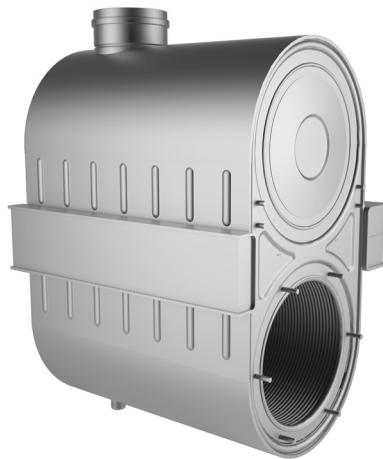


Luna Duo-tec MP+ 50-150 kW Wall hung commercial condensing boilers



The range of high output wall hung boilers LUNA DUO-TEC MP + consists of condensing heat generators for heating only, with output between 50 and 150 kW (50/30°C).



Main features:

- **high modulation ratio (1:9);**
- nominal **efficiency 50/30°C: 105%;**
- **high efficiency full modulating circulating pump** included in the boiler;
- **heat exchanger** with combustion chamber and stainless steel coil hydraulic system, single chamber models from 50 to 70 kW, double chamber models 90 - 150 kW
- low water content in the exchanger that means very limited thermal inertia and therefore a rapid response to the variations in thermal energy required by the system;
- premixing unit with double clapet technique, ensuring that the burner constantly has an optimal air/gas ratio independently from the number of fan revs, keeping consumption to a minimum and always guaranteeing correct combustion and consequently a reduction in polluting emissions;
- **NTC sensor on flow and return** for a more precise modulation;
- **digital PCB with latest generation double microprocessor;**
- control panel with large back-lit LCD;
- **stainless steel burner** for 1.50, 1.70, 1.90, 1.130 and 1.150 models and metallic fiber for 1.110 model;
- adjustable speed fan and insulation for a noiseless operation;
- **electronics that allows great flexibility** in highly diversified contexts. With specific accessories that can also be installed inside the boiler, it is possible to control mixing zones, daily and weekly programming of heating and sanitary functions, cascade, recirculation and other functions;
- 0-10 V control available as optional;
- accessories for single or cascade installation, for wall hung mounting or with metal frame;
- hydraulic accessories to install from 2 to 6 boilers in cascade;
- operation with natural gas and LPG (with LPG conversion kit).

Available models

Heating only boiler with possibility to connect to a DHW tank



Model Luna Duo-tec MP/MP+	Power range (kW)	
	ΔT 50/30°C	ΔT 80/60 °C
Luna Duo-tec MP/MP+ 1.50	5,4 to 48,6	5 to 45
Luna Duo-tec MP/MP+ 1.60	6,6 to 59,4	6,1 to 55
Luna Duo-tec MP/MP+ 1.70	7,8 to 70,2	7,2 to 65
Luna Duo-tec MP/MP+ 1.90	10,2 to 91,8	9,4 to 85
Luna Duo-tec MP/MP+ 1.110	12,3 to 110,2	11,4 to 102
Luna Duo-tec MP/MP+ 1.130	26,2 to 130,6	24,3 to 121,5
Luna Duo-tec MP/MP+ 1.150	30,2 to 150,9	28,1 to 140,3

Model Luna Duo-tec MP/MP+	NO _x EMISSION LEVEL
Luna Duo-tec MP/MP+ 1.50	< 29 mg/kWh
Luna Duo-tec MP/MP+ 1.60	< 31 mg/kWh
Luna Duo-tec MP/MP+ 1.70	< 31 mg/kWh
Luna Duo-tec MP/MP+ 1.90	< 31 mg/kWh
Luna Duo-tec MP/MP+ 1.110	< 22 mg/kWh
Luna Duo-tec MP/MP+ 1.130	< 17 mg/kWh
Luna Duo-tec MP/MP+ 1.150	< 23 mg/kWh

Technical specifications

Luna Duo-tec MP+	Heating only							
		150	160	170	190	1110	1130	1150
Maximum heat input (heating)	kW	46,3	56,6	66,9	87,4	104,9	123,8	143
Minimum heat output	kW	5,1	6,3	7,4	9,7	11,7	24,8	28,6
Rated heat output (80/60°C) <i>Prated</i>	kW	45	55	65	85	102	121,5	140,3
Minimum heat output (80/60°C)	kW	5	6,1	7,2	9,4	11,4	24,3	28,1
Maximum heat output (50/30°C)	kW	48,6	59,4	70,2	91,8	110,2	130,6	150,9
Minimum heat output (50/30°C)	kW	5,4	6,6	7,8	10,2	12,3	26,2	30,2
Useful heat output at 30% of rated heat output and low temperature regime** P_1	kW	14,9	18,2	21,5	28,2	33,8	40,4	46,6
Seasonal space heating energy efficiency class		A	A	A	-	-	-	-
Efficiency η_n (lower calorific value) - Average temperature 70°C	%	97,4	97,2	97,2	97,3	97,2	98,1	98,1
Efficiency at 30% (lower calorific value) - Return temperature 30°C	%	107,8	107,4	107,1	107,5	107,4	108,6	108,6
Useful efficiency at rated heat output and high temperature regime* η_4	%	87,7	87,6	87,6	87,7	87,6	88,4	88,4
Useful efficiency at 30% of rated heat output and low temperature regime** η_1	%	97,1	96,8	96,5	96,8	96,8	97,8	97,8
Seasonal space heating energy efficiency η_s	%	92	92	92	93	93	93	93
NOx emissions	mg/kWh	29	31	31	31	22	17	23
Maximum pressure heating circuit	bar	4	4	4	4	4	6	6
Maximum inlet temperature heating circuit	°C	90	90	90	90	90	90	90
Heating temperature range	°C	25-80	25-80	25-80	25-80	25-80	25-80	25-80
Water content	l	4	5	6	9	10	10	11
Coaxial flue system	mm	80/125	80/125	80/125	110/160	110/160	110/160	110/160
Dual flue system	mm	80	80	80	110	110	110	110
Minimum working temperature	°C	-5	-5	-5	-5	-5	-5	-5
Maximum flue mass flow rate	kg/s	0,021	0,026	0,031	0,04	0,047	0,056	0,064
Minimum flue mass flow rate	kg/s	0,002	0,003	0,004	0,005	0,005	0,012	0,014
Maximum flue temperature	°C	80	80	74	70	70	70	70
Dimensions (hwxwd)	mm	766x450x377		766x450x505		952x600x584		
Net weight	kg	40	40	50	83	93	93	96
Gas type		Natural Gas/LPG						
Power consumption	W	230	230	230	275	320	360	460
Auxiliary electrical power consumption - Full load el_{max}	W	80	95	95	130	165	187	283
Auxiliary electrical power - Partial load el_{min}	W	20	20	20	17	18	51	52
Auxiliary electrical power - Stand-by P_{SB}	W	3	3	3	3	3	3	3
Sound power level, indoor L_{WA}	dB	62	59	62	63	63	60	64
Grade of protection		IPX5D	IPX5D	IPX5D	IPX5D	IPX5D	IPX5D	IPX5D