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 INSTALLATION | EASY MAINTENANCE | SYSTEM MANAGEMENT | MADE 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

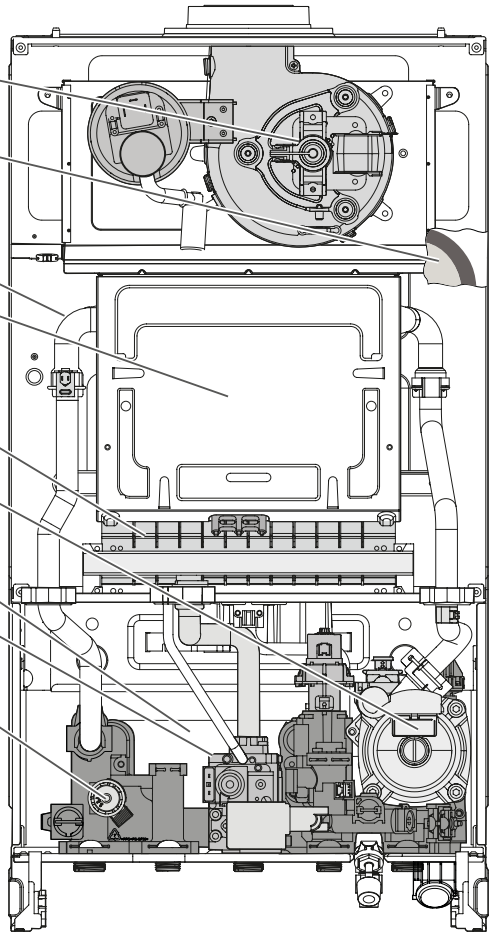
BURNER

CIRCULATION PUMP WITH AIR RELEASE VALVE

SECONDARY HEAT EXCHANGER

GAS VALVE

SAFETY VALVE (3 BAR)

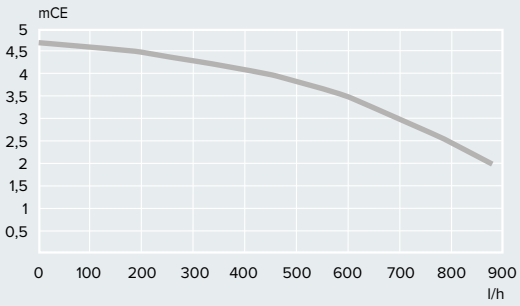


The drawing refers to FF version

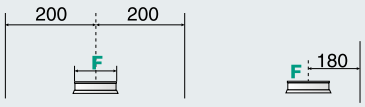
The essence of comfort matched with very good performances

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 (ΔT = 50°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
Minimun 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 %02)	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

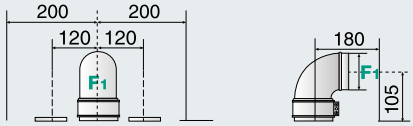
Graph of boiler's residual head



CF version - Natural Draught

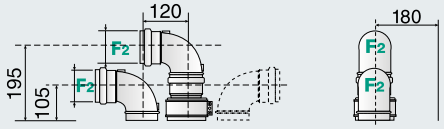


FF Version - Coaxial exhaust

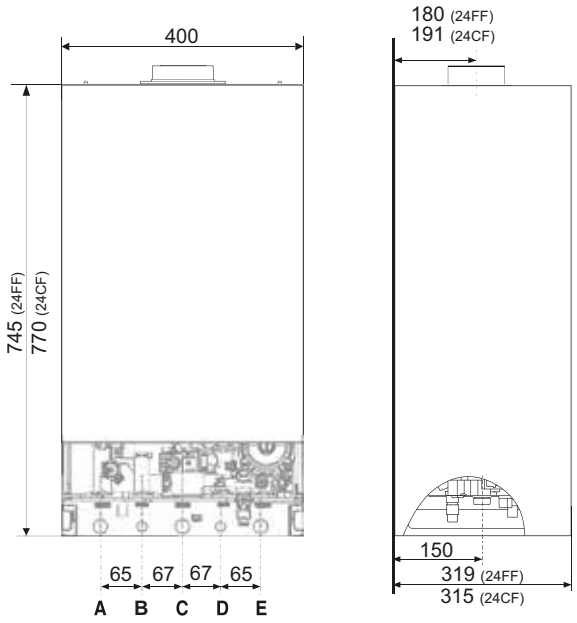


Max lenght:
Ø60/100: up to 4m (15-18-24 kW)
Ø80/125: up to 11m (15-18-24 kW)

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 ΔT=30°C) instant boilers	l/min	11,8	11,8	11,2	11,2	11,2
D.H.W. flow rate ΔT=25°C	l/min	14,3	14,3	13,5	13,5	13,5
D.H.W. flow rate ΔT=35°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



Chronothermostat

OPTIONAL ACCESSORIES	CODE
LPG CONVERSION KIT	
for Cares X System 15 CF-FF - 18 FF	No kits available
for Cares X System 24 CF-FF	3318261
TEMPLATES	
Carton-Plastic template kit (5 ps)	3318245
HYDRAULIC ACCESSORIES	
Basic kit without taps	3318222
2 taps (Gas and DHW inlet) connections kit	3318224
taps + pipes (CH flow and return) connections kit	3318225
3 taps (DHW inlet, CH flow and return) connetions kit	3318285
4 taps (CH flow and return, gas and DHW inlet) connections kit	3318228
Hydraulic bar kit	3678348
THERMOREGULATION ACCESSORIES	
On-off chronothermostat (wired)	3318590
On-off chronothermostat (wireless)	3318591
On-off Room thermostat	3318594
FLUE PIPES	
1000mm 60/100 coaxial kit complete with 90° elbow and terminal	3318000
Vertical starter	3318008
1000mm 80/125 coaxial kit complete with 90° elbow and terminal	3318035
Adaptor/Vertical starter 60/100 - 80/125	3318040
Horizontal twin pipe (Ø 80) flue kit	3318368
Adaptor (Ø 60/80) for twin pipe systems	3318367

For the whole accessories list see pag. 116