

PLAY 24 - 28 - 32

Wall-mounted gas condensing boiler for heating and DHW production



Technical and construction features

PLAY is an ultra-compact gas condensing boiler to produce heating and DHW.

PLAY is simple to install and use and is available with powers from 24 to 32 kW, the use of cutting-edge components and high quality standards guarantee a product with a high degree of reliability, the ultra-compact dimensions allow easy installation even in thinner walls.

PLAY provides advanced electronics, easily manageable from the intuitive control panel with backlit display.

Through the BEST System, combustion is analyzed at all times, guaranteeing the best performance in terms of efficiency and polluting emissions.

All models are equipped with electronic ignition and ionisation flame control.

The BEST system also allows the use of LPG (or methane gas) by acting only on the electronics without the need for additional conversion kits.



HIGH PERFORMANCE
103,4 % CERTIFICATED



CONDENSING
BOILER



HEATING
















DHW

Model	Thermal power kW*	Thermal flow kW	Code	€
PLAY 24 (heating and DHW)	24,9	24,0	30420021	1.830,00
PLAY 28 (heating and DHW)	29,2	28,0	30420022	1.890,00
PLAY 32 (heating and DHW)	33,5	32,0	30420023	1.950,00

*Heating thermal power (50-30 °C)

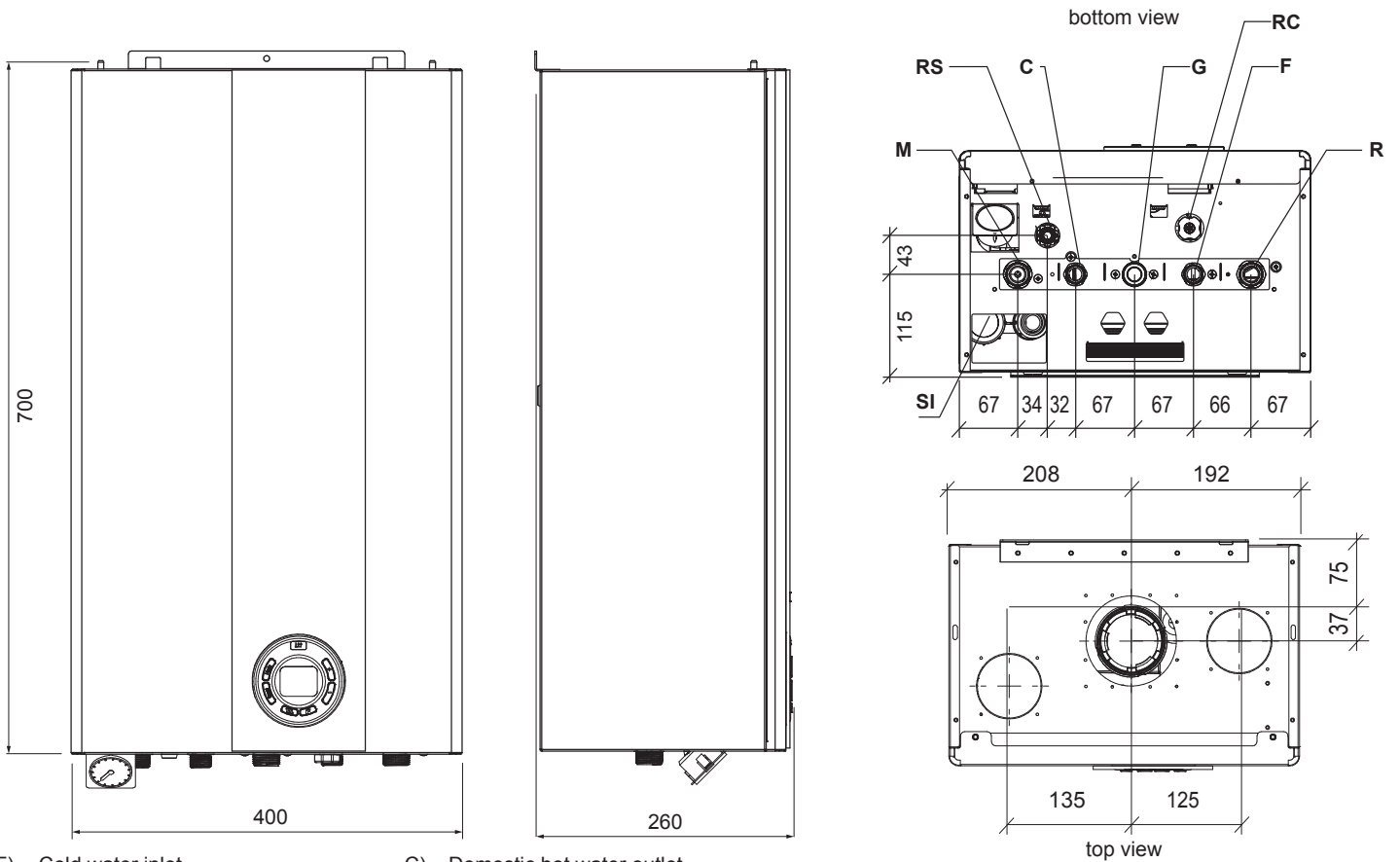
Accessories PLAY 24 - 28 - 32

	Standard remote control and command panel Advanced command and remote control panel	30400034 30403110	140,00 224,00
	Coaxial starting curve Ø 60/100 at 90 ° with smoke extraction	30403123	23,00
	Vertical coaxial outlet Ø 60/100 with smoke extraction	30403124	25,00
	Coaxial flue gas exhaust kit Ø 60/100	30403000	50,00
	Coaxial roof terminal Ø 60/100	30403014	118,00
	Coaxial extension Ø 60/100 M / F = 1000 mm	30403002	28,00
	Coaxial 90° bend Ø 60/100 M / F	30403004	30,00
	Coaxial 45° bend Ø 60/100 M / F	30403003	30,00
	Splitter kit from Ø 60/100 to Ø 80/80	30403018	33,00
	Separate duct kits 30403022 Ø 80/80 with smoke extraction	30403022	22,00
	Extension Ø 80 M/F = 1000 mm	30403011	8,00
	Coaxial 90° bend Ø 80 M / F	30403013	5,00
	Coaxial 45° bend Ø 80 M / F	30403012	5,00

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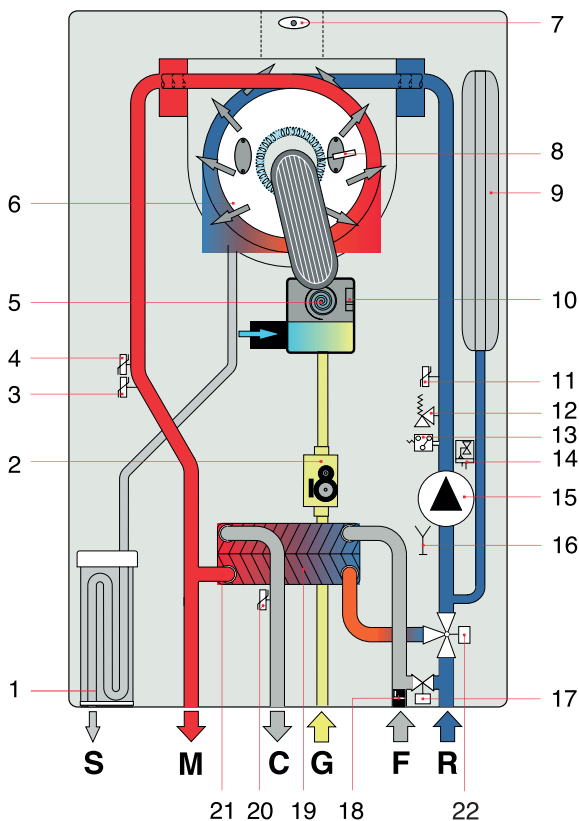
Dimensions PLAY 24 - 28 - 32



- F) Cold water inlet
- G) Gas inlet
- SI) Siphon inspection cap
- M) Heating system delivery
- C) Domestic hot water outlet
- R) Heating system return
- RS) Safety valve drain and drain cock
- RC) Filling cock

Values in mm

Hydraulic scheme PLAY 24 - 28 - 32



- 1 Condensate drain siphon
 - 2 Modulating gas valve
 - 3 Safety thermostat
 - 4 Flow temperature sensor
 - 5 Modulating fan
 - 6 Primary condensing exchanger
 - 7 Flue gas temperature probe
 - 8 Ignition and detection electrode
 - 9 Expansion vessel
 - 10 Fan control sensor
 - 11 Return temperature sensor
 - 12 3 bar safety valve
 - 13 Pressure transducer
 - 14 Deaerator
 - 15 Circulator
 - 16 Drain cock
 - 17 Filling cock
 - 18 Flowmeter with cold water filter
 - 19 Secondary plate exchanger
 - 20 Domestic hot water temperature sensor
 - 21 Automatic by-pass integrated on plate heat exchanger
 - 22 Motorized 3-way valve
- S Condensate drain
 - G Gas inlet
 - M Heating system flow
 - C Domestic hot water outlet
 - F Cold water inlet
 - R Heating system return

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Boiler technical data table PLAY 24 - 28 - 32

DESCRIPTION	U.M.	PLAY 24	PLAY 28	PLAY 32
Appliance category		I12H3P	I12H3P	I12H3P
Minimum pressure of the heating circuit	bar	0,5	0,5	0,5
Maximum pressure of the heating circuit	bar	3	3	3
Minimum pressure of the sanitary circuit	bar	0,5	0,5	0,5
Maximum pressure of the sanitary circuit	bar	6	6	6
Specific flow rate of sanitary water (ΔT 30K)	l/min	12	13,3	14
Power supply			230V/1/50Hz	
Power supply fuse	A	3,15	3,15	3,15
Max absorbed power	W	87	87	102
Degree of electrical protection		IP X4D	IP X4D	IP X4D
Methane gas consumption at max heating flow rate *	m ³ /h	2,54	2,90	3,37
LPG consumption at max flow rate in heating *	m ³ /h	0,75	0,83	0,97
Fan speed G20 heating max. / min. (x 100)	rpm	48 / 9	55 / 9	52 / 11
Number of DHW G20 fan revolutions max. / min. (x 100)	rpm	62,50	65,25	62,50
LPG heating fan speed max. / min. (x 100)	rpm	54 / 9	49 / 9	53 / 9
Numero di giri ventilatore GPL sanitario max. (x 100)	rpm	64,5	57	59,5
Fan speed G20 ignition (x 100)	rpm	35	35	35
Fan speed G20 ignition (x 100)	rpm	32	32	32
Maximum operating temperature in heating	°C	85	85	85
Maximum operating temperature in domestic hot water	°C	60	60	60
Total expansion vessel capacity	l	9	9	9
Net weight	Kg	29,9	31,4	33,0

*Value referred a 15 °C - 1013 mbar

Boiler operating data table PLAY 24

FUNZIONE	Heating thermal capacity kW		Heating thermal capacity 80-60°C kW		Heating thermal power 50-30°C kW		Supply pressure mbar	Diameter diaphragm mm	Value CO ₂ fumes %	
	min	max	min	max	min	max			min	max
Gas methane G20	2,8	24,0	2,5	23,0	2,9	24,9	20	5,6	9,3	9,8
Gas LPG	2,8	24,0	2,5	23,0	2,9	24,9	30/37	5,6	10,4	10,7

Production of domestic hot water with ΔT of 45 °C = 8 l / min
 Production of domestic hot water with ΔT of 40 °C = 9 l / min
 Production of domestic hot water with ΔT of 35 °C = 10 l / min

Production of domestic hot water with ΔT of 30 °C = 11 l / min
 Production of domestic hot water with ΔT of 25 °C = 14 l / min

Boiler operating data table PLAY 28

FUNCTION	Heating thermal capacity kW		Heating thermal capacity 80-60°C kW		Heating thermal power 50-30°C kW		Supply pressure mbar	Diameter diaphragm mm	Value CO ₂ fumes %	
	min	max	min	max	min	max			min	max
Gas methane G20	3,1	28,0	2,9	26,9	3,2	29,2	20	6,0	9,0	9,0
Gas LPG	3,1	28,0	2,9	26,9	3,2	29,2	30/37	6,0	10,5	10,5

Production of domestic hot water with ΔT of 45 °C = 8 l / min
 Production of domestic hot water with ΔT of 40 °C = 9 l / min
 Production of domestic hot water with ΔT of 35 °C = 10 l / min

Production of domestic hot water with ΔT of 30 °C = 11 l / min
 Production of domestic hot water with ΔT of 25 °C = 14 l / min

Boiler operating data table caldaia PLAY 32

FUNCTION	Heating thermal capacity kW		Heating thermal capacity 80-60°C kW		Heating thermal power 50-30°C kW		Supply pressure mbar	Diameter diaphragm mm	Value CO ₂ fumes %	
	min	max	min	max	min	max			min	max
Gas methane G20	3,4	32,0	3,3	30,8	3,5	33,5	20	6,3	8,4	10,6
Gas LPG	3,4	32,0	3,3	30,8	3,5	33,5	30/37	6,3	10,5	10,6

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 Production of domestic hot water with ΔT of 35 °C = 10 l / min

Production of domestic hot water with ΔT of 30 °C = 11 l / min
 Production of domestic hot water with ΔT of 25 °C = 14 l / min

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Boiler combustion data table PLAY 24

DESCRIPTION	U.M.	Pmax	Pmin	Carico 30%
Leaks in the casing with the burner running	%	0,4	8,2	
Leaks when burner is off	%	0,3	2,4	
Leaks in the chimney with the burner working	%	3,7	1,8	
Mass flow of fumes	g/s	11,9	1,3	
Smoke temperature	°C	70	62	
Thermal efficiency useful for power max (60/80 °C)	%	95,9	-	
Thermal efficiency useful for power max (30/50 °C)	%	103,7	-	
Thermal efficiency useful for power min. (60/80 °C)	%	-	90,0	
Thermal efficiency useful for power min. (30/50 °C)	%	-	102,1	
Thermal efficiency useful at 30% of charge	%	-	-	107,1
Class of emission NOX			6	

Boiler combustion data table PLAY 28

DESCRIPTION	U.M.	Pmax	Pmin	Carico 30%
Leaks in the casing with the burner running	%	1,6	5,0	
Leaks when burner is off	%	0,15	0,1	
Leaks in the chimney with the burner working	%	2,3	2,1	
Mass flow of fumes	g/s	13,0	1,6	
Smoke temperature	°C	68	65	
Thermal efficiency useful for power max (60/80 °C)	%	96,1		
Thermal efficiency useful for power max (30/50 °C)	%	104,2		
Thermal efficiency useful for power min. (60/80 °C)	%		92,9	
Thermal efficiency useful for power min. (30/50 °C)	%		102,8	
Thermal efficiency useful at 30% of charge	%			107,1
Class of emission NO			6	

Boiler combustion data table PLAY 32

DESCRIPTION	U.M.	Pmax	Pmin	Carico 30%
Leaks in the casing with the burner running	%	1,3	2,5	
Leaks when burner is off	%	0,2	1,8	
Leaks in the chimney with the burner working	%	2,4	1,8	
Mass flow of fumes	g/s	15,0	1,9	
Smoke temperature	°C	74,5	63	
Thermal efficiency useful for power max (60/80 °C)	%	96,3		
Thermal efficiency useful for power max (30/50 °C)	%	104,5		
Thermal efficiency useful for power min. (60/80 °C)	%		95,7	
Thermal efficiency useful for power min. (30/50 °C)	%		103,5	
Thermal efficiency useful at 30% of charge	%			107,1
Class of emission NO			6	

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ERP data and boiler labeling PLAY 24

Manufacturer's model identifier	PLAY ENTRY 24
Condensing boilers:	YES
Low temperature boiler (**)	YES
Boiler type B Caldaia tipo B	NO
Cogeneration appliance for ambient heating NO	If so, equipped with an additional heater
Mixed heater	YES

Element	Symbol	Value	Unit
Nominal Heat output	P_n	24	kW
<i>For space heating boilers and mixed boilers useful heat: useful heat output</i>			
At nominal heat output e at a high temperature regime (*)	P_4	23	kW
At 30% of the rated heat output and at a low temperature regime (**)	P_1	6,5	kW

Element	Symbol	Value	Unit
Seasonal energy efficiency of space heating	η_1	92	%
<i>For space heating boilers and mixed boilers useful heat: useful efficiency</i>			
At nominal heat output and at a high temperature regime (*)	η_4	86,4	%
At 30% of the rated heat output and at a high temperature regime (*)	η_4	96,4	%

Auxiliary electricity consumption			
Fully loaded	e_{lmax}	0,087	kW
Partial load	e_{lmin}	0,054	kW
In stand-by mode	P_{SB}	0,004	kW

Other elements			
Stand-by heat loss	P_{stby}	0,069	kW
Energy consumption of the ignition burner	P_{ign}	0	kW
Annual energy consumption	Q_{HE}	42,2	kW
Nitrogen oxide emissions	NO_x	23	mg/kWh

For mixed heaters:

Load profile declared	XL		
Daily consumption of electricity	Q_{elec}	0,16	kWh
Annual consumption of electricity	AEC	35,7	kWh

Seasonal energy efficiency water heating	Symbol	Value	Unit
	η_{wh}	90	%
Daily fuel consumption	Q_{fuel}	21,3	kWh
Annual fuel consumption	AFC	16,4	GJ

Contact details: A2B Accorroni E.G. s.r.l. Via d'Ancona, 37 - 60027 Osimo (An)

(*) High temperature mode: return temperature of 60 °C at the entrance to the appliance and 80 °C of use temperature at the exit of the appliance.

(**) Low temperature: return temperature (at the boiler inlet) for condensing boilers 30 °C, for low temperature of 37 °C and for other appliances of 50 °C.

Seasonal energy efficiency class for space heating	A
Energy efficiency class of water heating	A

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ERP data and boiler labeling PLAY 28

Manufacturer's model identifier	PLAY ENTRY 28
Condensing boilers:	YES
Low temperature boiler (**)	YES
Boiler type B Caldaia tipo B	NO
Cogeneration appliance for ambient heating NO	If so, equipped with an additional heater
Mixed heater	YES

Element	Symbol	Value	Unit
Nominal Heat output	P_n	28	kW
<i>For space heating boilers and mixed boilers useful heat: useful heat output</i>			
At nominal heat output e at a high temperature regime (*)	P_4	27	kW
At 30% of the rated heat output and at a low temperature regime (**)	P_1	8,1	kW

Element	Symbol	Value	Unit
Seasonal energy efficiency of space heating	η_1	92	%
<i>For space heating boilers and mixed boilers useful heat: useful efficiency</i>			
At nominal heat output and at a high temperature regime (*)	η_4	86,4	%
At 30% of the rated heat output and at a high temperature regime (*)	η_4	96,1	%

Auxiliary electricity consumption			
Fully loaded	e_{lmax}	0,087	kW
Partial load	e_{lmin}	0,042	kW
In stand-by mode	P_{SB}	0,004	kW

Other elements			
Stand-by heat loss	P_{stby}	0,070	kW
Energy consumption of the ignition burner	P_{ign}	0	kW
Annual energy consumption	Q_{HE}	55	kW
Nitrogen oxide emissions	NO_x	42	mg/kWh

For mixed heaters:

Load profile declared	XL		
Daily consumption of electricity	Q_{elec}	0,1	kWh
Annual consumption of electricity	AEC	22	kWh

Seasonal energy efficiency water heating	Symbol	Value	Unit
	η_{wh}	90	%
Daily fuel consumption	Q_{fuel}	21,7	kWh
Annual fuel consumption	AFC	17,2	GJ

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(**) Low temperature: return temperature (at the boiler inlet) for condensing boilers 30 °C, for low temperature of 37 °C and for other appliances of 50 °C.

Classe di efficienza energetica stagionale del riscaldamento dell'ambiente	A
Classe di efficienza energetica del riscaldamento dell'acqua	A

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Wall-mounted gas condensing boiler for heating and DHW production

ERP data and boiler labeling PLAY 32

Manufacturer's model identifier	PLAY ENTRY 24
Condensing boilers:	YES
Low temperature boiler (**)	YES
Boiler type B Caldaia tipo B	NO
Cogeneration appliance for ambient heating NO	If so, equipped with an additional heater
Mixed heater	YES

Element	Symbol	Value	Unit
Nominal Heat output	P_n	32	kW
<i>For space heating boilers and mixed boilers useful heat: useful heat output</i>			
At nominal heat output e at a high temperature regime (*)	P_4	31	kW
At 30% of the rated heat output and at a low temperature regime (**)	P_1	9,3	kW

Element	Symbol	Value	Unit
Seasonal energy efficiency of space heating	η_1	92	%
<i>For space heating boilers and mixed boilers useful heat: useful efficiency</i>			
At nominal heat output and at a high temperature regime (*)	η_4	867	%
At 30% of the rated heat output and at a high temperature regime (*)	η_4	96,4	%

Auxiliary electricity consumption			
Fully loaded	e_{lmax}	0,102	kW
Partial load	e_{lmin}	0,062	kW
In stand-by mode	P_{SB}	0,0054	kW

Other elements			
Stand-by heat loss	P_{stby}	0,071	kW
Energy consumption of the ignition burner	P_{ign}	0	kW
Annual energy consumption	Q_{HE}	62,7	kW
Nitrogen oxide emissions	NO_x	55	mg/kWh

For mixed heaters:

Load profile declared	XL		
Daily consumption of electricity	Q_{elec}	0,16	kWh
Annual consumption of electricity	AEC	346	kWh

Seasonal energy efficiency water heating	η_{wh}	90	%
Daily fuel consumption	Q_{fuel}	21,3	kWh
Annual fuel consumption	AFC	16,4	GJ

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(**) Low temperature: return temperature (at the boiler inlet) for condensing boilers 30 °C, for low temperature of 37 °C and for other appliances of 50 °C.

Seasonal energy efficiency class for space heating	A
Energy efficiency class of water heating	A