

CARES X

Wall-hung compact boiler



ENERGY EFFICIENCY

/ Thanks to the accurate design of the combustion unit, Cares X has a **very high efficiency**, up to 93,8% (24 FF) in the category of traditional boilers;

DESIGN AND TECHNOLOGY

/ LCD display and intuitive menu from which you can easily set the temperature you desire and activate functions;
/ Thanks to the addition of a thermostatic mixing valve, Cares X permits the **connection with a natural circulation solar water heater**;

LCD Display
★★★ efficiency
+10% saving
extra safe IPX5D
(vers. FF)





EASY TO USE

EASY
INSTALLATIONEASY
MAINTENANCEBUS
Bridge
Net
SYSTEM
MANAGEMENTMADE
IN ITALY

COMFORT

- / **Ariston Net** ready for
- / Thanks to the **connection with on-off thermoregulation accessories**, Cares X allows the heating programming for the whole week;
- / The boiler is already equipped with a three way-valve and a sanitary heat exchanger for the **domestic hot water production**; up to 13,5 l/min (dt 25°C), a very high value in its category;
- / The increased expansion vessel makes the boiler **suitable for large areas heating**;

QUALITY

- / Cares X is made up with the best material available: the aluminum (only 24 FF) used for the primary heat exchanger, and the stainless steel for the sanitary exchanger, guarantee **high reliability and very long lifecycle**;
- / The addition of heating return filter guarantees **boiler protection from water impurities accumulation**;
- / The use of antiseizing systems **prevent freezing and scale accumulation**, protecting not only the wall-hung boiler, but even your whole system; as well the air purge function protects from air accumulation;
- / The integrated minimum pressure switch guarantees **boiler protection from low pressure working conditions**;
- / The external combustion analysis port permits **easy check of combustion quality**;

FAN

EXPANSION VESSEL

MAIN HEAT EXCHANGER

COMBUSTION CHAMBER

BURNER

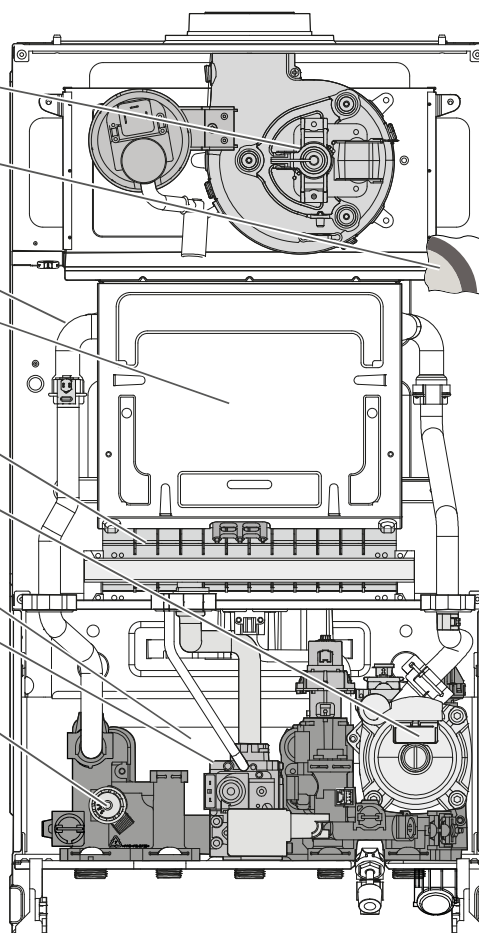
CIRCULATION PUMP
WITH AIR RELEASE VALVE

SECONDARY HEAT EXCHANGER

GAS VALVE

SAFETY VALVE (3 BAR)

**The essence of comfort
matched with very
good performances**



The drawing refers
to FF version

TECHNICAL DATA

15 CF

24 CF

15 FF

18 FF

24 FF

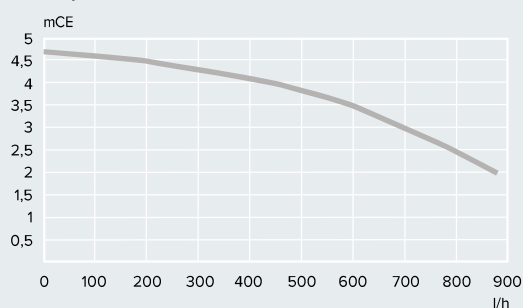
POWER SPECIFICATIONS

Max/min nominal heat input(Hi)	kW	16,5 / 11,0	25,8 / 11,0	15,0 / 11,0	19,0 / 11,0	25,8 / 11,0
Max/min nominal heat input (Hs)	kW	18,3 / 12,2	28,7 / 12,2	16,7 / 12,2	21,1 / 12,2	28,7 / 12,2
Max/min nominal heat input for hot water (Hi)	kW	27,0 / 11,0	27,0 / 11,0	25,8 / 11,0	25,8 / 11,0	25,8 / 11,0
Max/min nominal heat input for hot water (Hs)	kW	30,0 / 12,2	30,0 / 12,2	28,7 / 12,2	28,7 / 12,2	28,7 / 12,2
Heat output: max/min	kW	14,9 / 9,9	23,7 / 9,9	13,5 / 9,5	17,8 / 9,5	24,0 / 9,5
D.H.W. Heat output: max/min	kW	25,0 / 10,2	25,0 / 10,2	23,6 / 10,0	23,6 / 10,0	23,6 / 10,0
Combustion efficiency (of flue gas)	%	90,9	92,7	92,9	93,8	93,7
Gross efficiency of nominal heat input (60/80 °C) Hi/Hs	%	90,2 / 81,2	91,9 / 82,8	90,2 / 81,2	93,6 / 84,3	93,1 / 83,8
Gross efficiency at 30 % at 47°C Hi/Hs	%	89,5 / 80,6	91,2 / 82,1	89,3 / 80,4	92,4 / 83,2	93,3 / 84,0
Gross efficiency at minimum power Hi/Hs	%	90,2 / 81,8	90,2 / 81,2	86,7 / 78,1	86,7 / 78,1	86,7 / 78,1
Number of efficiency stars (Directive 92/42/EEC)	stars	**	**	**	***	***
Ma. heat loss to the casing ($\Delta T = 50^{\circ}\text{C}$)	%	0,7	0,8	2,7	0,2	0,6
Heat loss through the flue when burner on	%	9,1	7,3	7,1	6,2	6,3
Heat loss through the flue when burner off	%	0,4	0,4	0,4	0,4	0,4

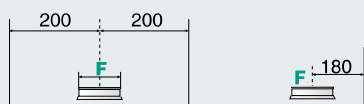
EMISSIONS

Residual discharge head	Pa	-	-	120	120	120
Minimum draw	Pa	3,6	4,1	-	-	-
Nox class	class	2	2	3	3	3
Flue fumes temperature (G20)	°C	98	116	115	115	117
CO2 content2 (G20)	%	3,4	5,4	5,5	6,5	6,5
CO content (0 %O2)	ppm	14	54	40	22	60
O2 content2 (G20)	%	14,4	10,8	10,6	8,8	8,8
Max capacity fumes (G20)	kg/h	67,2	67,2	56,9	56,9	56,9
Excess air	%	219	105	101	72	72

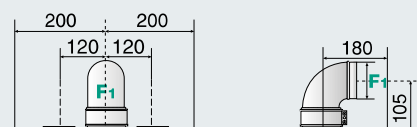
Graph of boiler's residual head



CF version - Natural Draught

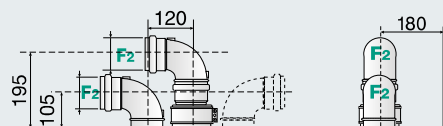


FF Version - Coaxial exhaust

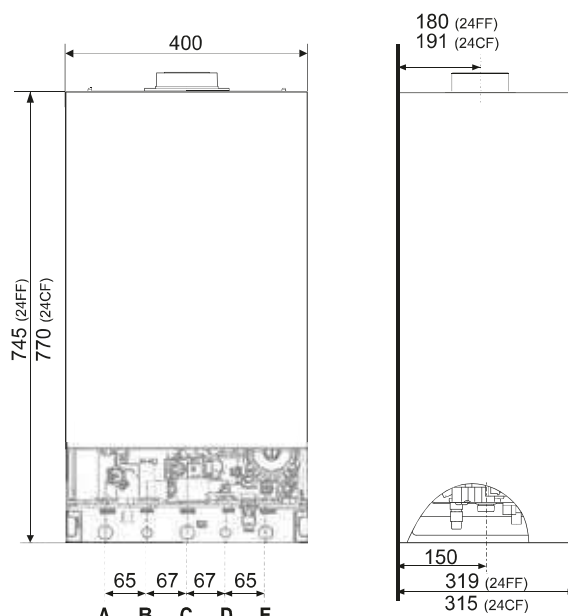


Max lenght:
 Ø60/100: up to 4m (15-18-24 kW)
 Ø80/125: up to 11m (15-18-24 kW)

FF Version - Twin pipe exhaust



Max lenght:
 Ø80/80: up to 45m (15-18-24 kW)



LEGEND

- A: Central Heating Flow
- B: Domestic Hot Water Outlet
- C: Gas Inlet
- D: Domestic Cold Water Inlet
- E: Central Heating Return

TECHNICAL DATA

15 CF

24 CF

15 FF

18 FF

24 FF

HEATING CIRCUIT

Expansion vessel pre-charged pressure	Mpa (bar)	0,1 (1)	0,1 (1)	0,1 (1)	0,1 (1)	0,1 (1)
Maximum central heating circuit pressure	Mpa (bar)	0,3 (3)	0,3 (3)	0,3 (3)	0,3 (3)	0,3 (3)
Expansion vessel capacity	l	8	8	8	8	8
Central heating temperature: max/min	°C	82 / 35	82 / 35	82 / 35	82 / 35	82 / 35

DOMESTIC HOT WATER CIRCUIT

Domestic hot water temperature max/min	°C	60/36	60/36	60/36	60/36	60/36
Specific flow rate of domestic hot water system (10 min. with $\Delta T=30^{\circ}\text{C}$) instant boilers	l/min	11,8	11,8	11,2	11,2	11,2
D.H.W. flow rate $\Delta T=25^{\circ}\text{C}$	l/min	14,3	14,3	13,5	13,5	13,5
D.H.W. flow rate $\Delta T=35^{\circ}\text{C}$	l/min	10,2	10,2	9,6	9,6	9,6
Hot water comfort stars (EN13203)	stars	**	**	**	**	**
D.H.W. minimum flow rate	l/min	<2	<2	<2	<2	<2
Domestic hot water pressure max/min	Mpa (bar)	0,7 / 0,1 (7 / 1)	0,7 / 0,1 (7 / 1)	0,7 / 0,1 (7 / 1)	0,7 / 0,1 (7 / 1)	0,7 / 0,1 (7 / 1)

ELECTRICAL

Power supply voltage/frequency	V/Hz	220 / 50	220 / 50	220 / 50	220 / 50	220 / 50
Power consumption	W	78	78	112	112	112
Minimum operating room temperature	°C	5	5	5	5	5
Electric system grades of protection	IP	X4D	X4D	X5D	X5D	X5D
Weight	kg	26	26	28	28	28

CODE NATURAL GAS

3300889

3300888

3300887

3300886

3300885

OPTIONAL ACCESSORIES

CODE



Chronothermostat

LPG CONVERSION KIT

for Cares X System 15 CF-FF - 18 FF
for Cares X System 24 CF-FF

No kits available
3318261

TEMPLATES

Carton-Plastic template kit (5 ps)

3318245

HYDRAULIC ACCESSORIES

Basic kit without taps
2 taps (Gas and DHW inlet) connections kit
taps + pipes (CH flow and return) connections kit
3 taps (DHW inlet, CH flow and return) connections kit
4 taps (CH flow and return, gas and DHW inlet) connections kit
Hydraulic bar kit

3318222
3318224
3318225
3318285
3318228
3678348

THERMOREGULATION ACCESSORIES

On-off chronothermostat (wired)
On-off chronothermostat (wireless)
On-off Room thermostat

3318590
3318591
3318594

FLUE PIPES

1000mm 60/100 coaxial kit complete with 90° elbow and terminal
Vertical starter
1000mm 80/125 coaxial kit complete with 90° elbow and terminal
Adaptor/Vertical starter 60/100 - 80/125
Horizontal twin pipe (Ø 80) flue kit
Adaptor (Ø 60/80) for twin pipe systems

3318000
3318008
3318035
3318040
3318368
3318367

For the whole accessories list see pag. 116