

ne NEW

# MALL HUNG GAS BOILERS

the comfort instinct



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KÖBER LTD DUMBRAVA ROSIE Vaduri head office, producer of MOTAN wall hung gas boilers is a Romanian company, part of KÖBER group, a very powerful industrial group, with good quoted trading values.

Köber Group aims at coming closer to customers understanding their needs and finding the proper solution for them. Knowing our clients needs, we are investing heavily in research and development to assure a large product portfolio of high quality. Köber Group has a large range of combination boilers, made with the best materials and in accordance with the highest standards in the industry. Boilers can be either condensing or conventional.

Delivering heat and hot water to many customers across world, Köber Group works with every part of the supply chain-wholesalers, installers, specifiers, utility companies and the end-user customer in their homes and businesses.

For installers and specifiers we also provide outstanding training and technical back-up. KOBER Group trains installers from different countries. Our spare parts network is also an important customer support. For end user customers we provide excellent warranty programmes and after sales service.

The system of the quality management introduced in our company is certified according to ISO 90001:2015 Standard by the DNV GL certification bodie. Maintaining this standard of quality at excellent levels is the driving force behind every phase of the company process.

All types of wall hung gas boilers MOTAN mark have "CE" type examination certificate with fre circulation in the European Community.



**(£**2726





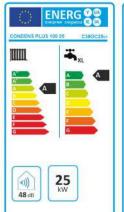
#### **Environmental protection**

We make constant efforts for environmental protection.
Following the Kyoto Protocol, the European Community has imposed the implementation known as climate target 20 -20 -20 -European Energy Plan.

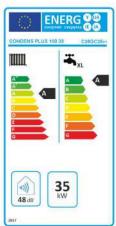
Explained, this objective aims 20% reduction in exhaust emissions with greenhouse effect, of reduction with 20% of

electricity consumption and 20% of the insurance of European energy coming from renewables.

Thus, MOTAN condensing wall hung gas boilers - CONDENS 100 PLUS and CONDENS 100 models meets the requirements of the Commission Regulation (EU) no 811-814/2013, implementing Directive 2009/125/EC of the European Parliament and of the Council.













Currently, boilers that are produced by KOBER Ltd Vaduri Branch, are solt in 17 countries, arround the globe.

The export sales are un important component in our long-term development strategy.

Romania; Italy; Germany; Rep. Moldova; Belgium; Bulgaria; Greece; Slovakia; Georgia; Ukraine; Latvia; Lithuania; Jordan; Armenia; Algeria; Iran; Pakistan;



# CONDENS PLUS 100 25



# Product code: C38GC25V1



# A class efficiency-

Domestic Hot Water comfort - 3 stars 
(EN 13203)

NOx CLASS 5

# Dimensions and mounting positions:



Front panel - touch screen

- HIGH-TECH look glass front panel (touch screen) with 4.3 inch display (visible area);
- Up to 106% efficiency and 1:10 modulation ratio;
- Friendly environment during operation releases significantly reduced amounts of NOx, CO and CO2 - Class NOx 5;
- High comfort on DHW circuit OVERSIZED secondary heat exchanger;
- Designed and build for maximum operating efficiency and economy according to the latest European legislative requirements;
- STAINLESS STEEL primary heat exchanger;
- The possibility of connecting a chronothermostat, remote control panel and/or external temperature probe;



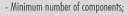
Tochnic	ral an	d func	tional characteristics	
Type	cui uii	u ione	nonai characteristics	C38GC25V1
				CONDENS PLUS
Trade na		P. 111000	CONTROL CONTRO	10025
Efficiency	stars (c	dir. 92/	42/CEE)	****
Gas cateo		oe used		G20-I2H
Flue type		011 00	4 605 7 6011	Forced, variable speed fan
			4, G25.1, G31)	5
Heating (				A
Max pow				25,6 kW
	-		condensing)(G2O-I2H)	28,2 kW
			iominal heat input (80/60°C)(620-12H)	97%
- marine and a construction			nominal heat input (50/30°C - condensing(620-12H)	106%
Max gas			прпоп	≈2,8 Nmc/h
Gas press				20 mbar 35 mbar
A TORSON BASE OF			U alreadt	
Maximun			interval CH	0,8 ÷ 3 bar 30 ÷ 80°C
			interval underfloor	15÷45°C
			e hot water circuit	0,2 ÷ 8 bar
Temperat				30÷55°C
			30°C (flow restrictor 12l/min)	13,5 l/min
DHW Con	fort EN	13203	,	***
DHW effic	ciency cl	ass		A, load profile XL
		ıht (mm		750
		th (mm)		400
8		h (mm)		345
fure	Weig		······································	32 kg
pej	Pimo	ary heat	exchanger capacity	1,41
tive	C		Thermal input, output	3/4 "
stru	Coni	nectors	Cold water input, hot water output	1/2 "
Constructive features	r		Gas input	3/4 "
2000			essel with membrane	***************************************
				axial D100/D60, Dual D80* max 20m; Dual max 20m*
Length of burnt gases connecting pipe Evacuation type Bn, Bn, Cn, Cn, Cn, Cn, Cn, Cn, Cn, Cn, Cn, C				
		temp.	ype 51, 51, 51, 51, 51, 51, 51, 61, 61, 61, 61	≈80°C
-	10.11	Power		~230VAC/50 Hz
character	trical		al power	81 W
character	121162		on class	IP 44
* The standa	ard gas boile	er is delivere	d with dual coaxial kit as accessory; dual kit is delivered as accessor	y on demand

The new condensing heat exchanger for the CONDENS PLUS 100 boiler is a single purpose integrated and compact heat exchanger based on a simple stainless steel coil with an oval section. The heat exchanger is composed by a combustion chamber, condensing area and an insulated metallic disk protected with silicon ceramic fiber which separates the two areas. Using single coil, included inlet/outlet connection, to produce the coil, ensure the benefits below:

- Autocleaning - To avoid dirt and debris accumulation, especially in replacement market.

Flow rate is uniformly distributed in a single pipe ensuring a proper heat transfer. Best performance in water pressure drop:





- High efficiency and robustness -
- Constant water speed over a long lifecycle
- Stainless Steel Excellent resistance to corrosion and easily machinable;
- Avoiding welding process



# CONDENS PLUS 100 25 WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- o Condensing heat exchanger Circond Valmex (Italy);
- Circulation pump GRUNDFOS (Denmark);
- o Gas valve SIT (Italy);
- O Build-in gas-air nozzle fan SIT (Italy);
- Brass hydroblock Fugas (Italy);
- Safety valve Kramer / Bitron (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH CONDENS PLUS 100 25 BOILER:

#### Product name:

STORAGE TANK BA120L-V1

SMART ROOM THERMOSTAT HT500

WIRELESS ROOM THERMOSTAT HT220S SET

**ROOM THERMOSTAT HT220S** 

CASCADE MODULE KOBER

FILTER WITH TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 6A

**OUTSIDE TEMPERATURE SENSOR N10** 

BOILER TEMPERATURE SENSOR N10

COAXIAL EXHAUSTING FLUE 60/100 CT CONDENS

DUAL EXHAUSTING FLUE D80 CT CONDENS

ROOF VERTICAL EXHAUSTING FLUE 60/100 CT CONDENS

ADAPTOR FOR ROOF VERTICAL EXHAUSTING FLUE CT CONDENS

EXTENSION 0.5M 60/100 CT CONDENS

EXTENSION 1M 60/100 CT CONDENS

EXTENSION 1.5M 60/100 CT CONDENS

EXTENSION 0.5M D80 CT CONDENS

EXTENSION 1M D80 CT CONDENS

90° ELBOW 60/100 EXTENSION CT CONDENS

90° ELBOW D80 EXTENSION CT CONDENS

45° ELBOW 60/100 EXTENSION CT CONDENS







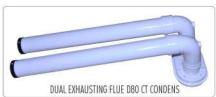






FILTER WITH TRANSFORMER - 3A





# CONDENS PLUS 100 29



Product code: C38GC29V1



# A class efficiency-

- 4 stars  $\bigstar$   $\bigstar$   $\bigstar$   $\bigstar$  (dir. 92/42/CEE)

Domestic Hot Water comfort - 3 stars (EN 13203)

NOx CLASS 5

# Dimensions and mounting positions: TR 3% (ngrox 26) 120 September 170 A B C C C September 170 345



Front panel - touch screen

- HIGH-TECH look glass front panel (touch screen) with 4.3 inch display (visible area);
- Up to 106% efficiency and 1:10 modulation ratio;
- Friendly environment during operation releases significantly reduced amounts of NOx, CO and CO2 - Class NOx 5;
- High comfort on DHW circuit OVERSIZED secondary heat exchanger;
- Designed and build for maximum operating efficiency and economy according to the latest European legislative requirements;
- STAINLESS STEEL primary heat exchanger;
- The possibility of connecting a chronothermostat, remote control panel and/or external temperature probe;



Techni	cal and	func	tional characteristics	
Туре				C38GC29V1
Trade na	me			CONDENS PLUS
Efficiency	stars (di	ir. 92/	12/CEE)	10029
Gas category to be used				G20-I2H
Flue type				Forced, variable speed fan
	s (620-12 energy ef		I, G25.1, G31)	5 A
	er (80/6			28.3 kW
Max pov	ver (50/3	0°C - 0	ondensing)(G20-I2H)	32.4 kW
Output p	erforman	ce at n	ominal heat input (80/60°C)(G20-12H)	97%
			ominal heat input (50/30°C - condensing(G20-12H)	106%
	nominal		nption	≈3 Nmc/h
	sure (G20			20 mbar 35 mbar
	sure (GN) m pressur		H circuit	0.8 ÷ 3 bar
			interval CH	30÷80°C
Tempera	ture adju	stment	interval underfloor	15 ÷ 45°C
			e hot water circuit	0,2 ÷ 8 bar
	ture adjus			30÷55°C
			30°C (flow restrictor 121/min)	15.7 l/min
DHW Con DHW effi				A, load profile XL
		nt (mm	)	750
		n (mm)		400
S		(mm)		345
ture 1	Weig		and an arrange	34 kg
電	rima	ry neui	exchanger capacity	1,61
÷Ě	Conn	ectors	Thermal input, output Cold water input, hot water output	3/4 " 1/2 "
Constructive features	Comm		Gas input	3/4 "
3			ssel with membrane	81
				oxial D100/D60, Dual D80*
				max 20m; Dual max 20m*
	Flue to	e, Co, Co, Co, Co, Co, Co, Co, Co, Co ≈70°C		
	1.1	Power		~230VAC/50 Hz
character	inical		l power	81 W
			on class	IP 44
* The stand	ard gas boiler	is delivere	with dual coaxial kit as accessory; dual kit is delivered as accessor	y on demand

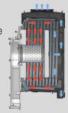
The new condensing heat exchanger for the CONDENS PLUS 100 boiler is a single purpose integrated and compact heat exchanger based on a simple stainless steel coil with an oval section. The heat exchanger is composed by a combustion chamber, condensing area and an insulated metallic disk protected with silicon ceramic fiber which separates the two areas. Using single coil, included inlet/outlet connection, to produce the coil, ensure the benefits below:

- Autocleaning - To avoid dirt and debris accumulation, especially in replacement market.

Flow rate is uniformly distributed in a single pipe ensuring a proper heat transfer. Best performance in water pressure drop;



- Minimum number of components;
- High efficiency and robustness Constant water speed over a long lifecycle
- Stainless Steel Excellent resistance to corrosion and easily machinable;
- Avoiding welding process



#### CONDENS PLUS 100 29 WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- Condensing heat exchanger Circond Valmex (Italy);
- Circulation pump GRUNDFOS (Denmark);
- o Gas valve SIT (Italy):
- O Build-in gas-air nozzle fan SIT (Italy);
- Brass hydroblock Fugas (Italy);
- Safety valve Kramer / Bitron (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH CONDENS PLUS 100 29 BOILER:

#### Product name:

STORAGE TANK BA120L-V1

SMART ROOM THERMOSTAT HT500

WIRELESS ROOM THERMOSTAT HT220S SET

**ROOM THERMOSTAT HT220S** 

CASCADE MODULE KOBER

FILTER WITH TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 6A

**OUTSIDE TEMPERATURE SENSOR N10** 

**BOILER TEMPERATURE SENSOR N10** 

COAXIAL EXHAUSTING FLUE 60/100 CT CONDENS

DUAL EXHAUSTING FLUE D80 CT CONDENS

ROOF VERTICAL EXHAUSTING FLUE 60/100 CT CONDENS

ADAPTOR FOR ROOF VERTICAL EXHAUSTING FLUE CT CONDENS

EXTENSION 0.5M 60/100 CT CONDENS

EXTENSION 1M 60/100 CT CONDENS

EXTENSION 1.5M 60/100 CT CONDENS

EXTENSION 0.5M D80 CT CONDENS

EXTENSION 1M D80 CT CONDENS

90° ELBOW 60/100 EXTENSION CT CONDENS

90° ELBOW D80 EXTENSION CT CONDENS

45° ELBOW 60/100 EXTENSION CT CONDENS







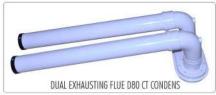












# CONDENS PLUS 100 35



Product code: C38GC35V1



# A class efficiency-

- 4 stars  $\bigstar$   $\bigstar$   $\bigstar$   $\bigstar$  (dir. 92/42/CEE)

Domestic Hot Water comfort - 3 stars 
(EN 13203)

NOx CLASS 5

# Dimensions and mounting positions:



Front panel - touch screen

- HIGH-TECH look glass front panel (touch screen) with 4.3 inch display (visible area);
- Up to 106% efficiency and 1:10 modulation ratio;
- Friendly environment during operation releases significantly reduced amounts of NOx, CO and CO2 - Class NOx 5;
- High comfort on DHW circuit OVERSIZED secondary heat exchanger;
- Designed and build for maximum operating efficiency and economy according to the latest European legislative requirements;
- STAINLESS STEEL primary heat exchanger;
- The possibility of connecting a chronothermostat, remote control panel and/or external temperature probe;



Techni Type	ical and fun	ctional characteristics	C38GC35V1		
	Mark S.C.		CONDENS PLUS		
Trade na	MATIC		100 35		
Efficiency	stars (dir. 92/	42/CEE)	****		
	gory to be used		G20-I2H		
Flue type			Forced, variable speed fan		
	(G20-I2H, G2		5		
	energy efficienc		A		
	er (80/60°C)(G		32,8 kW		
		ondensing)(G20-I2H)	35,8 kW		
		nominal heat input (80/60°C)(G20-12H)	97%		
		nominal heat input (50/30°C - condensing(620-12H)	106%		
	nominal consul	mption	≈3,5 Nmç/h		
	sure (G20-12H)		20 mbar		
	sure (GN)	11 - 12 - 12 - 12 - 12 - 12 - 12 - 12 -	35 mbar		
	n pressure on C		0,8 ÷ 3 bar		
	ture adjustment		30÷80°C		
		interval underfloor	15 ÷ 45°C 0,2 ÷ 8 bar		
	n pressure on n ture adjustment	ne hot water circuit	0,2 → 6 but 30 ÷ 55°C		
		=30°C (flow restrictor 121/min)	17 l/min		
	fort EN 13203	-00 C (now restrictor 120 min)	***		
	ciency class		load profile XL		
	Height (mn	1)	750		
	Width (mm)		400		
	Depth (mm)		345		
	Weight		35 kg		
ures	Pimary heat	exchanger capacity	1,81		
feat		Thermal input, output	3/4 "		
Constructive features	Connectors	Cold water input, hot water output	1/2 "		
其	222	Gas input	3/4 ″		
SIIS		ssel with membrane	8		
			ial D100/D60, Dual D80*		
Length of burnt gases connecting pipe Coaxial max 20m; Dual					
	Evacuation type B <sub>20</sub> , B <sub>20</sub> , C <sub>10</sub> , C <sub>20</sub> , C <sub>20</sub> , C <sub>10</sub> , C <sub>20</sub> ,				
	Flue temp.		≈82°C ~230VAC/50 Hz		
Elect	trical Nomina	nower	~230VAC/30112 81 W		
characteri			IP 44		
* The standar	d gas boiler is delivered	with dual coaxial kit as accessory; dual kit is delivered as accessory	on demand		

#### STAINLESS STEEL HEAT EXCHANGER:

The new condensing heat exchanger for the CONDENS PLUS 100 35 boiler is a single purpose integrated and compact heat exchanger based on a simple stainless steel coil with an oval section. The heat exchanger is composed by a combustion chamber, condensing area and an insulated metallic disk protected with silicon ceramic fiber which separates the two areas. Using single coil, included inlet/outlet connection, to produce the coil, ensure the benefits below:

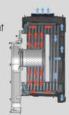
 Autocleaning - To avoid dirt and debris accumulation, especially in replacement market. Flow rate is uniformly distributed in a single pipe ensuring a proper heat transfer. Best performance in water pressure drop,





Minimum number of components;

- High efficiency and robustness Constant water speed over a long lifecycle
- Stainless Steel Excellent resistance to corrosion and easily machinable;
- Avoiding welding process



# CONDENS PLUS 100 35 WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- Condensing heat exchanger Circond Valmex (Italy);
- Circulation pump GRUNDFOS (Denmark);
- Gas valve SIT (Italy);
- O Build-in gas-air nozzle fan SIT (Italy);
- Brass hydroblock Fugas (Italy);
- Safety valve Kramer / Bitron (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH CONDENS PLUS 100 35 BOILER:

#### Product name:

STORAGE TANK BA120L-V1

SMART ROOM THERMOSTAT HT500

WIRELESS ROOM THERMOSTAT HT220S SET

**ROOM THERMOSTAT HT220S** 

CASCADE MODULE KOBER

FILTER WITH TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 6A

**OUTSIDE TEMPERATURE SENSOR N10** 

**BOILER TEMPERATURE SENSOR N10** 

COAXIAL EXHAUSTING FLUE 60/100 CT CONDENS

DUAL EXHAUSTING FLUE D80 CT CONDENS

ROOF VERTICAL EXHAUSTING FLUE 60/100 CT CONDENS

ADAPTOR FOR ROOF VERTICAL EXHAUSTING FLUE CT CONDENS

EXTENSION 0.5M 60/100 CT CONDENS

EXTENSION 1M 60/100 CT CONDENS

EXTENSION 1.5M 60/100 CT CONDENS

EXTENSION 0.5M D80 CT CONDENS

EXTENSION 1M D80 CT CONDENS

90° ELBOW 60/100 EXTENSION CT CONDENS

90° ELBOW D80 EXTENSION CT CONDENS

45° ELBOW 60/100 EXTENSION CT CONDENS













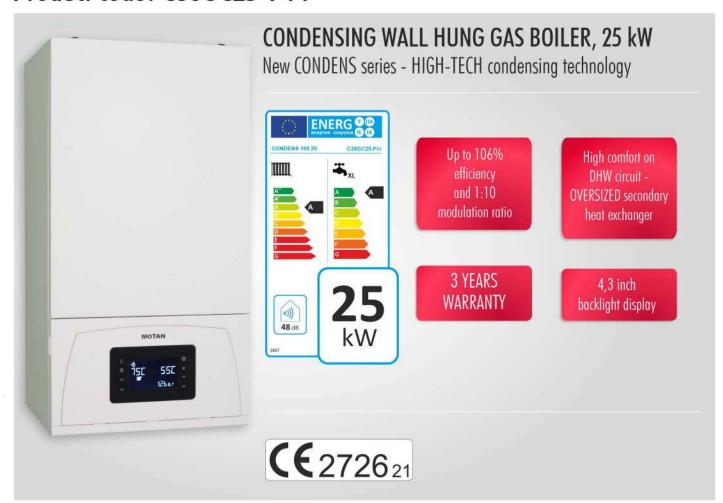




# **CONDENS** 100 25



## Product code: C38GC25-PV1

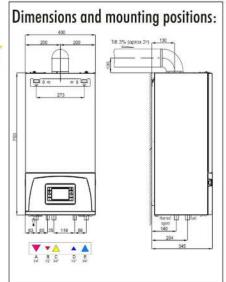


# A class efficiency-

- 4 stars  $\bigstar$   $\bigstar$   $\bigstar$   $\bigstar$  (dir. 92/42/CEE)

Domestic Hot Water comfort - 3 stars (EN 13203)

NOx CLASS 5





Front Panel

- High class MOTAN wall hung gas boiler condensing series
- New design whit 4,3 inch backlight display;
- Up to 106% efficiency and 1:10 modulation ratio;
- Friendly environment during operation releases significantly reduced amounts of NOx, CO and CO2 - Class NOx 5;
- High comfort on DHW circuit OVERSIZED secondary heat exchanger;
- Designed and build for maximum operating efficiency and economy according to the latest European legislative requirements;
- STAINLESS STEEL primary heat exchanger;
- The possibility of connecting a chronothermostat, remote control panel and/or external temperature probe;



Techni	ical and functional characteristics				
Type		C38GC25-PV1			
Trade na	me (4:- 02 (42 (CEE)	CONDENS 100 25			
	stars (dir. 92/42/CEE)				
	gory to be used	G20-I2H			
Flue type		Forced, variable speed fan			
	s (G20-I2H, G24, G25.1, G31)	5			
	energy efficiency class	A			
	er (80/60°C)(G20-12H)	25,6 kW			
Max pow	er (50/30°C - condensing)(G20-12H)	28,2 kW			
	erformance at nominal heat input (80/60°C)(G20-12H)	97%			
Output p	erformance at nominal heat input (50/30°C - condensing(G20-12H)	106%			
Max gas	nominal consumption	≈2,8 Nmc/h			
Gas press	sure (G20-12H)	20 mbar			
Gas press		35 mbar			
	n pressure on CH circuit	0,8 ÷ 3 bar			
	ture adjustment interval CH	30 ÷ 80°C			
	ture adjustment interval underfloor	15÷45°C			
	n pressure on the hot water circuit	0,2 ÷ 8 bar			
	ure adjustment interval	30 ÷ 55°C			
	r flow at $\Delta T = 30^{\circ}C$ (flow restrictor 12I/min)	13,5 l/min			
	fort EN 13203	***			
DHW etti	ciency, class	load profile XL			
	Height (mm)	750			
	Width (mm)	400			
	Depth (mm)	345			
	Weight	32 kg			
JES	Pimary heat exchanger capacity	1,41			
eatr	Thermal input, output	3/4 "			
ive i	Connectors Cold water input, hot water output	1/2 "			
red	Gas input	3/4 "			
Constructive features	Expansion vessel with membrane	81			
J		ial D100/D60, Dual D80*			
	Length of burnt gases connecting pipe Coaxial max 20m; Dual max				
	Evacuation type B <sub>10</sub> , B <sub>10</sub> , C <sub>10</sub> ,				
	Flue temp	≈80°€			
Elac	Power Naminal power	~230VAC/50 Hz			
character	, , I Holling power	81 W			
	TISTICS   Protection class d gas boiler is delivered with dual coasial kit as accessory, dual kit is delivered as accessory of	IP 44			

#### STAINLESS STEEL HEAT EXCHANGER:

The new condensing heat exchanger for the CONDENS 100 25 boiler is a single purpose integrated and compact heat exchanger based on a simple stainless steel coil with an oval section. The heat exchanger is composed by a combustion chamber, condensing area and an insulated metallic disk protected with silicon ceramic fiber which separates the two areas. Using single coil, included inlet/outlet connection, to produce the coil, ensure the benefits below:

- Autocleaning - To avoid dirt and debris accumulation, especially in replacement market. Flow rate is uniformly distributed in a single pipe ensuring a proper heat transfer. Best performance in water pressure drop;





Minimum number of components; - High efficiency and robustness - Constant

- water speed over a long lifecycle - Stainless Steel - Excellent resistance to
- corrosion and easily machinable; Avoiding welding process



#### CONDENS PLUS 100 25 WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- Condensing heat exchanger Circond Valmex (Italy);
- Circulation pump GRUNDFOS (Denmark);
- Gas valve SIT (Italy);
- O Build-in gas-air nozzle fan SIT (Italy);
- Expansion tank Zilio (Italy));
- Safety valve Kramer / Bitron (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH CONDENS 100 25 BOILER:

#### Product name:

STORAGE TANK BA120L-V1

SMART ROOM THERMOSTAT HT500

WIRELESS ROOM THERMOSTAT HT220S SET

**ROOM THERMOSTAT HT220S** 

CASCADE MODULE KOBER

FILTER WITH TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 6A

**OUTSIDE TEMPERATURE SENSOR N10** 

BOILER TEMPERATURE SENSOR N10

COAXIAL EXHAUSTING FLUE 60/100 CT CONDENS

DUAL EXHAUSTING FLUE D80 CT CONDENS

ROOF VERTICAL EXHAUSTING FLUE 60/100 CT CONDENS

ADAPTOR FOR ROOF VERTICAL EXHAUSTING FLUE CT CONDENS

EXTENSION 0.5M 60/100 CT CONDENS

EXTENSION 1M 60/100 CT CONDENS

EXTENSION 1.5M 60/100 CT CONDENS

EXTENSION 0.5M D80 CT CONDENS

EXTENSION 1M D80 CT CONDENS

90° ELBOW 60/100 EXTENSION CT CONDENS

90° ELBOW D80 EXTENSION CT CONDENS

45° ELBOW 60/100 EXTENSION CT CONDENS



















# CONDENS 050 24



# Product code: C34GV24-PV2



# B class efficency

- 4 stars \* \* \* \* \* (dir. 92/42/CEE)

**Domestic Hot Water comfort** - 3 stars 🜟 🌟 🜟

(EN 13203)

NOx CLASS 5

# Dimensions and mounting positions: C34GV24-PV2 - dimensions (mm) 255 | 143 | 153 | 186



Front Panel

- Constant and high efficiency up to 104%;
- Modulation ration 1:4;
- Available in 24kW and 28 kW variants;
- O Designed and build for maximum operating efficiency and economy - B CLASS EFFICENCY
  - 4 stars\*\*\*\* (dir. 92/42/CEE)
- Increased comfort on domestic hot water: Secondary heat exchanger oversized
  - A CLASS EFFICENCY 3 stars \*\*\* (EN 13203);
- The possibility of connecting a chronothermostat, remote control panel and/or external temperature probe;
- Control panel with LCD display that provides a advanced graphical interface, and switch keys;



Technic Type	al and func	tional characteristics	C34GV24-PV2
Trade na	me		CONDENS 050 24
	y stars (dir. 92	/42/CEE)	****
Gas type	501 9.8 0		II2H3B/P
Flue type	)		Forced, variable speed fan
Nox class	s (G20-I2H)		3
Thermal	efficiency (80)	/60°C) (G20-I2H)	97%
		'30°C - condensing)(G20-I2H)	104%
		nax.) (G20-I2H)	7 - 24 kW
	max. consump		≈2,4 Nmç/h
Rated pr	essure gas inp	ut (G20-I2H)	20 mbar
Pressure	(min/max) on	thermal circuit	0,5 ÷ 3 bar
Pressure	(min/max) on	DHW circuit	0,2 ÷ 8 bar
Energy e	fficiency class	on central heating circuit	
Tempera	ture on thermo	al circuit (for Stainless Steel heat exchanger)	45 ÷ 75°0
Tempera	ture on domes	tic hot water circuit (for Stainless Steel heat exchang	er) 40 ÷ 55°(
	er flow $\Delta T = 3$		, 12 l/mir
DHW cor	mfort - EN1320	03	***
DHW ene	ergy efficiency	class	A, XL load profile
	Height (mm	)	750
	Width (mm)		400
3	Depth (mm)		330
erisi	Weight		34 kg
Construction characteristics	Capacity mo	iin heat exchanger	1
-6		Thermal input, output	3/4"
dio	Conectors	Cold water input, hot water output	1/2 *
Struc	,	Gas input	3/4 *
5		essel with membrane	8
			oaxial D100/D60, Dual D80*
		rnt gases connecting pipe	Coaxial max 3m; Dual 5m*
	Evacuation type		C12, C128, C32, C32
		(maximum temperature)	≈60°C
Ele	ectric Input	al acusa	~230V/50 Hz
character	ictics	al power	80 W
* The heiler		ion class red with 1 m co-axial flue	IP 44



# CONDENS 050 24 WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- o Circulation pump GRUNDFOS (Denmark);
- Gas valve SIT (Italy);
- O Build-in gas-air nozzle fan SIT (Italy);
- Secondary heat exchanger CONDEVO (Italy) / SWEP (Sweden)
- Expansion tank Zilio (Italy);
- Safety valve Kramer / Bitron (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH CONDENS 050 24:

#### Product name:

STORAGE TANK BA120L-V1

SMART ROOM THERMOSTAT HT500

WIRELESS ROOM THERMOSTAT HT220S SET

**ROOM THERMOSTAT HT220S** 

CASCADE MODULE KOBER

FILTER WITH TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 6A

**OUTSIDE TEMPERATURE SENSOR N10** 

BOILER TEMPERATURE SENSOR N10

COAXIAL EXHAUSTING FLUE 60/100 CT CONDENS

DUAL EXHAUSTING FLUE D80 CT CONDENS

ROOF VERTICAL EXHAUSTING FLUE 60/100 CT CONDENS

ADAPTOR FOR ROOF VERTICAL EXHAUSTING FLUE CT CONDENS

EXTENSION 0.5M 60/100 CT CONDENS

EXTENSION 1M 60/100 CT CONDENS

EXTENSION 1.5M 60/100 CT CONDENS

EXTENSION 0.5M D80 CT CONDENS

EXTENSION 1M D80 CT CONDENS

90° ELBOW 60/100 EXTENSION CT CONDENS

90° ELBOW D80 EXTENSION CT CONDENS

45° ELBOW 60/100 EXTENSION CT CONDENS













FILTER WHIT TRANSFORMER - 3A





# CONDENS 050 28



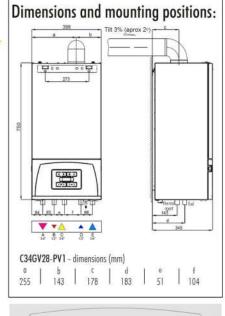
## Product code: C34GV28-PV1



# B class efficiency - 4 stars \* \* \* \* \* (dir. 92/42/CEE)

**Domestic Hot Water comfort** - 3 stars 🜟 🜟 🌟 (EN 13203)

NOx CLASS 5





Front Panel

- Constant and high efficiency up to 104%;
- Modulation ration 1:4;
- Available in 24kW and 28 kW variants;
- Designed and build for maximum operating efficiency and economy - B CLASS EFFICENCY - 4 stars\*\*\*\* (dir. 92/42/CEE);
- Increased comfort on domestic hot water: Secondary heat exchanger oversized
  - A CLASS EFFICENCY 3 stars \*\*\* (EN 13203);
- The possibility of connecting a chronothermostat, remote control panel and/or external temperature probe;
- Control panel with LCD display that provides a advanced graphical interface, and switch keys;



Techni Type	ical and fur	actional characteristics	C34GV28-PV1
Trade n	name		CONDENS 050 28
	cy stars (dir. 9	92/42/CEE)	****
Gas typ			II2H3B/P
Flue typ	эе		Forced, variable speed fan
Nox cla	ss (G20-I2H)		3
Heating	energy effici	ency class	В
		0/60°C) (G20-I2H)	97%
Therma	l efficiency (5	0/30°C - condensing)(G20-I	104%
	wer (80/60°C		27 kW
		- condensing)(G20-I2H)	29 kW
	al max. consu		≈2,97 Nmg/h
		put (G20-I2H)	20 mbar
Max. ro	ited pressure	gas input	35 mbar
	ressure gas ir		40 mbar
		on thermal circuit	$0.8 \div 3$ bar
33 6 (N. 7. 18 18 18 18 18 18 18 18 18 18 18 18 18	ature on ther		45÷75°C
		ient interval underfloor	30÷75°C
		estic hot water circuit	40÷55°C
		justment interval	35 ÷ 55°C
		=30°C (flow restrictor 12l/min)	12 l/min
	omfort - EN13 nergy efficiend		A, load profile XL
DITTI O	Height (mr		750
	Width (mn		400
tics	Depth (mn		345
teris	Weight	*	33 kg
100	Capacity m	ain heat exchanger	11
Ĕ		Thermal input, output	3/4 "
tion	Conectors	Cold water input, hot water output	1/2 "
E		Gas input	3/4 "
Construction characteristics	Expansion	vessel with membrane	81
_	Air/ gas in	coming/ outgoing flue pipe	Coaxial D100/D60, Dual D80*
		ournt gases connecting pipe	Coaxial max 3m; Dual 5m*
	Evacuation		C12, C12X, C32, C32X
-	Burnt gase	s (maximum temperature)	≈77°(
E	eristics Nomin	al power	~230V/50 Hz 83 W
characte	eristics Nomin	ion class	03 W IP 44
* The bo	piler is standard o	lelivered with 1m co-axial flue	IF 44



#### **CONDENS 050 28 WALL HUNG GAS BOILER INTEGRATE** COMPONENTS OF THE BEST QUALITY:

- Circulation pump GRUNDFOS (Denmark);
- Gas valve SIT (Italy);
- O Build-in gas-air nozzle fan SIT (Italy);
- Secondary heat exchanger CONDEVO (Italy) / SWEP (Sweden)
- Expansion tank Zilio (Italy);
- Safety valve Kramer / Bitron (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH CONDENS 050 28:

#### Product name:

STORAGE TANK BA120L-V1

SMART ROOM THERMOSTAT HT500

WIRELESS ROOM THERMOSTAT HT220S SET

**ROOM THERMOSTAT HT220S** 

CASCADE MODULE KOBER

FILTER WITH TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 6A

**OUTSIDE TEMPERATURE SENSOR N10** 

BOILER TEMPERATURE SENSOR N10

COAXIAL EXHAUSTING FLUE 60/100 CT CONDENS

**DUAL EXHAUSTING FLUE D80 CT CONDENS** 

ROOF VERTICAL EXHAUSTING FLUE 60/100 CT CONDENS

ADAPTOR FOR ROOF VERTICAL EXHAUSTING FLUE CT CONDENS EXTENSION 0.5M 60/100 CT CONDENS

EXTENSION 1M 60/100 CT CONDENS

EXTENSION 1.5M 60/100 CT CONDENS

EXTENSION 0.5M D80 CT CONDENS

EXTENSION 1M D80 CT CONDENS

90° ELBOW 60/100 EXTENSION CT CONDENS

90° ELBOW D80 EXTENSION CT CONDENS

45° ELBOW 60/100 EXTENSION CT CONDENS













FILTER WHIT TRANSFORMER - 3A









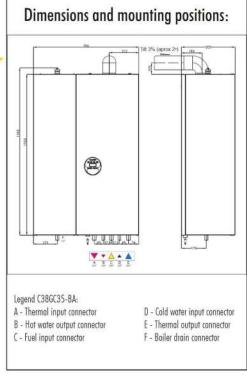
# Product code: C38GC35-BA



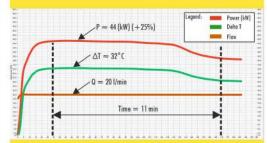


Domestic Hot Water comfort - 3 stars (EN 13203)

### NOx CLASS 5



#### **DHW SUPERIOR COMFORT**



The boiler, in operation on DHW circuit, at a constant flow of 201 / min and a  $\Delta T = 32^{\circ}C$  - has a maximum power of 44kW for 11min (more by 25% - compared to a 35kW condensing boiler, this ADVANTAGE is due to the built-in 40 liters stainless steel storage tank).

- O The top model in the range of MOTAN boilers
  DHW superior comfort due to the built-in 40 liters STAINLESS
  STEEL storage tank:
- Storage tank temperature losses are considerably reduced, due to the use of high quality insulation, from polyurethane foam;
- O Friendly environment during operation releases significantly reduced amounts of NOx, CO and CO<sub>2</sub> Class NOx 5;
- Designed and build for maximum operating efficiency and economy according to the latest European legislative requirements;
- STAINLESS STEAL primary heat exchanger;



#### Technical and functional characteristics

Type Trade name Efficiency stars (dir. 92/42/CEE)			C38GC35-BA MKDENS35 BA PLUS ****
. Noneman transport	ory to be used	(ACL)	G20-I2H
Flue type	uly to ue useu		Forced, variable speed fan
	(G20-I2H, G24,	625 1 631)	Forced, variable speed for
	nergy efficiency		Ā
		(min./max.) (G20-I2H)	3.5 - 33.9 kW
	er (80/60°C)(G2		32.8 kW
		ndensing)(G20-I2H)	35.8 kW
		minal heat input at (80/60°C)(G20-1:	5505000
		minal heat input (50/30°C - condens	
	nominal consum		≈3.5 Nmc/h
	ure (G20-12H)	piloli	20 mbar
Gas press			35 mbar
	pressure on CH	circuit	0,8 ÷ 3 bar
	ure adjustment i		30 ÷ 80°C
		nterval underfloor	15÷45°C
	perature adjustn		30÷60°C
		80°C (INSTANT mode)	18.5 l/min
		at $\Delta T = 30^{\circ}$ C (for approx. 10 min,	
	ort EN 13203		***
DHW effic	iency class		A, load profile XL
Stainless	steel storage tar	k volume	40 liters
Storage to	ınk water regeni	eration time	20 min
	Height (mm)		1100
	Width (mm)		756
	Depth (mm)		384
JA.	Weight (with	out packaging)	86 ka
Fact	Pimary heat e	exchanger capacity	1,81
SUO		Thermal input, output	3/4"
ţiġ	Connectors	Cold water input, hot water output	1/2*
erris		Gas input	3/4 ~
Caracteristici constructive	Expansion ves	sels with membrane / DHW	81/21
J	Air/ gas incon	ning/outgoing flue pipe	Coaxial D100/D60, Dual D80*
	Length of burn	nt gases connecting pipe	Coaxial max 20m; Dual max 20m*
	Evacuation type		Box, Box, Cox, Cox, Cox, Cox, Cox, Cox, Cox, C
	Flue temp.		≈59°C
El-	Power		~230V/50 Hz
characte	trical Nomina		81 W
	Profection	n class ed with dual coaxial kit as accessory; dual kit is del	IP 40



#### MKDENS35-BA PLUS WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- Condensing heat exchanger Circond Valmex (Italy);
- STAINLESS STEEL 40 liters STORAGE TANK with high quality PU insulation;
- Circulation pump GRUNDFOS (Denmark);
- Gas valve SIT (Italy);
- Build-in gas-air nozzle fan SIT (Italy):
- Expansion tank Zilio (Italy));
- Safety valve Kramer / Bitron (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH MKDENS35-BA PLUS:

#### Product name:

STORAGE TANK BA120L-V1 SMART ROOM THERMOSTAT HT500 WIRELESS ROOM THERMOSTAT HT220S SET

**ROOM THERMOSTAT HT220S** CASCADE MODULE KOBER

FILTER WITH TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 6A

**OUTSIDE TEMPERATURE SENSOR N10** 

**BOILER TEMPERATURE SENSOR N10** 

COAXIAL EXHAUSTING FLUE 60/100 CT CONDENS

DUAL EXHAUSTING FLUE D80 CT CONDENS

ROOF VERTICAL EXHAUSTING FLUE 60/100 CT CONDENS

ADAPTOR FOR ROOF VERTICAL EXHAUSTING FLUE CT CONDENS

EXTENSION 0.5M 60/100 CT CONDENS

EXTENSION 1M 60/100 CT CONDENS

EXTENSION 1.5M 60/100 CT CONDENS

EXTENSION 0.5M D80 CT CONDENS

EXTENSION 1M D80 CT CONDENS

90° ELBOW 60/100 EXTENSION CT CONDENS

90° ELBOW D80 EXTENSION CT CONDENS

45° ELBOW 60/100 EXTENSION CT CONDENS













FILTER WHIT TRANSFORMER - 3A





# CONDENS 100 CH1



# Product code: C38GC35-CH1V1

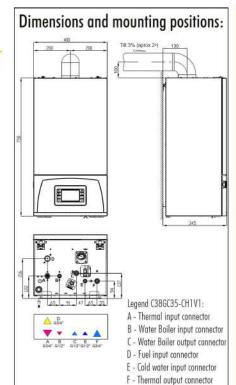


# A class efficiency

Condensing boiler only for heating

3-way valve included

NOx CLASS 5



- The top model in the range of MOTAN boilers;
- Friendly environment during operation releases significantly reduced amounts of NOx, CO and CO2 - Class NOx 5;
- Designed and build for maximum operating efficiency and economy according to the latest European legislative requirements - low energy pump;
- Evaluated pressure sensor provides intelligent protection against overpressure or low pressure
- The possibility of connecting a chrono-thermostat, remote control panel and/or external temperature probe;
- Maximum efficiency: the boiler operates in a condensing system EFFICIENCY CLASS - 4 stars \*\*\*\* (dir. 92/42/EEC);
- O STAINLESS STEEL primary heat exchanger;
- Installation ventilation function the circulation pump works on request outside the combustion cycle in order to easily ventilate the installation
- Control panel with LCD display that provides advanced graphical interface, and switch keys;



#### Technical and functional characteristics

Туре			C38GC35-CH1V1	
Trade na	M275		CONDENS 100 CH1	
	y stars (dir. 92/		****	
	gory to be used		G20-I2H	
Flue type	e		ed, variable speed fan	
		G24, G25.1, G31)	5	
	energy efficiend		Α	
Min/Ma	x CH power (C	G20-I2H)	3.5 - 33.9kW	
Max por	wer(80/60°C)	(G20-I2H)	32,8 kW	
		- condensing)(G20-I2H)	35,8 kW	
Output	performance a	t nominal heat input (80/60°C)(G20-I2H	97%	
Output	performance a	t nominal heat input (50/30°C - condensing(G2	0-I2H)) 106%	
Max ga:	s nominal con	sumption	≈3,59 Nmc/h	
Gas pres	ssure(G20-I2F	1)	20 mbar	
Gas pres	ssure (GN)		35 mbar	
	ım pressure or		0,8÷3 bar	
		ent interval CH	30 ÷ 80°C	
Tempero	ature adjustme	ent interval underfloor	15 ÷ 45°C	
	Height (mn	n)	750	
	Width (mm		400	
	Depth (mn		345	
	Weight	<i>M</i>	36 kg	
SS		exchanger capacity	1,8 Ĭ	
윰	-	Thermal input, output	3/4 "	
/e fe	Connectors	Cold water input, hot water output	1/2 "	
üţ	38-970/000 7800/00	Gas input	3/4 "	
Constructive features	Expansion v	essel with membrane	81	
3	Air/ gas inco	oming/outgoing flue pipe Coaxial D1	00/D60, Dual D80*	
	Length of bu	m; Dual max 20m*		
	Tip evacua			
		AX (60-80°C)	≈69°C	
ERS	. Power	100	~230VAC/50 Hz 81 W	
	Electrical Nominal power			
	Holeci	ion class with dual coaxial kit as accessary; dual kit is delivered as accessary on demand	IP 44	

#### STAINLESS STEEL HEAT EXCHANGER:

The new condensing heat exchanger for the CONDENS 100 Ch1 boiler is a single purpose integrated and compact heat exchanger based on a simple stainless steel coil with an oval section. The heat exchanger is composed by a combustion chamber, condensing area and an insulated metallic disk protected with silicon ceramic fiber which separates the two areas. Using single coil, included inlet/outlet connection, to produce the coil, ensure the benefits

- Autocleaning - To avoid dirt and debris accumulation, especially in replacement market. Flow rate is uniformly distributed in a single pipe ensuring a proper heat transfer. Best performance in water pressure drop;





Minimum number of components;

- High efficiency and robustness Constant water speed over a long lifecycle
- Stainless Steel Excellent resistance to corrosion and easily machinable:
- Avoiding welding process



#### CONDENS 100 CH1 WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- O Condensing heat exchanger Circond Valmex (Italy):
- Circulation pump GRUNDFOS (Denmark);
- Gas valve SIT (Italy);
- Build-in gas-air nozzle fan SIT (Italy);
- Brass hydroblock Fugas (Italy);
- Safety valve Kramer / Bitron (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH CONDENS 100 CH1:

#### Product name:

DHW STORAGE TANK BP120L-V1 SMART ROOM THERMOSTAT HT500

WIRELESS ROOM THERMOSTAT HT220S SET

**ROOM THERMOSTAT HT220S** 

CASCADE MODULE KOBER

FILTER WITH TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 6A

**OUTSIDE TEMPERATURE SENSOR N10** 

**BOILER TEMPERATURE SENSOR N10** 

COAXIAL EXHAUSTING FLUE 60/100 CT CONDENS

DUAL EXHAUSTING FLUE D80 CT CONDENS

ROOF VERTICAL EXHAUSTING FLUE 60/100 CT CONDENS

ADAPTOR FOR ROOF VERTICAL EXHAUSTING FLUE CT CONDENS

EXTENSION 0.5M 60/100 CT CONDENS

EXTENSION 1M 60/100 CT CONDENS

EXTENSION 1.5M 60/100 CT CONDENS

EXTENSION 0.5M D80 CT CONDENS

EXTENSION 1M D80 CT CONDENS

90° ELBOW 60/100 EXTENSION CT CONDENS

90° ELBOW D80 EXTENSION CT CONDENS

45° ELBOW 60/100 EXTENSION CT CONDENS



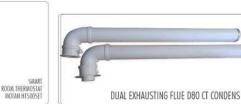


HT220S - ROOM THERMOSTAT











CASCADE MODULE KÖBER





# Product code: C38GC35-CH2V1

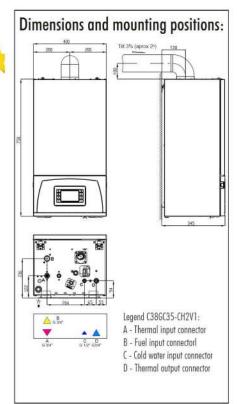


# A class efficiency

Condensing boiler only for heating

Without 3-way valve

NOx CLASS 5



- O The top model in the range of MOTAN boilers;
- Friendly environment during operation releases significantly reduced amounts of NOx, CO and CO2 - Class NOx 5;
- Designed and build for maximum operating efficiency and economy according to the latest European legislative requirements - low energy pump;
- Evaluated pressure sensor provides intelligent protection against overpressure or low pressure
- The possibility of connecting a chrono-thermostat, remote control panel and/or external temperature probe;
- Maximum efficiency: the boiler operates in a condensing system EFFICIENCY CLASS - 4 stars \*\*\*\*\* (dir. 92/42/EEC);
- O STAINLESS STEEL primary heat exchanger;
- Installation ventilation function the circulation pump works on request outside the combustion cycle in order to easily ventilate the installation
- Control panel with LCD display that provides advanced graphical interface, and switch keys;



#### Technical and functional characteristics

Type Trade nam	е		C38GC45V1 CONDENS 100 45 CH2
	stars (dir. 92/	42/CFF)	****
- Automit communicacy funds	ory to be used	, / / / / / / / / / / / / / / / / / / /	G20-I2H
Flue type	// 10 BC 0300		Forced, variable speed fan
	(G20-I2H, (	G24, G25.1, G31)	5
	nergy efficiency		Ā
		, 20-12H (G20-12H)	3.5 - 33.9kW
Max powe	er(80/60°C)	(G20-I2H)	45 kW
Max powe	er (50/30°C	- condensing)(G20-I2H)	50 kW
Output pe	erformance o	t nominal heat input (80/60°C)(G20-I2H	97%
Output pe	erformance o	t nominal heat input (50/30°C - condens	ing(G20-I2H)) 106%
	nominal con		4.97Nmc/h
Gas pressi	ure(G20-I2H	()	20 mbar
Gas pressi			35 mbar
	pressure or		0,8÷3 bar
		ent interval CH	30 ÷ 80°C
Temperati	ure adjustm	ent interval underfloor	15÷45°C
	Height (mr	n)	788
	Width (mm		400
	Depth (mr		372
	Weight	*	35 kg
89		exchanger capacity	1,41
of pe		Thermal input, output	1
Ve	Connectors	Cold water input	1/2 "
nd.		Gas input	3/4 "
Constructive features	Expansion v	essel with membrane	81
0		oming/outgoing flue pipe Coax	ial D100/D60, Dual D80*
			nax 20m; Dual max 20m*
	Tip evacua		$\zeta_{0},\zeta_{0},\zeta_{0},\zeta_{0},\zeta_{0},\zeta_{1},\zeta_{2},\zeta_{0},\zeta_{0},\zeta_{0},\zeta_{0},\zeta_{0}$
		AX (60-80°C)	≈69°C
Electr	Power	Ĭ	~230VAC/50 Hz
characteris	WORRING	al power ion class	81 W IP 44
* The standard o	1,10,000	with dual coaxial kit as accessory; dual kit is delivered as accessory on d	

#### STAINLESS STEEL HEAT EXCHANGER:

The new condensing heat exchanger for the CONDENS 100 CH2 boiler is a single purpose integrated and compact heat exchanger based on a simple stainless steel coil with an oval section. The heat exchanger is composed by a combustion chamber, condensing area and an insulated metallic disk protected with silicon ceramic fiber which separates the two areas. Using single coil, included inlet/outlet connection, to produce the coil, ensure the benefits

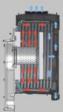
- Autocleaning - To avoid dirt and debris accumulation, especially in replacement market. Flow rate is uniformly distributed in a single pipe ensuring a proper heat transfer. Best performance in water pressure drop;





Minimum number of components;

- High efficiency and robustness Constant water speed over a long lifecycle
- Stainless Steel Excellent resistance to corrosion and easily machinable:
- Avoiding welding process



#### CONDENS 100 45 CH2 WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- Condensing heat exchanger Circond Valmex (Italy):
- Circulation pump GRUNDFOS (Denmark);
- Gas valve SIT (Italy);
- O Build-in gas-air nozzle fan SIT (Italy);
- O Brass hydroblock Fugas (Italy);
- Safety valve Kramer / Bitron (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH CONDENS 100 CH2:

#### Product name:

DHW STORAGE TANK BP120L-V1 SMART ROOM THERMOSTAT HT500

WIRELESS ROOM THERMOSTAT HT220S SET

**ROOM THERMOSTAT HT220S** 

CASCADE MODULE KOBER

FILTER WITH TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 6A

**OUTSIDE TEMPERATURE SENSOR N10** 

**BOILER TEMPERATURE SENSOR N10** 

COAXIAL EXHAUSTING FLUE 60/100 CT CONDENS

DUAL EXHAUSTING FLUE D80 CT CONDENS

ROOF VERTICAL EXHAUSTING FLUE 60/100 CT CONDENS

ADAPTOR FOR ROOF VERTICAL EXHAUSTING FLUE CT CONDENS

EXTENSION 0.5M 60/100 CT CONDENS

EXTENSION 1M 60/100 CT CONDENS

EXTENSION 1.5M 60/100 CT CONDENS

EXTENSION 0.5M D80 CT CONDENS

EXTENSION 1M D80 CT CONDENS

90° ELBOW 60/100 EXTENSION CT CONDENS

90° ELBOW D80 EXTENSION CT CONDENS

45° ELBOW 60/100 EXTENSION CT CONDENS



















# CONDENS 100 45 CH2



Product code: C38GC45V1

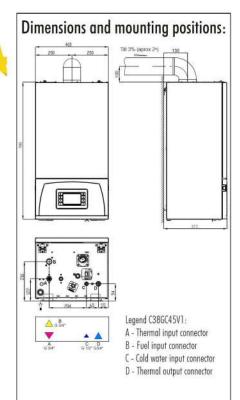


# A class efficiency

Condensing boiler only for heating

Without 3-way valve

NOx CLASS 5



- O The top model in the range of MOTAN boilers;
- Friendly environment during operation releases significantly reduced amounts of NOx, CO and CO2 - Class NOx 5;
- Designed and build for maximum operating efficiency and economy according to the latest European legislative requirements - low energy pump;
- The possibility of connecting IN CASCADE MODE, remote control panel and/or external temperature probe;
- Maximum efficiency: the boiler operates in a condensing system EFFICIENCY CLASS - 4 stars \*\*\*\* (dir. 92/42/EEC);
- STAINLESS STEEL primary heat exchanger;
- Installation ventilation function the circulation pump works on request outside the combustion cycle in order
- to easily ventilate the installation
   Control panel with LCD display that provides advanced graphical interface, and switch keys;



#### Technical and functional characteristics

Туре			C38GC45V1
Trade na	me		CONDENS 100 45 CH2
Efficienc	y stars (dir. 92/	/42/CEE)	***
	gory to be used		G20-I2H
Flue type			Forced, variable speed fan
		G24, G25.1, G31)	5
	energy efficien		A
Min/Ma	x CH power (0	G20-I2H (G20-I2H)	3.5 - 33.9kW
Max pov	wer(80/60°C)	(G20-I2H)	45 kW
Мах роч	wer (50/30°C	- condensing)(G20-I2H)	50 kW
Output p	performance c	nt nominal heat input (80/6	60°C)(G20-I2H 97%
			30°C - condensing(G20-I2H)) 106%
	s nominal con		4.97Nmc/h
	ssure(G20-I2F	1)	20 mbar
	ssure (GN)	60.	35 mbar
	m pressure or		0,8 ÷ 3 bar
		ent interval CH	30 ÷ 80°C
lempero		ent interval underfloor	15÷45°C
	Height (mr		788
	Width (mm		400
	Depth (mr	n)	372
	Weight	17	37 kg
ures	Pimary hea	t exchanger capacity	1,41
feat		Thermal input, output	1
five	Connectors		1/2 "
Constructive features		Gas input	3/4"
Cons	Expansion vessel with membrane		8
353		oming/outgoing flue pipe	Coaxial D100/D60, Dual D80*
		rnt gases connecting pipe	Coaxial max 20m; Dual max 20m*
Tip evacuare Flue temp MAX (60-80°C)			C13, C131, C13, C331, C43, C431, C83, C831, C83, C831 ≈59°C
	Power	MAN (00-00 C)	≈ 59 C ~230VAC/50 Hz
	ctrical Nomin	al power	180 W
characte		ion class	IPX4D

#### STAINLESS STEEL HEAT EXCHANGER:

The new condensing heat exchanger for the CONDENS 100 45 CH2 boiler is a single purpose integrated and compact heat exchanger based on a simple stainless steel coil with an oval section. The heat exchanger is composed by a combustion chamber, condensing area and an insulated metallic disk protected with silicon ceramic fiber which separates the two areas. Using single coil, included inlet/outlet connection, to produce the coil, ensure the benefits below:

- Autocleaning - To avoid dirt and debris accumulation, especially in replacement market. Flow rate is uniformly distributed in a single pipe ensuring a proper heat transfer. Best performance in water pressure drop;





Minimum number of components;

- High efficiency and robustness Constant water speed over a long lifecycle
- Stainless Steel Excellent resistance to corrosion and easily machinable;
- Avoiding welding process



#### CONDENS 100 45 CH2 WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- Condensing heat exchanger Circond Valmex (Italy):
- Circulation pump GRUNDFOS (Denmark);
- Gas valve SIT (Italy);
- O Build-in gas-air nozzle fan SIT (Italy);
- O Brass hydroblock Fugas (Italy);
- Safety valve Kramer / Bitron (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH CONDENS 100 45 CH2:

#### Product name:

DHW STORAGE TANK BP120L-V1 SMART ROOM THERMOSTAT HT500

WIRELESS ROOM THERMOSTAT HT220S SET

\* The standard gas boiler is delivered with dual cooxial kit as accessory; dual kit is delivered as accessory on demand

**ROOM THERMOSTAT HT220S** 

CASCADE MODULE KOBER

FILTER WITH TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 6A

**OUTSIDE TEMPERATURE SENSOR N10** 

**BOILER TEMPERATURE SENSOR N10** 

COAXIAL EXHAUSTING FLUE 60/100 CT CONDENS

DUAL EXHAUSTING FLUE D80 CT CONDENS

ROOF VERTICAL EXHAUSTING FLUE 60/100 CT CONDENS

ADAPTOR FOR ROOF VERTICAL EXHAUSTING FLUE CT CONDENS

EXTENSION 0.5M 60/100 CT CONDENS

EXTENSION 1M 60/100 CT CONDENS

EXTENSION 1.5M 60/100 CT CONDENS

EXTENSION 0.5M D80 CT CONDENS

EXTENSION 1M D80 CT CONDENS

90° ELBOW 60/100 EXTENSION CT CONDENS

90° ELBOW D80 EXTENSION CT CONDENS

45° ELBOW 60/100 EXTENSION CT CONDENS













FILTER WHIT TRANSFORMER - 3A

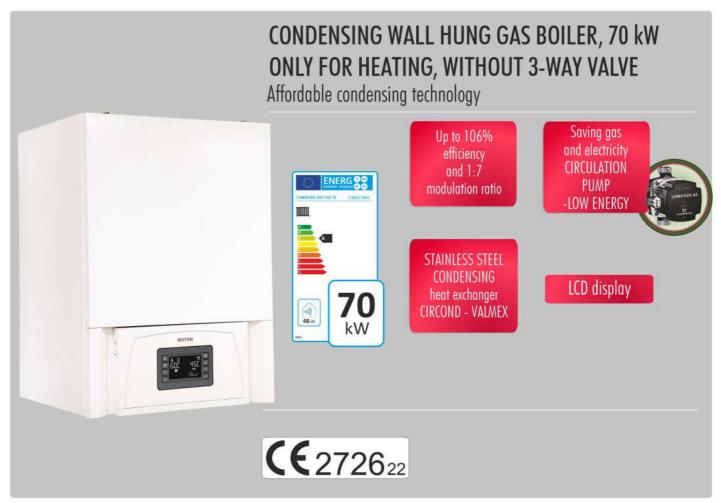




# **CONDENS 100 CH2 70**



Product code: C38GC70V1

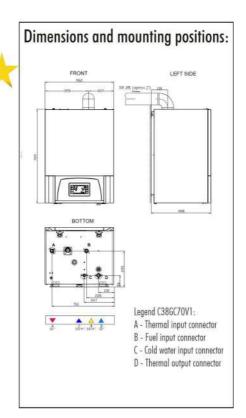


# A class efficiency

Condensing boiler only for heating

Without 3-way valve

NOx CLASS 5



- O The top model in the range of MOTAN boilers;
- Friendly environment during operation releases significantly reduced amounts of NOx, CO and CO2 - Class NOx 5;
- Designed and build for maximum operating efficiency and economy according to the latest European legislative requirements - low energy pump;
- The possibility of connecting IN CASCADE MODE, remote control panel and/or external temperature probe;
- Maximum efficiency: the boiler operates in a condensing system EFFICIENCY CLASS - 4 stars \*\*\*\*\* (dir. 92/42/EEC);
- O STAINLESS STEEL primary heat exchanger;
- Installation ventilation function the circulation pump works on request outside the combustion cycle in order
- to easily ventilate the installation
   Control panel with LCD display that provides advanced graphical interface, and switch keys;



#### Technical and functional characteristics

Туре			C38GC70V
Trade na			CONDENS 100 CH2 70
	/ stars (dir. 92,		***
	gory to be used	1	II2H3B/I
Flue type			Forced, variable speed
		G24, G25.1, G31)	
Heating	energy efficien	cy class	
Max por	wer(80/60°C)	(G20-I2H)	69 kW
Max por	wer (50/30°C	- condensing)(G20-I2H)	72 kW
Output	performance o	at nominal heat input (80/6	.0°C)(G20-I2H 97,1%
		at nominal heat input (50/3	
Max gas	s nominal cor	sumption	≈7.46 mc/l
Gas pres	sure(G20-I2	H)	20 mba
	ssure (GN)	75.00 Pt. 01	35 mba
	m pressure o		0,8 ÷ 3 ba 30 ÷ 80°0
		ent interval CH	
rempero		ent interval underfloor	15÷45°(
	Height (m		765
	Width (mn		562
	Depth (mi	m)	488
200	Weight		60 kg
bires	Pimary hea	t exchanger capacity	7,5
_B	Connectors	Thermal input, output	2/4
tive.	Connectors	Cold water input	3/4
Constructive features		Gas input	3/4
Con	Length of be Tip evacua	oming/ outgoing flue pipe urnt gases connecting pipe re NAX (60-80°C)	Coaxial D80/D125 min. 1 m - max. 20n  Dual D80/D80 min. 1 m - max. 5 n  C13, C134, C34, C34, C44, C44, C45, C46, C47, C47  ≈60°(
TI.	Power	£	~230V/50 Hz

#### STAINLESS STEEL HEAT EXCHANGER:

The new condensing heat exchanger for the CONDENS 100 CH2 70 boiler is a single purpose integrated and compact heat exchanger based on a simple stainless steel coil with an oval section. The heat exchanger is composed by a combustion chamber, condensing area and an insulated metallic disk protected with silicon ceramic fiber which separates the two areas. Using single coil, included inlet/outlet connection, to produce the coil, ensure the benefits below:

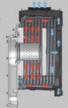
- Autocleaning - To avoid dirt and debris accumulation, especially in replacement market. Flow rate is uniformly distributed in a single pipe ensuring a proper heat transfer. Best performance in water pressure drop;





Minimum number of components;

- High efficiency and robustness Constant water speed over a long lifecycle
- Stainless Steel Excellent resistance to corrosion and easily machinable:
- Avoiding welding process



#### CONDENS 100 CH2 70 WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- Condensing heat exchanger Circond Valmex (Italy):
- Circulation pump GRUNDFOS (Denmark);
- O Gas valve SIT (Italy);
- O Build-in gas-air nozzle fan SIT (Italy);
- Safety valve Kramer / Bitron (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH CONDENS 100 CH2 70:

#### Product name:

characteristics | Protection class

Nominal power

Electrical

DHW STORAGE TANK BP120L-V1 SMART ROOM THERMOSTAT HT500

WIRELESS ROOM THERMOSTAT HT220S SET

\* The standard gas boiler is delivered with dual coaxial kit as accessory; dual kit is delivered as accessory on demand

**ROOM THERMOSTAT HT220S** 

CASCADE MODULE KOBER

FILTER WITH TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 3A

FILTER WITHOUT TRANSFORMER - 6A

**OUTSIDE TEMPERATURE SENSOR N10** 

**BOILER TEMPERATURE SENSOR N10** 

COAXIAL EXHAUSTING FLUE 60/100 CT CONDENS

DUAL EXHAUSTING FLUE D80 CT CONDENS

ROOF VERTICAL EXHAUSTING FLUE 60/100 CT CONDENS

ADAPTOR FOR ROOF VERTICAL EXHAUSTING FLUE CT CONDENS

EXTENSION 0.5M 60/100 CT CONDENS

EXTENSION 1M 60/100 CT CONDENS

EXTENSION 1.5M 60/100 CT CONDENS

EXTENSION 0.5M D80 CT CONDENS

EXTENSION 1M D80 CT CONDENS

90° ELBOW 60/100 EXTENSION CT CONDENS

90° ELBOW D80 EXTENSION CT CONDENS

45° ELBOW 60/100 EXTENSION CT CONDENS

















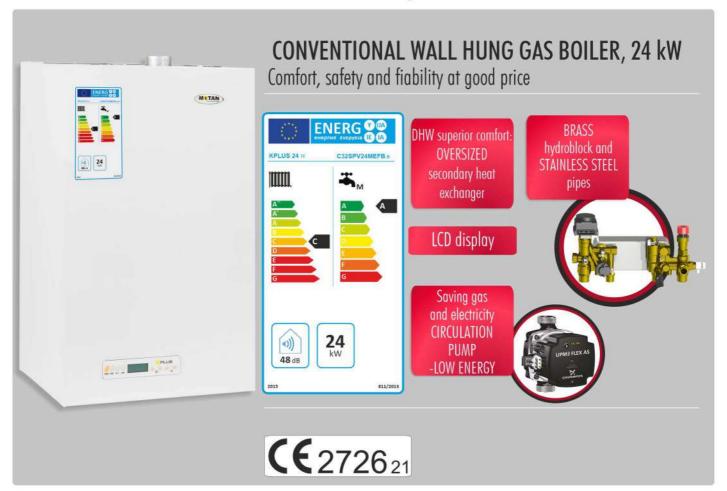








# Product code: C32SPV24MEFB-B-ERP / C32SPV24MEFBV3



Monothermal secondary heat exchanger for DHW

Efficiency: 93%

Compact size

Forced draft

# Dimensions and mounting positions: 436 A 36 A 325 Dimensions (mm): a - 231 mm b - 205 mm c - 145 mm d - 107 mm e - 176 mm f - 306 mm E - Thermal output connector E - Thermal output connector E - Thermal output connector

#### **CLIENT ADVANTAGES:**

- Designed and build for maximum operating efficiency and economy - C CLASS EFFICENCY - 3 stars\*\*\* (dir. 92/42/CEE)
- O DHW Increased comfort: classified 2 stars \*\*

  (En13203), respectively class A (regulation 811-814 / 2013 for implementation Eco-design directive (ERP directive) 2009/125 / EC) on the DHW comfort

#### SAFETY FEATURES

- Overpressure safety valve protects the gas boiler at pressures higher than 3 bar;
- O Water temperature sensor in the heating circuit
- Air pressure switch that detects no exhaust flue gases;
- O Overheating safety thermostat for the heat exchanger;
- Electronic module of control and command;
- Self-diagnostic performant system;
- Antifreeze performant system;
- O Chalk deposits prevention system;
- Antibloking pump system with action every 24h;



Technico	al and functi	ional characteristics	
Туре			C32SPV24MEFB-B-ERP
Trade name			C32SPV24MEFBV3 KPLUS TF
Efficiency stars (dir. 92/42/CEE)			***
Gas type	siais (am 72)	,,	II2H3B/P, I2H, I2E+, II2ELL3B/P, II2HS3B/P
Flue type			Forced
	(G20-I2H)		4
	efficiency (G20	-I2H)	93%
		ax.) (G20-I2H)	7,4 - 23,2 kW
	max. consumpt		≈2,3 Nmc/h
	ssure gas inpu		20 mbar
	min/max) on t		$0,5 \div 3$ bar
	min/max) on [		0,2 ÷ 8 bar
		n central heating circuit	C
	ure on thermal		30 ÷ 80°C
		circuit for underfloor system	15÷45°€
10		ic hot water circuit	35÷55°€
	flow $\triangle T = 30$		12 l/min
DHW comfort - EN13203			***
DHW energy efficiency class		luss	A
	Height (mm)		700
	Wjdth (mm)		436
S	Depth (mm)		306
isi;	Weight		32 kg
icter	Capacity main heat exchanger		11
pa	Conactors	Thermal input, output	3/4 "
5	Conectors	Cold water input, hot water output	1/2 "
Construction characteristics		Gas input	3/4 ″
onst	Expansion vessel with membrane		81
0	Air/ gas incoming/ outgoing flue pipe		Coaxial D100/D60, Dual D80*
	Length of burnt gases connecting pipe		Coaxial max 3m; Dual 5m*
	Evacuation type  Purat gases (maximum temporature)		C12, C12, C11, C12, C12, C12, C12, C12,
Burnt gases (maximum temperature)		пилипин тетирегитите)	≈150 °C ~230V/50 Hz
Electric Mamin		power	~250V/50 Hz 82 W
characteri	istics Protection		IP 40
The boiler i	is standard, delivere	ed with 1m co-axial flue	25.32



# KPLUS WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- Circulation pump GRUNDFOS (Denmark);
- O Gas valve SIT (Italy);
- O Burner WORGAS (Italy);
- O Exhaust fan ELICA (Italy);
- O Primary heat exchanger VALMEX (Italy)
- Expansion vessel ZILIO (Italy);
- o Ignition transformer ANSTOSS (Austria)
- O Safety valve KRAMER (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH KPLUS TF

#### Product name: STORAGE TANK BA120L-V1 SMART ROOM THERMOSTAT HT500 WIRELESS ROOM THERMOSTAT HT220S SET **ROOM THERMOSTAT HT220S** CASCADE MODULE KOBER FILTER WITH TRANSFORMER - 3A FILTER WITHOUT TRANSFORMER - 3A FILTER WITHOUT TRANSFORMER - 6A **OUTSIDE TEMPERATURE SENSOR N10 BOILER TEMPERATURE SENSOR N10** KIT D.60/100 CT NORMALE AMTK 700507 DUAL KIT WITH D80 CT ATMOSPHORE ADAPTER. VERTICAL KIT 60/100 ROOF CT ATMOSF. VERTICAL KIT COAXIAL CT ADAPTER ATMOSF VERTICAL KIT + ADAPTER + REC CT NORMAL 71MN71213 EXTENSION 0.5M 60/100 CT ATMOS EXTENSION 1M 60/100 CT ATMOS EXTENSION 1.5M 60/100 CT ATMOS EXTENSION 0.5M D80 CT ATMOS EXTENSION 1M D80 CT ATMOS 90° ELBOW 60/100 EXTENSION CT ATMOS 90° ELBOW D80 EXTENSION CT ATMOS 45° ELBOW 60/100 EXTENSION CT ATMOS













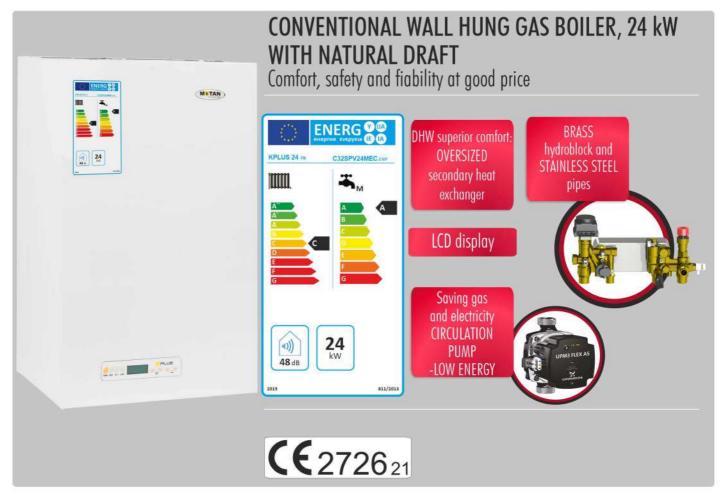








# Product code: C32SPV24MEC-ERP

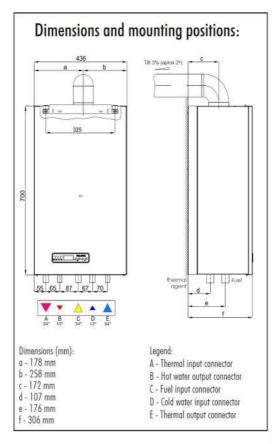


Monothermal secondary heat exchanger for DHW

Efficiency: 93%

Compact size

Natural draft



#### CLIENT ADVANTAGES:

- Designed and build for maximum operating efficiency and economy - C CLASS EFFICENCY - 3 stars\*\*\* (dir. 92/42/CEE)
- DHW Increased comfort: classified 2 stars \*\*
   (En13203), respectively class A (regulation 811-814 / 2013 for implementation Eco-design directive (ERP directive) 2009/125 / EC) on the DHW comfort

#### SAFETY FEATURES

- O Overpressure safety valve protects the gas boiler at pressures higher than 3 bar;
- O Water temperature sensor in the heating circuit
- Air pressure switch that detects no exhaust flue gases;
- Overheating safety thermostat for the heat exchanger;
- O Electronic module of control and command;
- Self-diagnostic performant system;
- O Antifreeze performant system;
- O Chalk deposits prevention system;
- O Antibloking pump system with action every 24h;



Technic	al and funct	ional characteristics	
Туре			C32SPV24MEC-ERP
Trade na			KPLUS TN
fficiency	stars (dir. 92/	42/CEE)	**
Gas type			II2H3B/P, I2H, I2E+, II2ELL3B/P, II2HS3B/P
lue type			Natural
Nox class (G20-I2H)			2
	efficiency (G20		93%
		ax.) (G20-I2H)	8,5 - 23,3 kW
	max. consump		≈2,4 Nmc/h
	essure gas inpu		20 mbar
Pressure (min/max) on thermal circuit			$0,5 \div 3$ bar
	(min/max) on		$0.2 \div 8$ bar
		n central heating circuit	C
	ture on therma		30÷80°C
		circuit for underfloor system	15÷45°C
Temperature on domestic hot water circuit			35÷55°C
	r flow $\triangle T = 3$		12 Vmin
DHW comfort - EN13203			**
DHW energy efficiency class		lass	A
	Height (mm)		700
	Width (mm)		436
	Depth (mm)		306
if.	Weight		28 kg
teris	Capacity main heat exchanger		11
31.00		Thermal input, output	3/4 "
-5	Conectors	Cold water input, hot water output	1/2 ″
Ę.		Gas input	3/4 ″
Construction characteristics	Expansion vessel with membrane		81
5	Air/ gas incoming/ outgoing flue pipe		D125
	Length of burnt gases connecting pipe		Coaxial max 3m; Dual 5m*
	Evacuation type		Bu
	Burnt gases (maximum temperature)		≈138°C
ri	Input		~230V/50 Hz
tı haracter	ectric Nominal power		72 W
muruciei	Protection class		IP 40



# KPLUS TN WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- O Circulation pump GRUNDFOS (Denmark);
- o Gas valve SIT (Italy);
- O Burner WORGAS (Italy);
- O Primary heat exchanger VALMEX (Italy)
- Expansion vessel ZILIO (Italy);
- O Brass hydroblock Fugas (Italy);
- O Safety valve KRAMER (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH KPLUS TN

# Product name: STORAGE TANK BA120L-V1 SMART ROOM THERMOSTAT HT500 WIRELESS ROOM THERMOSTAT HT220S SET ROOM THERMOSTAT HT220S CASCADE MODULE KOBER FILTER WITH TRANSFORMER - 3A FILTER WITHOUT TRANSFORMER - 3A FILTER WITHOUT TRANSFORMER - 6A OUTSIDE TEMPERATURE SENSOR N10 BOILER TEMPERATURE SENSOR N10



















# Product code: C32SPV24MEFB-PV1

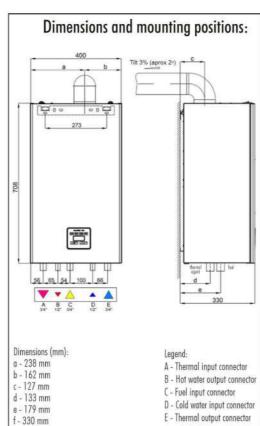


Monothermal secondary heat exchanger for DHW

Efficiency: 93%

Compact size

Forced draft



#### **CLIENT ADVANTAGES:**

- Designed and build for maximum operating efficiency and economy - C CLASS EFFICENCY - 3 stars\*\*\* (dir. 92/42/CEE)
- O DHW Increased comfort: classified 2 stars \*\*
  (En13203), respectively class A (regulation 811-814 / 2013 for implementation Eco-design directive (ERP directive) 2009/125 / EC) on the DHW comfort

#### SAFETY FEATURES

- Overpressure safety valve protects the gas boiler at pressures higher than 3 bar;
- Water temperature sensor in the heating circuit
- Air pressure switch that detects no exhaust flue gases;
- O Overheating safety thermostat for the heat exchanger;
- Electronic module of control and command:
- O Self-diagnostic performant system;
- O Antifreeze performant system;
- O Chalk deposits prevention system;
- Antibloking pump system with action every 24h;



Technic	al and fund	tional characteristics	
Туре		C32SPV24MEFB-PV1	
Trade na	me	CLASIC 24 TF	
Efficiency	stars (dir. 92,	***	
Gas type			II2H3B/P, I2H, I2E+, II2ELL3B/P, II2HS3B/P
Flue type			Forced
	(G20-I2H)		4
Thermal	efficiency (G20	)-I2H)	92,6%
Nominal	power (min./r	nax.) (G20-I2H)	8,7 - 23,2 kW
Nominal	max. consump	otion	≈2,67 Nmc/h
Rated pre	essure gas inpi	ut (G20-I2H)	20 mbar
Pressure	(min/max) on	thermal circuit	$0.5 \div 3$ bar
Pressure	(min/max) on	DHW circuit	$0.2 \div 8$ bar
Energy et	fficiency class	on central heating circuit	(
Tempera	ture on thermo	l circuit	45÷75°C
For boile	r with stainless	s steel heat exchanger, underfloor heating is blocked	
Tempera	ture on domes	tic hot water circuit	40 ÷ 55°C
	$r \text{ flow } \Delta T = 3$		12 l/min
DHW con	nfort - EN1320	03	***
DHW energy efficiency class		- A	
	Height (mm)		708
	Width (mm)		400
10	Depth (mm)		330
stice	Weight		32 kg
cteri	Capacity main heat exchanger		11
Jara	capacity ma	Thermal input, output	3/4"
b II	Conectors	Cold water input, hot water output	1/2 "
ndiç		Gas input	3/4"
Construction characteristics	Expansion vessel with membrane		81
3	Air/ gas incoming/ outgoing flue pipe		Coaxial D100/D60, Dual D80*
		rnt gases connecting pipe	Coaxial max 3m; Dual 5m*
	Evacuation ty		(12, (22, (32, (42, (31, (52, (22, (52
	Burnt gases (maximum temperature)		≈150°C
Electric   Input			~230V/50 Hz
character	CCHIC	al power	82 W
character		ion class	IP 40
* The boiler		red with 1m co-axial flue	



# CLASIC 24 TF WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- Circulation pump GRUNDFOS (Denmark);
- o Gas valve SIT (Italy);
- O Burner WORGAS (Italy):
- O Exhaust fan ELICA (Italy);
- O Primary heat exchanger KÖBER (Romania);
- Expansion vessel ZILIO (Italy);
- O Safety valve KRAMER (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH CLASIC 24 TF

#### Product name: STORAGE TANK BA120L-V1 SMART ROOM THERMOSTAT HT500 WIRELESS ROOM THERMOSTAT HT220S SET ROOM THERMOSTAT HT220S CASCADE MODULE KOBER FILTER WITH TRANSFORMER - 3A FILTER WITHOUT TRANSFORMER - 3A FILTER WITHOUT TRANSFORMER - 6A **OUTSIDE TEMPERATURE SENSOR N10** BOILER TEMPERATURE SENSOR N10 KIT D.60/100 CT NORMALE AMTK 700507 DUAL KIT WITH D80 CT ATMOSPHORE ADAPTER. VERTICAL KIT 60/100 ROOF CT ATMOSF. VERTICAL KIT COAXIAL CT ADAPTER ATMOSF VERTICAL KIT + ADAPTER + REC CT NORMAL 71MN71213 EXTENSION 0.5M 60/100 CT ATMOS EXTENSION 1M 60/100 CT ATMOS EXTENSION 1.5M 60/100 CT ATMOS EXTENSION 0.5M D80 CT ATMOS EXTENSION 1M D80 CT ATMOS 90° ELBOW 60/100 EXTENSION CT ATMOS 90° ELBOW D80 EXTENSION CT ATMOS 45° ELBOW 60/100 EXTENSION CT ATMOS





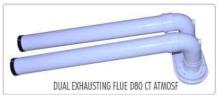








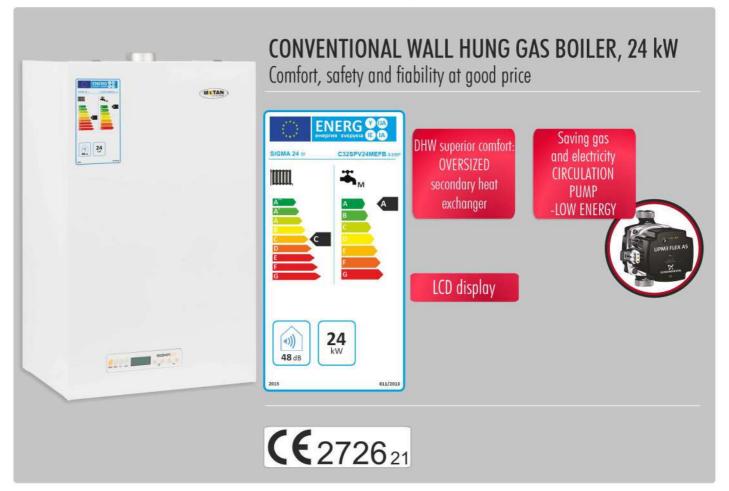








# Product code: C32SPV24MEFB-S-ERP / C32SPV24MEFB-PV3

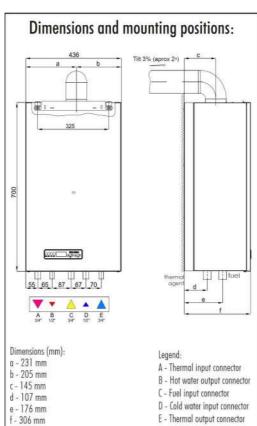


Monothermal secondary heat exchanger for DHW

Efficiency: 93%

Compact size

Forced draft



#### **CLIENT ADVANTAGES:**

- Designed and build for maximum operating efficiency and economy - C CLASS EFFICENCY - 3 stars\*\*\* (dir. 92/42/CEE)
- DHW Increased comfort: classified 2 stars \*\*
  (En13203), respectively class A (regulation 811-814 / 2013 for implementation Eco-design directive (ERP directive) 2009/125 / EC) on the DHW comfort

#### SAFETY FEATURES

- O Overpressure safety valve protects the gas boiler at pressures higher than 3 bar;
- O Water temperature sensor in the heating circuit
- O Air pressure switch that detects no exhaust flue gases;
- O Overheating safety thermostat for the heat exchanger;
- O Electronic module of control and command;
- O Self-diagnostic performant system;
- Antifreeze performant system;
- O Chalk deposits prevention system;
- Antibloking pump system with action every 24h;



	al and funct	ional characteristics	
Type		C32SPV24MEFB-S-ERP	
Trade na		SIGMA TF	
Efficiency	stars (dir. 92)	***	
Gas type			112H3B/P, 12H, 12E+, 112ELL3B/P, 112HS3B/P
Flue type			Forced
	(G20-I2H)		4
	efficiency (G20		93%
		nax.) (G20-I2H)	7,4 - 23,2 kW
	max. consump		≈2,3 Nmc/h
Rated pre	essure gas inpu	ıt (G20-12H)	20 mbar
Pressure	(min/max) on	thermal circuit	$0.5 \div 3$ bar
Pressure	(min/max) on	DHW circuit	0,2÷8 bar
Energy ef	ficiency class o	on central heating circuit	(
	ture on therma		30÷80°C
For boiler	with stainless	steel heat exchanger, underfloor heating is blocked	15÷45°C
Temperat	ure on domest	ic hot water circuit	35÷55°0
Hot wate	$r \text{ flow } \Delta T = 3$	0°C	12 l/mir
DHW comfort - EN13203			***
DHW energy efficiency class		A	
	Height (mm)		700
	Width (mm)		436
S	Depth (mm)		306
istic	Weight		32 kg
rcter	Capacity main heat exchanger		1
haro	Conectors	Thermal input, output	3/4"
5 15		Cold water input, hot water output	1/2 "
udj		Gas input	3/4"
Construction characteristics	Expansion vessel with membrane		8
J	Air/ gas incoming/ outgoing flue pipe		Coaxial D100/D60, Dual D80*
		nt gases connecting pipe	Coaxial max 3m; Dual 5m*
	Evacuation type		C12, C22, C32, C42, C52, C62, C72, C62
	Burnt gases (maximum temperature)		≈150°C
Flectric   Input			~230V/50 Hz
characteristics Nominal power		82 W	
			IP 40
The boiler	is standard deliver	ed with 1m co-axial flue	



#### SIGMA TF WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- O Circulation pump GRUNDFOS (Denmark);
- O Gas valve SIT (Italy);
- O Burner WORGAS (Italy);
- Exhaust fan ELICA (Italy);
- O Primary heat exchanger VALMEX (Italy)
- Expansion vessel ZILIO (Italy);
- Safety valve KRAMER (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH SIGMA TF:

#### Product name: STORAGE TANK BA120L-V1 SMART ROOM THERMOSTAT HT500 WIRELESS ROOM THERMOSTAT HT220S SET **ROOM THERMOSTAT HT220S** CASCADE MODULE KOBER FILTER WITH TRANSFORMER - 3A FILTER WITHOUT TRANSFORMER - 3A FILTER WITHOUT TRANSFORMER - 6A **OUTSIDE TEMPERATURE SENSOR N10 BOILER TEMPERATURE SENSOR N10** KIT D.60/100 CT NORMAL AMTK 700507 DUAL KIT WITH D80 CT ATMOSPHORE ADAPTER. VERTICAL KIT 60/100 ROOF CT ATMOSF. VERTICAL KIT COAXIAL CT ADAPTER ATMOSF VERTICAL KIT + ADAPTER + REC CT NORMAL 71MN71213 EXTENSION 0.5M 60/100 CT ATMOS EXTENSION 1M 60/100 CT ATMOS EXTENSION 1.5M 60/100 CT ATMOS EXTENSION 0.5M D80 CT ATMOS EXTENSION 1M D80 CT ATMOS 90° ELBOW 60/100 EXTENSION CT ATMOS 90° ELBOW D80 EXTENSION CT ATMOS 45° ELBOW 60/100 EXTENSION CT ATMOS NOZZLE 0.77 MM LPG S227077 NOZZLE COPPER GASKET LPG Z144.



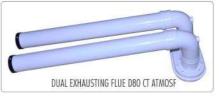








HT220S - ROOM THERMOSTAT





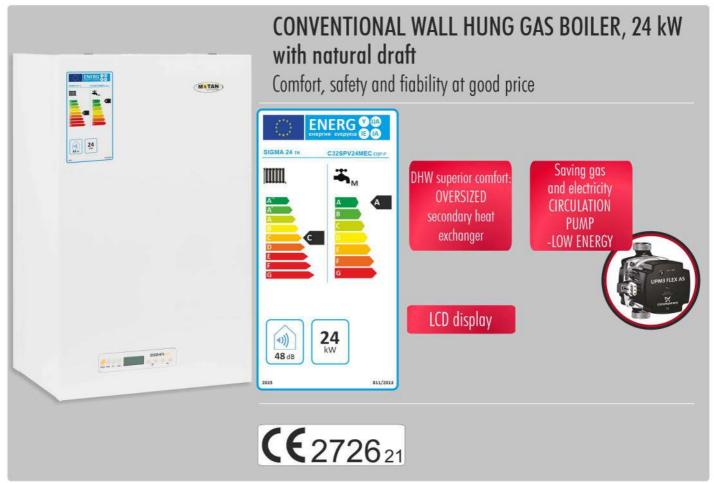
CASCADE MODULE KÖBER

FILTER WHIT TRANSFORMER - 3A

# SIGMA24 TN



# Product code: C32SPV24MEC-ERP-P

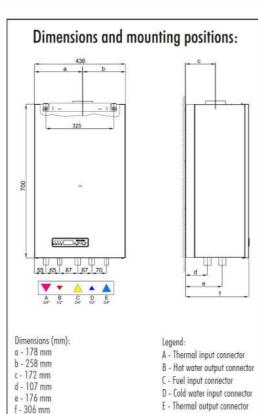


Monothermal secondary heat exchanger for DHW

Efficiency: 93%

Compact size

Natural draft



#### **CLIENT ADVANTAGES:**

- Designed and build for maximum operating efficiency and economy - C CLASS EFFICENCY - 3 stars\*\*\* (dir. 92/42/CEE)
- O DHW Increased comfort: classified 2 stars \*\* (En13203), respectively class A (regulation 811-814 / 2013 for implementation Eco-design directive (ERP directive) 2009/125 / EC) on the DHW comfort

#### SAFETY FEATURES

- O Overpressure safety valve protects the gas boiler at pressures higher than 3 bar;
- O Water temperature sensor in the heating circuit
- O Air pressure switch that detects no exhaust flue gases;
- O Overheating safety thermostat for the heat exchanger;
- O Electronic module of control and command;
- O Self-diagnostic performant system;
- O Antifreeze performant system;
- O Chalk deposits prevention system;
- Antibloking pump system with action every 24h;



	al and funct	ional characteristics	COOCDVOANTC FDD D
Type			C32SPV24MEC-ERP-P
Trade na	me	42 (CLL)	SIGMA TN
Efficiency stars (dir. 92/42/CEE)		42/CEE)	**
Gas type			112H3B/P, 12H, 12E+, 112ELL3B/P, 112HS3B/P Natural
Flue type			(MEA-EA-EA-EA-EA-EA-EA-EA-EA-EA-EA-EA-EA-E
	s (G20-I2H)	(211)	20.004
	efficiency (G20		92.8%
		iax.) (G20-I2H)	8.5 - 23,3 kW
	max. consump		≈2,4 Nmc/h
	essure gas inpu		20 mbar
	(min/max) on		0,5÷3 bar
	(min/max) on		0,2 ÷ 8 bar
		n central heating circuit	22 2000
	ture on therma		30 ÷ 80°C
Temperature on thermal circuit for underfloor system			15÷45°C
Temperature on domestic hot water circuit			35÷55°(
Hot water flow $\Delta T = 30^{\circ}C$			12 l/min
	nfort - EN1320		**
JHW ene	ergy efficiency o	IOSS	A
Height (mm)			700
	Width (mm)		436
1000	Depth (mm)		306
stics	Weight		28 kg
teri.	Capacity mai	n heat exchanger	1.1
ara		Thermal input, output	3/4 "
-	Conectors	Cold water input, hot water output	1/2 "
ctio.		Gas input	3/4 "
Weight Capacity main heat exchanger  Thermal input, output Conectors Cold water input, hot water output Gas input  Expansion vessel with membrane  Air/ ans incoming/outgoing flue pine		ssel with membrane	81
ق	Air/ gas incoming/ outgoing flue pipe		D125
	Length of burnt gases connecting pipe		Minim 1 m $+$ cos
	Evacuation ty	pe	Bii
	Burnt gases (maximum temperature)		≈138 °C
r.i	. Input		~230V/50 Hz
	ectric Nominal		72 W
haracteristics Protection class			IP 40



# SIGMA TN WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- O Circulation pump GRUNDFOS (Denmark);
- O Gas valve SIT (Italy);
- O Burner WORGAS (Italy);
- O Primary heat exchanger VALMEX (Italy)
- O Expansion vessel ZILIO (Italy);
- Safety valve KRAMER (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE SIGMA24 TN

# Product name: STORAGE TANK BA120L-V1

SMART ROOM THERMOSTAT HT500
WIRELESS ROOM THERMOSTAT HT220S SET
ROOM THERMOSTAT HT220S
CASCADE MODULE KOBER
FILTER WITH TRANSFORMER - 3A
FILTER WITHOUT TRANSFORMER - 3A
FILTER WITHOUT TRANSFORMER - 6A
OUTSIDE TEMPERATURE SENSOR N10
BOILER TEMPERATURE SENSOR N10











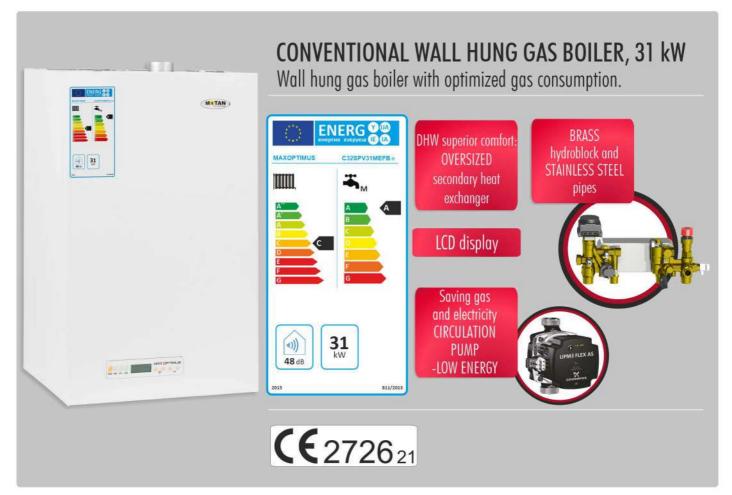
FILTER WHIT TRANSFORMER - 3A







#### Product code: C32SPV31MEFB-B-ERP



# Efficiency class - 3 stars

(dir. 92/42/CEE)

DHW comfort
- 2 stars 
(EN 13203)

Nox class - 3

# Dimensions and mounting positions: 436 Tit 3% (aprox 2°) S55 85 87 67 70 A B C D E Set Dimensions (mm): a - 271 mm b - 165 mm c - 168 mm d - 129 mm e - 197 mm f - 328 mm Tit 3% (aprox 2°) C C D E Set Thermal input connector C - Fuel input connector E - Thermal output connector

- O Constant and high efficiency;
- Low electricity consumption low energy pump; EFFICIENCY CLASS 3 stars \*\*\* according to the European directive 92/42 / EEC; respectively class C (regulation811-814 / 2013 for the implementation of the directive of Eco-Design (ERP Directive 2009/125 / EC) and 2\*\* stars comfort on domestic hot water regime (EN13203); respectively class A (regulation 811-814 / 2013for the implementation of the EcoDesign directive(ERP Directive) 2009/125 / EC);
- O Easy to install due to compact size;
- Primary heat exchanger and secondary heat exchanger oversized;
- O Possibility to connect a underfloor heating system;
- Control panel with LCD display, which provides advanced graphical interface and switch keys;
- Very good operating stability, foruser set temperature on both circuits;
- When the "Comfort function" is activated, allows the user to use DHW in the range of 35-45 °C;
- O Low emissions class NOx 3 on natural gas;



Technic	al and	functi	onal characteristics	
Type				C32SPV31MEFB-B-ERP
Trade nar	ne			MAXOPTIMUS
Gas type	200		8	***
Efficiency		ir. 92/-	42/CEE)	II2H3B/P, I2H, I2E+, II2ELL3B/P, II2HS3B/P
Flue type		2006500		Forced
Nox class				4
Thermal (	efficienc	y (G20-	-I2H)	93,6%
			ax.) (G20-I2H)	9.6 - 30.8 kW
Nominal				≈3,51 Nmc/h
			(G20-I2H)	20 mbar
			hermal circuit	$0.5 \div 3$ bar
			OHW circuit	$0.2 \div 8$ bar
			n central heating circuit	C
Temperat				30 ÷ 80°C
Temperat	ure on t	hermal	circuit for underfloor system	15÷45°C
Temperat	ure on d	lomesti	c hot water circuit	35 ÷ 55°C
Hot water	r flow △	T = 30	0°C	14,5 l/min
DHW com				**
DHW ene	rgy effic	iency c	ass	A
1	Heigh	t (mm)		700
	Width	(mm)		436
	Depth			328
is is	Weigh			32 kg
eris			n heat exchanger	1,8 1
1100	7.00,000	-	Thermal input, output	3/4 "
ě	Con	ectors	Cold water input, hot water output	1/2 "
iģ.			Gas input	3/4 "
Construction characteristics	Expans	sion ves	ssel with membrane	81
ق ا			ning/ outgoing flue pipe	Coaxial D100/D60, Dual D80*
			nt gases connecting pipe	Coaxial max 3m; Dual 5m*
		ition ty		C12, C22, C82, C82, C82, C82, C82, C82, C8
	Burnt	gases (	maximum temperature)	≈129°C
-	+ 1	nput	an men an an an meirich #300000 Z ∓0€ A	~230V/50 Hz
El character	ectric		power	87 W
character	ISIICS P	rotectio	on class	IP 40
* The boiler	is standar	d delivere	ed with 1m co-axial flue	



#### MAXOPTIMUS WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- O Circulation pump GRUNDFOS (Denmark);
- O Gas valve SIT (Italy);
- O Burner WORGAS (Italy);
- O Exhaust fan ELICA (Italy);
- O Primary heat exchanger VALMEX (Italy)
- Expansion vessel ZILIO (Italy);
- O Brass hidroblock FUGGAS (Italy);
- Safety valve KRAMER (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH MAXOPTIMUS:

#### Product name: STORAGE TANK BA120L-V1 SMART ROOM THERMOSTAT HT500 WIRELESS ROOM THERMOSTAT HT220S SET **ROOM THERMOSTAT HT220S** CASCADE MODULE KOBER FILTER WITH TRANSFORMER - 3A FILTER WITHOUT TRANSFORMER - 3A FILTER WITHOUT TRANSFORMER - 6A **OUTSIDE TEMPERATURE SENSOR N10** BOILER TEMPERATURE SENSOR N10 KIT D.60/100 CT NORMALE AMTK 700507 DUAL KIT WITH D80 CT ATMOSPHORE ADAPTER. VERTICAL KIT 60/100 ROOF CT ATMOSF. VERTICAL KIT COAXIAL CT ADAPTER ATMOSF VERTICAL KIT + ADAPTER + REC CT NORMAL 71MN71213 EXTENSION 0.5M 60/100 CT ATMOS EXTENSION 1M 60/100 CT ATMOS EXTENSION 1.5M 60/100 CT ATMOS EXTENSION 0.5M D80 CT ATMOS EXTENSION 1M D80 CT ATMOS 90° ELBOW 60/100 EXTENSION CT ATMOS 90° ELBOW D80 EXTENSION CT ATMOS 45° ELBOW 60/100 EXTENSION CT ATMOS













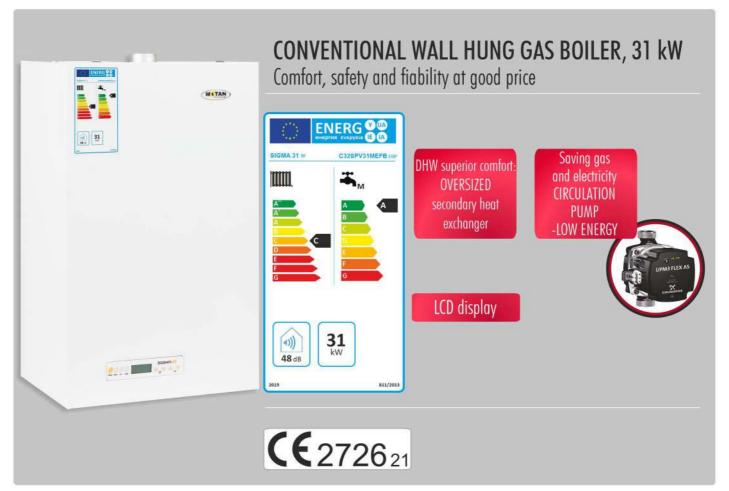








#### Product code: C32SPV31MEFB-ERP

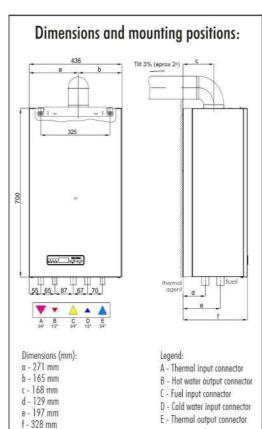


Monothermal secondary heat exchanger for DHW

Efficiency: 93%

Compact size

Forced draft



- O Constant and high efficiency;
- O Low electricity consumption low energy pump; EFFICIENCY CLASS 3 stars \*\*\* according to the European directive 92/42 / EEC; respectively class C (regulation811–814 / 2013 for the implementation of the directive of Eco-Design (ERP Directive 2009/125 / EC) and 2\*\* stars comfort on domestic hot water regime (EN13203); respectively class A (regulation 811–814 / 2013for the implementation of the EcoDesign directive(ERP Directive) 2009/125 / EC);
- Easy to install due to compact size;
- Primary heat exchanger and secondary heat exchanger oversized;
- O Possibility to connect a underfloor heating system;
- Low chalk deposits- hydroblock made of fiberglass-reinforced polyamide;
- Very good operating stability, for user set temperature on both circuits;
- Intelligent detection system for water flow and heat demand;
- O Low emissions class NOx 3 on natural gas;



2255	al and functi	ional characteristics	
Туре			C32SPV31MEFB-ERP
Trade name			SIGMA31 TF
Efficiency	stars (dir. 92/	42/CEE)	***
Gas type			II2H3B/P, I2H, I2E+, II2ELL3B/P, II2HS3B/P
Flue type			Forced
	(G20-I2H)		4
	efficiency (G20		93.6%
		ax.) (G20-I2H)	9.6 - 30.8 kW
	max. consumpt		≈3.51 Nmc/h
	essure gas inpu		20 mbar
	(min/max) on 1		0,5 ÷ 3 bar
	(min/max) on l		$0,2 \div 8$ bar
		n central heating circuit	C
	ure on thermal		30 ÷ 80°C
Temperat	ure on thermal	circuit for underfloor system	15÷45°C
Temperature on domestic hot water circuit		ic hot water circuit	35÷55°C
Hot water flow △T = 30°C		0°C	14 l/min
DHW comfort - EN13203			**
DHW ene	ergy efficiency o	lass	A
	Height (mm)		700
	Width (mm)		436
	Depth (mm)		328
tics	Weight		36 kg
teris	Capacity mai	in heat exchanger	1.81
arac		Thermal input, output	3/4 "
4	Conectors	Cold water input, hot water output	1/2 "
dior		Gas input	3/4 "
Construction characteristics	Expansion ve	ssel with membrane	81
	Air/ gas incoming/ outgoing flue pipe		Coaxial D100/D60, Dual D80*
	Length of burnt gases connecting pipe		Coaxial max 3m; Dual 5m*
	Evacuation type		C12, C22, C32, C42, C52, C52, C52, C52, C52
	Burnt gases (	maximum temperature)	≈129 °C
-1	Input	- 100 - 100	~230V/50 Hz
characte:	ectric Nomina		87 W
characte	Protection	on class	IP 40
* The boiler	is standard deliver	ed with 1m co-axial flue	



# SIGMA 31 WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- O Circulation pump GRUNDFOS (Denmark);
- O Gas valve SIT (Italy);
- O Burner WORGAS (Italy);
- Exhaust fan ELICA (Italy);
- O Primary heat exchanger VALMEX (Italy)
- Expansion vessel ZILIO (Italy);
- O Safety valve KRAMER (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH SIGMA31:

#### Product name: STORAGE TANK BA120L-V1 SMART ROOM THERMOSTAT HT500 WIRELESS ROOM THERMOSTAT HT220S SET **ROOM THERMOSTAT HT220S** CASCADE MODULE KOBER FILTER WITH TRANSFORMER - 3A FILTER WITHOUT TRANSFORMER - 3A FILTER WITHOUT TRANSFORMER - 5A OUTSIDE TEMPERATURE SENSOR N10 BOILER TEMPERATURE SENSOR N10 TEMPERATURE SENSOR STO4/18/H F28 KIT D.60/100 CT NORMAL AMTK 700507 DUAL KIT WITH D80 CT ATMOSPHERE ADAPTER. VERTICAL KIT 60/100 ROOF CT ATMOSF. VERTICAL KIT COAXIAL CT ADAPTER ATMOSF VERTICAL KIT + ADAPTER + REC CT NORMAL 71MN71213 EXTENSION 0.5M 60/100 CT ATMOS EXTENSION 1M 60/100 CT ATMOS EXTENSION 1.5M 60/100 CT ATMOS EXTENSION 0.5M D80 CT ATMOS EXTENSION 1M D80 CT ATMOS 90° ELBOW 60/100 EXTENSION CT ATMOS 90° ELBOW D80 EXTENSION CT ATMOS 45° ELBOW 60/100 EXTENSION CT ATMOS NOZZLE 0.77 MM LPG S227077 NOZZLE COPPER GASKET LPG Z144.













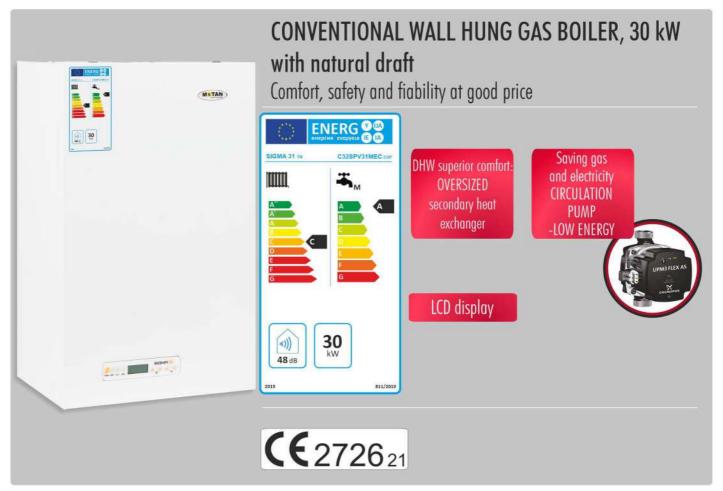








#### Product code: C32SPV31MEC-ERP

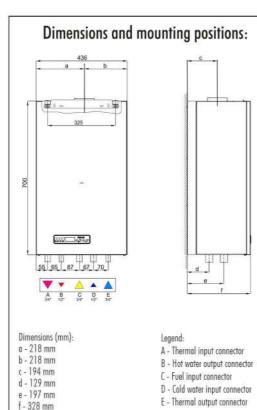


Monothermal secondary heat exchanger for DHW

Efficiency: 93%

Compact size

Natural draft



- O Constant and high efficiency;
- O Low electricity consumption low energy pump; EFFICIENCY CLASS 3 stars \*\*\* according to the European directive 92/42 / EEC; respectively class C (regulation811–814 / 2013 for the implementation of the directive of Eco-Design (ERP Directive 2009/125 / EC) and 2\*\* stars comfort on domestic hot water regime (EN13203); respectively class A (regulation 811–814 / 2013for the implementation of the EcoDesign directive(ERP Directive) 2009/125 / EC);
- Easy to install due to compact size;
- Primary heat exchanger and secondary heat exchanger oversized;
- Low chalk deposits- hydroblock made of fiberglass-reinforced polyamide;
- Very good operating stability, for user set temperature on both circuits;
- Intelligent detection system for water flow and heat demand:
- O Low emissions class NOx 3 on natural gas;



<b>lechnic</b> Type	al and tunct	ional characteristics	C32SPV31MEC-ERP
Trade na	ma		SIGMA31 TN
11000	1110	N3/CEE)	310MA01 1N
Efficiency stars (dir. 92/42/CEE) Gas type		42/(11)	II2H3B/P, I2H, I2E+, II2ELL3B/P, II2HS3B/P
Flue type			Natural
	(G20-I2H)		3
	efficiency (G20	-I2H)	93.7%
		iax.) (G20-I2H)	10 - 30 kW
	max. consump		≈3,44 Nmc/h
	essure gas inpu		20 mbar
	(min/max) on t		0,5 ÷ 3 bar
	(min/max) on I		0,2 ÷ 8 bar
	The contract of the contract o	n central heating circuit	C
	ture on thermal		30 ÷ 80°C
		circuit for underfloor system	15÷45°C
Temperature on domestic hot water circuit			35÷55°€
Hot water flow $\Delta T = 30^{\circ}$ C			14.5 l/mir
DHW con	nfort - EN1320	3	**
DHW ene	ergy efficiency o	lass	A
Height (mm)			700
	Width (mm)		436
	Depth (mm)		328
fics	Weight		31 kg
teris		in heat exchanger	1.8
arac		Thermal input, output	3/4 ″
-5	Conectors		1/2 *
dj.		Gas input	3/4 "
Construction characteristics	Expansion ve	ssel with membrane	81
9	Air/ gas incoming/ outgoing flue pipe		D125
	Length of burnt gases connecting pipe		Minim 1 m $+$ coş
	Evacuation type		Вп
		maximum temperature)	≈111°C
El	ectric Noming	1 0 000 000 000 000 000 000 000 000 000	~230V/50 Hz
characte	· · ·		72 W
characto	ristics   Protection	on class	IP 40



# SIGMA31 TN WALL HUNG GAS BOILER INTEGRATE COMPONENTS OF THE BEST QUALITY:

- O Circulation pump GRUNDFOS (Denmark);
- O Gas valve SIT (Italy);
- O Burner WORGAS (Italy);
- Exhaust fan ELICA (Italy);
- O Primary heat exchanger VALMEX (Italy)
- O Expansion vessel ZILIO (Italy);
- O Safety valve KRAMER (Italy);

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH SIGMA31 TN:

# Product name: STORAGE TANK BA120L-V1 SMART ROOM THERMOSTAT HT500 WIRELESS ROOM THERMOSTAT HT220S SET ROOM THERMOSTAT HT220S CASCADE MODULE KOBER FILTER WITH TRANSFORMER - 3A FILTER WITHOUT TRANSFORMER - 3A FILTER WITHOUT TRANSFORMER - 6A OUTSIDE TEMPERATURE SENSOR N10 BOILER TEMPERATURE SENSOR N10









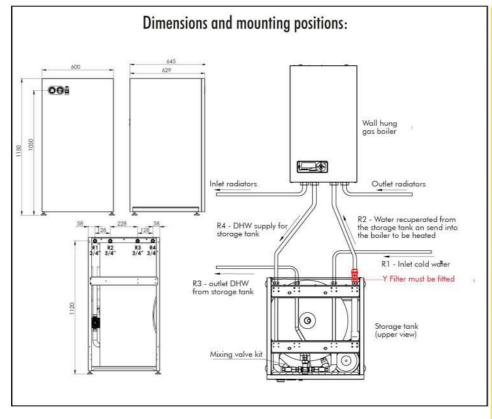
FILTER WHIT TRANSFORMER - 3A





Product code: BA120L-V1





- The storage tank is made from stainless steel, this fact assures 10 years medium lifetime, through the shocks and corrosion resistance, also the quality of stored domestic hot water;
- STORAGE mode tank. Must be attached to a boiler which produces domestic hot water. Results an assembly: gas boiler and storage tank - with a superior efficiency and comfort;
- O Store the volume of water at temperatures up to 75-78°C which leads to a considerable increase in the time of use of stored domestic hot water. This also eliminates the risk of occurrence of legionella bacteria;
- Temperature losses are considerably reduced, due to the use of a high quality insulation, from polyurethane foam;
- COMPACT product witch incorporate the safety elements: expansion vessel (81), safety valve (8 bar) and command and control elements: control panel (thermostat and thermometer), and also circulation pump and drain valve;
- Supplementary anti-corrosion protection, assured by magnesium anode, with Ca and Mg ions attraction function;



Technical and functional characteristics	DHW
Name	Storage Tank
Туре	BA120L-V
Maximum level of noise	<50 dB(A)
Capacity of storage domestic hot water	120 liters
DHW maximum pressure	8 bar
Recommended maximum input pressure	5 bar
Maximum input DHW temperature	60°0
User output DHW temperature (the temperature is adjusted by the mixing valve kit)	30 - 50°C
User output DHW temperature set from the factory	≈45°C
Storage minimum temperature	5°C
Expanssion vessel with membrane	8 liters
Loading pressure for the expanssion vessel	3,5 bar
Electric characteristics	230V/50Hz - 135W
Netto weight (without water)	61 kg
Connections: Inlet domestic cold water	3/4 "
Outlet domestic hot water	3/4 "
Outlet/Inlet circulation water	3/4 "
Dimensions:	
Depth (mm):	645
Length (mm):	600
Height (mm):	1150



#### Mixing Valve kit FUNCTIONS:

- reduces the temperature at the point of use to a value lower than that of storage in the boiler to be suitable for domestic use;
- ensures high thermal performance and is able to precisely control the temperature of the water mixture supplied in case of variations in pressure, temperature or flow;
- anti-damping function which immediately stops the hot water flow in the event of a cold water supply failure.

#### Technical specification of mixing valve:

	20 20-2
Water outlet temperature - range	30-50°C
Precision	+/- 2°€
Maximum working pressure (static)	10 bar
Maximum working pressure (dynamic)	5 bar
Maximum inlet temperature	85°C
Maximum inlet pressure ratio	6:1
Minimum temperature difference between hot water inlet and mixed water outlet to ensure anti-rust	10°C
Minimum flow for optimum performance	4 l/min

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH DHW STORAGE TANK BA120L-V1:

## CONDENS 100 P

CONDENS 100 PLUS 25 Wall Hung Gas Boiler

CONDENS 100 PLUS 29 Wall Hung Gas Boiler

CONDENS 100 PLUS 35 Wall Hung Gas Boiler

CONDENS 100 25 Wall Hung Gas Boiler

CONDENS 050 24 Wall Hung Gas Boiler

CONDENS 050 28 Wall Hung Gas Boiler

KPLUS Wall Hung Gas Boiler

KPLUS TN Wall Hung Gas Boiler

SIGMA24 Wall Hung Gas Boiler

SIGMA24 TN Wall Hung Gas Boiler

MAXOPTIMUS Wall Hung Gas Boiler

SIGMA31 Wall Hung Gas Boiler

SIGMA31 TN Wall Hung Gas Boiler

BOILER TEMPERATURE SENSOR N10











#### Product code: BP120L-V1



#### DHW STORAGE CYLINDER WITH SINGLE COIL

High WHW comfort

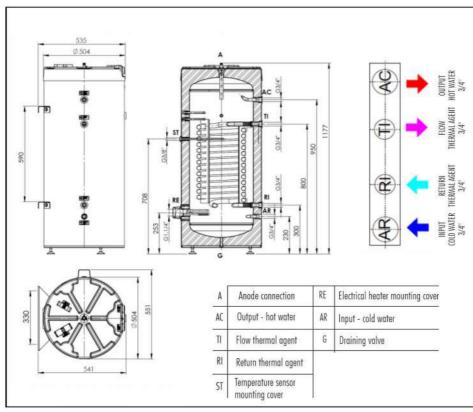
Cylinder Capacity 120 liters

STAINLESS STEEL cylinder and coil

Exchange POWER in continuous mode (max coil output): 35,7 kW

Equipped with Mixing Valve kit with anti-damping function





- The body of the cylinder and the corrugated coil pipe are made from 316L stainless steel and the welds are made by TIG process, witch confer by corrosion resistance a long life operation time, which also complies with all the DHW regulations;
- Another element that contributes decisively to the corrosion resistance is the PASSIVATION process of the welding seams;
- O BP120L-V1 DHW storage cylinder with single coil, is intended for preparing and storing hot water hygienically comfortable and economically, using energy from the solar collectors or boiler and / or electric immersion heater. The boiler is equipped to run only upright both on the ground or fixed on the wall;
- Temperature losses are considerably reduced, due to the use of a high quality insulation, from polyurethane foam;
- Heating a large volume of water due to surface of the corrugated coil pipe reaching to the bottom of the cylinder;
- It can be used in the bivalent preparation of domestic hot water, combination between a boiler and electric immersion heater;



Technical and functional characteristics	2200
Name	DHW storage cylinder
Туре	BP120L V1
Cylinder capacity	120 liters
DHW maximum temperature	60°C
Maximum temperature of the primary thermal agent circuit	80°C
Recommended maximum input pressure	5 bar
Dimensions: Depth (mm)	551
Lengh (mm)	541
Height (mm)	1177
Netto weight (without water)	≈50 kg
Thermal agent capacity	3,5 liters
Coil heating surface Connections:	1,92 m <sup>2</sup>
Coil, thermal agent flow connection	3/4 "
Coil, thermal agent return connection	3/4 "
Cold water input, hot water output	3/4 "
Electrical heater	1,1/4 "



#### Mixing Valve kit FUNCTIONS:

- reduces the temperature at the point of use to a value lower than that of storage in the boiler to be suitable for domestic use;
- ensures high thermal performance and is able to precisely control the temperature of the water mixture supplied in case of variations in pressure, temperature or flow;
- anti-damping function which immediately stops the hot water flow in the event of a cold water supply failure.

#### Technical specification of mixing valve:

Water outlet temperature - range	30-50°C
Precision	+/- 2°C
Maximum working pressure (static)	10 bar
Maximum working pressure (dynamic)	5 bar
Maximum inlet temperature	85°C
Maximum inlet pressure ratio	6:1
Minimum temperature difference between hot water inlet and mixed water outlet to ensure anti-rust	10°C
Minimum flow for optimum performance	4 I/min

#### LIST OF ACCESSORIES AND OTHER MOTAN PRODUCTS COMPATIBLE WITH DHW STORAGE CYLINDER BP120L-V1:

#### Product name:

MKDENS35 CH1

(wall hung gas boiler only for heating, with 3-way valve)

MKDENS35 CH2

(wall hung gas boiler only for heating, without 3-way valve)

**BOILER TEMPERATURE SENSOR N10** 





#### SMART THERMOSTAT- HT500 SET



#### Product code: HT500 SET



# SMART ROOM THERMOSTAT (WIRELESS, INTERNET CONTROL)

Temperature control via mobile App

Wireless room thermostat

Outside temperature indicator

Digital LCD display with backlight



















Available App, in App Store and Google Play

#### **TECHNICAL DATA**

Feeding voltage (usage with adapter)
Feeding voltage (usage with battery)
Maximum load current (usage with adapter)

Maximum load current (usage with battery)

Dimensions

Temperature measurement sensitivity

Operating sensitivity

Wi-Fi connection frequency

Communication distance

Operating temperature

Storage temperature

#### RECEIVER TECHNICAL DATA

Operating current Relay NO switching current Storage temperature Dimensions

Storage temperature

5V (DC)

3V (DC) 500 mA

80 mA

131 mm/74 mm/25.5 mm

0.1°C

0.5°

Wi-Fi 802.11 b/g/n @ 2.46Hz

100 m (open space)

(-10°C) - 50°C

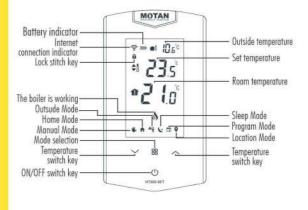
(-20°C) - 60°C

220V (AC)

7A (220V AC) (-10°C) - 50°C

85 mm/90 mm/28.5 mm

(-20°C) - 60°C





#### Control with mobile App

Control your home temperature with your SMART Thermostat wherever you are in the word.



#### **SMART location feature**

Through the location feature, you can decrease the temperature of your home when you move away from home, or you can increase the temperature of your home when you approach.



#### History data reports

Ht500 SE SMART room thermostat allows you to graphically view the working hours of your heating unit, the temperature of your home and outside temperature according to the data range selected from the mobile app.

# VERSONRIES

#### Product code: HT220S SET and HT220S

#### HT220S SET

#### WIRELESS ROOM THERMOSTAT

HT250S SET is a wireless room thermostat.

You can increase the temperature of your room with required temperature

setting manually, so you can provide both saving and comfort.

#### Wireless connection

Sensitive temperature control

#### Heating calibration

#### ON/OF control

#### TECHNICAL DATA

Operating current
Operating sensitivity
Operating temperature range
Storage temperature

Dimensions

RECEIVER TECHNICAL DATA

Operating current Relay NO switching current Storage temperature

Dimensions

 $3V \pm 0.2V$  (DC)

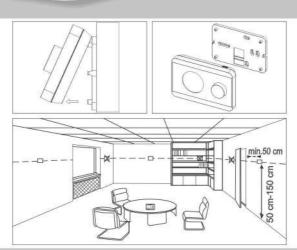
± 0.5°C 5°C - 30°C

(-10°C) - 50°C

88 mm/136 mm/34 mm

220V AC 7A (220V AC) (-10°C) - 50°C

88 mm/136 mm/34 mm



MOTAN



# HT2205 WIRED ROOM THERMOSTAT

HT220S is a wired room thermostat

You can increase the temperature of your room with required temperature setting manually, so you can provide both saving and comfort

Sensitive temperature control

Heating calibration

Wired connection

ON/OF control

#### TECHNICAL DATA

Operating current Relay NO switching current Operating sensitivity

Operating temperature range

Storage temperature

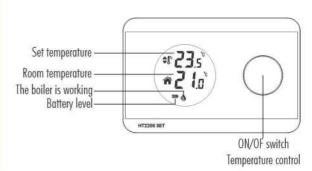
 $3V \pm 0.2V$  (DC)

8A

± 0.5°C 5°C - 30°C

(-10°C) - 50°C

Dimensions 88 mm/136 mm/34 mm

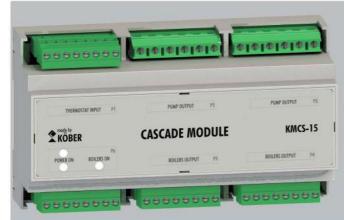






#### KÖBER CASCADE MODULE

Product code: KMCS-15



The KMCS cascade module is a device that meets the requirements of SR EN 60335-1, which can control up to 8 MOTAN wall hung gas boilers cascade. It can be used for the heat distribution in 5 zones independently controlled by room thermostats.

#### Characteristics:

- Possibility to connect to both the KMCSP source manufactured by S.C.Köber S.R.L. at 17 VDC respectively 35 VDC and at a universal 24 VDC source.
- Three LEDs for viewing the presence of working voltage.
- Five analogue inputs designed specifically for ambient room thermostats.
- Five power outputs for controlling the 5 zones (pumps, electroventile, etc.).
- Eight outlets for controlling up to eight cascade-connected thermal wall hung gas boilers
- · Possibility of DIN rail mounting.

#### Thenical specification:

- Power supply:
  - -17VDC and 35 VDC (use KMCSP power supply module, product of S.C. Köber S.R.L.), or 24 VDC (use24 VDC/10W min power supply).
- Operating temperature:  $-20^{\circ}\text{C}/+60^{\circ}\text{C}$
- Protection class: IP 40
- Dimensions: 158x90x58 mm (9 DIN module)

#### Electrical specification

- Power contacts
- Maximum voltage: 250VAC, 30VDC
- Maximum electric current: 10A
- Maximum power: 2500VA, 300W

# POWER-SYSTEM PROTECTION MODULE FOR KÖBER CASCADE MODULE Product code: KMCSP-03A



The KMCSP module is a device that can be used to protect the power supply of electronic devices against electromagnetic disturbances, anti-surges and surges in the electrical system. Special varistors operate both in the typical network, as well as in dangerous asymmetrical voltages. the filter absorbs the high impulse very well, with a very short response time. This module was specifically designed to be used with the KÖBER KMCS cascading module.

#### Characteristics:

- The KMCSP module can also be used in various applications that suit its features.
- Dual filter for power-system protections improved performance.
- Possibility of DIN rail mounting.
- $\circ$  Module power supply to 230 VAC (-15%/+10%):
  - $-U \min = 195 \text{ VAC } (-15\%);$
  - $-U \max = 253 \text{ VAC } (+10\%).$

Tehnical specifications:		
Parameters	KMCSP-03A	
Filter voltage	230VAC	
Filter current	3A	
Filter frequency	50 Hz	
Maximum voltage	275VAC	
Protection level L(N)->PE	<1KV	
Inductance	2,7 mH (L, N)	
Current absorbed	0,5mA	
Capacitor L->N	0,5uF	

Capacitor L(N)->re	4,711
resistance	60m Ω
Working temperature	$-25^{\circ}\text{C/} + 85^{\circ}\text{C}$
Weight	130g
Rail mounting	DIN-RAIL TH-35
KMCSP-XXA m	odule outputs:
F1:U(f1) = 230VAC	Out A: Ua = 35VDC
I(f1) = 3A	I(a) = 1A
F2:U(f2) = 230VAC	Out B: Ub = 17 VD0
$I(f2) = 1.2\Delta$	I(a) = 1A



## POWER-SYSTEM PROTECTION MODULE

Product code: KLSP-XXA-15



The KLSP-3A-15 / KLPS-6A-15 module is a device that can be use to:

- -protect the power supply of electronic devices;
- -against electromagnetic disturbances;
- -anti-surge protection and overvoltage protection in the electrical system on electronic devices;

Varistors operate both in the typical power network an in dangerous symmetric voltages, which often occur simultaneously with asymmetrical voltages. The filter absorbs the height impulses very well, with a very short response time.

#### Characteristics:

- O Dual filter for power-system protection improved performance
- Possibility of DIN rail mounting.
- Module power supply to 230 VAC (-15%/+10%):
   U min = 195 VAC (-15%); U max = 253 VAC (+10%).

KLSP-3A-15 / KLPS-6A-15 module outputs :

- o F1 : U (f1) = 230 VAC
  - I(f1) = 3A / 6A
- F2 : U (f2) = 230 VAC
  - I(f2) = 1,2 A

Parameter	KLSP-03-15	KLSP-06A-15
Filter voltage	230VAC	230VAC
Filter current	3A	6A
Filter frequency	50 Hz	50 Hz
Maxium voltage	253VAC	253VAC
Protection level L(N) ->PE	<1KV	<1KV
Inductance	2,7 mH (L, N)	1 mH (L, N)
Current absorbed	0,5 mA	0,5 mA
Capacitor L ->N	0,54uF	0,54uF
Capacitor L(N)->PE	4,7nF	4 ,7nF
Resistance	<100m Ω	<50m Ω
Working temperature	-10 ÷ +60°C	-10 ÷ +60°C
Weight	130g	130g
Rail mounting	DIN-RAIL TH-35	DIN-RAIL TH-35

#### OTHER ACCESSORIES (for compatibility with certain boiler models, please contact a technical consultant):

# Accesories for conveying exhaust gases from CONDENSING boilers

COAXIAL EXHAUSTING FLUE 60/100 CT CONDENS
DUAL EXHAUSTING FLUE D80 CT CONDENS
ROOF VERTICAL EXHAUSTING FLUE 60/100 CT CONDENS
ADAPTOR FOR ROOF VERTICAL EXHAUSTING FLUE CT CONDENS

EXTENSION 0,5M 60/100 CT CONDENS

EXTENSION 1M 60/100 CT CONDENS

EXTENSION 1.5M 60/100 CT CONDENS

EXTENSION 0,5M D80 CT CONDENS

EXTENSION 1M D80 CT CONDENS

90° ELBOW 60/100 EXTENSION CT CONDENS

90° ELBOW D 80 EXTENSION CT CONDENS

45° ELBOW 60/100 EXTENSION CT CONDENS

#### OTHER ACCESORIES

NOZZLE 0.77 MM LPG S227077 OUTSIDE TEMPERATURE SENSOR N10 BOILER TEMPERATURE SENSOR N10 NOZZLE COPPER GASKET LPG Z144 MAGNETIC FILTER IVANCI G0201 MAGNETIC FILTER PINTOSSI + C 9085

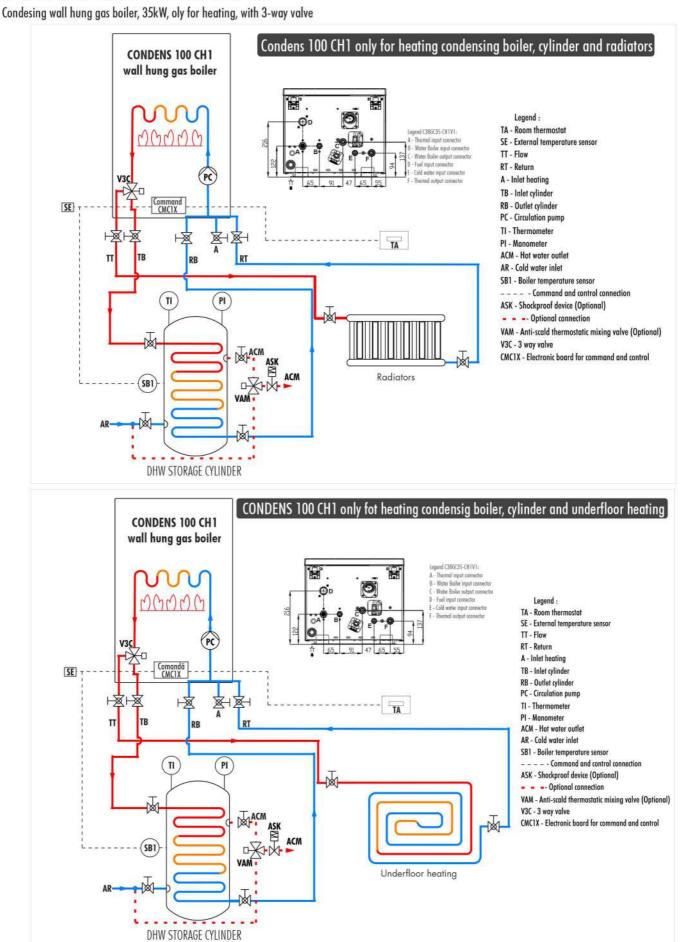
# Accesories for conveying exhaust gases from CONVENTIONAL boilers

FLUE D.60/100 CT CONVENTIONAL ANTK 700507
DUAL FLUE WITH ADAPTOR D80 CT CONVENTIONAL.
VERTICAL ROOF FLUE 60/100 CT CONVENTIONAL.
ADAPTOR COAXIAL CT CONVENTIONAL
EXTENSION 0,5M 60/100 CT CONVENTIONAL
EXTENSION 1.5M 60/100 CT CONVENTIONAL
EXTENSION 1.5M 60/100 CT CONVENTIONAL
EXTENSION 0,5M D80 CT CONVENTIONAL
EXTENSION 1 M D80 CT CONVENTIONAL
90° ELBOW 60/100 EXTENSION CT CONVENTIONAL
90° ELBOW D 80 EXTENSION CT CONVENTIONAL
45° ELBOW D 80 EXTENSION CT CONVENTIONAL



Operation diagrams and installation option, using CONDENS 100 CH1 - only for heating boilers:

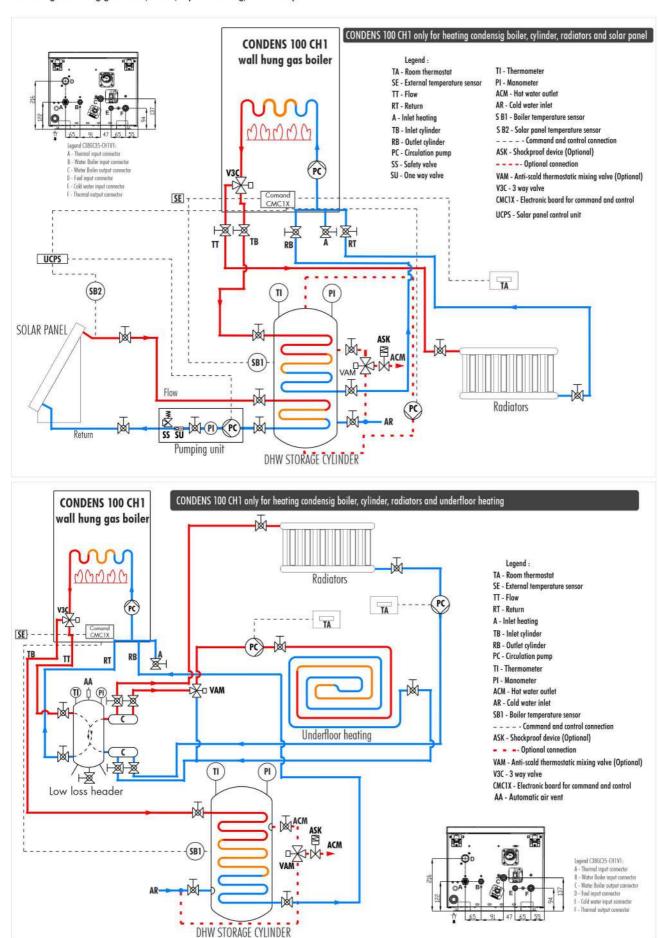
#### CONDENS 100 CHI





#### CONDENS 100 CHI

Condesing wall hung gas boiler, 35kW, oly for heating, with 3-way valve

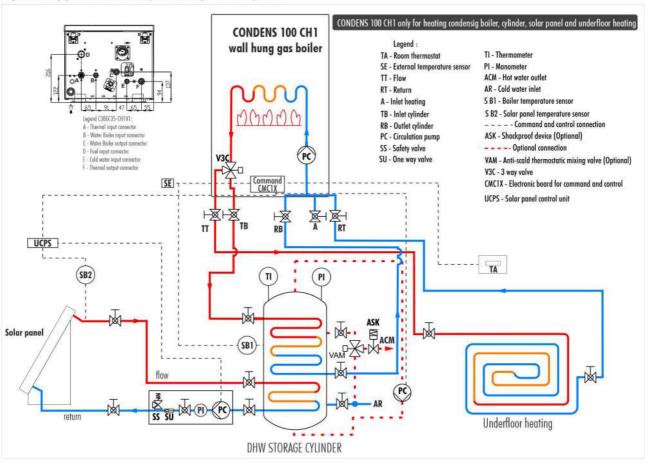


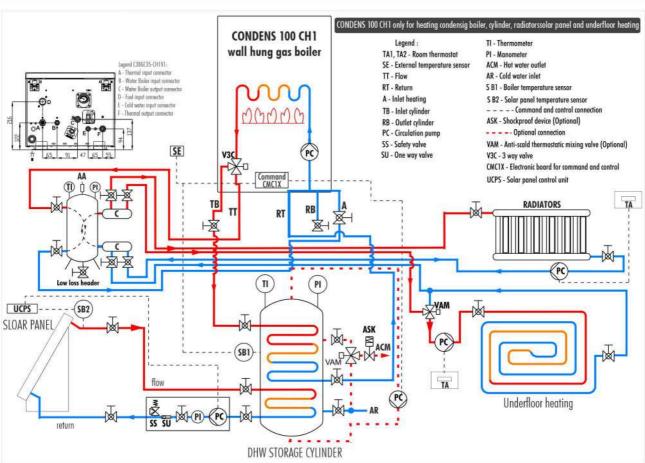


Operation diagrams and installation option, using CONDENS 100 CH1 - only fot heating boilers:

#### CONDENS 100 CHI

Condesing wall hung gas boiler, 35kW, oly for heating, with 3-way valve



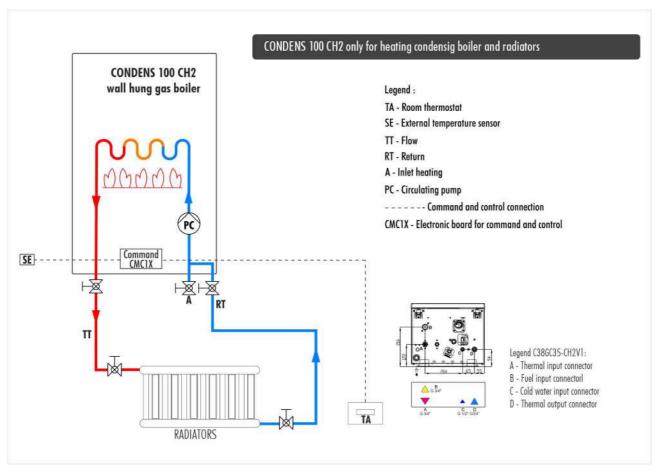


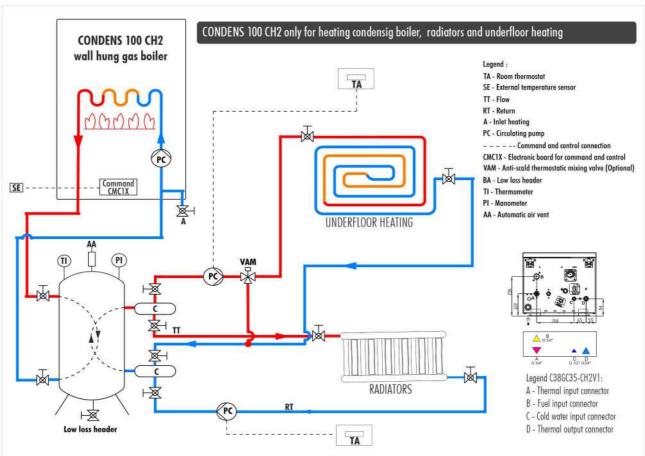


Operation diagrams and installation option, using CONDENS 100 CH2 - only fot heating boilers:

#### CONDENS 100 CH2

Condesing wall hung gas boiler, 35kW, oly for heating, without 3-way valve



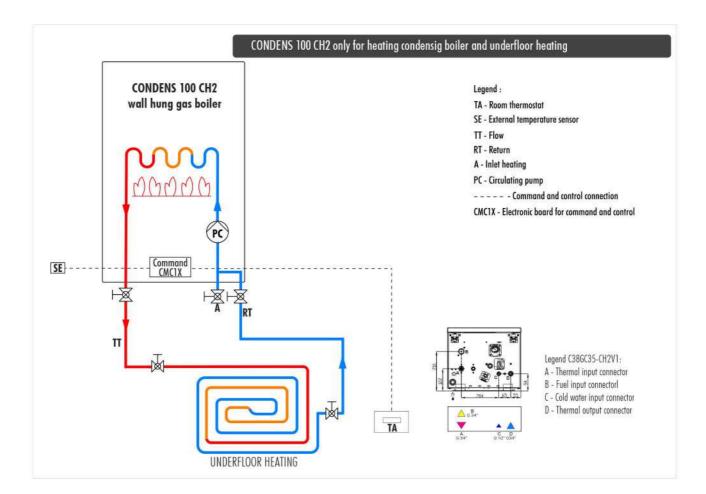




Operation diagrams and installation option, using CONDENS 100 CH - only fot heating boilers:

#### CONDENS 100 CH2

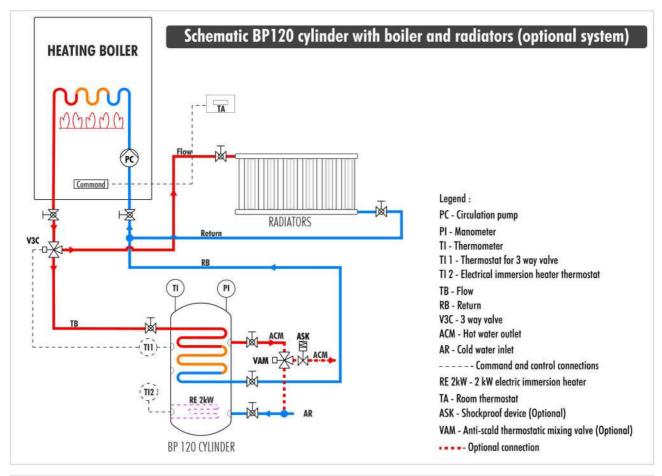
Condesing wall hung gas boiler, 35kW, oly for heating, without 3-way valve

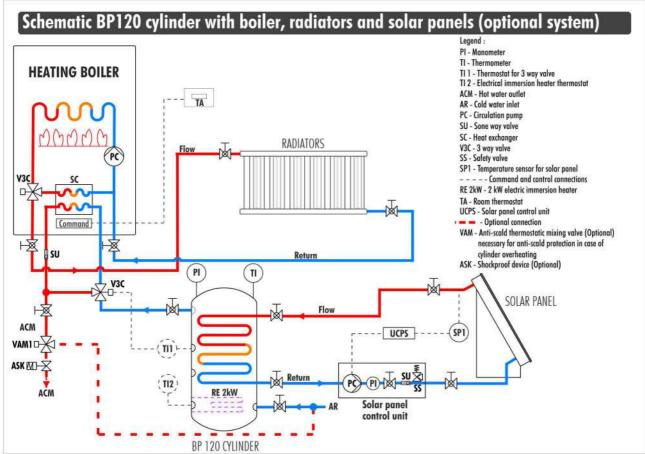




Installation option, using Bp120 DHW storage cylinder with single coil:

#### DHW CYLINDER BP120L-V1







Installation option, using BP120 DHW storage cylinder with single coil:

#### DHW CYLINDER BP120L-V1

