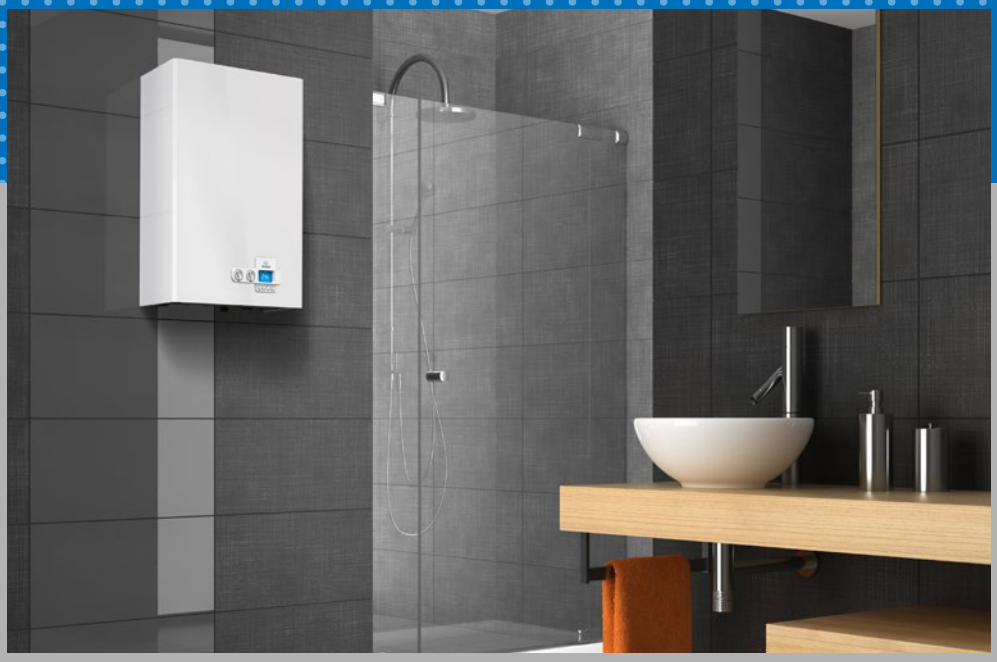
PRODUCT CATALOGUE

Thermona®



2018-2019

Czech producer of boiler

LEGEND

Consumer appliance with the highest NOx 6 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

CONTENT

Division of THERM boilers

THERM wall-mounted gas condensing boilers

Heating power (kW)	Only for heating*	With flow heating of water	With connection to external storage tank *	With integrated storage tank for DHW
PREMIUM *Condens*				
1,8 - 19,0	THERM 18 KD		THERM 18 KDZ	THERM 18 KDZ 5 (55 l, stainless)
2,65 - 24,9	THERM 25 KD	THERM 25 KDC	THERM 25 KDZ	THERM 25 KDZ 5 (55 l, stainless)
OPTIMUM *Condens*				
3,2 - 14,8	THERM 14 KDN		THERM 14 KDZN	THERM 14 KDZN 5 (55 l, stainless)
4,9 - 20,7 (24,0)	THERM 24 KDN	THERM 24 KDCN	THERM 24 KDZN	THERM 24 KDZN 5 (55 l, stainless)
CLASSIC *Condens*				
6,6 - 28,0	THERM 28 KD.A	THERM 28 KDC.A	THERM 28 KDZ.A	THERM 28 KDZ5.A (55 l, stainless) THERM 28 KDZ10.A (100 l, enamel) **
13,0 - 45,0	THERM 45 KD.A			
25,0 - 95,0	THERM 90 KD.A			

THERM wall-mounted gas atmospheric boilers

Heating power (kW)	With flow heating of water	With connection to external storage tank	With integrated storage tank for DHW
5,0 - 14,0		THERM PRO 14 XZ.A	THERM PRO 14 KX.A (55 l, stainless)
8,0 - 20,0	THERM 20 CXE.AA	THERM 20 LXZE.A	THERM 20 LXZE.A 5 (55 l, stainless)
12,0 - 28,0	THERM 28 CXE.AA	THERM 28 LXZE.A	

THERM wall-mounted electric boilers

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
Econonomic serie		**Standard serie**		**With touch display**	
2,5 - 7,5	THERM ELN 8	2,5 - 7,5	THERM EL 8	0,5 - 4,5	THERM EL 5
5,0 - 15,0	THERM ELN 15	2,5 - 15,0	THERM EL 15	1,0 - 9,0	THERM EL 9
		2,5 - 22,5	THERM EL 23	1,5 - 13,5	THERM EL 14
		5,0 - 30,0	THERM EL 30		
		5,0 - 37,5	THERM EL 38		
		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

www.thermona.eu

THERM BOILERS

Dear Customer,

Thermona continuously prepares a series of novelties for its customers and endeavours to adjust to the modern trends in heating. To make the product range of condensing boilers clearly arranged, we have divided them into series that differ in construction and workmanship, and bring a lot of advantages we would like to introduce to you.

PREMIUM *Condens* Series

The **PREMIUM *Condens*** condensing gas boiler series includes boilers that operate with natural gas or propane, designed for central heating and supply water heating. This boiler series brings top technology based in the latest observations in the field. A boiler consists of state-of-the-art components providing for active control of the combustion process. Customers can choose from two output series: **25 kW** (on the market) and **18 kW** (novelty from August 2018).

The boilers have stainless exchanger with cooled front burner wall. The new type of the gas valve in combination with the BLUEJET® burner provides a high level modulation. It allows for operation and quality combustion even at low gas flow rate. The regulation ratio of this type of boiler is then 1:10 and the minimum output starts at 1.8 kW. Moreover, the gas valve allows for optimisation of the combustion process and gas consumption preventing unnecessary heat losses. This series provides very quiet operation thanks to the multiphase fan.

Thanks to the broad range of output modulation, from 1.8 kW to 19.0 kW (eventually 2,65 – 24,9 kW), the boilers are suitable to be used in low-energy buildings with low heat loss. The boilers can also be used for heating supply water. The maximum possible heating power of the boiler is always used. Naturally, the boilers include equithermic regulation, including service setting of the required output range.

The THERM 18 KDx boiler serie with its output range replaces the THERM 14 KDx.A and THERM 17 KDx.A boiler series, the production of which has been terminated.

OPTIMUM *Condens* Series

The **OPTIMUM *Condens*** gas condensing boiler series includes boilers that operate with natural gas or propane, designed for central heating and household water heating. There are currently two output series – **24 kW** (sale starts in 2017) and newly **14 kW** (sale starts in September 2018). The boilers in the series consist of components that provide an alternative of the boiler with an optimal price/performance ratio. Thus, we offer customers a high-quality condensing boiler with a wide range of use for a very favourable price.

The boiler consists of a condensing body with stainless exchanger, providing long service life, and a top-quality burner with high efficiency and ecological operation. The shape and dimensions of the exchanger tube plate limit the settlement of scale and sedimentation of the exchanger.

The boilers have built-in equithermic regulation for optimisation of the hot water temperature based on the outdoor temperature, thus reducing the cost of heating. The THERM 24 KDxN boiler series has an increased output for hot water production and meet the high comfort demands of customers.

The advantages of the boilers also include the very quiet operation and small compact dimensions that allow for the installation of the boiler in the interior of family homes and flats. It is ideal to combine them with floor heating.

CLASSIC *Condens* Series

The **CLASSIC *Condens*** gas condensing boiler series includes boilers that operate with natural gas or propane, designed for central heating and household water heating. We are currently offering three output series – **28 kW**, **45 kW** and **90 kW**. These are condensing boilers with an attested design for heating larger objects. This type of boilers is also base for condensing cascade boiler rooms for heating residential homes, schools, medical facilities, accommodation facilities, or industrial objects.

The boiler consists of a condensing body with stainless exchanger and other quality components that provide safe operation at low cost. The boilers have built-in equithermic regulation for optimisation of the hot water temperature based on the outdoor temperature, thus reducing the cost of heating.

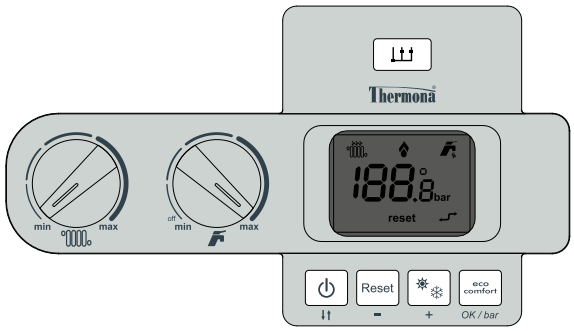
The THERM 28 KDx.A boiler series provides a high-comfort hot water supply, whether through a plate heat exchanger, or stored in a tank. The THERM 45 KD.A and THERM 90 KD.A boilers use an external three-way valve for water heating in an external tank.

THERM BOILERS Condensing boilers for heating

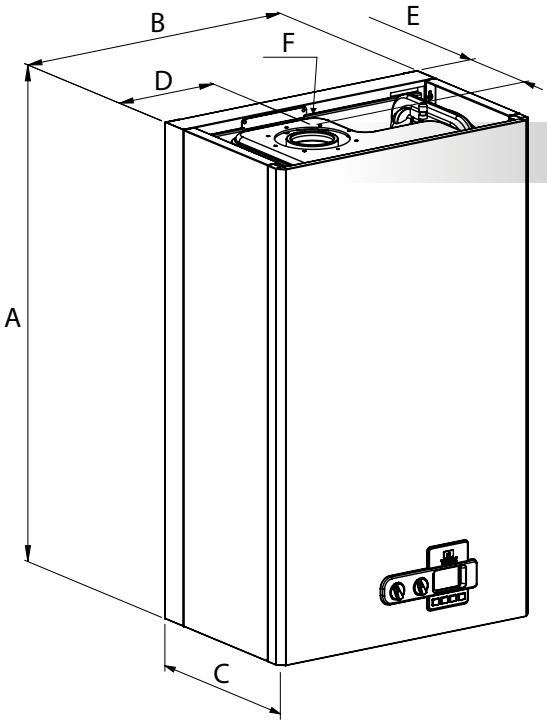
THERM 18 KD A
THERM 25 KD A

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.

- Exceptionally ecological operation – Class NOx 6
- Condensing body with a brand new type of boiler: BLUEJET®
- Broad range of boiler output modulation
- New design of a multiphase fan
- Noise reduction at higher speed
- Electrically modulated SGV gas valve
- Modulated circulating pump with high effectiveness
- New control unit with auto-diagnostics
- The electronic system receives feedback about the status of burning and performs optimisation of the program map
- There is also the option to heat water in an external reservoir and fitting with a three-way valve
- Boiler communication via OpenTherm+ protocol
- Suitable combination with the floor heating system



Control panel



DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL
	18 KD, 25 KD
A	725
B	430
C	280
D	160
E	130
F	60/100

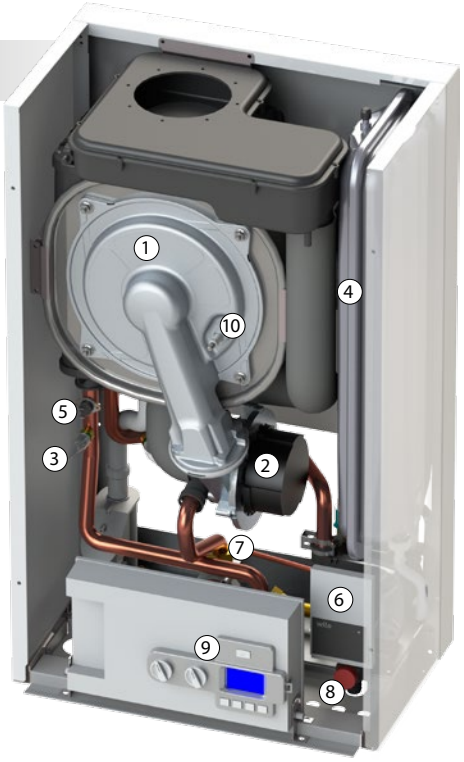
THERM BOILERS

Condensing boilers for heating

NEWS

BOILER SET

1 - Condensing chamber
2 - Ventilator
3 - Heating temperature probe
4 - Expansion heating vessel
5 - Emergency thermostat
6 - Energy saving pump
7 - Gas valve
8 - Safety valve
9 - Control panel
10 - Compound ignition and ionising electrode



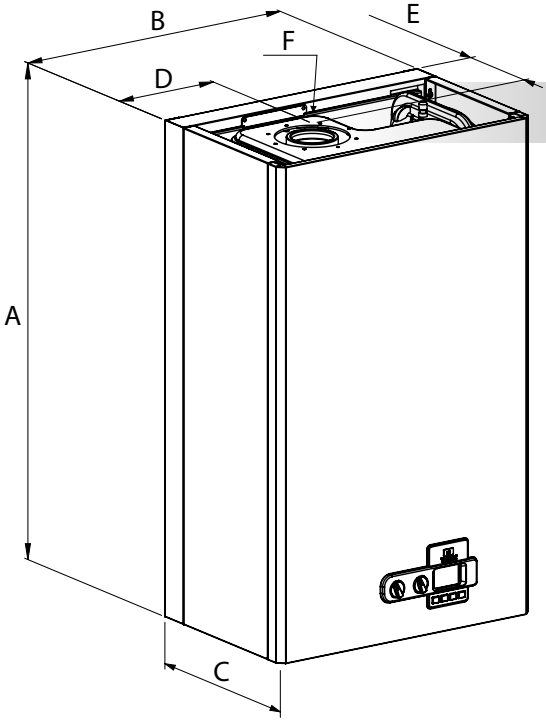
Technical data	Unit	THERM 18 KD	THERM 25 KD
Nominal thermal input power	kW	18.0	23.5
Min. – max. thermal output for heating	kW	1,8 – 19,0	2,65 – 24,9
Consumption of gas - natural gas	m^3/h	0,181 – 1,749	0,26 – 2,50
Consumption of gas - propane	m^3/h	0,070 – 0,711	0,10 – 0,92
Min. – max. overpressure of heating system	bar	0,8 – 3,0	0,8 – 3,0
Max. output temperature of heating water	°C	80	80
Boiler efficiency	%	99 – 106	99 – 106
Volume of expansion unit	l	7	7
Nominal supply voltage / frequency	V/Hz	230/50 ~	230/50 ~
Auxiliary electricity at rated heat input	W	68.2	68.2
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	725/430/280	725/430/280
Weight of boiler	kg	28	28
Class of seasonal energy efficiency of heating	-	A	A
Order number	-	10105	1096

THERM BOILERS Condensing boilers with connection to external storage tank

THERM 18 KDZ A
THERM 25 KDZ 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
- Exceptionally ecological operation – Class NOx 6
- Condensing body with a brand new type of boiler: BLUEJET®
- Broad range of boiler output modulation
- New design of a multiphase fan
- Noise reduction at higher speed
- Electrically modulated SGV gas valve
- Modulated circulating pump with high effectiveness
- New control unit with auto-diagnostics
- The electronic system receives feedback about the status of burning and performs optimisation of the program map
- Boiler communication via OpenTherm+ protocol
- Suitable combination with the floor heating system



DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL
	18 KDZ, 25 KDZ
A	725
B	430
C	280
D	160
E	130
F	60/100

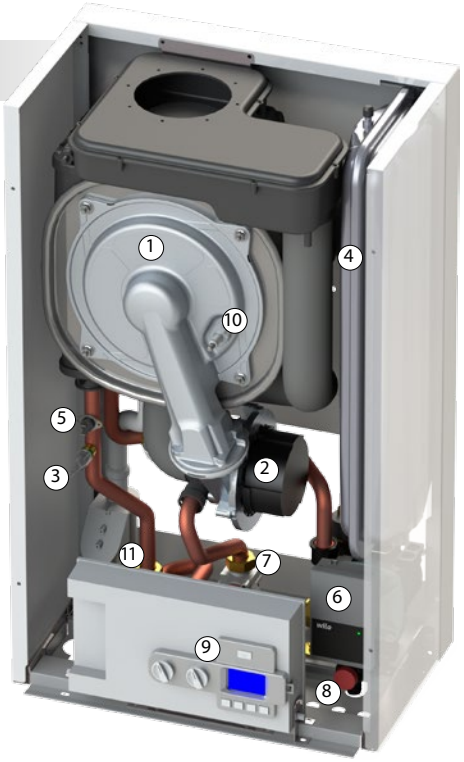
THERM BOILERS

NEWS

Condensing boilers with connection to external storage tank

SET OF BOILER

1 - Condensing chamber
2 - Ventilator
3 - Heating temperature probe
4 - Expansion heating vessel
5 - Emergency thermostat
6 - Energy saving pump
7 - Gas valve
8 - Safety valve
9 - Control panel
10 - Compound ignition and ionising electrode
11 - Three-way valve



Technical data	Unit	THERM 18 KDZ	THERM 25 KDZ
Nominal thermal input power	kW	18.0	23.5
Min. – max. thermal output for heating	kW	1,8 – 19,0	2,65 – 24,9
Nominal thermal output for heating DHW	kW	17.5	23.0
Consumption of gas - natural gas	m^3/h	0,181 – 1,749	0,26 – 2,50
Consumption of gas - propane	m^3/h	0,070 – 0,711	0,10 – 0,92
Min. – max. overpressure of heating system	bar	0,8 – 3,0	0,8 – 3,0
Max. output temperature of heating water	°C	80	80
Boiler efficiency	%	99 – 106	99 – 106
Volume of expansion unit	l	7	7
Nominal supply voltage / frequency	V/Hz	230/50 ~	230/50 ~
Auxiliary electricity at rated heat input	W	68.2	68.2
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	725/430/280	725/430/280
Weight of boiler	kg	28	29
Class of seasonal energy efficiency of heating	-	A	A
Order number	-	10106	1097

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 18 KDZ	20	25	20	25	32	40
THERM 25 KDZ	16	19	16	19	24	33

THERM BOILERS Condensing boilers with integrated storage tank

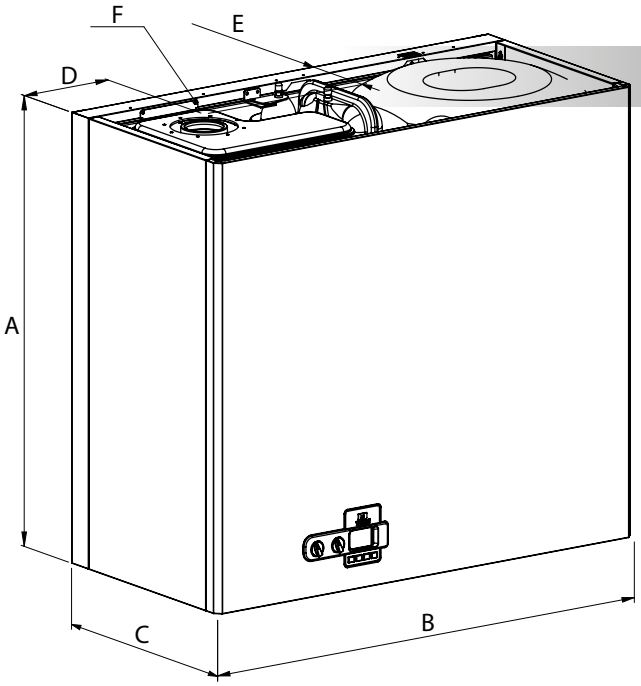
THERM 18 KDZ 5

THERM 25 KDZ 5

(with built in 55 l storage tank)

The boilers are designed for heating of the central heating system and heating water in an indirect heating external 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. It can be used anywhere where a technical room is missing and the boiler is situated in the interior of a flat or a house.
The advantage - there is no need for connections between the boiler and the tank.

- The boiler includes an indirect tank with a capacity of 55 litres (stainless)
- Exceptionally ecological operation – Class NOx 6
- Condensing body with a brand new type of boiler: BLUEJET®
- Broad range of boiler output modulation
- New design of a multiphase fan
- Noise reduction at higher speed
- Electrically modulated SGV gas valve
- Modulated circulating pump with high effectiveness
- New control unit with auto-diagnostics
- The electronic system receives feedback about the status of burning and performs optimisation of the program map
- Boiler communication via OpenTherm+ protocol
- Suitable combination with the floor heating system



DIMENSIONS OF BOILER

DIMENSIONS OF BOILER (mm)	BOILER MODEL
	18 KDZ 5, 25 KDZ 5
A	725
B	800
C	385
D	160
E	130
F	60/100

THERM BOILERS

NEWS

Condensing boilers with integrated storage tank

SET OF BOILER

1 - Condensing chamber
2 - Ventilator
3 - Heating temperature probe
4 - Expansion heating vessel
5 - Emergency thermostat
6 - Energy saving pump
7 - Gas valve
8 - Tank DHW
9 - Control panel
10 - Compound ignition and ionising electrode
11 - Three-way valve
12 - Expansion tank DHW

Technical data	Unit	THERM 18 KDZ 5	THERM 25 KDZ 5
Nominal thermal input power	kW	18.0	23.5
Min. – max. thermal output for heating	kW	1,8 – 19,0	2,65 – 24,9
Nominal thermal output for heating DHW	kW	17.5	23.0
Consumption of gas - natural gas	m^3/h	0,181 – 1,749	0,26 – 2,50
Consumption of gas - propane	m^3/h	0,070 – 0,711	0,10 – 0,92
Min. – max. overpressure of heating system	bar	0,8 – 3,0	0,8 – 3,0
Max. output temperature of heating water	°C	80	80
Boiler efficiency	%	99 – 106	98 – 106
Volume of the expansion tank for heating water	l	7	7
Volume of integrated 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	68.2	68.2
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	725/800/385	725/800/385
Weight of boiler	kg	54	54
Class of seasonal energy efficiency of heating	-	A	A
Energy efficiency class of water heating	-	A	A
Declared loading profile	-	L	XL
Order number	-	10107	1099

THERM BOILERS Condensing boilers with flow heating of water

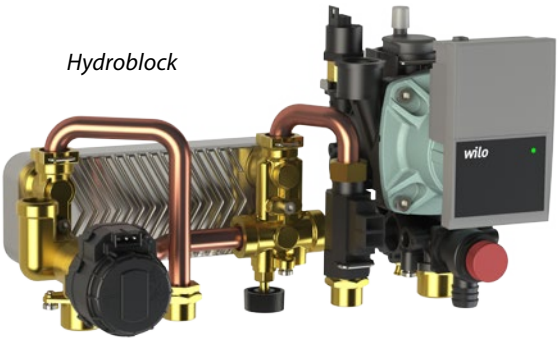
THERM 25 KDC

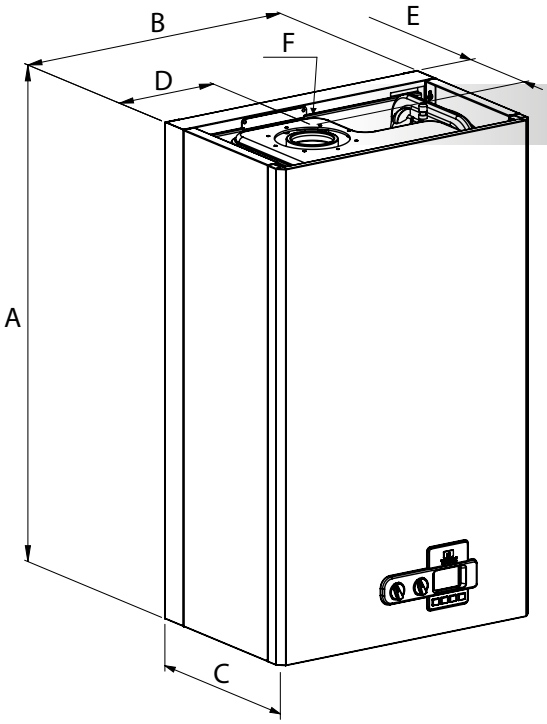
A
A XL

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
- Exceptionally ecological operation – Class NOx 6
- Condensing body with a brand new type of boiler: BLUEJET®
- Broad range of boiler output modulation
- New design of a multiphase fan
- Noise reduction at higher speed
- Electrically modulated SGV gas valve
- Modulated circulating pump with high effectiveness
- New control unit with auto-diagnostics
- The electronic system receives feedback about the status of burning and performs optimisation of the program map
- Boiler communication via OpenTherm+ protocol
- Suitable combination with the floor heating system

Hydroblock





DIMENSIONS OF BOILER

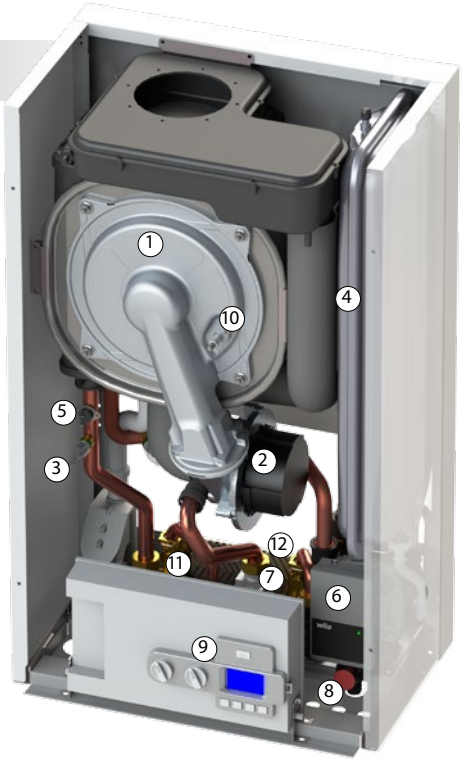
DIMENSIONS OF BOILER (mm)	BOILER MODEL
	25 KDC
A	725
B	430
C	280
D	160
E	130
F	60/100

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 - Emergency thermostat
6 - Energy saving pump
7 - Gas valve
8 - Safety valve
9 - Control panel
10 - Compound ignition and ionising electrode
11 - Three-way valve
12 - Plate exchanger



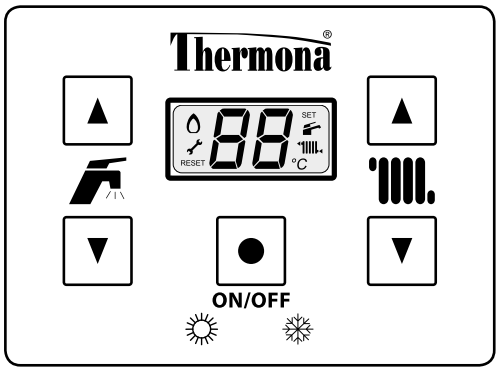
Technical data	Unit	THERM 25 KDC
Nominal thermal input power	kW	23.5
Min. – max. thermal output for heating	kW	2,65 – 24,9
Nominal thermal output for heating DHW	kW	23.0
Consumption of gas - natural gas	m^3/h	0,26 – 2,50
Consumption of gas - propane	m^3/h	0,10 – 0,92
Min. – max. overpressure of heating system	bar	0,8 – 3,0
Max. output temperature of heating water	°C	80
Boiler efficiency	%	99 – 106
Volume of expansion unit	l	7
Nominal supply voltage / frequency	V/Hz	230/50 ~
Auxiliary electricity at rated heat input	W	68.2
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	725/430/280
Weight of boiler	kg	29
Class of seasonal energy efficiency of heating	-	A
Energy efficiency class of water heating	-	A
Declared loading profile	-	XL
Order number	-	1098

THERM BOILERS Condensing boilers for heating

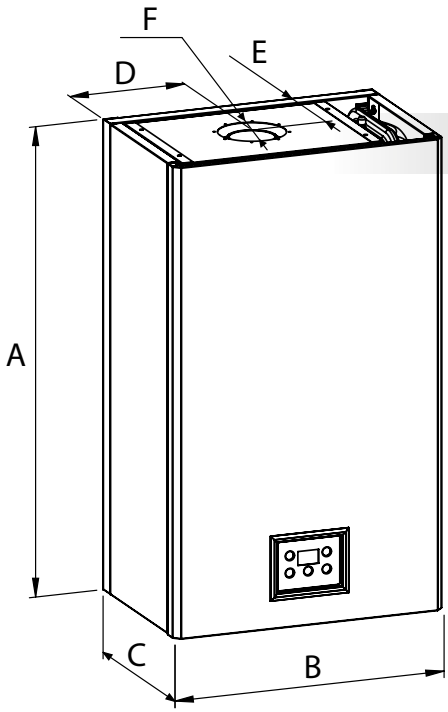
THERM 14 KDN
THERM 24 KDN

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

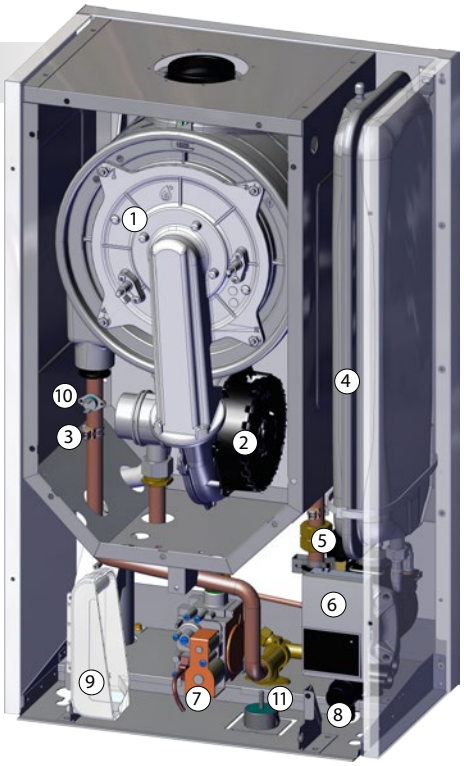
DIMENSIONS OF BOILER (mm)	BOILER MODEL
	14 KDN, 24 KDN
A	725
B	430
C	285
D	182
E	135
F	60/100

THERM BOILERS Condensing boilers for heating

NEWS

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 condensing body

Technical data	Unit	THERM 14 KDN	THERM 24 KDN
Nominal thermal input power	kW	14.7	20.6
Min. – max. thermal output for heating	kW	3,2 – 14,8	4,9 – 20,7
Consumption of gas - natural gas	m^3/h	0,31 – 1,52	0.48 – 2.04
Consumption of gas - propane	m^3/h	0,12 – 0,60	0,20 – 0,80
Min. – max. overpressure of heating system	bar	0,8 – 3,0	0,8 – 3,0
Max. output temperature of heating water	°C	80	80
Boiler efficiency	%	99 – 107	99 – 107
Volume of expansion unit	l	7	7
Nominal supply voltage / frequency	V/Hz	230/50 ~	230/50 ~
Auxiliary electricity at rated heat input	W	70.0	70,0
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	725/430/285	725/430/285
Weight of boiler	kg	32	32
Class of seasonal energy efficiency of heating	-	A	A
Order number	-	10101	1093

THERM BOILERS

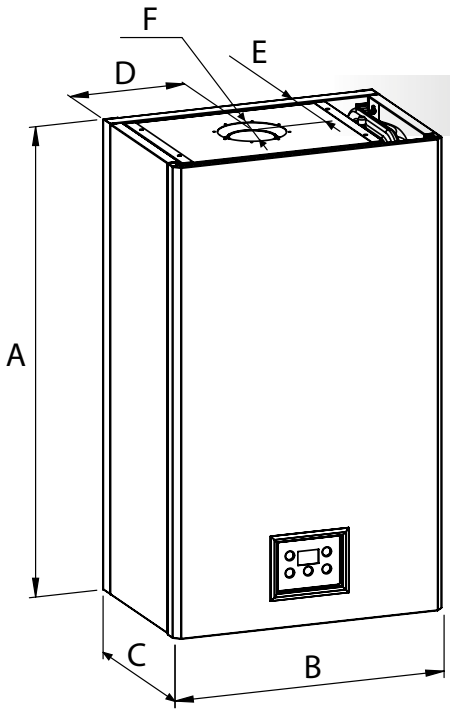
Condensing boilers with connection to external storage tank

THERM 14 KDZN

THERM 24 KDZN

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
	14 KDZN, 24 KDZN
A	725
B	430
C	285
D	182
E	135
F	60/100

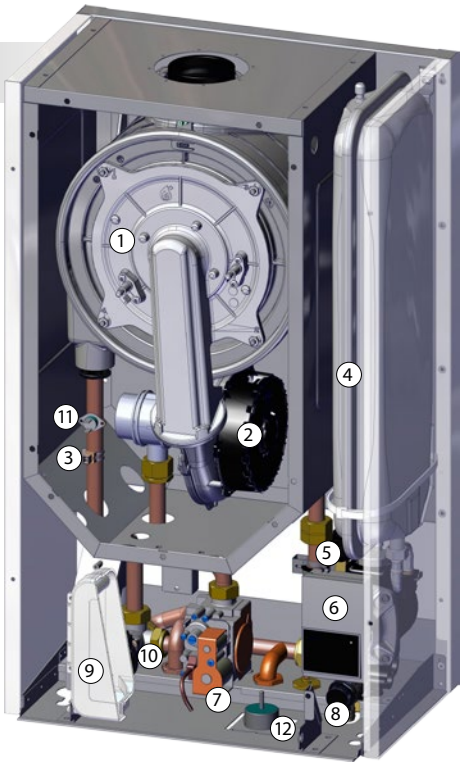
THERM BOILERS

NEWS

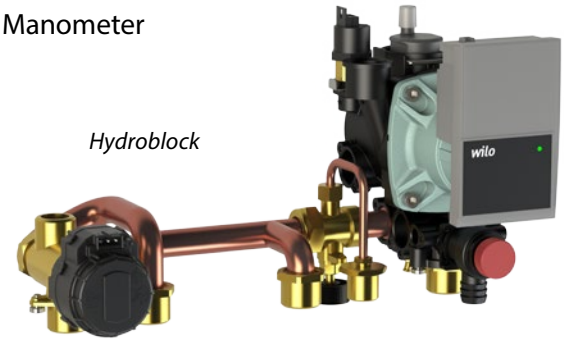
Condensing boilers with connection to external storage tank

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 14 KDZN	THERM 24 KDZN
Nominal thermal input power	kW	14.7	20.6
Min. – max. thermal output for heating	kW	3,2 – 14,8	4,9 – 20,7
Nominal thermal output for heating DHW	kW	14.2	24.0
Consumption of gas - natural gas	m^3/h	0,31 – 1,52	0,48 – 2,04
Consumption of gas - propane	m^3/h	0,12 – 0,60	0,20 – 0,80
Min. – max. overpressure of heating system	bar	0,8 – 3,0	0,8 – 3,0
Max. output temperature of heating water	°C	80	80
Boiler efficiency	%	99 – 107	99 – 107
Volume of expansion unit	l	7	7
Nominal supply voltage / frequency	V/Hz	230/50 ~	230/50 ~
Auxiliary electricity at rated heat input	W	70.0	70,0
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	725/430/285	725/430/285
Weight of boiler	kg	33	33
Class of seasonal energy efficiency of heating	-	A	A
Order number	-	10102	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 14 KDZN	25	30	25	30	38	53
THERM 24 KDZN	16	19	16	19	24	33

THERM BOILERS Condensing boilers with integrated storage tank

THERM 14 KDZN 5

A

B

THERM 24 KDZN 5

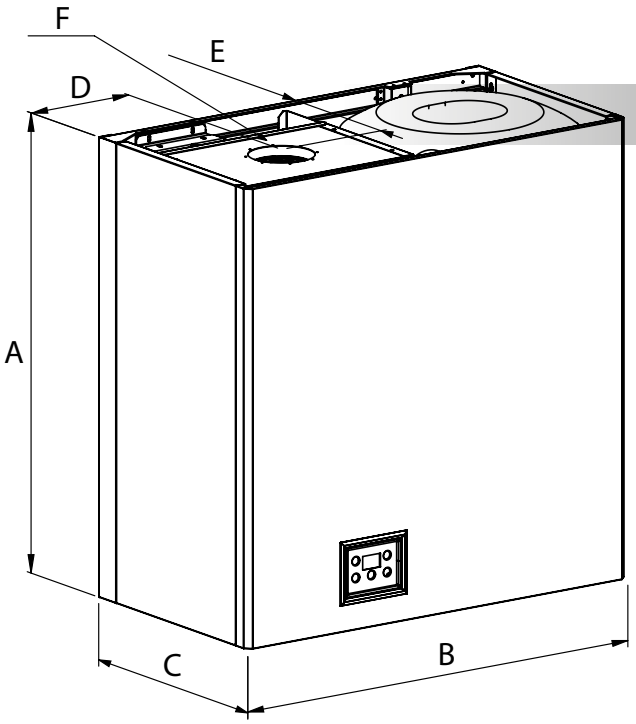
A

A

(with built in 55 l storage tank)

The boilers are designed for heating of the central heating system and heating water in an indirect heating external 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. It can be used anywhere where a technical room is missing and the boiler is situated in the interior of a flat or a house.
The advantage - there is no need for connections between the boiler and the tank.

- The boiler includes an indirect tank with a capacity of 55 litres (stainless)
- 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
	14 KDZN 5, 24 KDZN 5
A	725
B	715
C	386
D	182
E	223
F	60/100

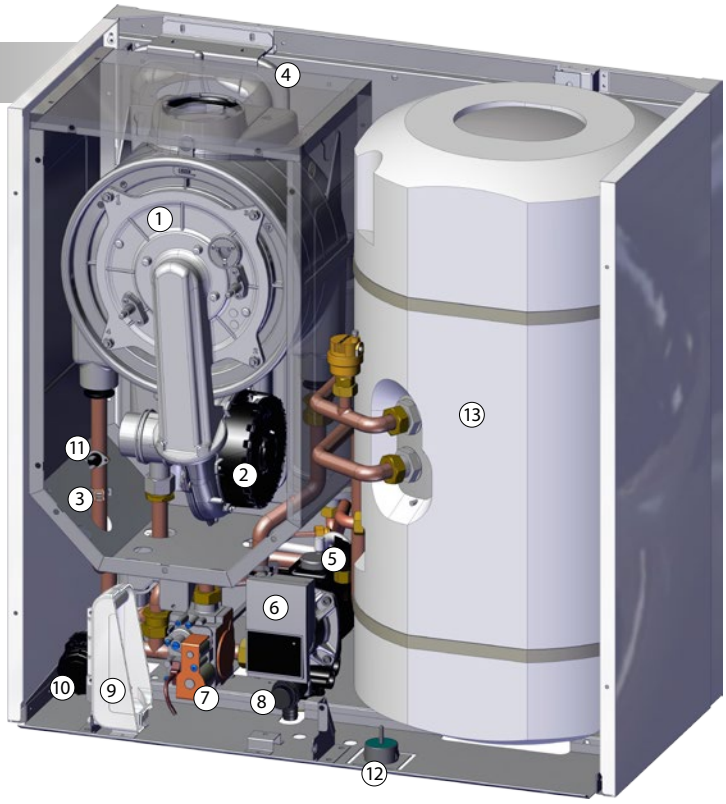
THERM BOILERS

NEWS

Condensing boilers with integrated 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
13 - Tank DHW



Technical data	Unit	THERM 14 KDZN 5	THERM 24 KDZN 5
Nominal thermal input power	kW	14.7	20.6
Min. – max. thermal output for heating	kW	3,2 – 14,8	4,9 – 20,7
Nominal thermal output for heating DHW	kW	14.2	24.0
Consumption of gas - natural gas	m^3/h	0,31 – 1,52	0,48 – 2,04
Consumption of gas - propane	m^3/h	0,12 – 0,60	0,20 – 0,80
Min. – max. overpressure of heating system	bar	0,8 – 3,0	0,8 – 3,0
Max. output temperature of heating water	°C	80	80
Boiler efficiency	%	99 – 107	98 – 107
Volume of the expansion tank for heating water	l	7	7
Volume of integrated 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	70.0	70,0
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	725/715/386	725/715/386
Weight of boiler	kg	48	48
Class of seasonal energy efficiency of heating	-	A	A
Energy efficiency class of water heating	-	A	A
Declared loading profile	-	XL	XL
Order number	-	10103	1094

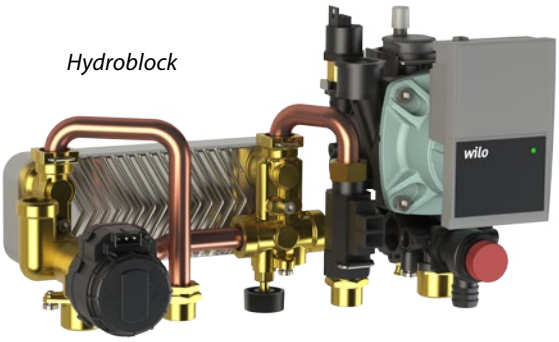
THERM 24 KDCN

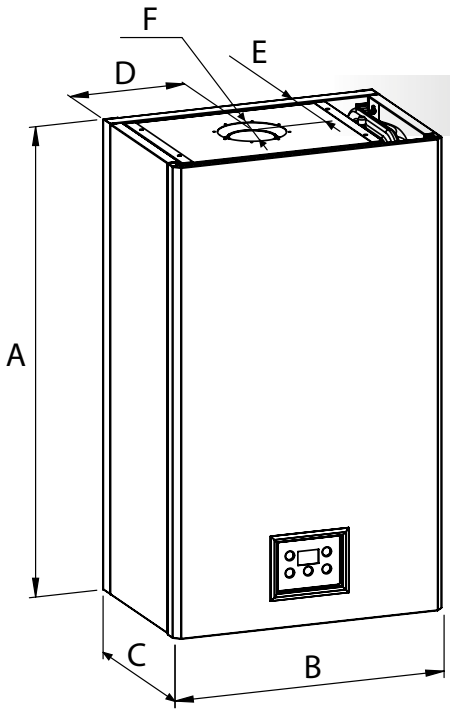
A
A

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





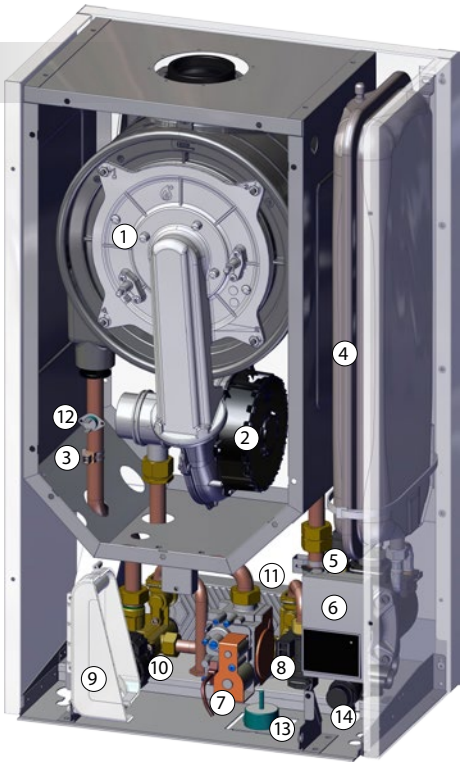
DIMENSIONS OF BOILER

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

THERM BOILERS 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



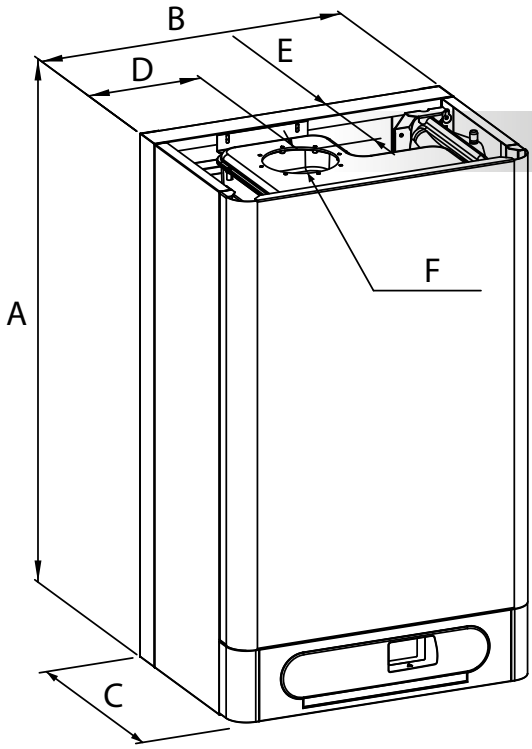
Technical data	Unit	THERM 24 KDCN
Nominal thermal input power	kW	20.6
Min. – max. thermal output for heating	kW	4,9 – 20,7
Nominal thermal output for heating DHW	kW	24.0
Consumption of gas - natural gas	m^3/h	0,48 – 2,04
Consumption of gas - propane	m^3/h	0,20 – 0,80
Min. – max. overpressure of heating system	bar	0,8 – 3,0
Max. output temperature 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	70.0
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 28 KD.A

A

Suspended KD.A condensing boilers are only designed only for heating. 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.
The output range of the boiler is adapted for use in buildings with low heat loss, e.g. low-energy house 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 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)
- Fluent regulation of boiler output
- High ecological operation
- Suitable combination with the floor heating system



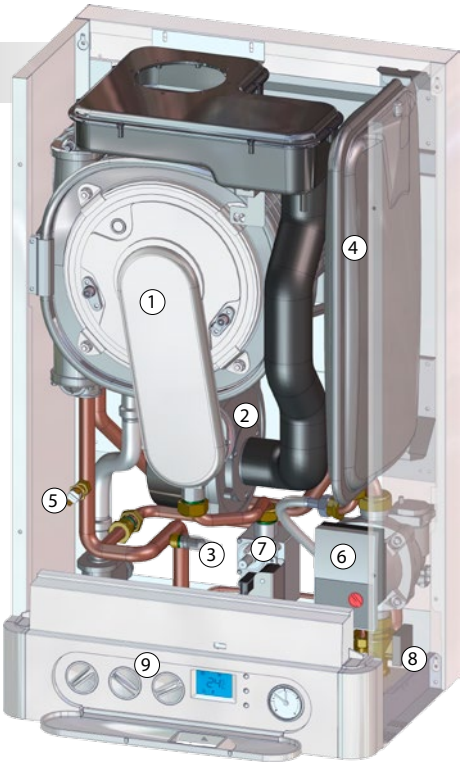
DIMENSIONS OF BOILER

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

THERM BOILERS Condensing boilers 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 28 KD.A
Nominal thermal input power	kW	26.4
Min. – max. thermal output for heating	kW	6,6 – 28,0
Consumption of gas - natural gas	m^3/h	0,68 – 2,85
Consumption of gas - propane	m^3/h	0,24 – 0,93
Min. – max. overpressure of heating system	bar	0,8 – 3,0
Max. output temperature 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	45
Class of seasonal energy efficiency of heating	-	A
Order number	-	1030.7

THERM BOILERS

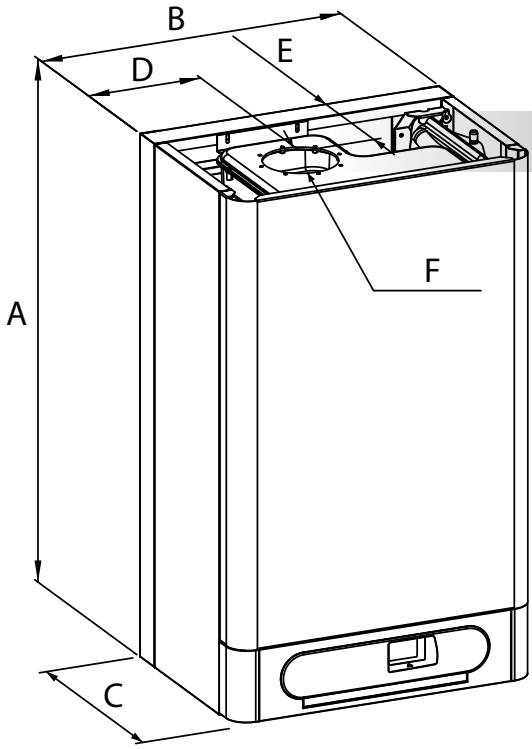
Condensing boilers with connection to external storage tank

THERM 28 KDZ.A

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

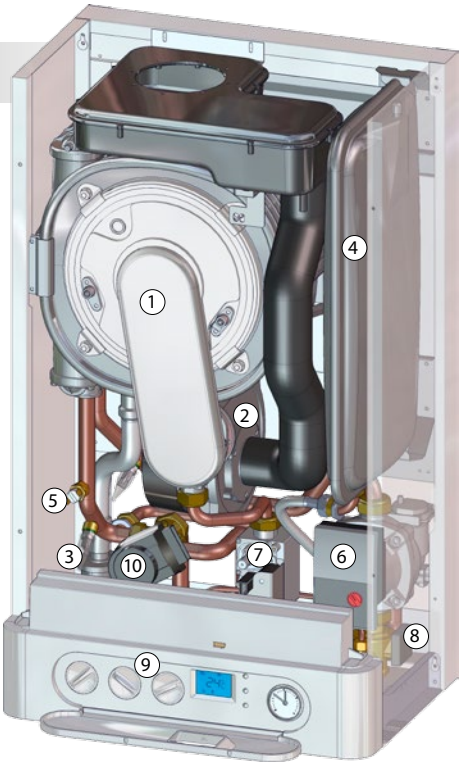
DIMENSIONS OF BOILER (mm)	BOILER MODEL
	28 KDZ.A
A	800
B	430
C	325
D	160
E	145
F	60/100

THERM BOILERS

Condensing boilers with connection to external 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 28 KDZ.A
Nominal thermal input power	kW	26.4
Min. – max. thermal output for heating	kW	6,6 – 28,0
Consumption of gas - natural gas	m^3/h	0,68 – 2,85
Consumption of gas - propane	m^3/h	0,24 – 0,93
Min. – max. overpressure of heating system	bar	0,8 – 3,0
Max. output temperature 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	46
Class of seasonal energy efficiency of heating	-	A
Order number	-	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 28 KDZ.A	14	17	14	17	22	28

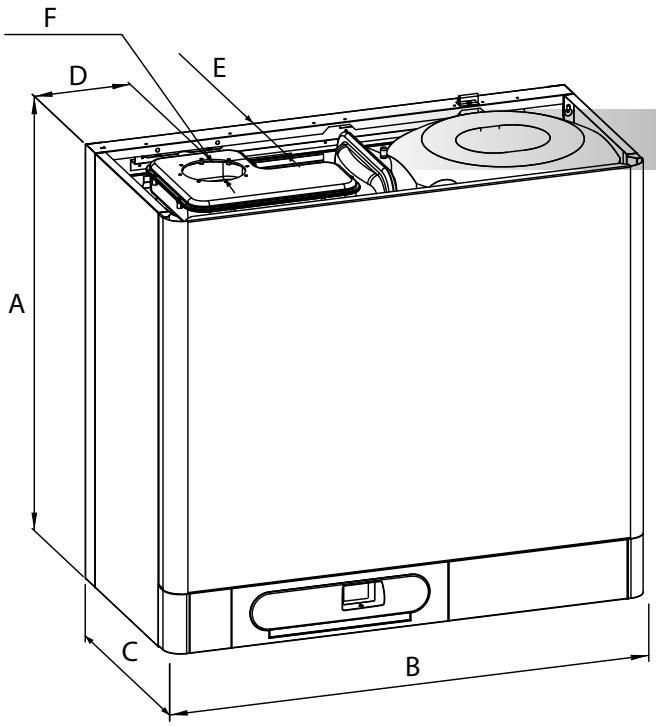
THERM 28 KDZ5.A

A
A XL

(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. It can be used anywhere where a technical room is missing and the boiler is situated in the interior of a flat or a house.
The advantage - there is no need for connections between the boiler and the tank.

- Energy saving pump - savings of electric energy up to 50 %
- Use of new HDIMS 20-TH20 automatic control system
- The boiler includes an indirect tank with a capacity of 55 litres (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

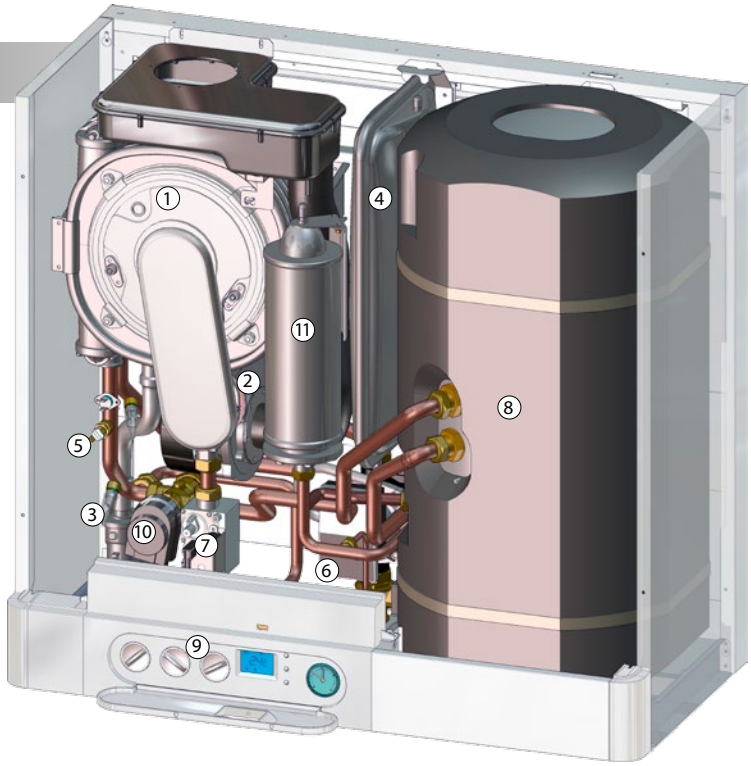
DIMENSIONS OF BOILER (mm)	BOILER MODEL
	28 KDZ5.A
A	800
B	800
C	390
D	160
E	145
F	60/100

THERM BOILERS

Condensing boilers with integrated 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 - Tank DHW
9 - Control panel
10 - Three-way valve
11 - Expansion tank DHW



Technical data	Unit	THERM 28 KDZ5.A
Nominal thermal input power	kW	26.4
Min. – max. thermal output for heating	kW	6,6 – 28,0
Consumption of gas - natural gas	m^3/h	0,68 – 2,85
Consumption of gas - propane	m^3/h	0,24 – 0,93
Min. – max. overpressure of heating system	bar	0,8 – 3,0
Max. output temperature of heating water	°C	80
Boiler efficiency	%	98 – 106
Volume of the expansion tank for heating water	l	7
Volume of integrated tank for water	l	55 (stainless)
Volume of expansion unit of DHW	l	2
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	800/800/390
Weight of boiler	kg	67
Class of seasonal energy efficiency of heating	-	A
Energy efficiency class of water heating	-	A
Declared loading profile	-	XL
Order number	-	1058.7

THERM BOILERS Condensing boilers with integrated storage tank

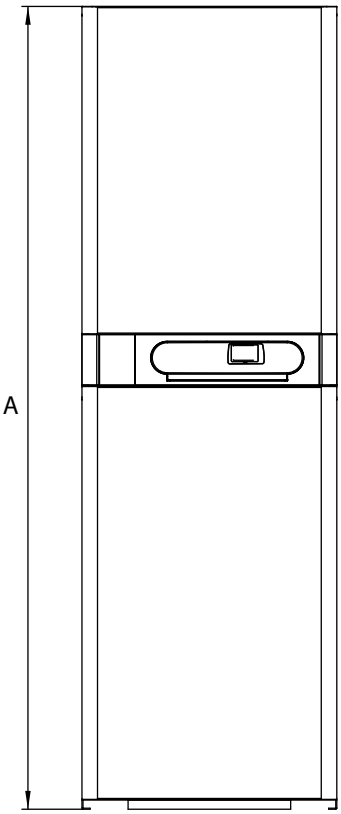
THERM 28 KDZ10.A

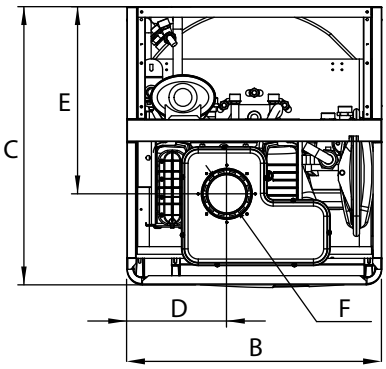
A
A XL

(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. It can be used anywhere where a technical room is missing and the boiler is situated in the interior of a flat or a house. The advantage - there is no need for connections between the boiler and the 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





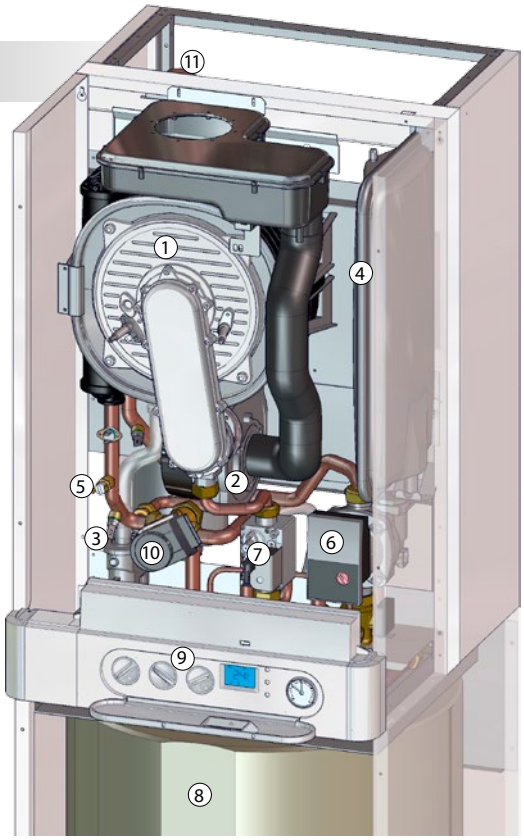
DIMENSIONS OF BOILER

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

THERM BOILERS Condensing boilers with integrated 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 - Tank DHW
9 - Control panel
10 - Three-way valve
11 - Expansion tank DHW



Technical data	Unit	THERM 28 KDZ10.A
Nominal thermal input power	kW	26.4
Min. – max. thermal output for heating	kW	6,6 – 28,0
Consumption of gas - natural gas	m^3/h	0,68 – 2,85
Consumption of gas - propane	m^3/h	0,24 – 0,93
Min. – max. overpressure of heating system	bar	0,8 – 3,0
Max. output temperature of heating water	°C	80
Boiler efficiency	%	98 – 106
Volume of the expansion tank for heating water	l	7
Volume of integrated tank for water	l	100 (enamel)
Volume of expansion unit of DHW	l	4
Nominal supply voltage / frequency	V/Hz	230/50 ~
Auxiliary electricity at rated heat input	W	66.17
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	1575/500/535
Weight of boiler	kg	102
Class of seasonal energy efficiency of heating	-	A
Energy efficiency class of water heating	-	A
Declared loading profile	-	XL
Order number	-	1059.7

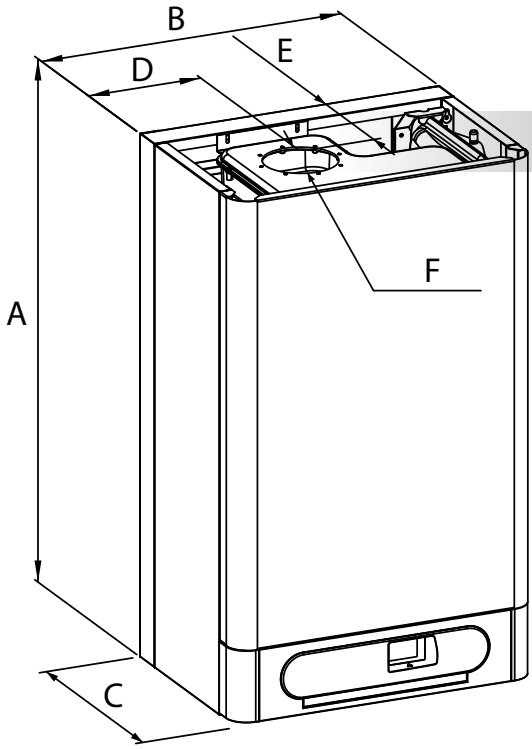
THERM 28 KDC.A

A
A XL

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



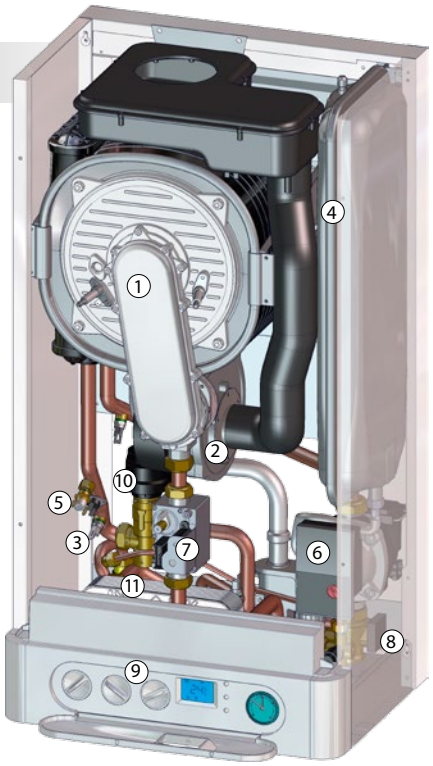
DIMENSIONS OF BOILER

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
Consumption of gas - natural gas	m^3/h	0,68 – 2,85
Consumption of gas - propane	m^3/h	0,24 – 0,93
Min. – max. overpressure of heating system	bar	0,8 – 3,0
Max. output temperature 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

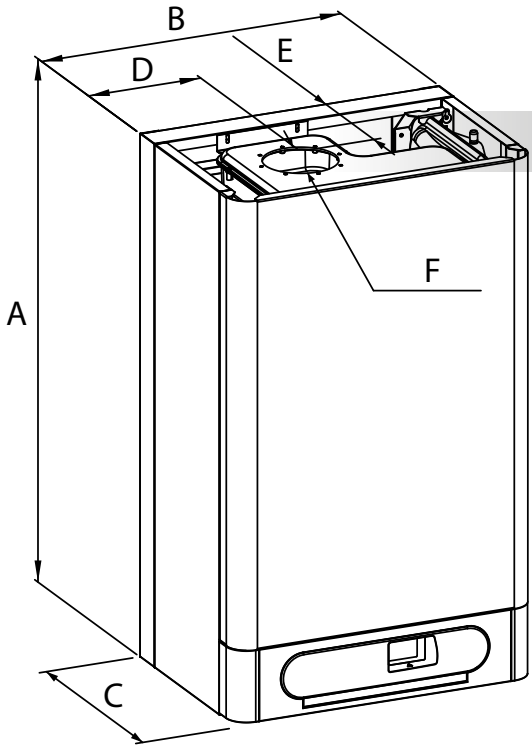
THERM BOILERS Condensing boilers for heating

THERM 45 KD.A

A

Suspended KD.A condensing boilers are only designed only for heating. These boilers are recommended in cases where 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 - savings of electric energy up to 50 %
- Use of new HDIMS 20-TH20 automatic control system
- 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)
- 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

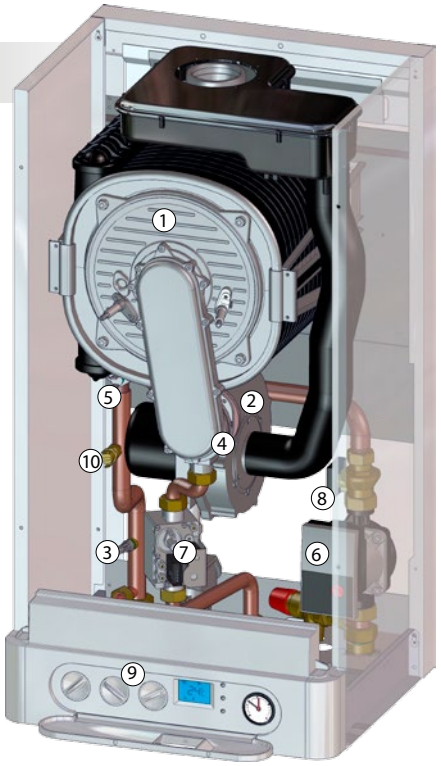


DIMENSIONS OF BOILER

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

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

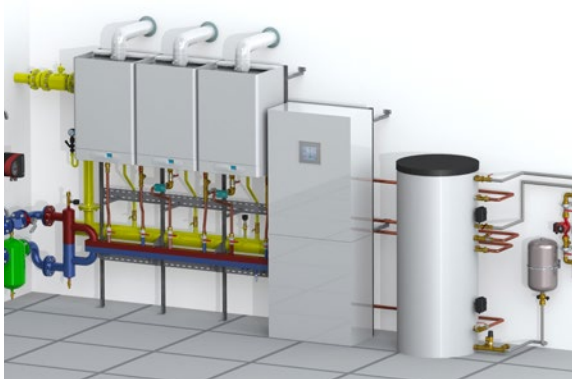


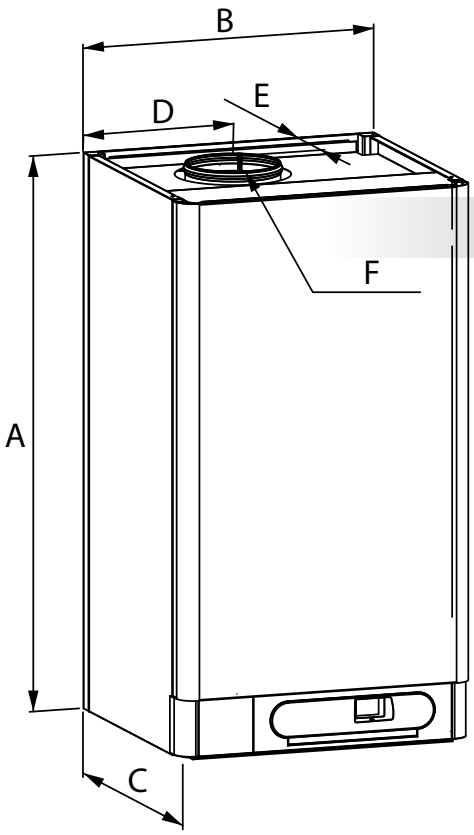
Technical data	Unit	THERM 45 KD.A
Nominal thermal input power	kW	42.5
Min. – max. thermal output for heating	kW	13,0 – 45,0
Consumption of gas - natural gas	m^3/h	1,28 – 4,52
Consumption of gas - propane	m^3/h	-
Min. – max. overpressure of heating system	bar	0,8 – 3,0
Max. output temperature of heating 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 with the use of the principle of condensing water steam from burnt gases
- Display of parameters via LCD display
- Option of connection into cascade boiler rooms in order to increase heating power





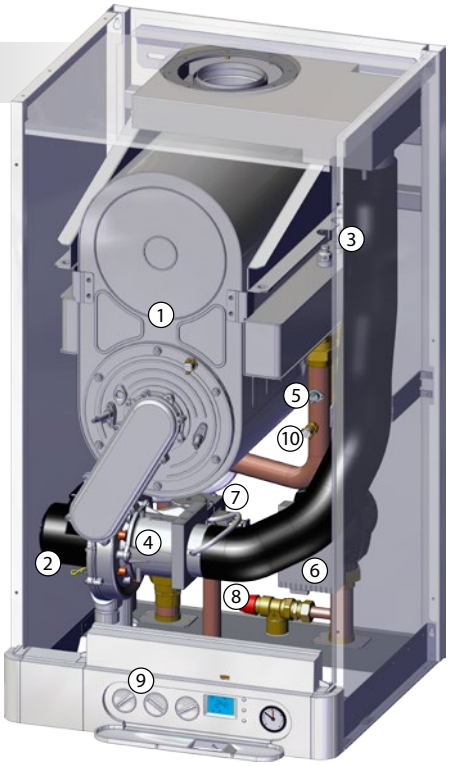
DIMENSIONS OF BOILER

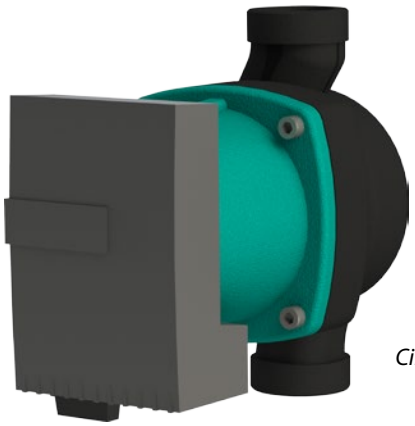
DIMENSIONS OF BOILER (mm)	BOILER MODEL
	90 KD.A
A	970
B	530
C	500
D	230
E	120
F	110/160

THERM BOILERS Condensing boilers 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

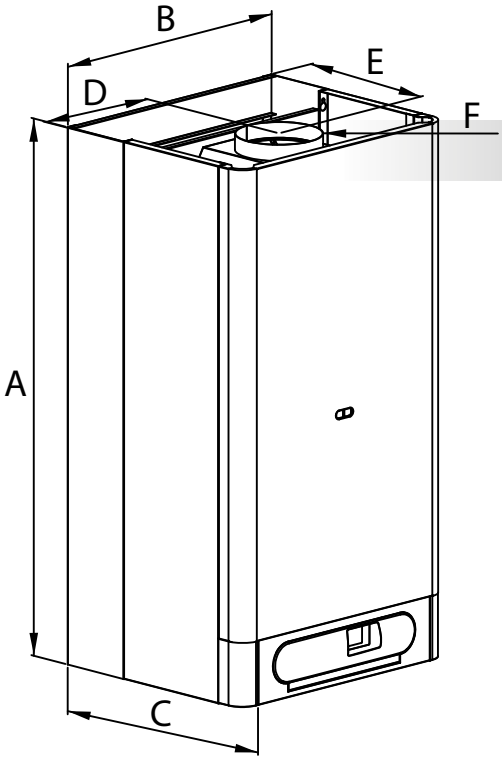
Technical data	Unit	THERM 90 KD.A
Nominal thermal input power	kW	89.7
Min. – max. thermal output for heating	kW	25,0 – 95,0
Consumption of gas - natural gas	m^3/h	2,46 – 9,53
Consumption of gas - propane	m^3/h	-
Min. – max. overpressure of heating system	bar	0,8 – 4,0
Max. output temperature of heating 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 With connection to 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+ communication
- The boilers are fitted with a low-emission burner with very low emissions of CO and NOx



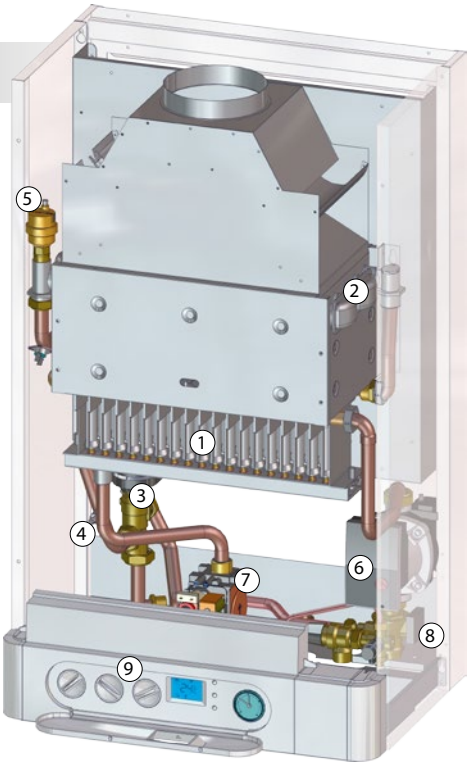
DIMENSIONS OF BOILER

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 With connection to external storage tank

SET OF BOILER

1 - Lownox burners
2 - Exchangers (burnt gases - water)
3 - Three-way valve
4 - Heating temperature probe
5 - Automatic de-aerating valve
6 - Circulation 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
Consumption of gas - natural gas	m^3/h	0,58 – 1,62	0,90 – 2,30	1,40 – 3,25
Consumption of gas - 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
Max. output temperature of heating water	°C	80	80	80
Boiler efficiency	%	92	92	92
Volume of expansion unit	l	7	7	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 With integrated storage tank

THERM PRO 14 KX.A

C
B

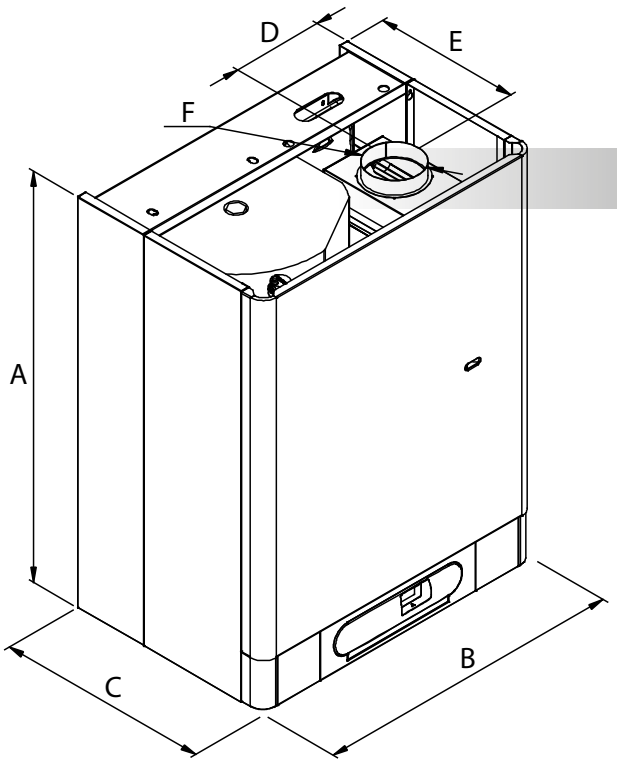
THERM 20 LXZE.A 5

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 connection between the boiler and the tank is not necessary.

- Wall-mounted boilers with built-in storage tank
- The boiler includes an indirect tank with a capacity of 55 litres (stainless)
- The boiler contains a three-way valve for alternative heating of the heating system and the 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+ communication

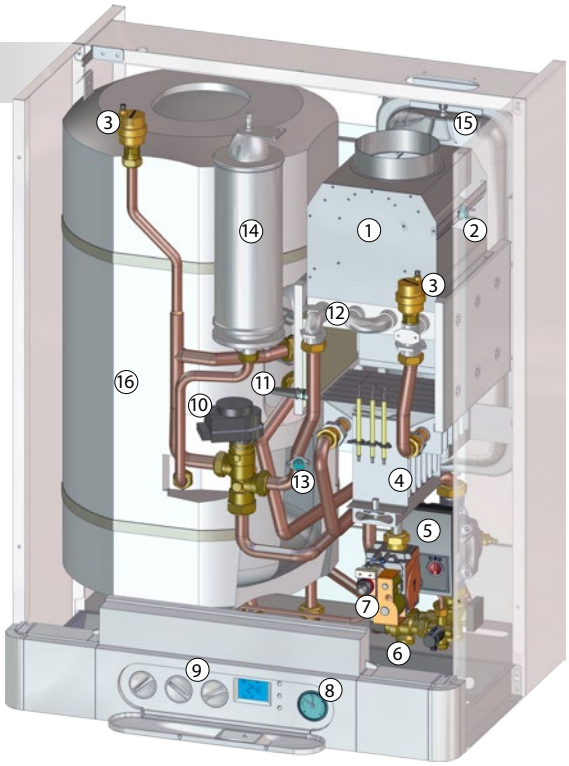


DIMENSIONS OF BOILER

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

THERM BOILERS With integrated 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
Consumption of gas - natural gas	m^3/h	0,58 – 1,62	0,90 – 2,30
Consumption of gas - 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
Max. output temperature 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	1076.1

THERM BOILERS With flow heating of water

THERM 20 CXE.AA

C
A L

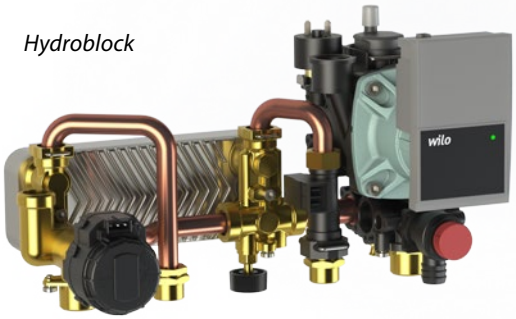
THERM 28 CXE.AA

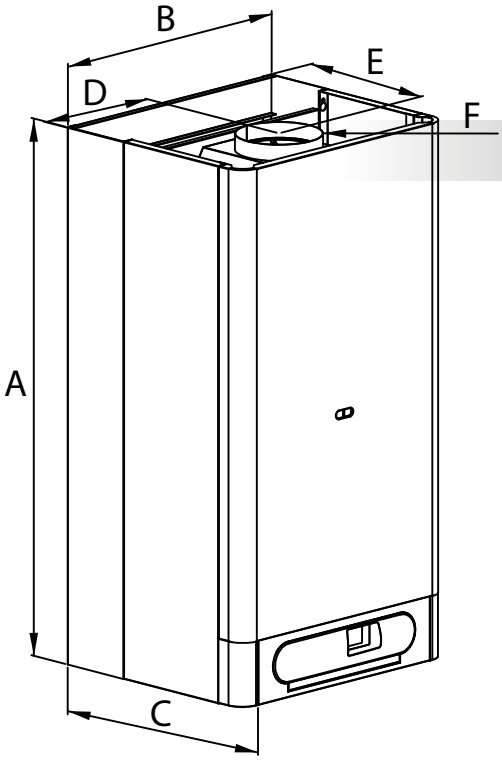
C
B XL

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+ communication

Hydroblock





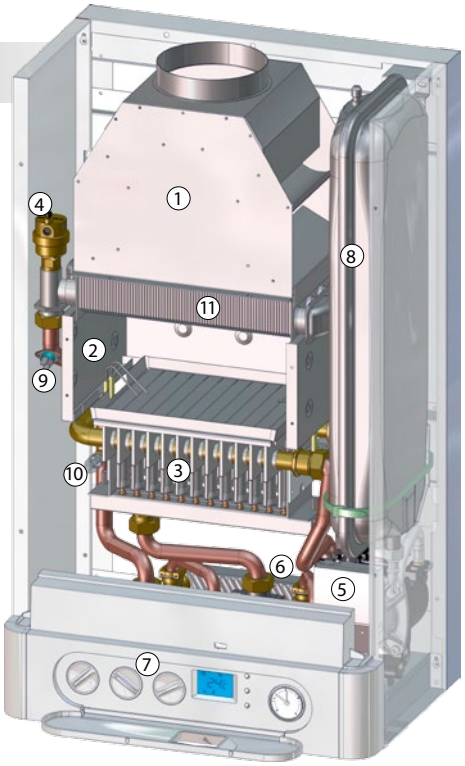
DIMENSIONS OF BOILER

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

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

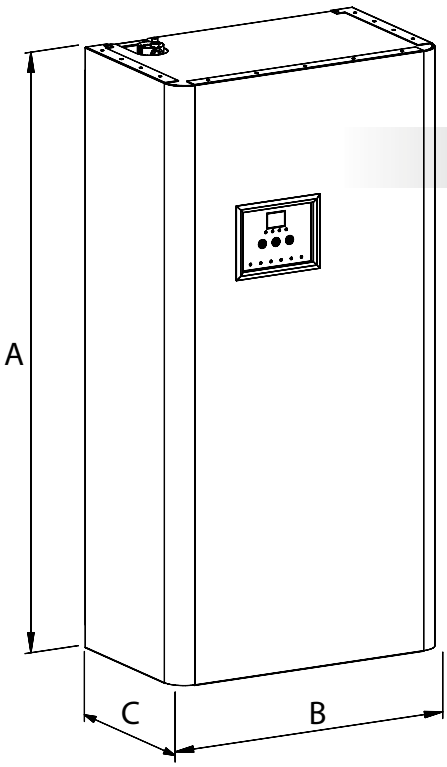


Technical data	Unit	THERM 20 CXE.AA	THERM 28 CXE.AA
Max. thermal input power	kW	22.2	31.0
Min. – max. thermal output for heating	kW	8 – 20	12 – 28
Consumption of gas - natural gas	m^3/h	0,90 – 2,30	1,40 – 3,25
Consumption of gas - propane	m^3/h	0,34 – 0,85	0,50 – 1,20
Flow of DHW at Δt = 25 °C	l/min.	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
Max. output temperature 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	40
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



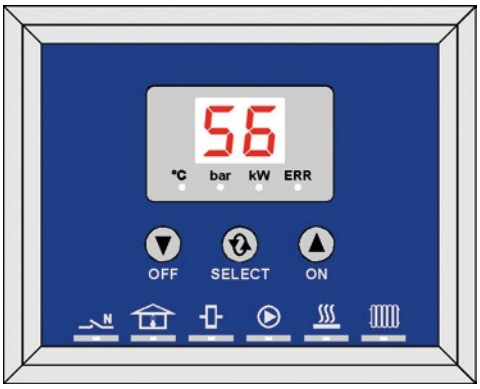
DIMENSIONS OF BOILER

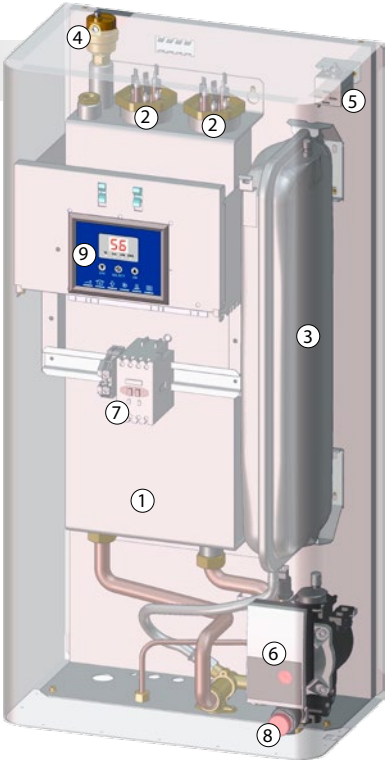
DIMENSIONS OF BOILER (mm)	BOILER MODEL	
	ELN 8	ELN 15
A	805	805
B	400	400
C	235	235

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 for 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 watter	kg	31	33
Class of seasonal energy efficiency of heating	-	D	D
Order number	-	1611.1	1612.1

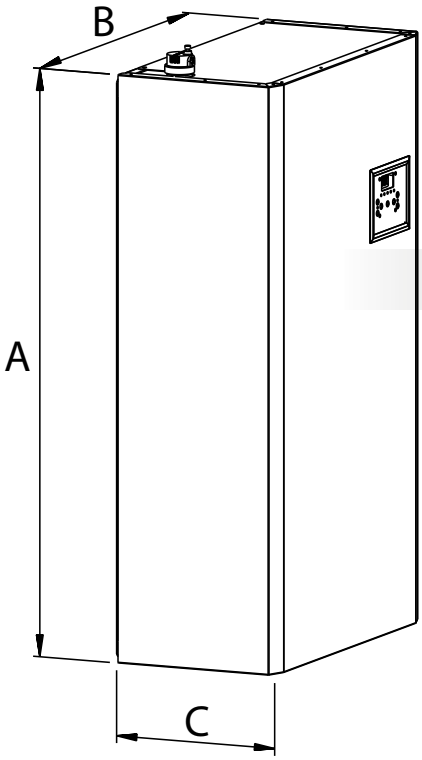
THERM BOILERS Electric - standard series

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



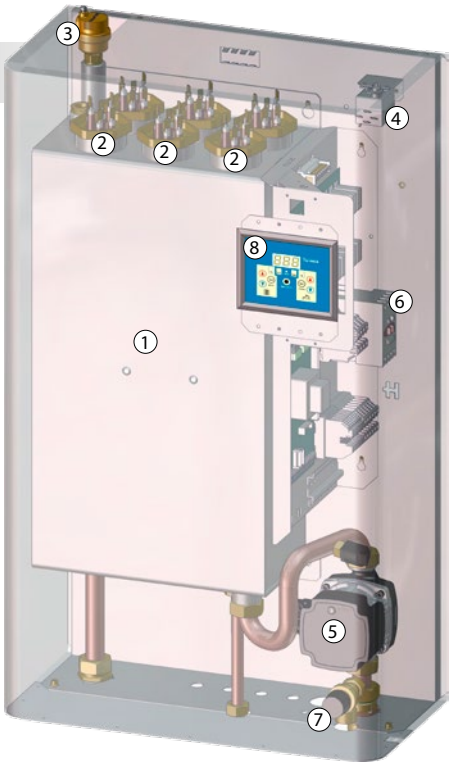
DIMENSIONS OF BOILER

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



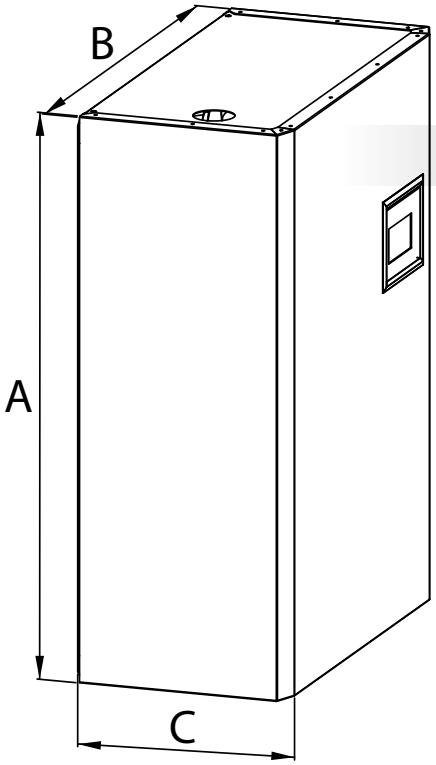
Technical data	Unit	THERM EL 8	THERM EL 15	THERM EL 23	THERM EL 30	THERM EL 38	THERM EL 45
Nominal heat output	kW	7.5	15.0	22.5	30.0	37.5	45.0
Minimum regulation level of the output	W	2500	2500	2500	2500/5000	2500/5000	2500/5000
Rated current (single-phase connection)	A	11 (33)	22 (66)	33	44	55	66
Level 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 for 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 watter	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-arranged 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)



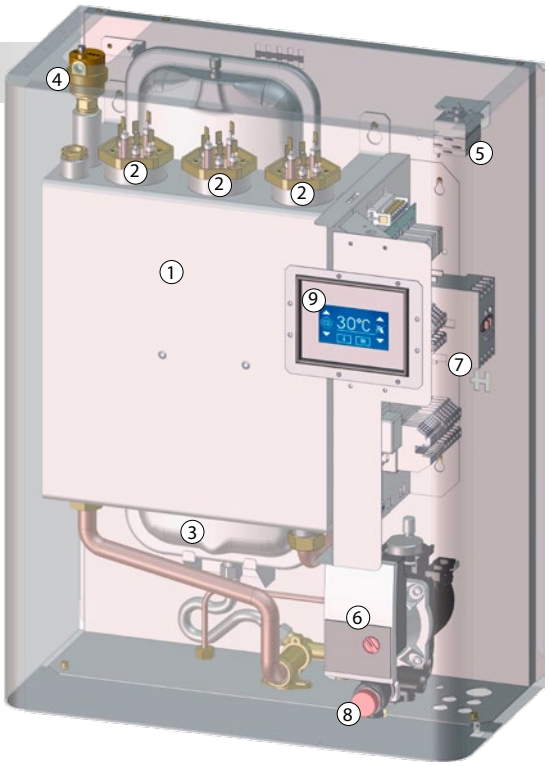
DIMENSIONS OF BOILER

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 for 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 watter	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, stainless		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 *	14136 **	14128.A *	14135 **	14130.A *	14137 **

* THERM designed storage tanks, CLASSIC Condens series (THERM 28 KDZ.A)

** THERM designed storage tanks, OPTIMUM Condens series and PREMIUM Condens series (THERM 14, 24 KDZN and THERM 18, 25 KDZ)

THERM OKCE, OKH STORAGE TANKS

The series of THERM OKC, OKH stationary 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 IN/OUT connections to the boiler outlets in the upper part and they are suitable for wall boiler installation.

OKC 125 NTR/HV

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	OKH 100 NTR/HV	OKH 125 NTR/HV	OKC 100 NTR/HV	OKC 125 NTR/HV	OKC 160 NTR/HV	OKC 100 NTR	OKC 125 NTR	OKC 160 NTR
Volume	l	87	115	87	113	144	87	112	148
Weight	kg	55	67	53	64	77	53	66	73
Exchanger power	kW	24	32	24	32	32	24	32	32
Height	mm	897	1058	902	1067	1092	902	1067	1255
Width	mm	520	520	524	524	584	524	524	524
Class of energy efficiency	-	B	B	B	C	C	B	C	C
Order number	-	14355	14356	14373	14382	14440	14311	14312	14313

STORAGE TANKS For indirect heating of water

Type	Unit	OKC 200 NTR	OKC 200 NTRR	OKC 250 NTR	OKC 250 NTRR	OKC 300 NTR/BP	OKC 300 NTRR/BP
Volume	l	208	200	242	234	296	285
Weight	kg	93	102	92	104	108	126
Exchanger power	kW	32	24/24	32	24/24	35	24/35
Height	mm	1400	1400	1580	1580	1558	1558
Width	mm	584	584	584	584	670	670
Class of energy efficiency	-	C	C	C	C	C	C
Order number	-	14314	14315	14457	14352	14444	14394

Type	Unit	OKC 400 NTR/BP	OKC 400 NTRR/BP	OKC 500 NTR/BP	OKC 500 NTRR/BP	OKC 750 NTRR/BP	OKC 1000 NTRR/BP
Volume	l	373	363	447	433	710	930
Weight	kg	139	153	137	158	197	248
Exchanger power	kW	58	58/26	58	58/37	60/33	76/32
Height	mm	1920	1920	1924	1924	2030	2050
Width	mm	650	650	700	700	910	1010
Class of energy efficiency	-	C	C	C	C	C	C
Order number	-	14409	14411	14685	14412	14413	14476

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 300 NTRR / 3 - 6 kW
Volume	l	87	113	148	208	285
Weight	kg	58	70	80	95	135
Exchanger power	kW	24	32	32	32	35/27
Height	mm	902	1067	1047	1357	1581
Width	mm	524	524	584	584	670
Class of energy efficiency	-	B	C	C	D	C
Order number	-	14339	14340	14341	14342	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 KDZN + OKH 100 NTR/HV	10102/100	A
THERM 14 KDZN + OKH 125 NTR/HV	10102/125	A
THERM 18 KDZ + OKH 100 NTR/HV	10106/100	A
THERM 18 KDZ + OKH 125 NTR/HV	10106/125	A
THERM 24 KDZN + OKH 100 NTR/HV	1092/100	A
THERM 24 KDZN + OKH 125 NTR/HV	1092/125	A
THERM 25 KDZ + OKH 100 NTR/HV	1097/100	A
THERM 25 KDZ + OKH 125 NTR/HV	1097/125	A
THERM EL 9 + OKH 100 NTR/HV	1608/125	D
THERM EL 14 + OKH 125 NTR/HV	1609/125	D

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 24 KDZN**	**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	214532	SRS 3	SRS 3	SRS 3	SRS 3
Pump unit		type S1 solar	type S1 solar	type S1 solar	type S1 solar
Collectors	214767	KPS 11 + ANT (2 pcs)	KPS 11 + ANT (2 pcs)	KPS 11 + ANT (2 pcs)	KPS 11 + ANT (2 pcs)
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	Kolekton P super (2 pcs)	Kolekton P super (2 pcs)	Kolekton P super (2 pcs)	Kolekton P super (2 pcs)
Connecting set	27710	yes	yes	yes	yes
Fixation set	212185	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 (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

I

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.

IV

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 programme for an unlimited time. It is recommended for all types of THERM boilers.

I

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.

IV

CMT 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.

IV

ROUND (43795) - modern wireless room thermostat with ON/OFF unit and internet firewall for remote access through a mobile application. A thermostat with a weekly program can be comfortably controlled using a turn knob, which is the body of the thermostat.

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

REGULATION

Intelligent regulators for 1 heating circuit

VI

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

CR 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.

VI

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.

Modul GSM - GST 1 (43460) - additional SMS module for PT 59 X regulators. It enables the heating connecting and disconnecting, 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 oder 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.

VI

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

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

REGULATION

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.

HJ103TRX (43518.1) - 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 (23657.1)

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

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

REGULATION

Zone regulation

THERM VPT regulator for 1 – 4 heating circuits VIII

- Regulation according to outdoor temperature and room temperature
- Regulator is placed on DIN bar into the switchboard
- Option to control the servo drives by 24 V or 230 V voltage
- Option for automatic filling of the heating system
  - VPT ADS module
- Option to connect additional displays
- Remote control option
  - LAN module
  - WiFi module
  - GSM module (through SMS)
- Possibility of signalling errors
  - VPT PSK module

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.

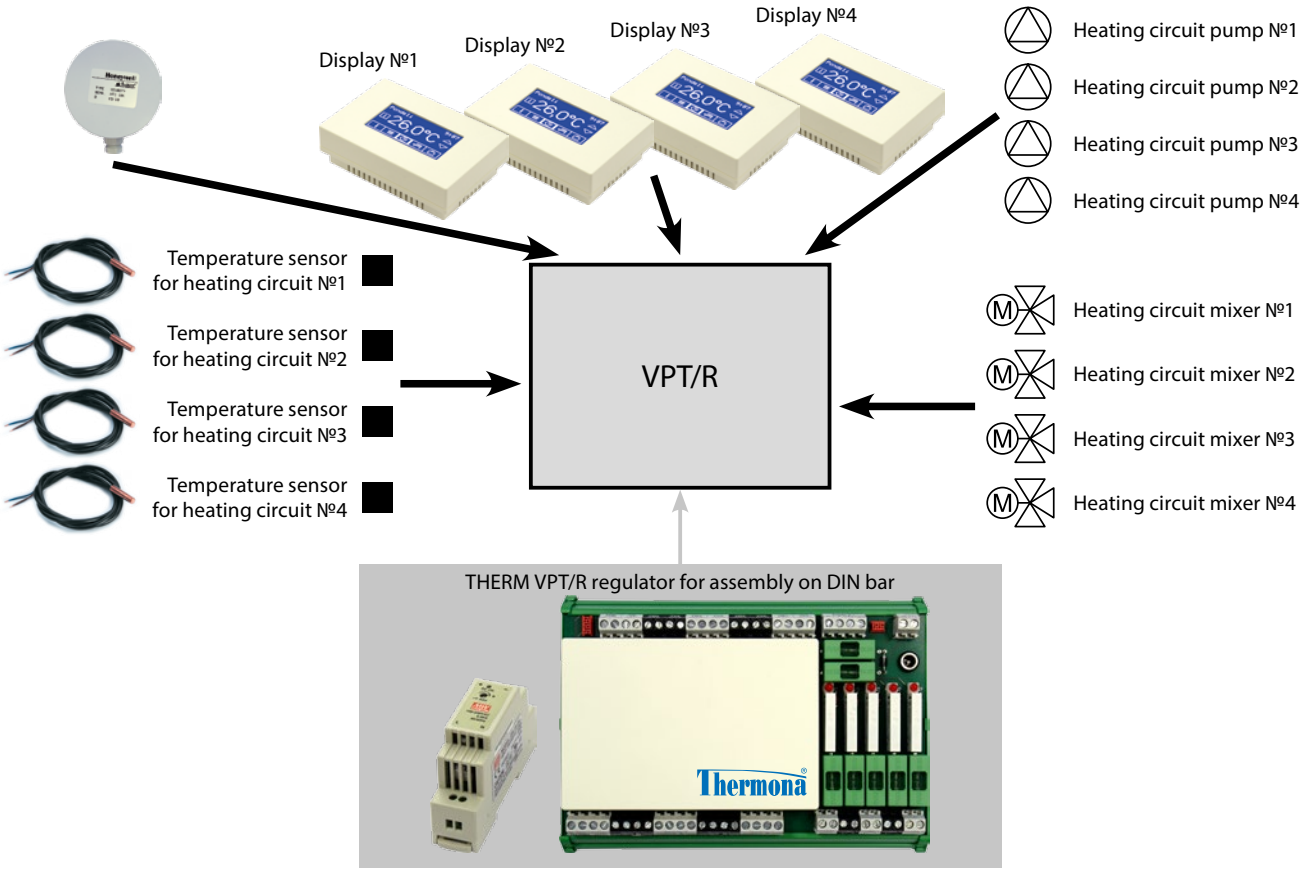
VPT/R SET - for regulation of the respective number of circuits with analogue servo drives 0 - 10 V contains an outdoor sensor and the respective number of sensors for regulation of the requested number of heating circuits, including the control display. It must be completed by the supply source.

Order number	Sign	Name of item
42730	SET VPT/R	Set of swichboard - basic
42731	SET VPT/R - 1	Set of swichboard - 1 circuit
42732	SET VPT/R - 2	Set of swichboard - 2 circuit
42733	SET VPT/R - 3	Set of swichboard - 3 circuit
42734	SET VPT/R - 4	Set of swichboard - 4 circuit

Order number	Sign	Name of item
42736		Supply 24 V / 0,63 A
42726		Supply 24 V / 2,50 A
42760	SET VPT DIS	Set of additional display
43628	VPT PSK	Protection module of the boiler room
43629	VPT ADS	Automatic fill-up module

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

REGULATION



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

THERM VPT PSK ADS regulators in distributors

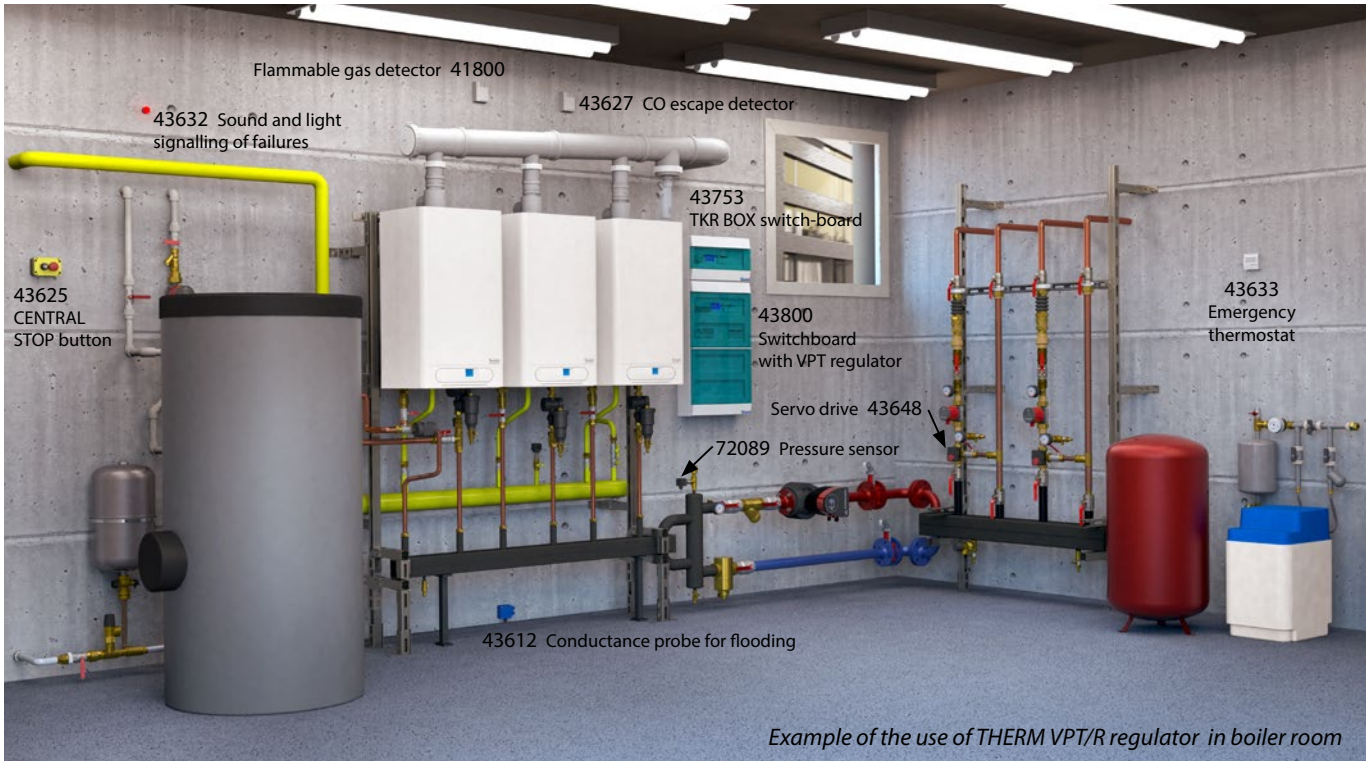
To simplify and accelerate the installation of THERM VPT regulation, THERMONA supplies VPT regulators built in the distributors, with a single test report according to the valid legislation.

43800 switch-board THERM VPT PSK ADS

REGULATION

The customer can choose the most suitable version from the following table:

	Order number	Name of item	Description
	43800	VPT PSK ADS switch-board	The distributor with a VPT regulator, a PSK boiler room protection module and ADS automatic fill-up module is designed for boiler rooms with up to four heating circuits.
	43801	VPT PSK switch-board	The distributor with a VPT regulator, a PSK boiler room protection module is designed for boiler rooms with up to four heating circuits.
	43820	VPT switch-board	The distributor with a VPT regulator is designed for smaller boiler rooms without the requirement to protect the boiler room, with up to four heating circuits.



Example of the use of THERM VPT/R regulator in boiler room

REGULATION

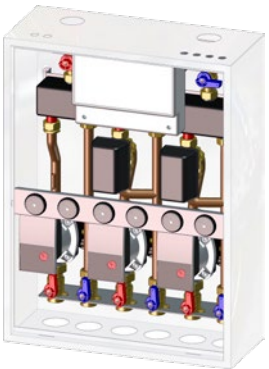
Zone hydraulic units SIM 3Z.H-21, SIM 2Z.H-20, SIM 2Z.H-11

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 pump
- 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

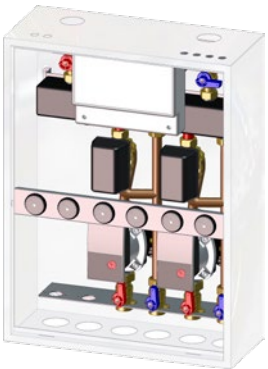
SIM 3Z.H-21 - two mixed circuits + one non-mixed circuit

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.



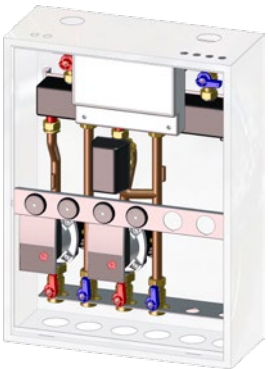
SIM 2Z.H-20 - two mixed circuits

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 circuits + one non-mixed circuit

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.



Without regulator	(43742)	(43741)	(43740)
With regulator	(43745)	(43744)	(43743)

Zone hydraulic unit i.a. includes:

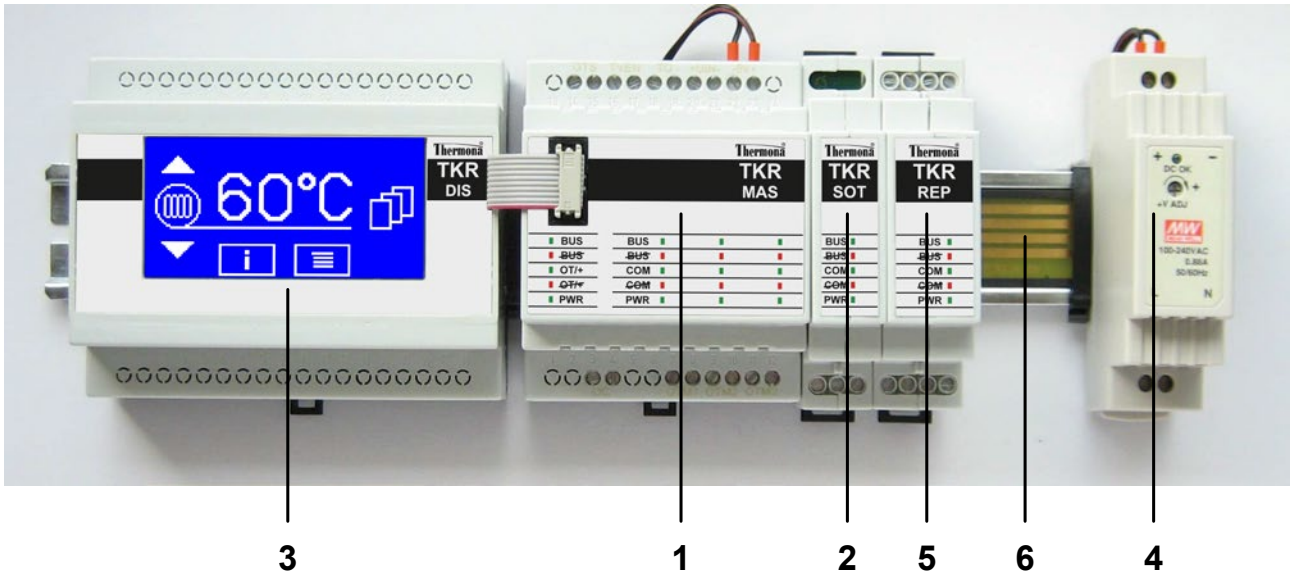
- Hydraulic balancer for dynamic pressures
- Honeywell mixing valves
- Zone modulation regulator SZ 10004
- Circulation pump
- Temperature sensors
- Discharging valve
- De-aerating valve
- Shut-off valves
- Informative thermometers

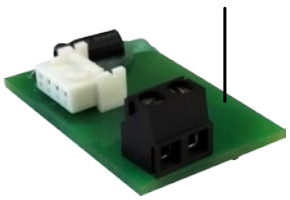
Cascade regulators

THERM TKR Cascade regulator

The THERM TKR regulator represents the simplest method of controlling wall-mounted THERM boilers, connected in a cascade. The regulator can control a cascade with up to 32 boilers, which represents the output of up to 3 MW! All THERM condensing boilers can be connected in a cascade, as well as the formerly manufactured boilers with mono-thermic exchanger and DIMS and H-DIMS automatics, and also THERM EL boiler series. The regulator is equipped with an input for connecting a superior regulator with communication OT/+ and an input for controlling with voltage of 0-10 V, in case of control with a regulator that does not support communication via OT/+.

The TKR MAS regulator control modules are delivered with basic setting for 2 or 3 boilers with an atmospheric burner, with activated equitherm regulation, and 60-minute run-down of the heating system pump. The regulator must be fed from a 5 V power supply and it must have a temperature sensor installed on the output of the circular ring. In case of requirement for equitherm regulation, an outdoor temperature sensor must also be connected.



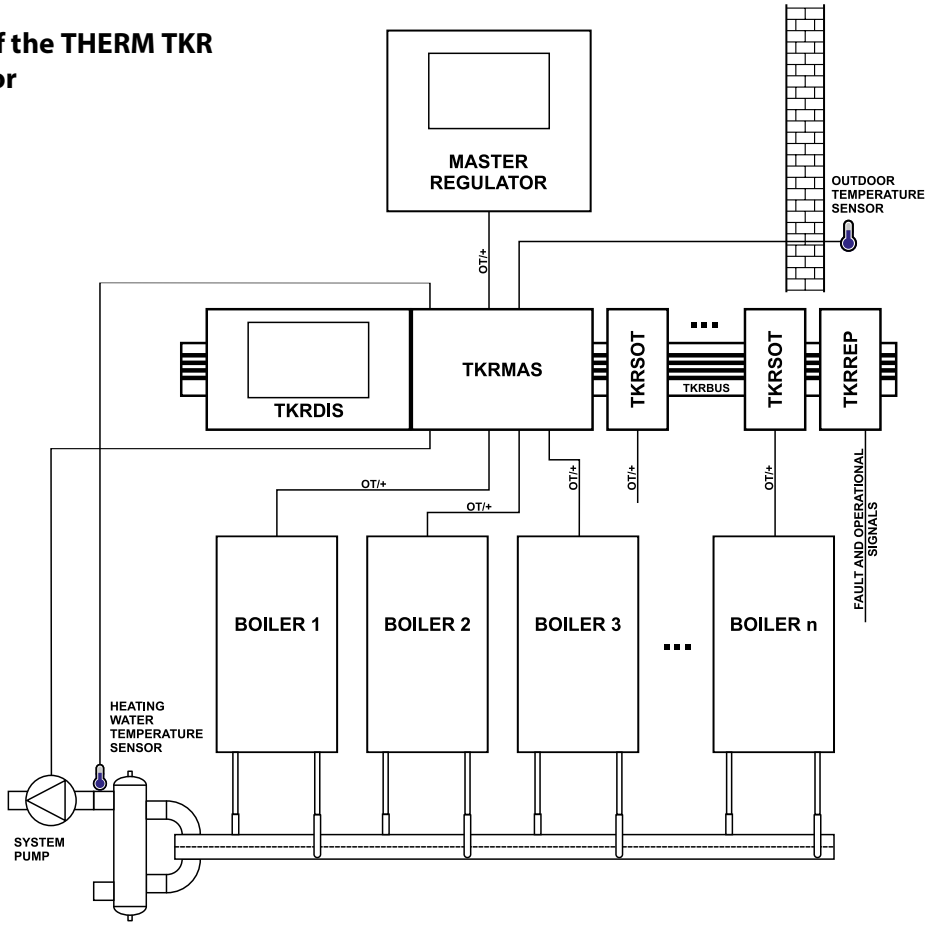


1. **TKR MAS/3** (42717) – basic module of the THERM TKR regulator – controls a cascade of up to 3 boilers independently
   (**TKR MAS/2** (42727) – controls a cascade of up to 2 boilers independently).
2. **TKR SOT** (42718) – extension module – used for connecting additional boiler to the cascade.
3. **TKR DIS** (42719) – touch display for setting additional functions, displaying the status of the regulator and parameters of all boilers connected to the cascade. When the option of setting and permanent display is not required, it is possible to use a service display, REK GTP-S during service activity for THERM EL electric boilers (the regulator works according to the last setting entered on the display when the setting is complete the display disconnected).
4. **Power supply** (42721) - 230 V / 5 V, 2,4 A – to feed the TKR regulator and all additional modules.
5. **TKR REP** (42720) – module for signalling malfunction of one of the boilers in the cascade or for signalling an emergency when all boilers in the cascade are malfunctioning.
6. **TKR BUS** (42722) – bus bar for fast and reliable connection of the TKR MAS regulator, with TKR SOT extension modules and TKR REP signalling modules. When only one additional module is used, the connection can be made using wire jumpers.
7. **TKR KOM** (42728) – communication module for connecting boilers with DIMS and H-DIMS automatics to the cascade.

REGULATION

All sensors required for the activity of the cascade regulator are connected to the basic TKR MAS regulator module – in any case, a heating system sensor located on the output pipe from the anchor ring, and also an outdoor temperature sensor in case equitherm regulation is required. A contactor of the heating system pump is also connected to the regulator, as well as a superior regulator and OT/+ communication to the boilers. When installing the TKR MAS regulator module on a DIN-rail with a built-in TKR BUS bar, the contact spots are connected with the bus bar, providing communication and power supply for all modules. The power supply must always be connected using a cable to the TKR MAS regulator module! The display is mounted on the DIN-rail to the left of TKR MAS, using a flat cable with a connector.

Block diagram of the THERM TKR cascade regulator



Order number	Sign	Name of item
43753	TKR BOX	TKR regulator for 3 boilers in an installation box (can be expanded to 8 boilers).
43749	TKR BOX II	TKR regulator for 3 boilers in an installation box (can be expanded to 24 boilers).
42053	TKR MAS/3 set	The set contains a TKR MAS/3 regulator for controlling a cascade of up to 3 boilers, power supply, the cascade temperature sensor and TKR KOM modules.
42729	TKR MAS/2 set	The set contains a TKR MAS/2 regulator for controlling a cascade of 2 boilers, power supply, the cascade temperature sensor and TKR KOM modules.
42054	TKR SOT set	The set contains the TKR SOT extension module and the TKR KOM communication module.
42719	TKR DIS	Display for DIN bar.
42721		Power supply 5V/2A.

Other components to the THERM TKR cascade regulator, including prices, can be found on the website at www.thermona.eu.

EXHAUSTION OF BURNT GASES

EXHAUSTION OF BURNT GASES - CONDENSING BOILERS

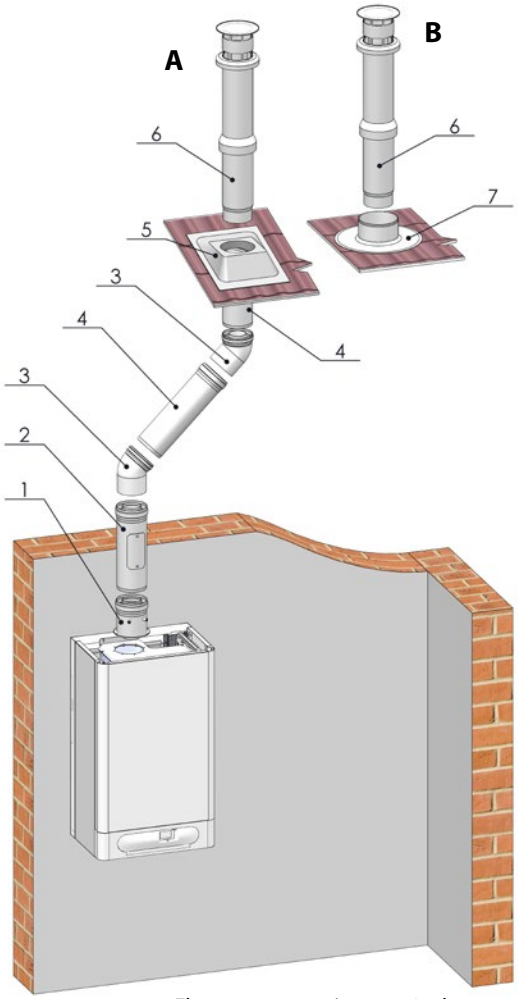
MAX. LENGTHS OF EXHAUSTION OF BURNT GASES FROM CONDENSING THERM BOILERS (m)

CONSUMER APPLIANCE	Ø 60/100		Ø 80/125		2 x Ø 80	Flex Ø 80
	horizontal	vertical	horizontal	vertical	horizontal and vertical	horizontal and vertical
THERM 14 KDN, KDZN, KDZN 5	6	6	11	11	11 + 11 (suction + exhaust)	11 + 11 (suction + exhaust)
THERM 18 KD, KDZ, KDZ 5	7	6	14	14	15 + 15 (suction + exhaust)	15 + 15 (suction + exhaust)
THERM 24 KDN, KDCN, KDZN, KDZN 5	6	6	11	11	11 + 11 (suction + exhaust)	11 + 11 (suction + exhaust)
THERM 25 KD, KDC, KDZ, KDZ 5	7	6	14	14	15 + 15 (suction + exhaust)	15 + 15 (suction + exhaust)
THERM 28 KD.A, KDC.A, KDZ.A, KDZ5.A, KDZ10.A	3	2.7	14	14	12 + 12 (suction + exhaust)	12 + 12 (suction + exhaust)
THERM 45 KD.A	-	-	5 (10, 15)*	5 (10, 15)*	5 + 5 (suction + exhaust)	5 + 5 (suction + exhaust)

* 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, 18, 24, 25, 28 KD...

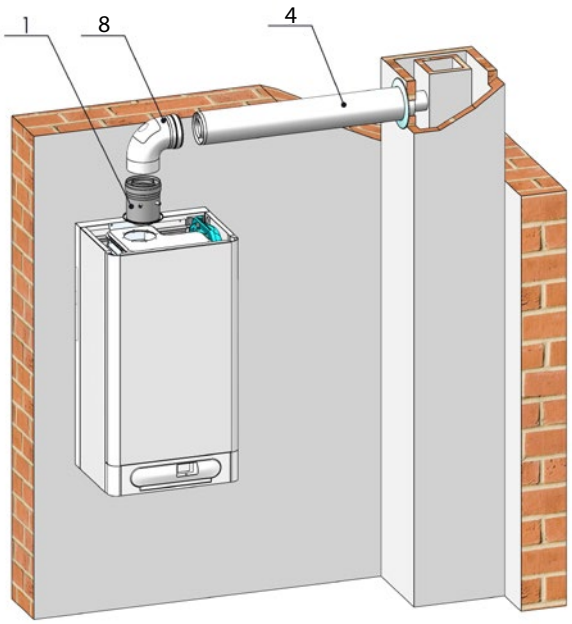


Flue system ø 60/100 vertical

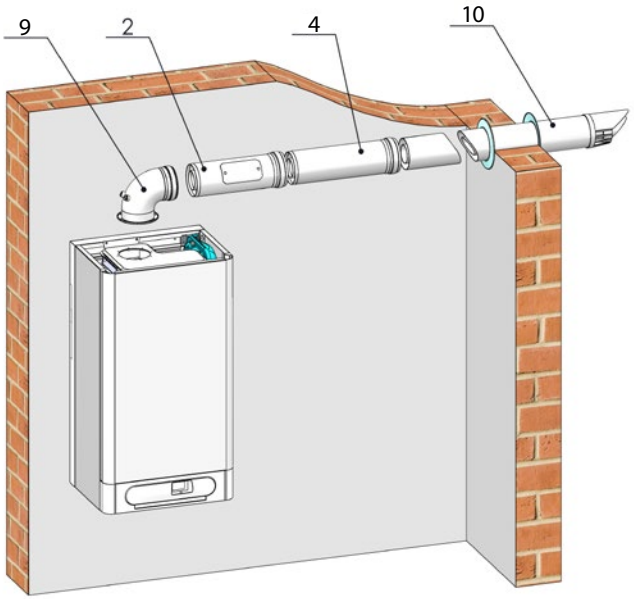
A – installation on sloped roof
B – installation on flat roof

	Name of item		Order number
1	Flange ø 60/100 with measuring points		24673
2	Insert with inspection hole 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 points of measurement		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

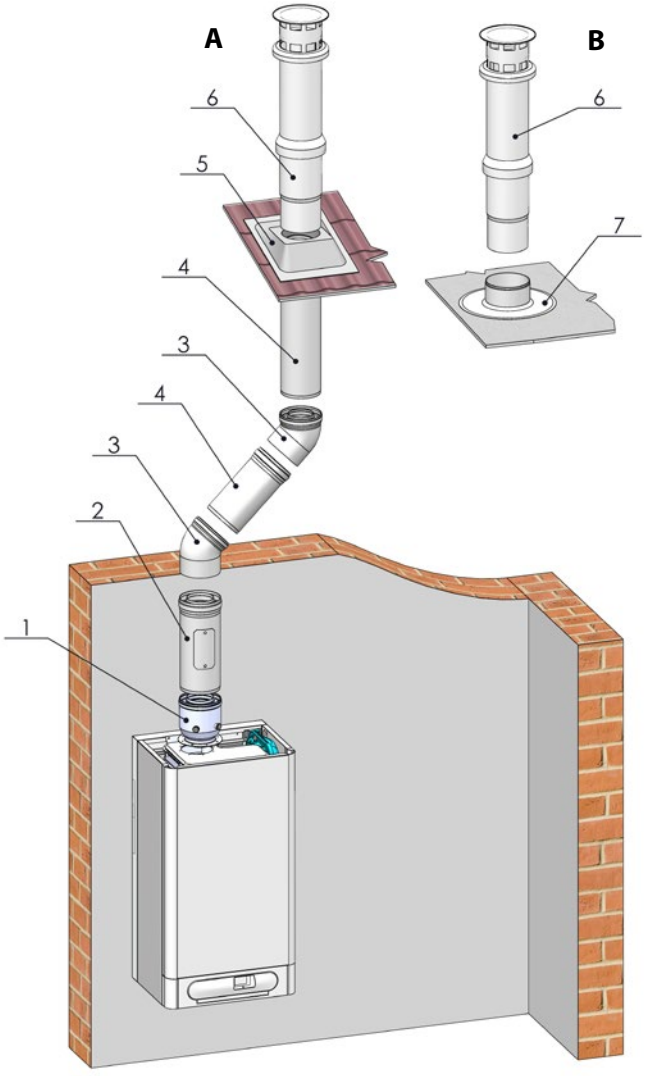


Flue system ø 60/100 horizontal



Flue system ø 60/100 horizontal

Flue system ø 80/125 - THERM 14, 18, 24, 25, 28 KD... and 45 KD.A

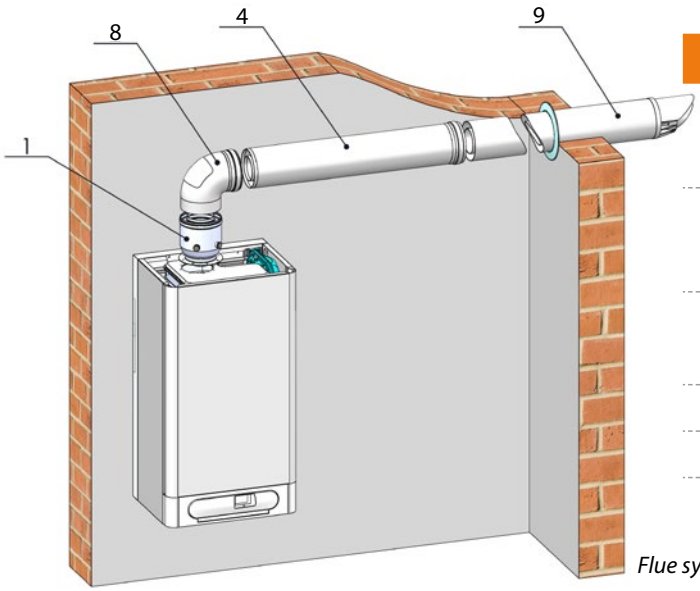


Flue system ø 80/125 vertical

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

	Name of item		Order number
1	Regulating flange from ø 60/100 on ø 80/125 with measuring points, for 14, 17, 24, 25 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 inspection hole 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	Tube suction - exhaust ø 80/125 - 1 m		27003
	Coaxial elbow ø 80/125, 90°		24676

EXHAUSTION OF BURNT GASES

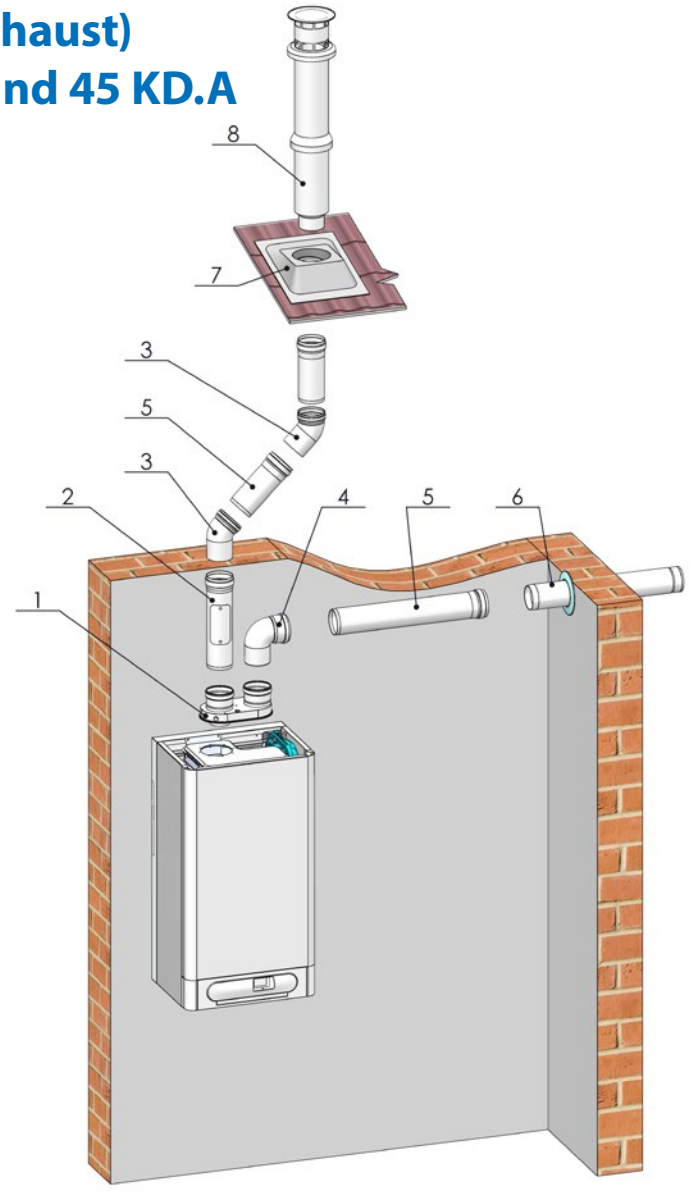


	Name of item		Order number
1	Regulating flange from ø 60/100 on ø 80/125 with measuring points, for 14, 17, 24, 25 and 28 KD...		24678
1	Regulating flange from ø 80/105 on ø 80/125 with measuring points, for 45 KD.A		27468
4	Concentric tube extension ø 80/125	0.5 m	24675
		1.0 m	27004
8	Elbow ø 80/125, 90° with control hole		27648
9	Tube suction - exhaust ø 80/125 - 1 m		27003

Flue system ø 80/125 horizontal

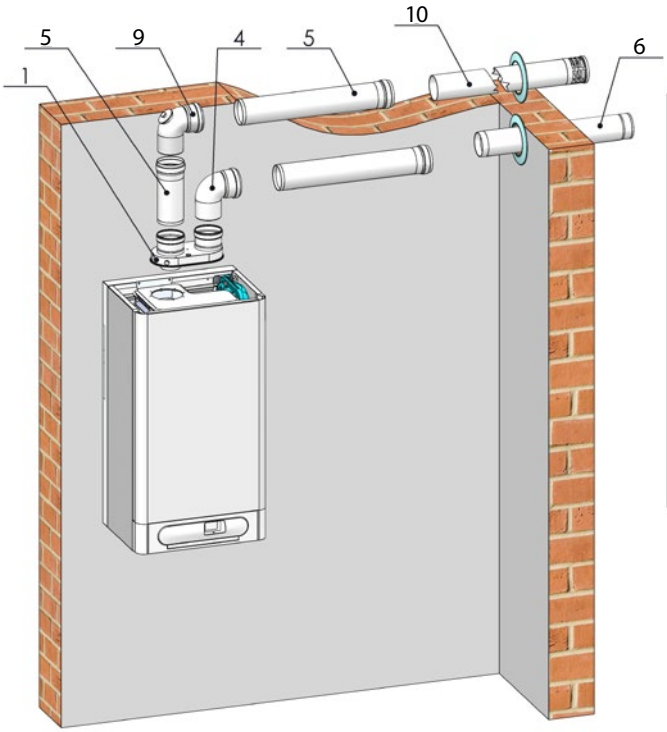
Flue system 2x ø 80 (suction / exhaust) - THERM 14, 18, 24, 25, 28 KD... and 45 KD.A

	Name of item		Order number
1	Divider from ø 60/100 on 2x ø 80, for 14, 17, 24, 25 and 28 KD...		212109
1	Divider from ø 80/125 on 2x ø 80, for 45 KD.A		212110
	+ 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 tubex ø 80	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

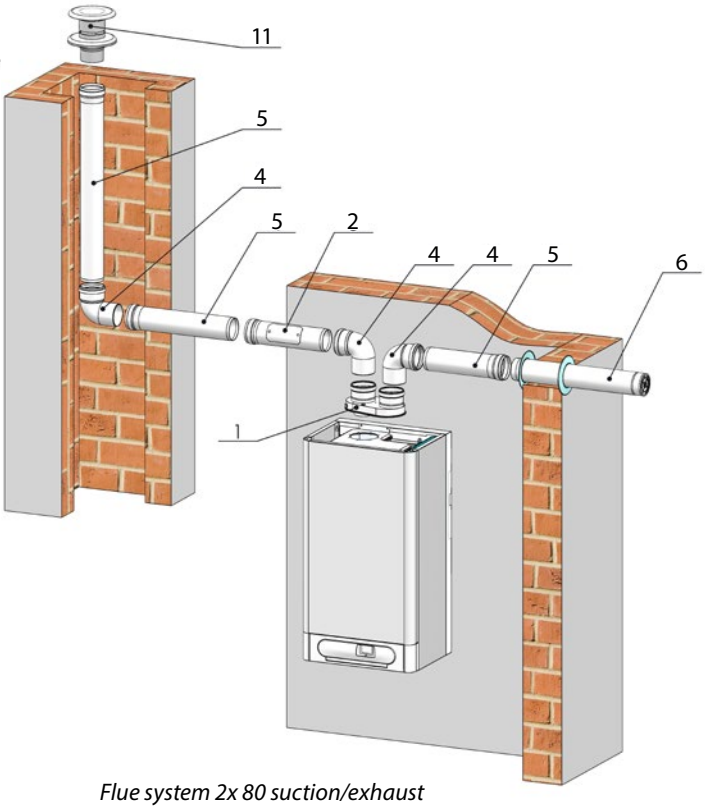


Flue system 2x 80 suction/exhaust

EXHAUSTION OF BURNT GASES



Flue system 2x 80 suction/exhaust

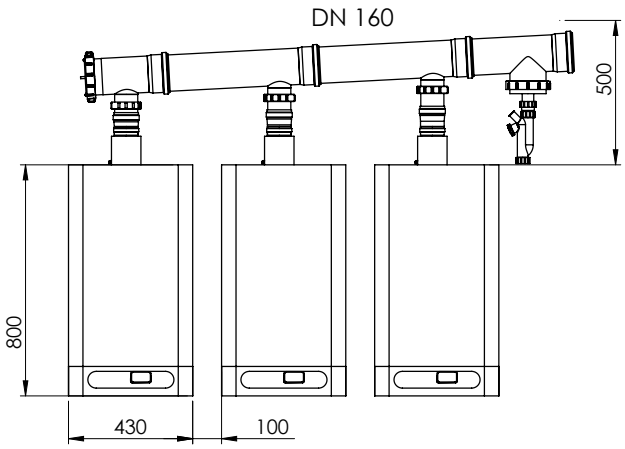


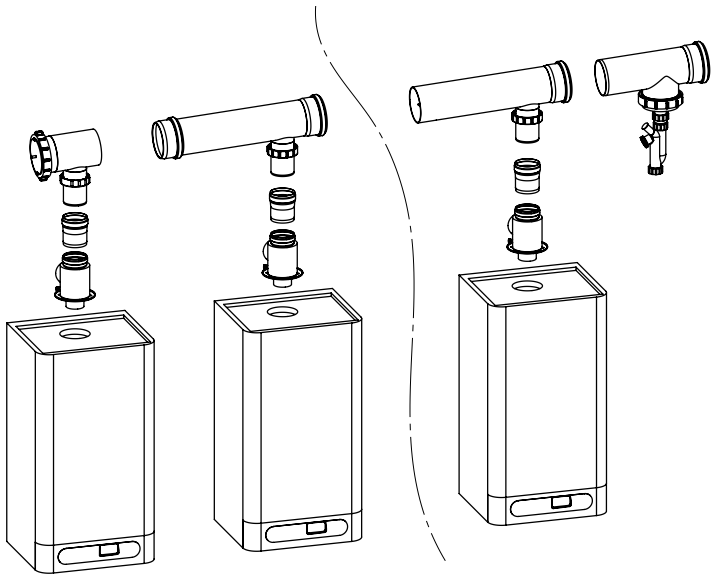
Flue system 2x 80 suction/exhaust

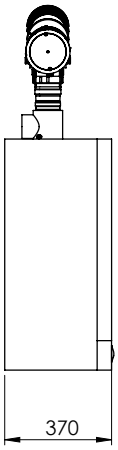
Basic sets flue system for THERM 45 KD.A boiler in the cascade

Order number	Name of 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



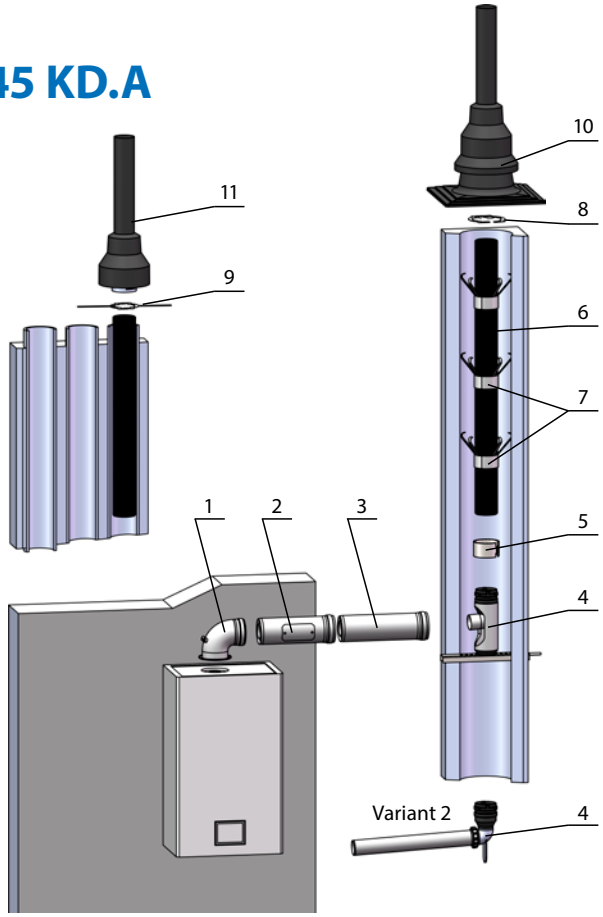


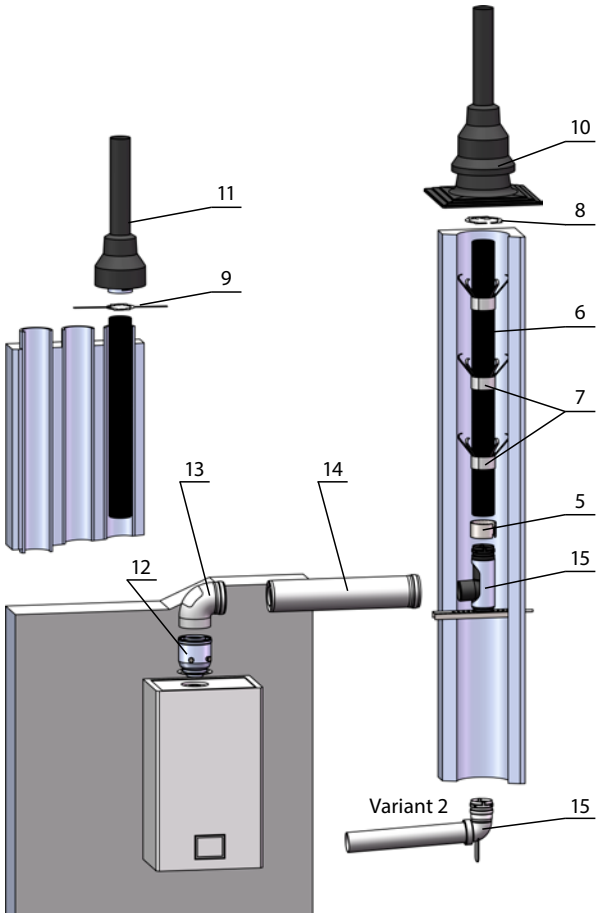


EXHAUSTION OF BURNT GASES

Flexible flue system ø 80 and ø 100 - THERM 14, 18, 24, 25, 28 KD... and 45 KD.A

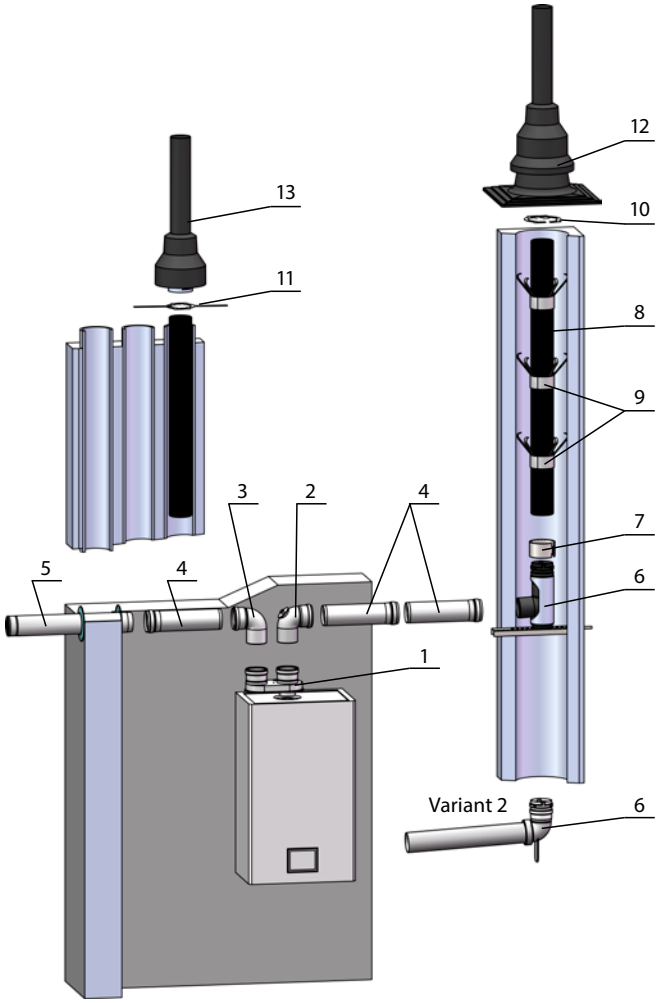
	Name of item	Order number
1	Elbow ø 60/100, 90° with flange and points of measurement	27216
2	Insert with inspection hole ø 60/100	213835
3	Concentric tube extension ø 60/100 - 1,0 m	29597
4	Variant 1 FLEX - foot elbow reduced at 87° with DN60/80 anchor	43877
	Variant 2 FLEX - elbow 87° for lining DN60/80	43879
5	FLEX - protective sleeve for DN80 joint	43881
6	FLEX - Black pipe UV stable DN80 - 15.0 m	43873
	FLEX - Black pipe UV stable DN80 - 30.0 m	43874
7	Spacing collar DN80	43871
8	FLEX - safety clamp DN80	43882
9	FLEX - anchoring clamp DN80	43883
10	FLEX - black plastic chimney capital DN80 - set (including safety clamp 43882)	43884
11	FLEX - flue grouping chimney ending, black DN80 - set (including anchoring clamp 43883)	43885
12	Regulating flange from ø 60/100 on ø 80/125 with measuring points, for 14, 17, 24, 25 and 28 KD...	24678
13	Elbow ø 80/125, 90° with control hole	27648
14	Concentric tube extension ø 80/125 - 1,0 m	27004
15	Variant 1 FLEX - foot elbow 87° with DN80 anchor	43876
	Variant 2 FLEX - Elbow 87° for lining DN80	43878





EXHAUSTION OF BURNT GASES

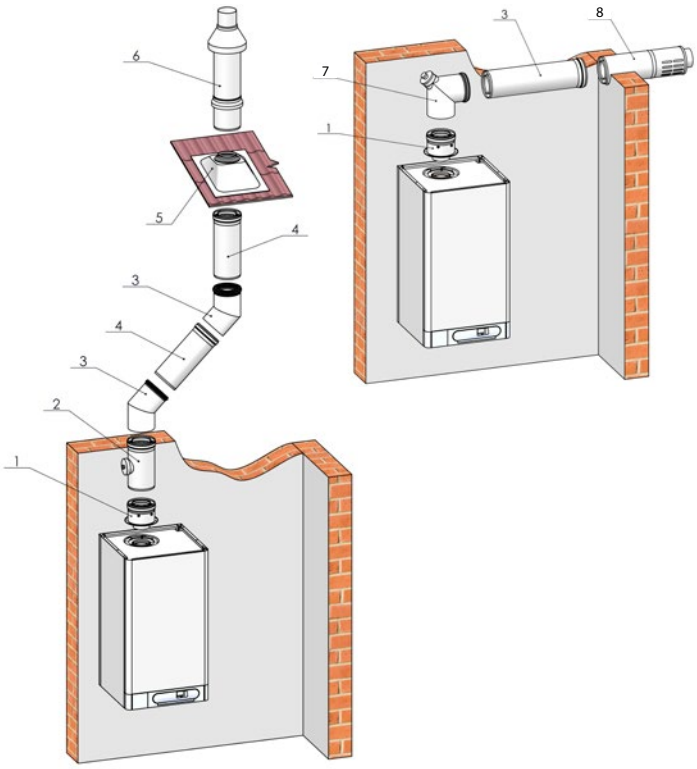
	Name of item	Order number
1	Divider from ø 60/100 on 2x ø 80, for 14, 17, 24, 25 and 28 KD...	212109
2	Elbow ø 80, 90° with control hole	212755
3	Elbow ø 80, 90°	26143
4	Extension tube ø 80 - 0,5 m	24666
5	Suction tube ø 80 - 1,0 m	26435
6	Variant 1 FLEX - foot elbow 87° with DN80 anchor	43876
	Variant 1 FLEX - foot elbow 87° with anchor, reduced at DN80/100	43889
	Variant 2 FLEX - Elbow 87° for lining DN80	43878
7	FLEX - protective sleeve for DN80 joint	43881
	FLEX - protective sleeve for DN100 joint	43892
8	FLEX - Black pipe UV stable DN80 - 15.0 m	43873
	FLEX - Black pipe UV stable DN80 - 30.0 m	43874
	FLEX - Black pipe UV stable DN100 - 15,0 m	43886
	FLEX - Black pipe UV stable DN100 - 30,0 m	43887
9	Spacing collar DN80	43871
	Spacing collar DN110	43872
10	FLEX - safety clamp DN80	43882
	FLEX - safety clamp DN100	43893
11	FLEX - anchoring clamp DN80	43883
	FLEX - anchoring clamp DN100	43894
12	FLEX - black plastic chimney capital DN80 - set (including safety clamp 43882)	43884
	FLEX - black plastic chimney capital DN100 - set (including safety clamp 43893)	43895
13	FLEX - flue grouping chimney ending, black DN80 - set (including anchoring clamp 43883)	43885
	FLEX - flue grouping chimney ending, black DN100 - set (including anchoring clamp 43894)	43896



EXHAUSTION OF BURNT GASES

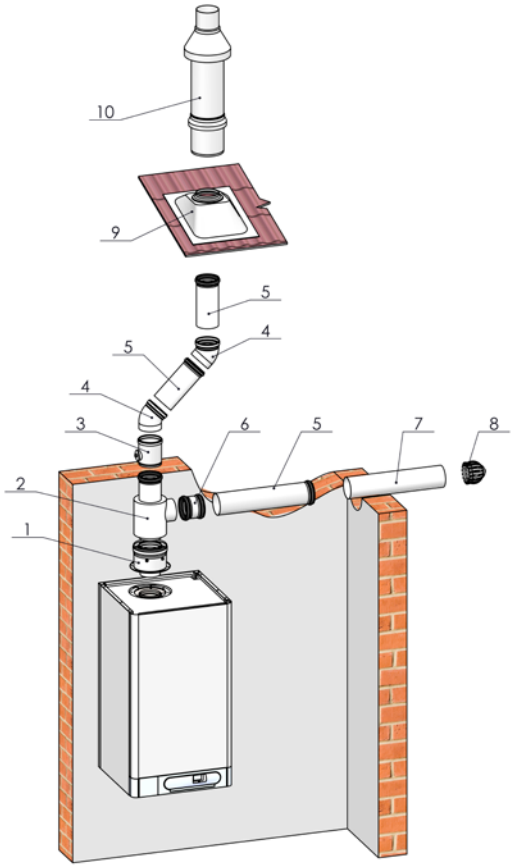
Flue system ø 110/160 - THERM 90 KD.A

	Name of 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, 45°		43701
4	Concentric tube extension ø 110/160 mm	0.5 m	43713
		1.0 m	43703
5	Roof lead-in 25-45° degree		43715
6	Vertical roof chimney 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, 87°		43704



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

	Name of item		Order number
1	Flange for boiler		43707
2	Divider from ø 110/160 mm 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	Protecting basket for suction		43725
9	Roof lead-in 25-45° degree		43715
10	Vertical roof chimney 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

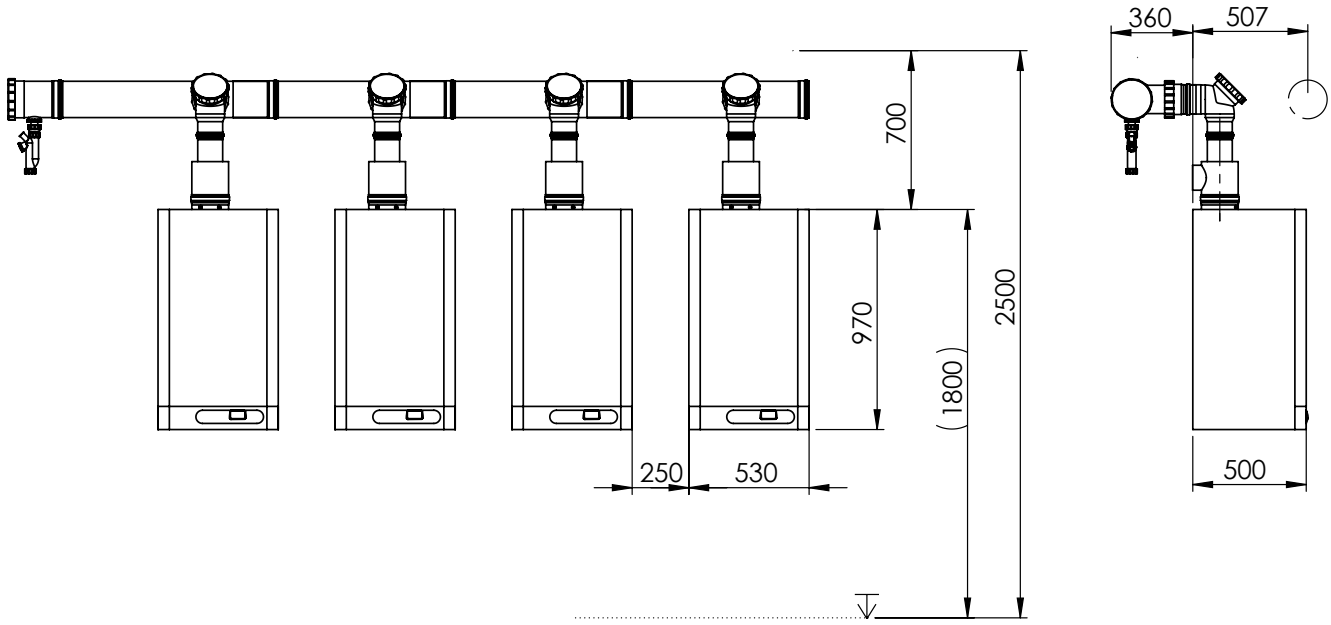


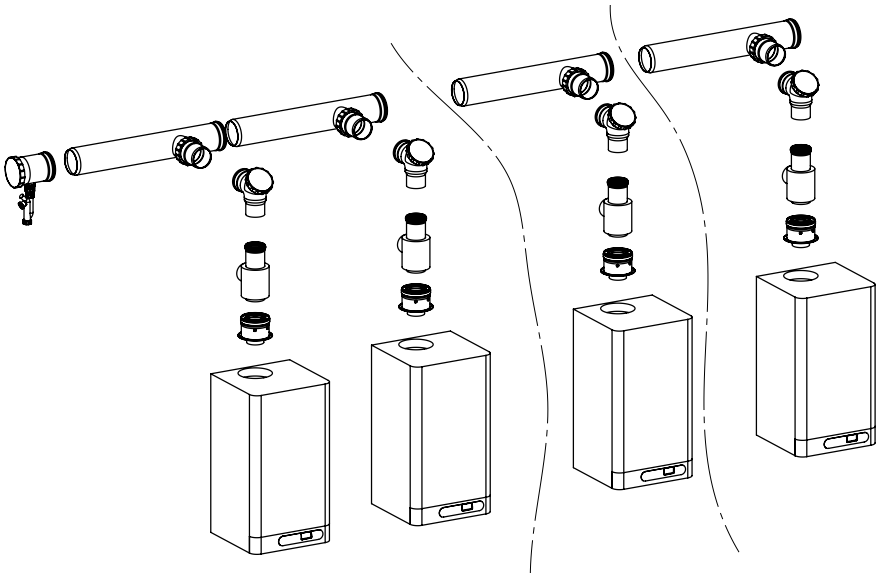
EXHAUSTION OF BURNT GASES

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

Order number	Name of item
43763	Set for 2 boilers 90 KD.A, ø 160 mm
43764	Set for 2 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 two boilers with the diameter 200 mm





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

CONSUMER APPLIANCE	Ø 110/160		2 x Ø 110
	horizontally	vertically	horizontally and vertically
THERM 90 KD.A	9	8	10 + 10 (suction + exhaust)

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

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