate two independent heating zones (2x mixed). Each zone can be controlled by the room regulator.



SIM 2Z.H-11 - one mixed circuit + one non-mixed unit

Unit SIM 2Z.H-11 enables to regulate two independent heating zones (1x mixed + 1x not mixed). Each zone can be controlled by the room regulator.



Order number	(43742)	(43741)	(43740)	without regulator
	(43745)	(43744)	(43743)	with regulator

The hydraulic unit zone contains:

- Hydraulic balancer for dynamic pressures
- Honeywell mixing valves
- Zone modulation regulator SZ 10004
- Circulation pumps
- Temperature sensors
- Discharging valve
- De-aerating valve
- Shut-off valves
- Informative thermometers

EXHAUSTION OF BURNT GASES

EXHAUSTION OF BURNT GASES - CONDENSING BOILERS

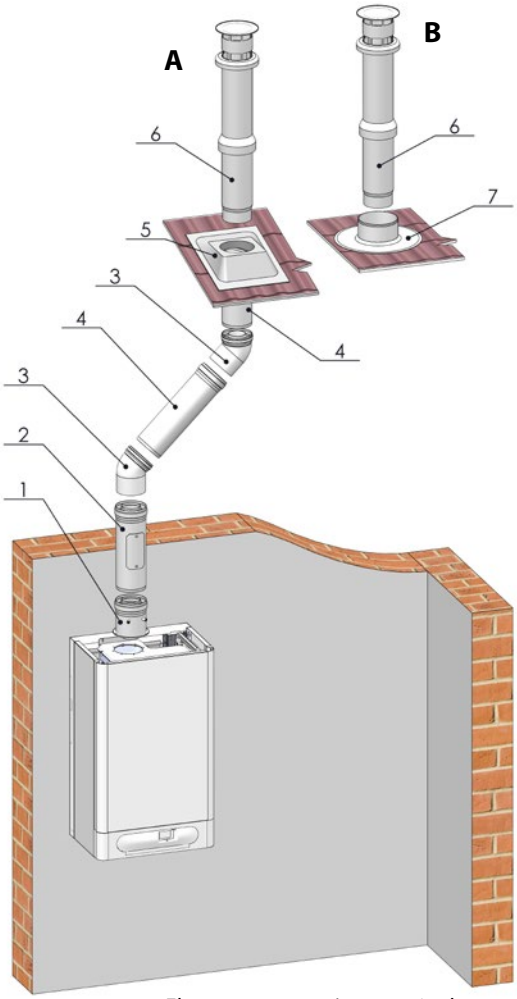
MAX. MAX. LENGTHS OF EXHAUSTION OF BURNT GASES FROM CONDENSING THERM BOILERS (m)

CONSUMER APPLIANCE	Ø 60/100		Ø 80/125		2 x Ø 80	Ø 110/160		2 x Ø 110
	horizontal	vertical	horizontal	vertical	horizontal and vertical	horizontal	vertical	horizontal and vertical
THERM 14 KD.A, KDZ.A, KDZ5.A	10	9	20	20	20 + 20 (suction + exhaust)	-	-	-
THERM 17 KD.A, KDZ.A, KDZ5.A, KDZ10.A	4	3.7	15	15	2 x 13	-	-	-
THERM 24 KDN, KDCN, KDZN	6	6	11	11	11 + 11 (suction + exhaust)			
THERM 28 KD.A, KDC.A, KDZ.A, KDZ5.A, KDZ10.A	3	2.7	14	14	2 x 12	-	-	-
THERM 45 KD.A	-	-	5 (10, 15)*	5 (10, 15)*	2 x 5	-	-	-
THERM 90 KD.A	-	-	-	-	-	9	8	2 x 10

* If extending the exhaust to 10 m, the boiler output must be restricted to a maximum output of 2 kW; in the case of extending to 15 m, then by a further 2 kW

Shortening of the maximum lengths of elbows: when using elbow 90° = 0.75 m; 45° = 0.50 m

Flue system ø 60/100 - THERM 14, 17, 24, 28 KD...

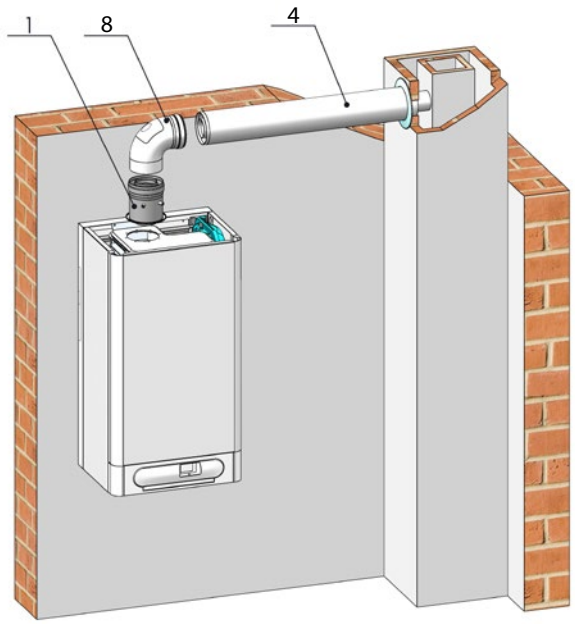


Flue system ø 60/100 vertical

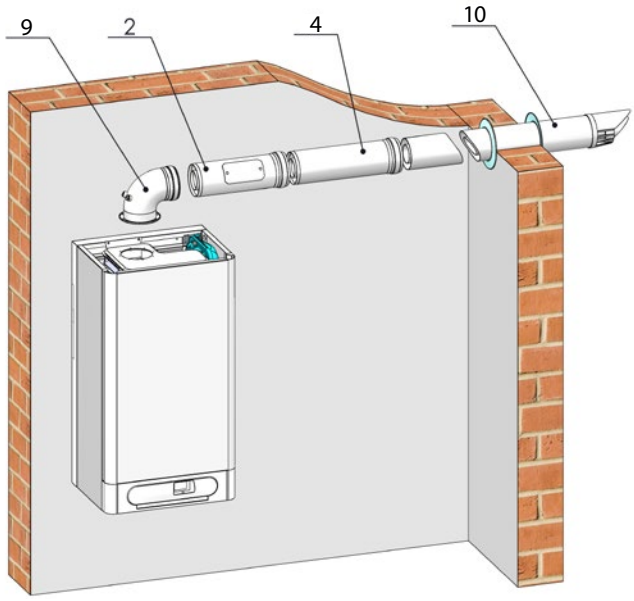
A – installation on sloped roof
B – installation on flat roof

	Item		Order number
1	Flange ø 60/100 with measuring points		24673
2	Insert with control place ø 60/100		213835
3	Coaxial elbow ø 60/100, 45°		26140
4	Concentric tube extension ø 60/100	0.5 m	29596
		1.0 m	29597
5	Roof penetration, sloped, hole ø 125 mm		28014
6	Vertical chimney ø 60/100		211253
7	Roof penetration, plain, hole ø 125 mm		20363
8	Elbow ø 60/100, 90° with control hole		212756
9	Elbow ø 60/100, 90° with flange and measuring points		27216
10	Air tube ø 60/100 horizontal		24677
	Coaxial elbow ø 60/100, 90°		26653
	Flange from ø 60/100 at 80 mm exhaust - suction from the room		27471

EXHAUSTION OF BURNT GASES

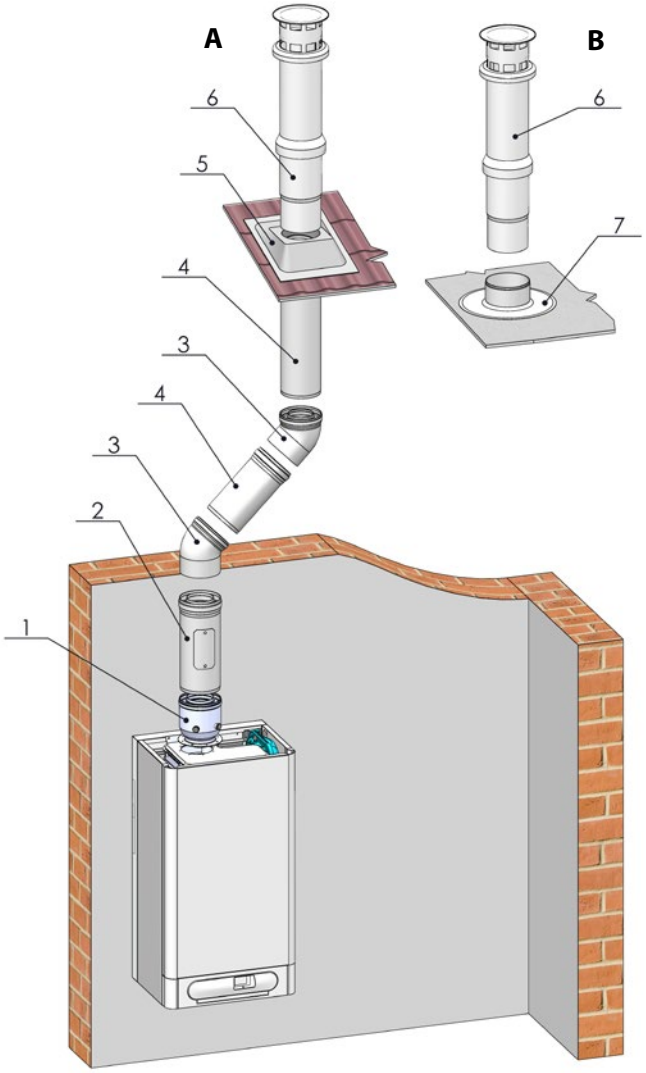


Flue system ø 60/100 horizontal



Flue system ø 60/100 horizontal

Flue system ø 80/125 - THERM 14, 17, 24, 28 KD... and 45 KD.A

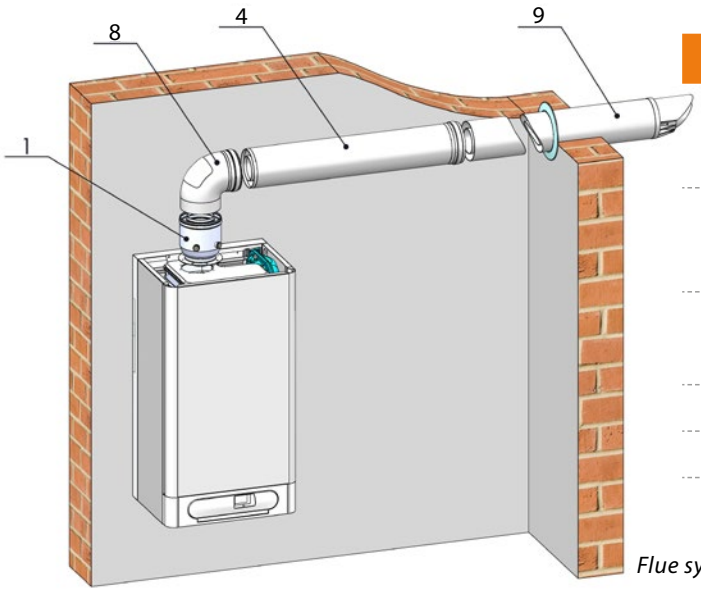


Flue system ø 80/125 vertical

A – installation on sloped roof
B – installation on flat roof

	Item		Order number
1	Regulating flange from ø 60/100 on ø 80/125 with measuring points, for 14, 17 and 28 KD...		24678
1	Regulating flange from ø 80/105 on ø 80/125 with measuring points, for 45 KD.A		27468
2	Insert with control place ø 80/125		211265
3	Coaxial elbow ø 80/125, 45°		26432
4	Concentric tube extension ø 80/125	0.5 m	24675
		1.0 m	27004
5	Roof penetration, sloped, hole ø 125 mm		28014
6	Vertical chimney ø 80/125		211255
7	Roof penetration, plain, hole ø 125 mm		20363
8	Elbow ø 80/125, 90° with control hole		27648
9	Suction tube - exhaust ø 80/125, 1 m		27003
	Coaxial elbow ø 80/125, 90°		24676

EXHAUSTION OF BURNT GASES

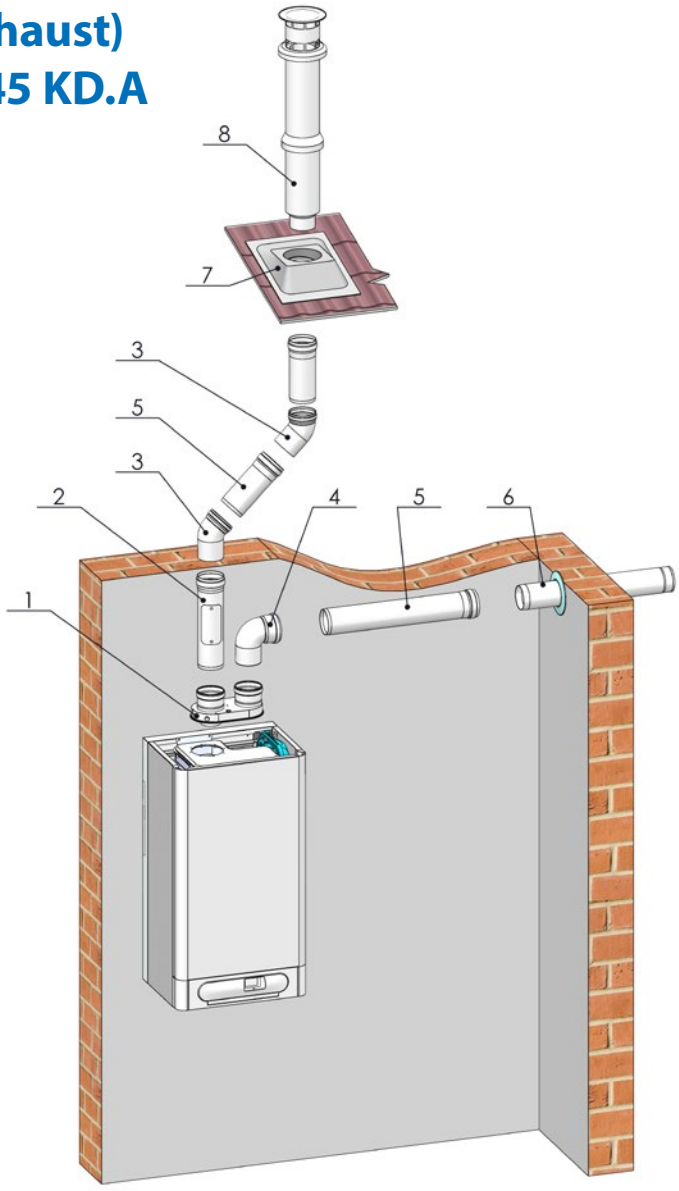


	Item		Order number
1	Regulating flange from ø 60/100 on ø 80/125 with measuring points, for 14, 17 and 28 KD...		24678
1	Regulating flange from ø 80/105 on ø 80/125 with measuring points, for 45 KD.A		27468
4	Concentric tube extension ø 80/125	0.5 m	24675
		1.0 m	27004
8	Elbow ø 80/125, 90° with control hole		27648
9	Suction tube - exhaust ø 80/125, 1 m		27003

Flue system ø 80/125 horizontal

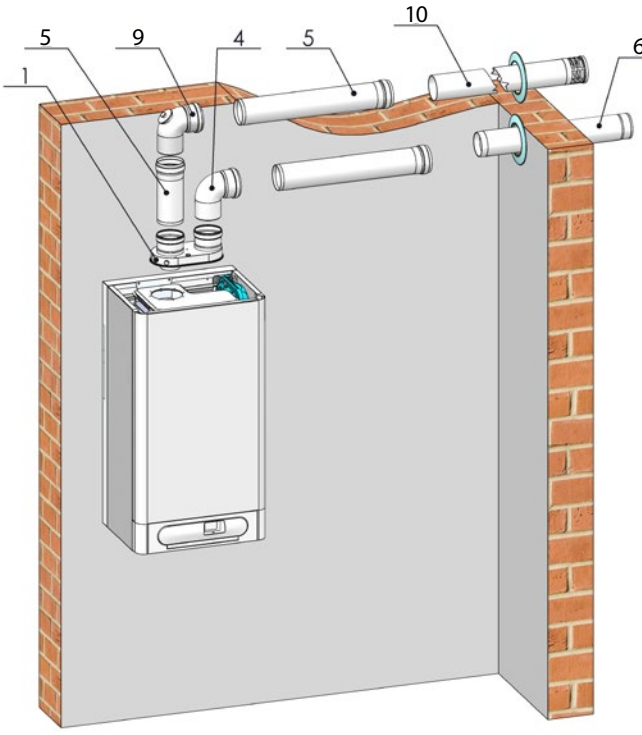
Flue system 2x ø 80 (suction / exhaust) - THERM 14, 17, 24, 28 KD... and 45 KD.A

	Item		Order number
1	Divider from ø 60/100 on 2x ø 80, for 14, 17 a 28 KD...		212109
1	Divider from ø 80/125 on 2x ø 80, for 45 KD.A		27472
	+ Regulating flange from ø 80/105 on ø 80/125 for 45 KD.A		27468
2	Insert with round control hole ø 80		211511
3	Elbow ø 80, 45°		26142
4	Elbow ø 80, 90°		26143
5	Extension tube ø 80/100	0.5 m	24666
		1.0 m	26141
6	Suction tube ø 80, 1 m		26435
7	Roof penetration, sloped, hole ø 125 mm		28014
8	Vertical chimney ø 80 (outer ø 125 mm)		211258
9	Elbow ø 80, 90° with control hole		212755
10	Air tube ø 80, 1 m		26144
11	Chimney head, ø 80		28167
	Reduction ø 80, neck-neck (for suction)		43771
	Flexible extension, 1.5 m		26874
	Chimney holder, including elbow 90°		28201
	Centring piece for the chimney		21961

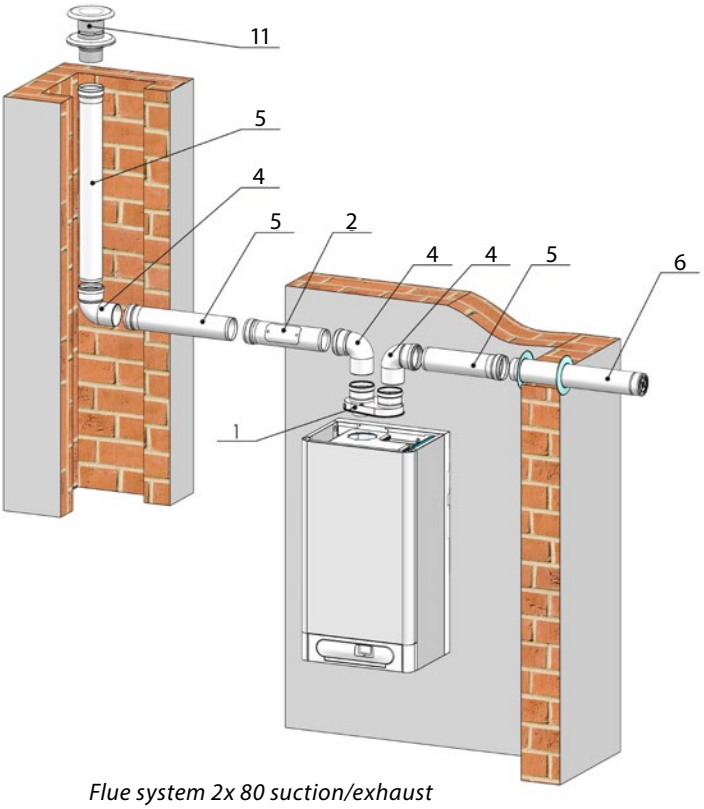


Flue system 2x 80 suction/exhaust

EXHAUSTION OF BURNT GASES



Flue system 2x 80 suction/exhaust

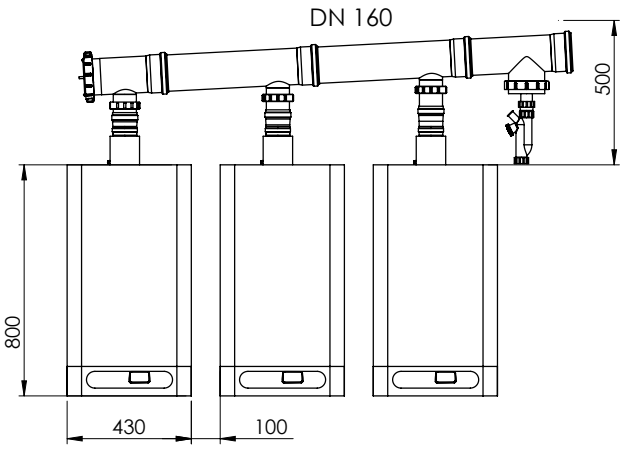


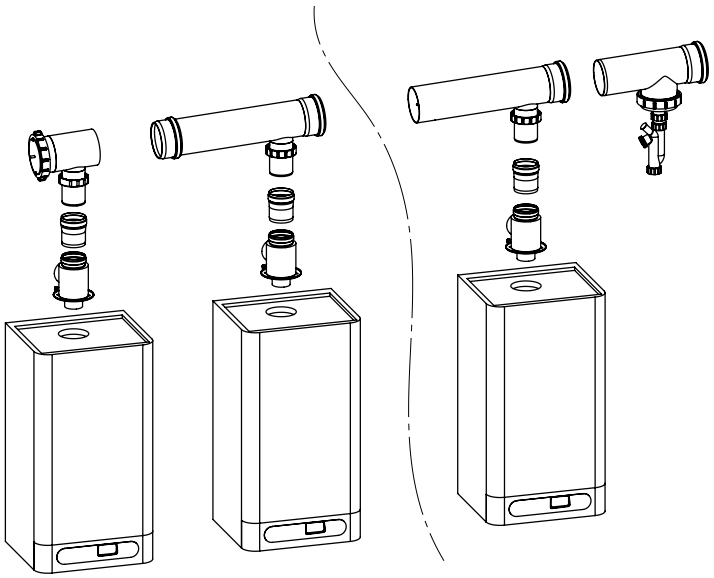
Flue system 2x 80 suction/exhaust

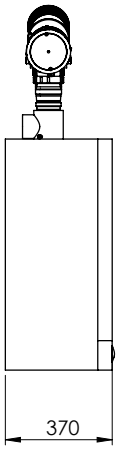
Basic sets flue system for THERM 45 KD.A boiler in the cascade

Order number	Item
43760	Set for 2 boilers 45 KD.A, ø 125 mm
43761	Set for 2 boilers 45 KD.A, ø 160 mm
43762	Expansion by a further boiler 45 KD.A, ø 160 mm

Rem.: Maximum expansion by a further two boilers with the diameter 160 mm



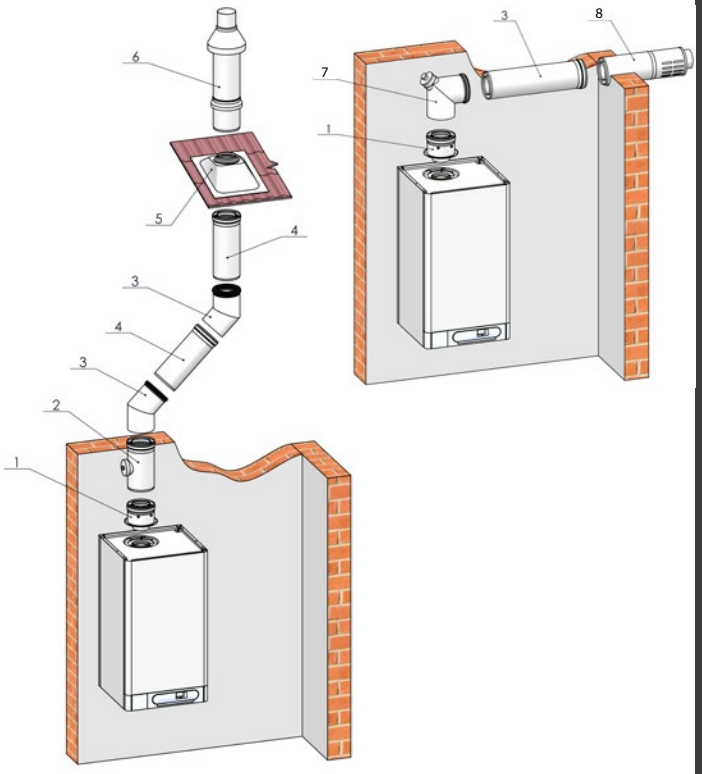




EXHAUSTION OF BURNT GASES

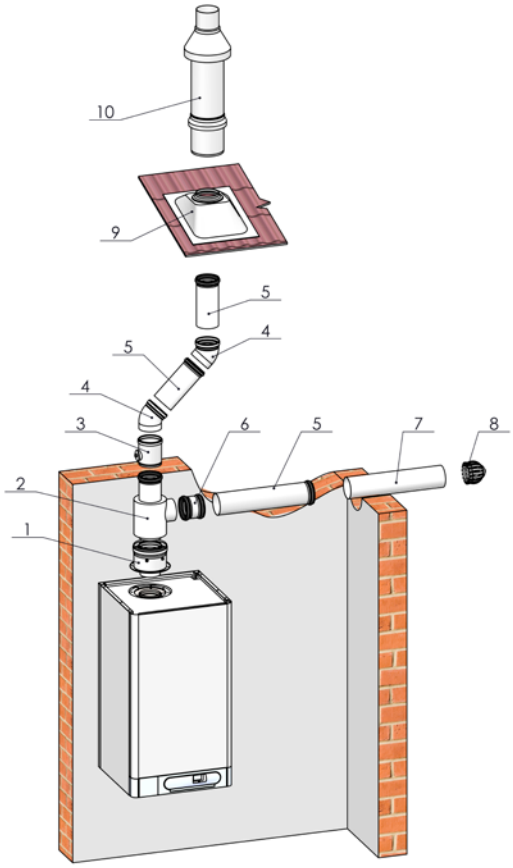
Flue system ø 110/160 - THERM 90 KD.A

	Item		Order number
1	Flange for boiler		43707
2	Revision T-piece ø 110/160 mm with outflow for condensate		43710
3	Coaxial elbow ø 110/160 mm, 45°		43701
4	Concentric tube extension ø 110/160 mm	0.5 m	43713
		1.0 m	43703
5	Roof penetration 25-45°		43715
6	Roof chimney, vertical. ø 110/160 mm		43714
7	Revision elbow ø 110/160 mm, 87°		43709
8	Air tube ø 110/160 mm, into a wall		43706
	Insert ø 110/160 mm with outflow for condensate		43711
	Coaxial elbow ø 110/160 mm, 87°		43704



Flue system 2x ø 110 (suction / exhaust) - THERM 90 KD.A

	Item		Order number
1	Flange for boiler		43707
2	Divider from ø 110/160 on 2x ø 110 mm		43712
3	Revision T-piece ø 110 mm		43719
4	Elbow ø 110, 45°		43716
5	Extension tube ø 110 mm	0.5 m	43722
		1.0 m	43721
6	Reduction ø 110 mm, neck-neck (for suction)		43723
7	Termination tube without the neck ø 110 mm (suction), 0,5 m		43724
8	Protective intake basket		43725
9	Roof penetration 25-45°		43715
10	Roof chimney, vertical. ø 110/160 mm		43714
	Elbow ø 110, 87°		43717
	Revision elbow ø 110 mm, 87°		43718
	Insert ø 110 mm with outflow for condensate		43720
	Air tube ø 110/160 mm, into a wall		43706

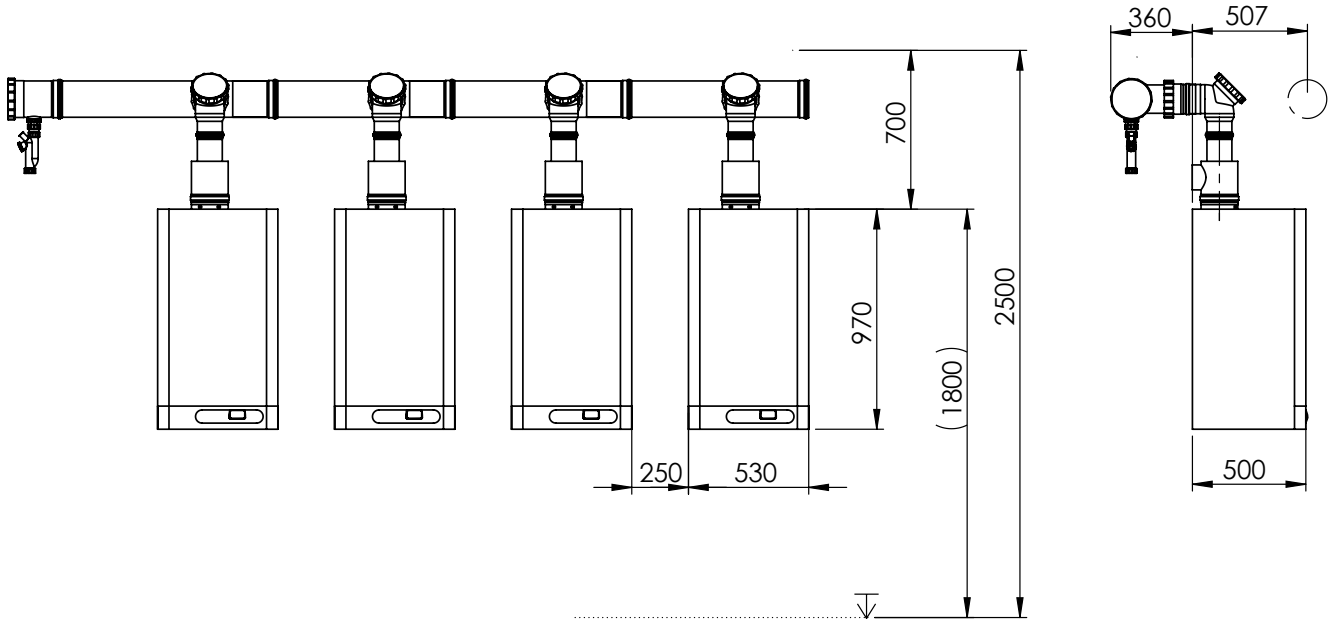


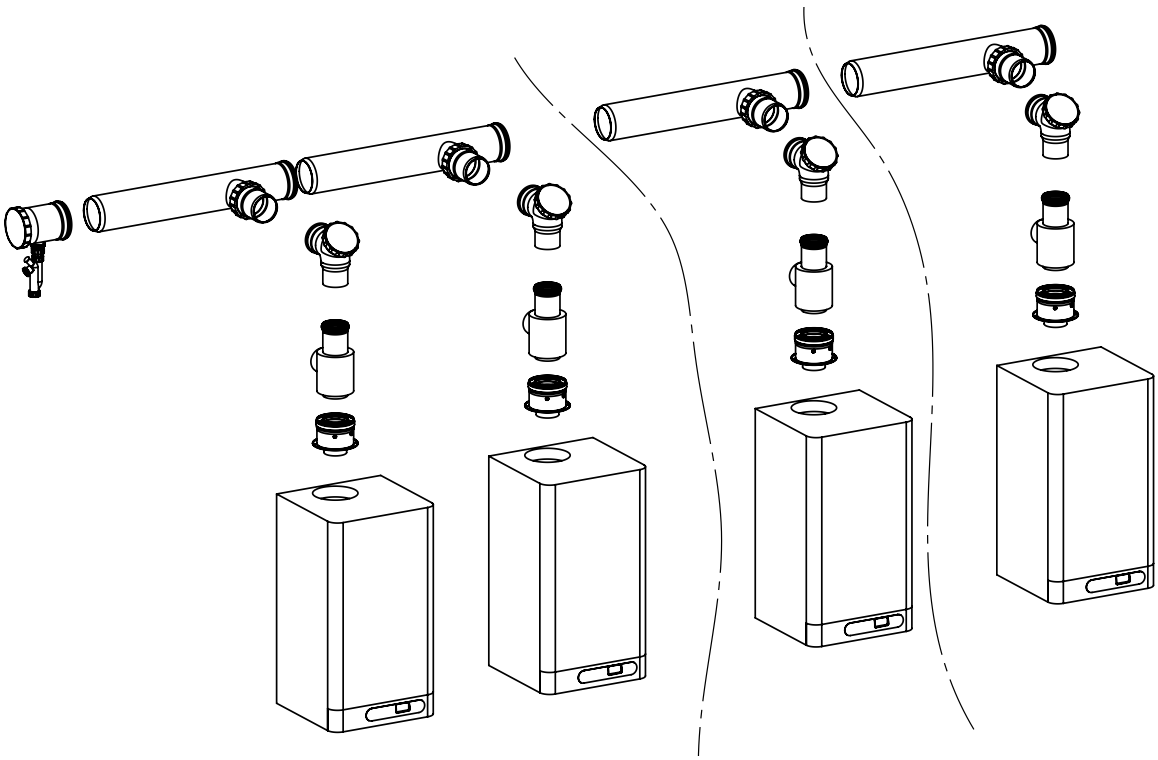
EXHAUSTION OF BURNT GASES

Basic sets flue system for THERM 90 KD.A boiler in the cascade

Order number	Item
43763	Set for 2 boilers 90 KD.A, ø 160 mm
43764	Set for 3 boilers 90 KD.A, ø 200 mm
43765	Expansion by a further boiler 90 KD.A, ø 200 mm

Rem.: Maximum expansion by a further boiler with the diameter 200mm





Note

LEGEND

Consumer appliance with the highest NOx 5 class


Boilers designed for heating


Boilers with flow heating of water


Boilers with preparation of hot water in a built-in or external storage tank
Storage tanks for indirect heating of water


Condensing boilers


Electric boilers


THERMONA solar systems


Boilers with the option to connect to a cascade

Equithermal regulation

Communication between the boiler and the regulator by OpenTherm+ protocol


Regulation of gas boilers, electric boilers and cascade boiler rooms


Exhaustion of burnt gases for condensing boilers


Communication through WiFi


Communication through LAN


Communication through GSM

KP AJ - 02/2017

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THERMONA, spol. s r.o. • Stará osada 258, 664 84 Zastávka u Brna • Tel.: +420 544 500 511 • thermona@thermona.cz