

AM Plus condensing

MODULATING UNIT HEATER

6 MODEL RANGE from 10.2kW (min) to 93.4kW (max)

**MAX 105%
EFFICIENCY**

**50% ENERGY
SAVING**

VERY LOW NO_x

**FULLY
MODULATING
PRE-MIXED
BURNER**

**REDUCED AIR
STRATIFICATION**

**STAINLESS STEEL
HEAT EXCHANGER AND
COMBUSTION CHAMBER**

SEALED COMBUSTION CIRCUIT



THE FULLY
MODULATING
PRE-MIXED
BURNER UNIT

This unique heater comes complete with a fully modulating pre-mixed burner together with a constant airflow that ensures the temperature of the heated air is much lower than that of a heater with a fixed output. Consequently, this decrease in thermal stratification allows us to achieve up to 50% energy saving, compared to a traditional non-modulating burner. The condenser, of which the pre-mix burner is an important part, reaches efficiency levels of up to 105%, which gives a large energy saving and reduced gas consumption. In addition to reduced gas consumption there is a large reduction in combustion products, very low NO_x (less than 30ppm) and the elimination of carbon monoxide.

The condensing AM PLUS unit heater reduces the average yearly gas consumption by 30% to 50%, compared to the consumption of traditional unit heaters.



Energy Technology Listed
Appliances, Qualifying for
the Governments
Enhanced Capital
Allowance Scheme

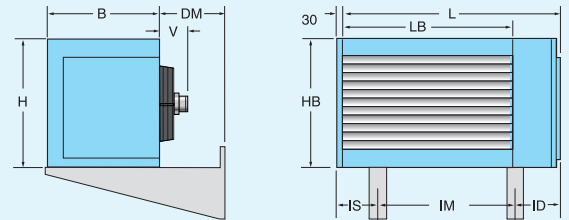


BUILT TO
ISO EUROPEAN
STANDARDS
WITH FULL CE
CERTIFICATION

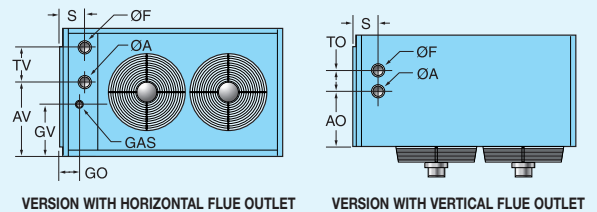
TECHNICAL INFORMATION

MODEL		PCO32	PCO35	PCO43	PCO54	PCO72	PCO92
CE APPROVAL	PIN	0694BM3433	0694BM3433	0694BM3433	0694BM3433	0694BM3433	0694BM3433
Nominal Heat Input kW	min	10,1	11,3	14,8	15,5	22	30
	max	34,85	38,8	47,5	58	78	98
Nominal Heat Output kW	min	10,2	11,7	15,54	16,27	23,1	31,5
	max	32,8	36,5	44,8	54	73,2	93,4
Efficiency (*)	max	101,0%	103,5%	105,0%	105,0%	105,0%	105,0%
	min	94,1%	94,1%	94,3%	93,1%	93,8%	95,3%
Condensate produced litres/hr		0,77	0,84	1,45	1,45	2,2	2,6
Ø Separate Discharge/Inlet flues mm		80/80	80/80	80/80	80/80	100/100	100/100
Available Flue Discharge Pressure Pa		70	80	120	120	120	120
Air Flow (T 15°C) m3/h (**)		3.300	3.800	5.000	6.500	7.600	9.750
Air Throw m (**)		24	25	30	32	34	38
ΔT Air °K (**)	min	8,9	8,8	8,9	7,2	8,7	9,3
	max	28,5	27,5	25,7	23,8	27,6	27,5
Fans Speed rpm (**)		1350	1350	1350	1350	1350	1350
Fans number-Ø/angle mm/(°) (**)		(1) 450/23°	(1) 450/27°	(2) 400/27°	(2) 400/33°	(2) 450/27°	(3) 450/27°
Power Supply V/hz		230/50	230/50	230/50	230/50	230/50	230/50
Power Absorbed W (**)		250	340	470	700	960	1400
Noise Level (free field conditions) (6m) db(A) (**)		45,3	45,4	47,1	47,8	48,2	50,4
Noise Level (typical Installation) (6m) (**)		56,4	56,6	58,6	59	59,8	62,3

Model	Overall Dimensions				Louvres		Brackets			Gas Supply			Weight	
	L	B	H	V	HB	LB	IM	IS	ID	DM	GAS	GO		GV
PCO32	920	650	740	165	550	616	450	205	265	475	3/4"	115	295	95
PCO35	920	650	740	165	550	616	450	205	265	475	3/4"	115	295	95
PCO43	1293	650	740	165	550	990	780	248	265	475	3/4"	115	295	115
PCO54	1293	650	740	165	550	990	780	248	265	475	3/4"	115	295	115
PCO72	1428	735	806	165	596	1120	894	269	265	390	1"	115	328	160
PCO92	1968	735	806	165	596	1690	1434	269	265	390	1"	115	328	200

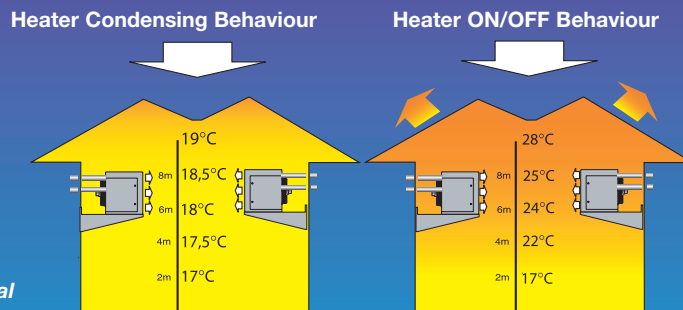


Model	Horizontal Flue Outlet					Vertical Flue Outlet				
	A	F	AV	TV	S	A	F	AO	TO	S
PCO32	80	80	424	204	145	80	80	318	120	145
PCO35	80	80	424	204	145	80	80	318	120	145
PCO43	80	80	424	204	145	80	80	318	120	145
PCO54	80	80	424	204	145	80	80	318	120	145
PCO72	100	100	468	204	145	100	100	332	204	145
PCO92	100	100	468	204	145	100	100	332	204	145



THERMAL STRATIFICATION INSIDE A HEATED BUILDING.

The condensing AM unit heater reduces the average yearly need of energy from 30% to 50% less compared to consumption of traditional unit heaters.



The reduced consumption is due to the large reduction of the thermal stratification inside the heated room. This is obtained by maintaining ventilation, and increasing the modulating field and therefore the exit of heat in the room to be heated, up to the condensing point, reaching the efficiency of 105%.
Experimental tests stress how the value of the temperature with respect to the roof cover of the room, is much smaller in the case of running a condensing modulating heater compared to the temperatures seen with an on/off heater.
Considering that in a factory the heat losses in the roof are larger than 50% of total losses. The higher temperature seen in the roof is only wasted heat.

For further information please contact:



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