

Dear Customer,

Thank you for choosing an **MX series HOT AIR GENERATOR**, an innovative, modern and high-efficiency product which provides comfort, unparalleled noiselessness and safety for a long time; in particular, if the generator is serviced by one of **TECNOCLIMA After-Sales Service Centers**, which are specifically qualified and trained to keep it at its maximum efficiency level, with reduced operating costs, and, when needed, they can also provide original spare parts.

This User Manual includes important instructions and recommendations that should be complied with, in order to easily install and to better use the **MX series HOT AIR GENERATOR**.

Thank you.

Tecnoclima S.p.A.

GENERAL
INFORMATION

COMPLIANCE AND PIN NUMBER

The device complies with the Directives, Standards and Regulations listed in the Statement of Conformity, which can be requested to the Manufacturer. The possible CE certification PIN number **CE** is included in the technical data plate.

GENERAL
INFORMATION

RANGE

This manual includes references to the TYPE. The following table shows the series and the correspondence between the TYPE and the TRADE NAME

TYPE	TRADE NAME
1	MX 20
2	MX 30
3	MX 40

GENERAL
INFORMATION

WARRANTY

The **MX** air generator is covered by a **SPECIFIC WARRANTY**, which starts from the purchase date, which should be proved by the Customer through the relevant documents; if the customer is unable to present the relevant documents, the warranty starts from the machine manufacturing date. The warranty conditions are specified in the **WARRANTY CERTIFICATE**, provided together with the machine. We suggest reading it carefully.

GENERAL
INFORMATION

DISPOSAL INSTRUCTIONS

Disposing of the appliance must be performed by an authorised company and in compliance with the applicable laws.

Before taking waste to Authorised Collection Centres, dismantle and separate the various materials that compose it which in summary are:

- ferrous materials;
- aluminium;
- electrical wiring;
- gaskets;
- insulating materials;
- plastic materials;
- electronic cards.



TYPE		1	2	3
THERMAL CAPACITY ¹	kW	19.2	28.6	36.5
	kcal/h	16,507	24,597	31,397
COMBUSTION EFFICIENCY ¹	%	94.3	94.4	94.5
THERMAL POWER ¹	kW	18.1	27.0	34.5
	kcal/h	15,566	23,220	29,670
NET FLUE GAS TEMPERATURE (Δt flue gases)	°K	~115	~110	~105
EMISSIONS NO _x ²	class	4	4	4
	mg/kwh	<80	<80	<80
COMBUSTION CHAMBER PRESSURE ³	mbar	~0.07	~0.20	~1.00
FLUE GAS VENTING AVAILABLE PRESSURE	mbar	0.7	1.3	1.3
MASS COMBUSTION PRODUCTS	kg/h	~32	~48	~61
AIR FLOW	m ³ /h	2,100	3,000	4,000
AIR THERMAL DIFFERENCE (ΔT)	°K	~26	~27	~26
COMBUSTIBLE INSTANTANEOUS CONSUMPTION ⁵				
- natural gas G20	Nm ³ /h	2.0	3.0	3.9
- natural gas G25 (where applicable)	Nm ³ /h	2.4	3.5	4.5
- propane gas G31	Nm ³ /h	0.8	1.2	1.5
MAIN ELECTRICAL POWER SUPPLY	single phase	230~50Hz	230~50Hz	230~50Hz
ELECTRICAL PROTECTION DEGREE				
- hot air generator	IP	40	40	40
- helical fan	IP	55	54	55
HELICAL FAN				
- polarity	No.	4	4	4
- electrical plate power	W	87	141	212
- electrical plate current	A	0.41	0.68	0.99
- condenser capacity	μF	2.5	4.0	6.3
SOUND PRESSURE ⁶	dB(A)	46	52	54
LANCE DISTANCE ⁷	m	~15	~18	~20
TYPE OF EQUIPMENT	See chapter Regulation 2016/2281			
GAS CATEGORY	See chapter Regulation 2016/2281			
COUNTRY OF DESTINATION	See device plate data label			
CE CERTIFICATION NO.	See device plate data label			
FIELD OF APPLICATION				
- temperature	°C	0/+35	0/+35	0/+35
- relative humidity (without condensation)	Rh	75	75	75

1) Referred to a lower heating power (Hi)

2) Referring to the UNI EN 1020 standard with natural gas G20

3) Referring to 1 m + 1 m of flue gas venting

4) Maximum pressure available for flue gas venting and combustion air intake ducts

5) Natural gas G20 Hi=34.02 MJ/Nm³, natural gas G25 Hi=29.25 MJ/Nm³, propane gas G31 Hi=88.00 MJ/Nm³

6) Typical installation on wall in free field. Measurement taken frontally at a distance of 6 meters

7) Distance from the equipment with residual speed of 0.1 m/s. Measurement taken with air at +15°C

TYPE		1	2	3
Configuration:		B23-B23P-C13-C33-C63	B23-B23P-C13-C33-C63	B23-B23P-C13-C33-C63
Fuel type:		Gassy	Gassy	Gassy
Capacity:				
$P_{rated,h}$	kW	18.1	27.0	34.5
P_{min}	kW	-	-	-
Useful efficiency:				
η_{nom}	%	84.9	85.0	85.1
η_{pl}	%	-	-	-
Electrical energy consumption:				
el_{max}	W	0.019	0.037	0.063
el_{min}	W	-	-	-
el_{sb}	W	0.005	0.005	0.005
Other elements:				
F_{env}	%	0	0	0
P_{ign}	kW	-	-	-
NOx	mg/kWh	<100	<100	<100
$\eta_{s,flow}$	%	92.0	92.0	92.4
$\eta_{s,h}$	%	72.3	72.4	72.7

Legend:

$P_{rated,h}$	Nominal heating capacity
$P_{rated,h}$	Minimum heating capacity
η_{nom}	Nominal heating capacity useful efficiency
η_{pl}	Minimum capacity useful efficiency
el_{max}	At nominal heating capacity
el_{max}	At minimum heating capacity
el_{sb}	In "stand-by" mode
F_{env}	Envelope loss factor
P_{ign}	Ignition burner consumption
NOx	Nitrogen oxide emissions
$\eta_{s,flow}$	Emission efficiency
$\eta_{s,h}$	Ambient heating seasonal energy efficiency

Note:

The data reported in the table refer to the calorific power lower than the fuel (GCV)