

Michelangelo

Pre-installation and installation manual

KML 435 KML 635 KML 635L KML 935



Introduction

This hood has been designed and constructed with the utmost care and undergone rigorous tests in our laboratories and for this reason we guarantee its absolute safety and functionality.

The installation must be carried out by **professionally qualified** staff, that can take responsibility for the installation and guarantee the best safe operating conditions.

Before the installation, read the content of this manual **carefully**: it contains important information regarding product assembly and safety regulations.

Technical service

The Dealer can solve any technical problem regarding installation.

Do not hesitate to contact him in case of doubt.

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1

CHECKS BEFORE PURCHASING

Before purchasing the hood and before installing it, check the following conditions, necessary for the correct installation, operation and maintenance of the hood.

A Transport (Owner's inspection)

- Make sure that, on the day when you receive the hood or it is installed:
 - lifting equipment is available that can handle the appliance safely (check weight and dimensions in the following pages), together with staff qualified to carry out this operation;
 - personal protection equipment is available (e.g. safety shoes, gloves, etc.)

B Installation room (Owner's inspection)

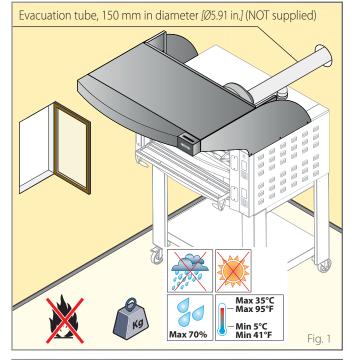
√ Make sure that:

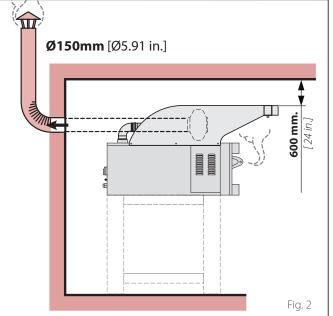
- the floor of the installation room is fireproof, perfectly flat and capable of withstanding the weight of the hood and underlying oven.
- the installation room:
- is dedicated and suitable to cooking food;
- has adequate air ventilation;
- complies with the current regulations on health and safety and systems in the workplace;
- is protected from the weather;
- has a maximum temperature of between +5° (41°F) and +35°C (95°F);
- has a maximum humidity of 70%.
- between the hood and the ceiling there is a distance of about 600 mm [24 in.] (shorter distances could damage ceilings made of particularly delicate and heat sensitive materials - e.g. wood)
- there is adequate ventilation according to the regulations in force in the Country of installation. If this is not the case, a Ø14 cm [Ø 5.51 in.] air intake is mandatory, communicating with the outside or a ventilated room (i.e. storeroom, attic, garage, basement).

When choosing the positioning room, take into account that the appliance must be easy **to move** for any extraordinary maintenance: be careful that any brickwork after installation (e.g.: wall construction, replacement of a door with a narrower one, renovations, etc.) do not hamper movements.

C Electrical connection (qualified electrician's inspection)

The equipment is supplied with the power cord already installed that must be connected to the electrical panel of the Michelangelo oven.





Checks before purchasing

D Smoke evacuation (Owner's inspection)

The oven is fitted with an adjustable exhaust in the top to get rid of the steam from the cooking chamber.

This steam, together with the one from the door during the work phases, **must be conveyed outside** through the hood.

There are two hood variants: the **ventilation** versions have a built-in 5-speed suction motor while the user's exhaust system can be installed in **neutral** versions.

Fig. 3

The following must be installed during installation:

- the pipe (A) (supplied by the Manufacturer)
- the connection **B** (supplied by the Manufacturer)
- a flue **D** blocking it with a metallic clamp **C** (NEITHER supplied by the Manufacturer).

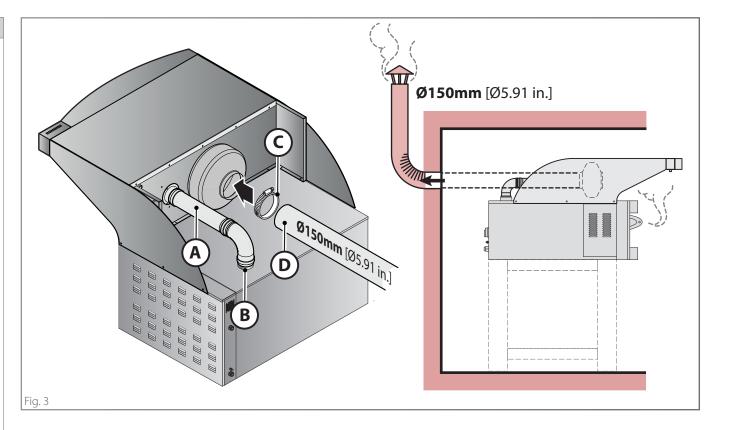
The flue must:

- be exclusively used by the equipment,
- have a 150 mm [Ø 5.91 in.] diameter (to guarantee correct draught up to a maximum of 20 linear metres [787.4 in.], three curves and a terminal on the roof),
- meet current regulations.

The recommended material is stainless steel resistant to high temperatures.



Provide a condensate drain (not supplied) to permit normal control and draining operations.



2 HOOD TECHNICAL DATA

KML 435	Units of measurement	KML435NT (neutral)	KML 435AS (with extraction fan)
Electrical supply (50/60 Hz)	Volt	AC 230	AC 230
Maximum absorption	kW max	0.0072	0.13
Connection cable (n x mm²)	Installed cable type (EU version): 3x1 mm² silicone cable, H07RN-F three-pole cable for single-phase cabling Installed cable section (UL/CSA version): 16/3 cable UL AWM Style 3644		three-pole cable
Maximum capacity	m³/h	-	700

model	neutral	with extraction fan
KML 435	41 kg [90,4 lb]	45 kg [99,2 lb]
KML 435	1200x1400x580mm [47.24x55.12x22.83 in.] 64 kg [141 lb]	1200x1400x580mm [47.24x55.12x22.83 in.] 68 kg [149,9 lb]

KML 635	Units of measurement	KML635NT (neutral)	KML635AS (with extraction fan)
Electrical supply (50/60 Hz)	Volt	AC 230	AC 230
Maximum absorption	kW max	0.0072	0.13
Connection cable (n x mm²)	Installed cable type (EU version): 3x1 mm² silicone cable, H07RN-F three-pole cable for single-phase cabling Installed cable section (UL/CSA version): 16/3 cable UL AWM Style 3644		three-pole cable
Maximum capacity	m³/h	-	700

model	neutral	with extraction fan
KML 635	41 kg [90,4 lb]	45 kg [99,2 lb]
KML 635	1200x1400x580mm [47.24x55.12x22.83 in.] 64 kg [141 lb]	1200x1400x580mm [47.24x55.12x22.83 in.] 68 kg [149,9 lb]

KML 635L	Units of measurement	KML635LNT (neutral)	KML635LAS (with extraction fan)
Electrical supply (50/60 Hz)	Volt	AC 230	AC 230
Maximum absorption	kW max	0.0072	0.13
Connection cable (n x mm²)	Installed cable type (EU version): 3x1 mm² silicone cable, H07RN-F three-pole cable for single-phase cabling Installed cable section (UL/CSA version): 16/3 cable UL AWM Style 3644		hree-pole cable
Maximum capacity	m³/h	-	700

model	neutral	with extraction fan
KML 635L	46 kg [101,4 lb]	51 kg [112,4 lb]
KML 635L	1560x1400x580mm [61.42x55.12x22.83 in.] 77 kg [169,7 lb]	1560x1400x580mm [61.42x55.12x22.83 in.] 82 kg [180,7 lb]

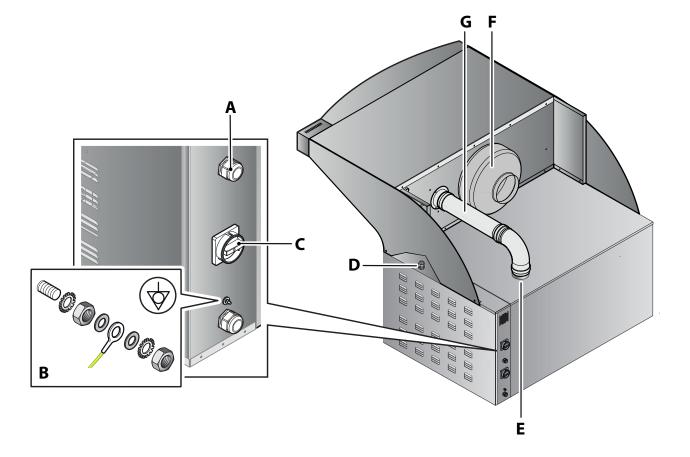
KML 935	Units of measurement	KML935NT (neutral)	KML935AS (with extraction fan)
Electrical supply (50/60 Hz)	Volt	AC 230	AC 230
Maximum absorption	kW max	0.0072	0.13
Connection cable (n x mm²)	Installed cable type (EU version): 3x1 mm² silicone cable, H07RN-F three-pole cabl for single-phase cabling Installed cable section (UL/CSA version): 16/3 cable UL AWM Style 3644		three-pole cable
Maximum capacity	m³/h	=	700

model	neutral	with extraction fan
KML 935	46 kg [101,4 lb]	51 kg [112,4 lb]
KML 935	1560x1400x580mm [61.42x55.12x22.83 in.] 77 kg [169,7 lb]	1560x1400x580mm [61.42x55.12x22.83 in.] 82 kg [180,7 lb]

Michelangelo hood technical data

Key

- A Oven supply input
- B Equipotential
- (C) Circuit breaker (only for American market)
- (D) Hood supply input
- (E) Oven smoke exhaust
- (F) Extraction fan
- (G) Hood fume inlet conduit



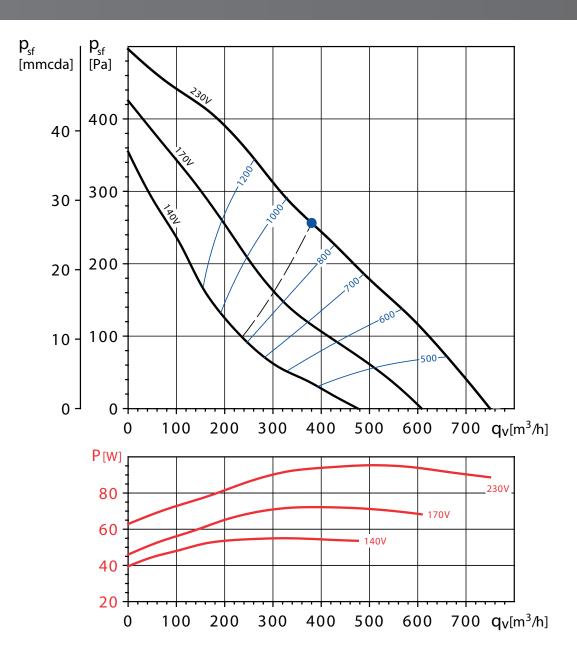
Michelangelo hood technical data

Fan technical data Characteristic curves - acoustic features

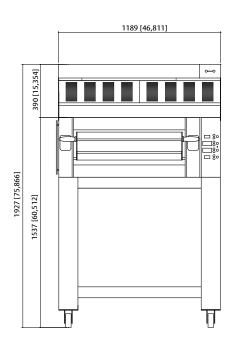
- q_v: flow in m³/h
- p_{st}: Static pressure in mmcda and Pa
- P: Incoming power in W
- SFP: Specific power factor in W/m³/s (blue curves) Compliance data with ISO 5810

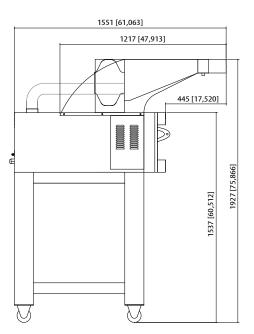
Sound pressure level* (dB(A))		
Extraction Expulsion Radiated		
59	56	42

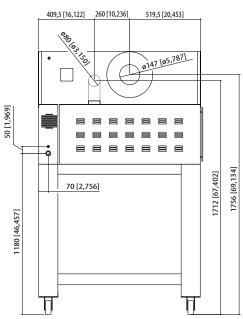
^{*} Sound pressure level measured in free field at 1.5 meters, at maximum air volume.

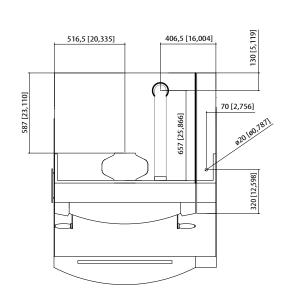


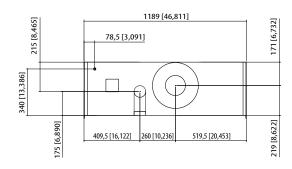
Michelangelo KML 435 hood technical data | hood + single oven

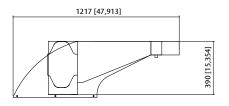




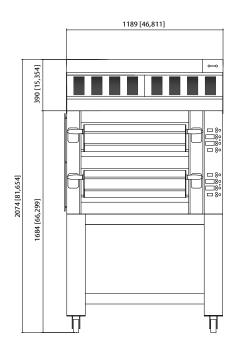


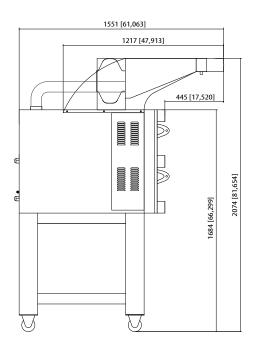


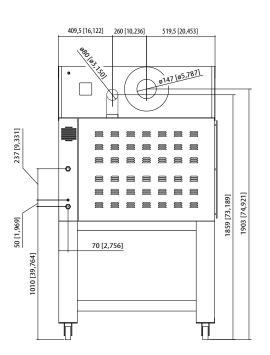


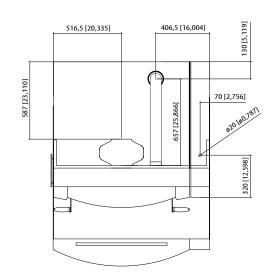


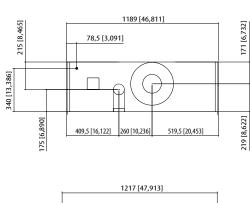
Michelangelo KML 435 hood technical data | hood + double oven

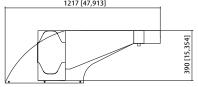




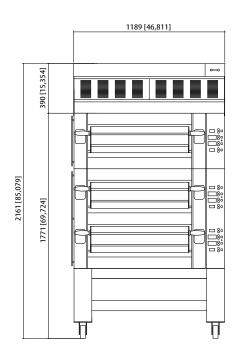


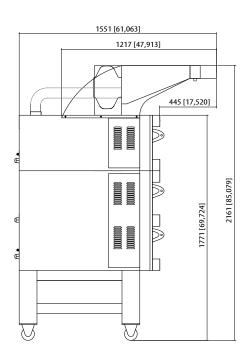


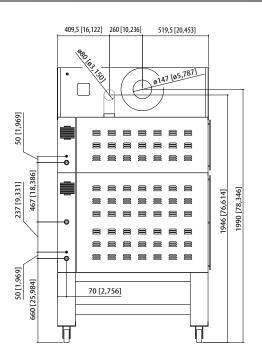


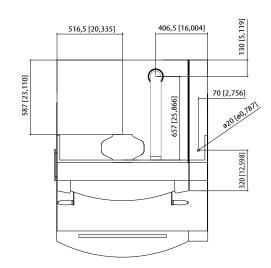


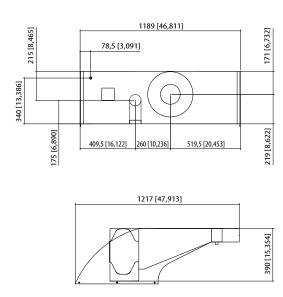
Michelangelo KML 435 hood technical data | hood + triple oven



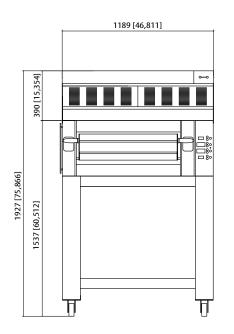


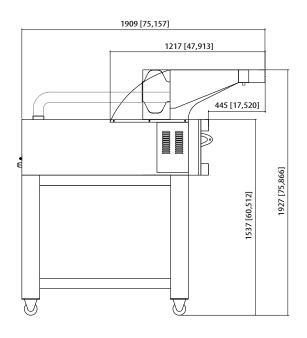


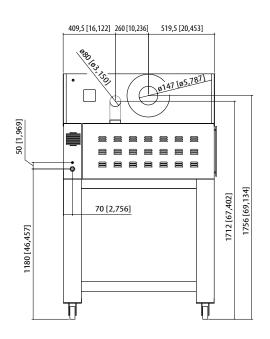


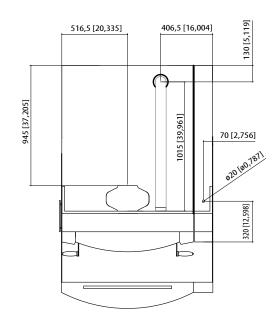


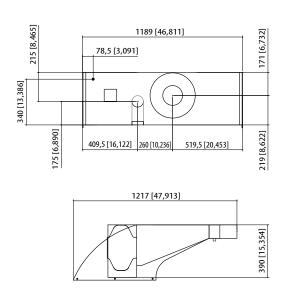
Michelangelo KML 635 hood technical data | hood + single oven



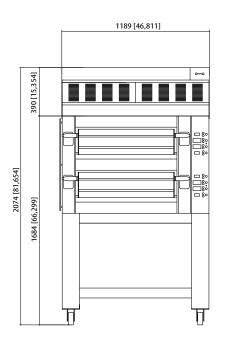


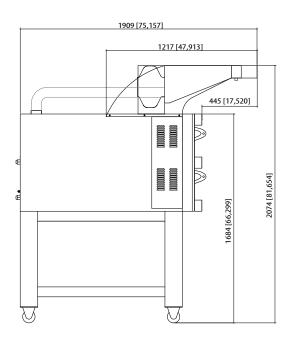


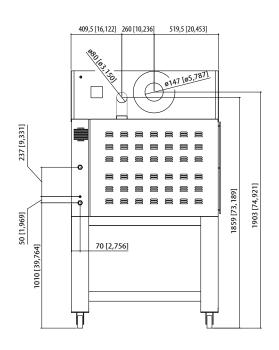


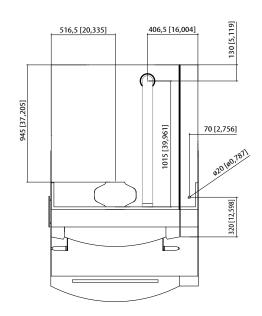


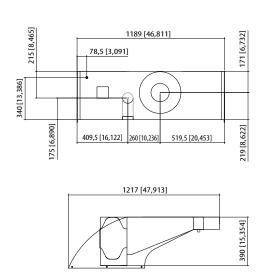
Michelangelo KML 635 hood technical data | hood + double oven



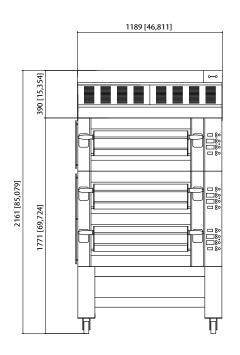


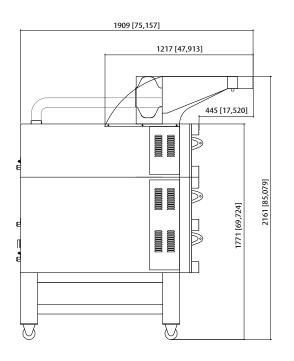


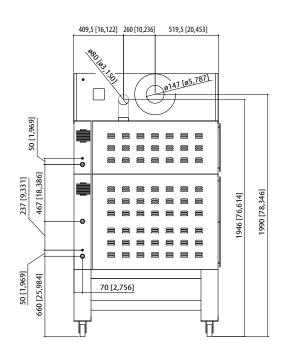


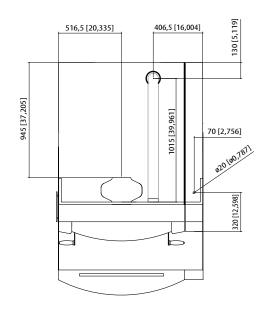


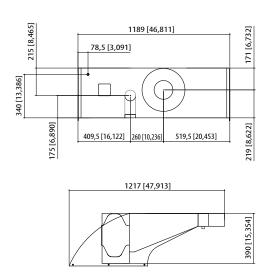
Michelangelo KML 635 hood technical data | hood + triple oven



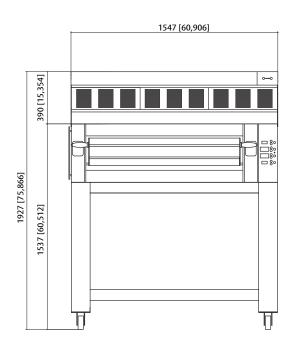


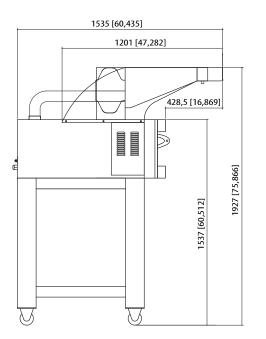


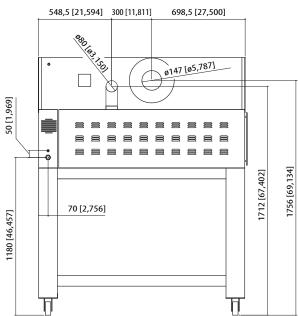


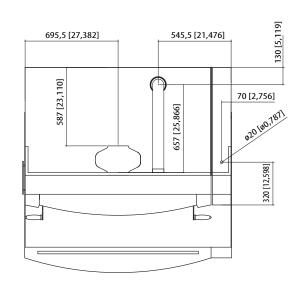


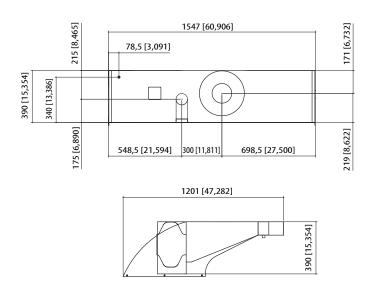
Michelangelo KML 635L hood technical data | hood + single oven



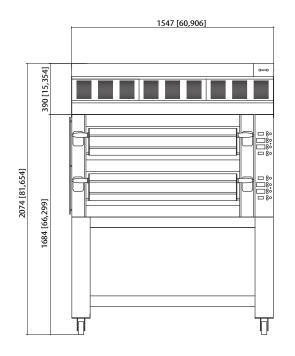


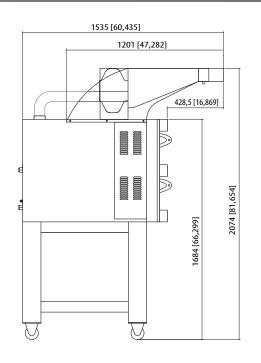


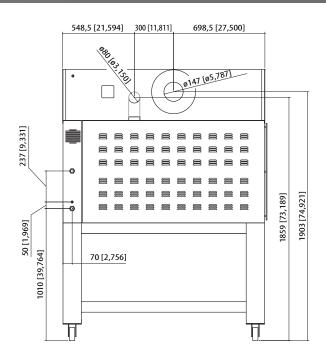


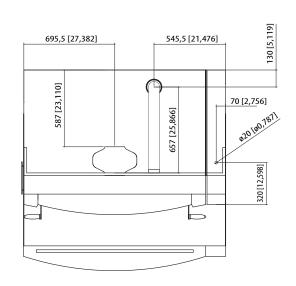


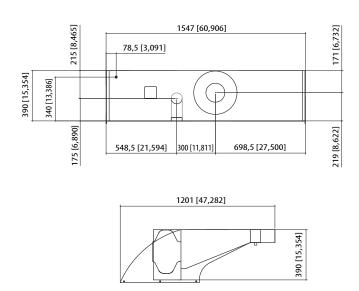
Michelangelo KML 635L hood technical data | hood + double oven



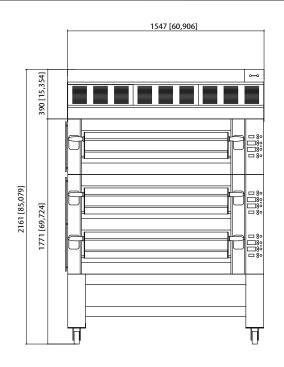


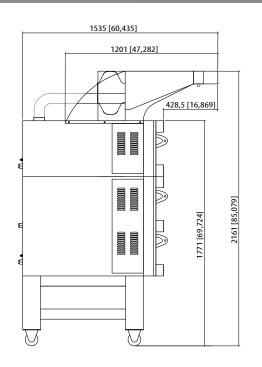


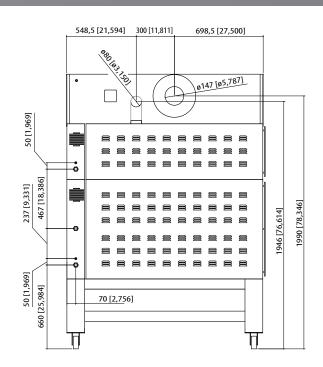


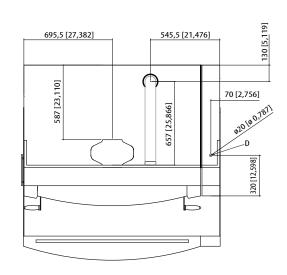


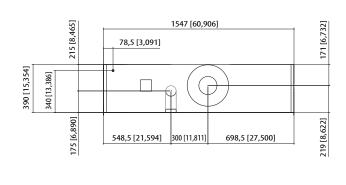
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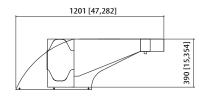




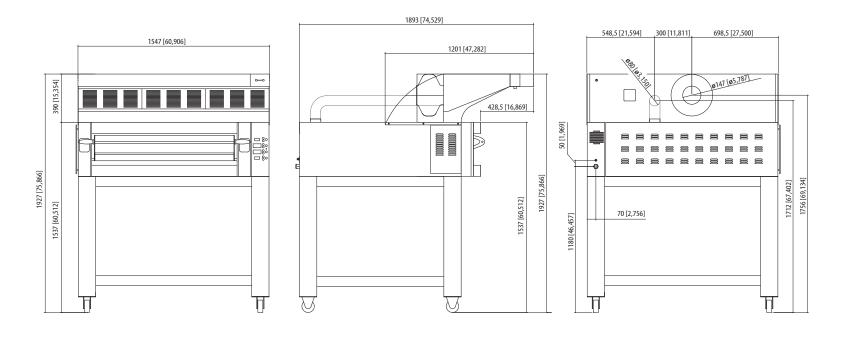


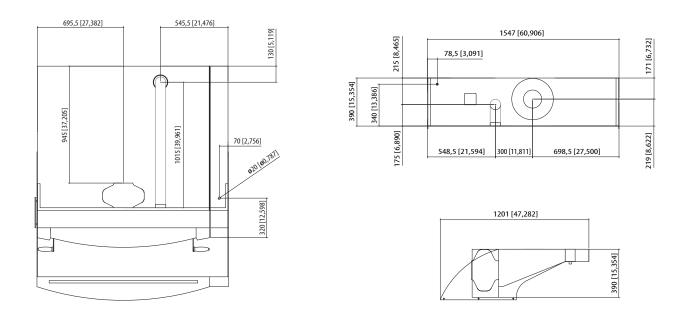




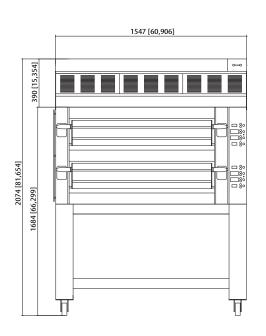


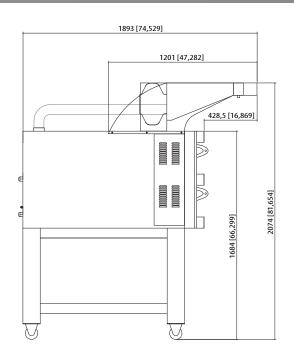
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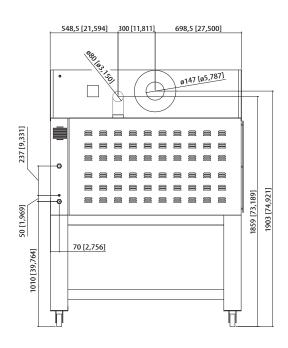


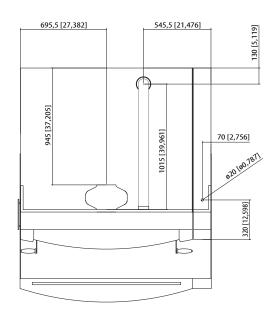


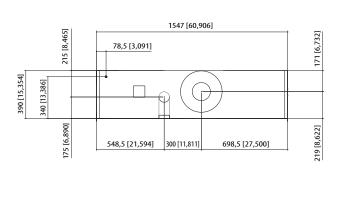
Michelangelo KML 935 hood technical data | hood + double oven

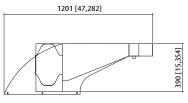




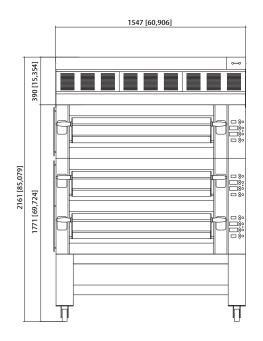


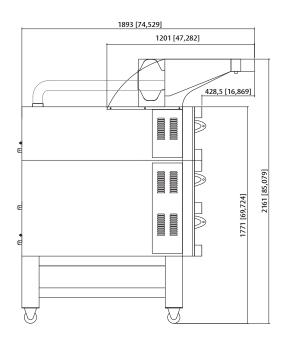


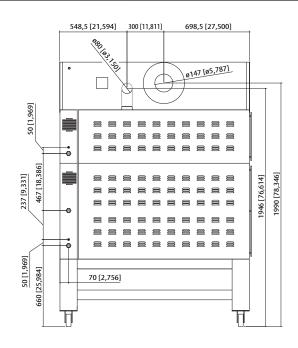


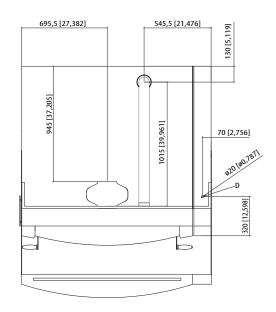


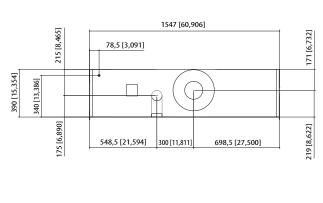
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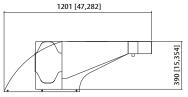












3 INSTALLATION

Safety instructions

- Read this guide carefully before installing the appliance, and keep it with care in an accessible place for any future consultation by the various operators.
- Moreover, the manual must always accompany the product through its life, even in case of transfer.
- Before any movement or installation, check that the room is suitable and systems comply with the installation country standards and the specifications indicated on the appliance rating plate.
- All installation, assembly and non-routine maintenance operations must be performed exclusively by qualified technicians that are authorised by the Dealer, in compliance with the regulations in force in the user country, and with the regulations on systems and work safety.
- Before performing any installation of maintenance, disconnect the electricity supply.
- Unauthorised actions, tampering or modifications that do not follow the information provided in this manual can cause damages, injuries or fatal accidents and null and void the warranty.
- It is forbidden to install the hood in environments at risk of explosion.
- Installation or maintenance that fails to comply with the instructions in this manual may cause damage, injury or fatal accidents.

- Persons not involved with the appliance installation may not pass through or stand in the work area during appliance assembly.
- The serial plate provides important technical information. This is vital in case of a request for maintenance or repair of the equipment: please do not remove, damage or modify it.
- Failure to follow these regulations may cause damage or even fatal injury, subsequently invalidating the guarantee and relieving the Manufacturer of all liability.

Symbols used in the manual and on the labels applied to the machine



Indicates that caution is required when performing an operation described in a paragraph that bears this symbol. The symbol also indicates that maximum operator awareness is required in order to avoid unwanted or dangerous consequences



Reference to another chapter where the subject is dealt with in more detail.



Manufacturer's tip



Indicates that the surfaces marked with this symbol may be hot and must therefore be touched carefully



Dangerous voltage



The symbol identifies the terminals which, connected to each other, carry the various parts of a device or system to the same potential (not necessarily the earth potential)



Indicates that it is necessary to read carefully the paragraph marked with this symbol before installing, using and maintaining the equipment

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Transport

Fig. 4

Fitted with personal protection equipment, transport the appliance to the installation location.

Use suitable equipment, capable of dealing with its weight: persons not involved with the appliance installation may not pass through or stand in the work area during the appliance assembly.

During the transport, pay particular attention to passing through openings and/or doors.

Preliminary operations

Fig. 5

Carefully remove the protective film.

If any glue residue is left on the surfaces, remove it with soapy water but without any corrosive or abrasive products or sharp or pointed instruments.



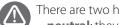
Check that all the parts making up the hood are in good condition and without any faults or breakages, if that is not the case, contact the Dealer for the procedures to follow.

Serial number plate reading

Fig. 6

The serial number is on the back of the appliance.

It provides important technical information that is vital in case of a request for maintenance or repair of the appliance: please do not remove, damage or modify it.

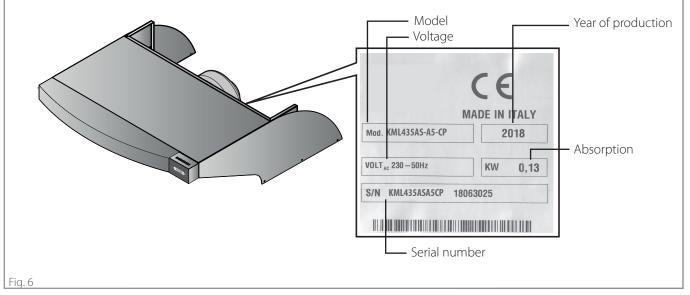


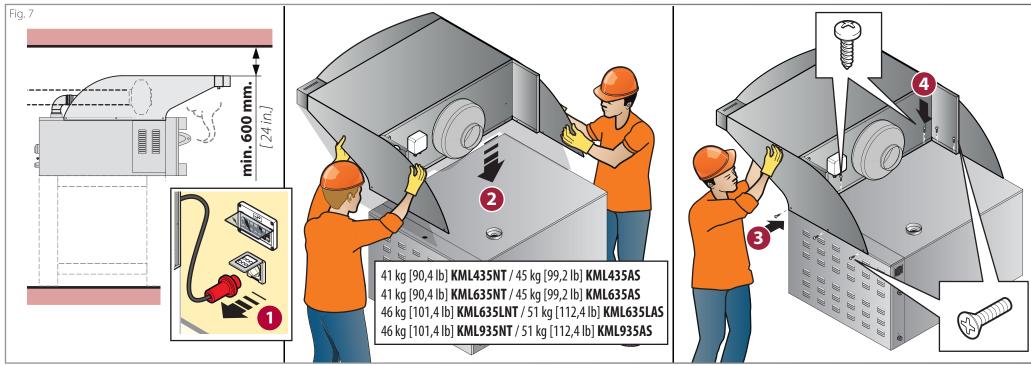
There are two hood variations:

- **neutral**: they only collect steam from the oven but do not have an aspiration motor or control panel. They are usually connected to a pre-existent exhaust system.
- ventilation: steam suction and exhaust from oven by a 5 differentiated speed motor controlled by a front control panel.









Positioning and connection to the oven below



The hoods can be positioned **only** over a Michelangelo oven.

Fig. 7

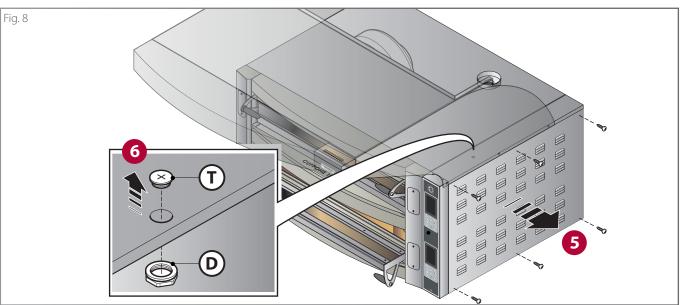
Disconnect the power supply from the oven to which the hood will be connected.

Fix the hood to the oven below acting as shown in the figure. Make sure that between the hood and the ceiling there is a distance of about **600 mm [24 in.]** (shorter distances could damage ceilings made of particularly delicate and heat sensitive materials - e.g. wood).

Fig. 8

Open the side compartment of the latter to gain access to the electrical panel.

Remove the cap **T** on the top of the Michelangelo oven and keep the locknut **D**.



Installation

Fig. 9



The electrical connection must be carried out **exclusively** by qualified personnel after reading the safety warnings at the beginning of the manual.



Before connecting the hood **check that the systems the oven is connected to comply with the current regulations** in the country of use.

Pass the hood cable with the connector **K** through the hole you took the cap off previously **T**.

Block the cable with the locknut **D**.

Plug the hood connector **K** into the socket **P** in the oven electrical panel.



If required, the cable can be replaced by the Dealer or its technical service or by a person with similar qualifications to prevent any risk.

Installed cable type (EU version):

3x1 mm² silicone cable, H07RN-F three-pole cable for single-phase cabling

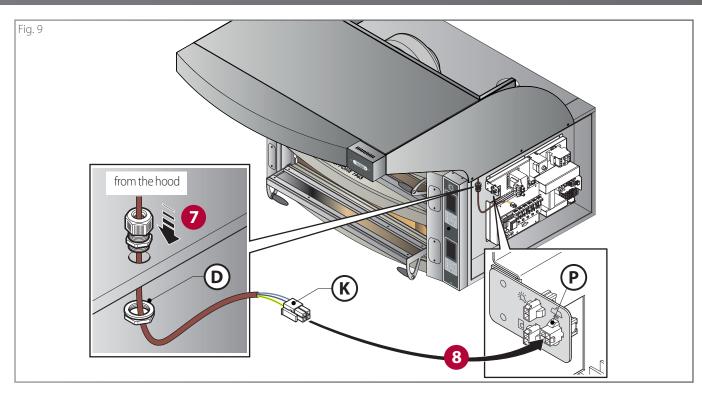
Installed cable section (UL/CSA version):

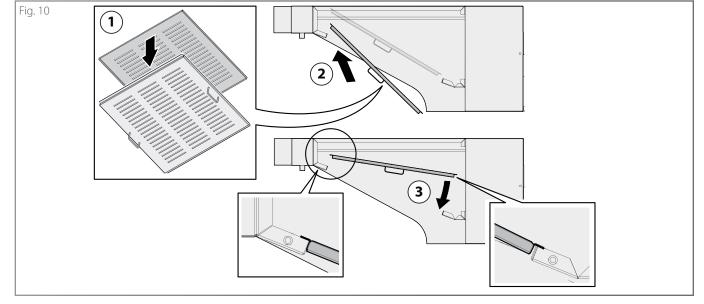
16/3 cable UL AWM Style 3644

Inserting the filters

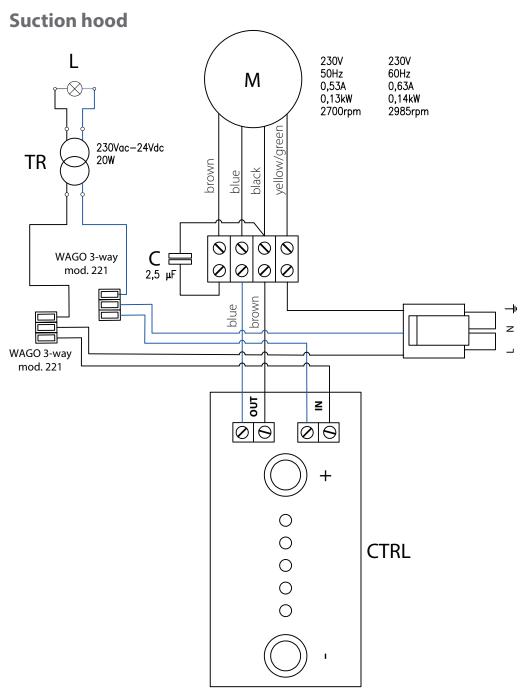
Fig. 10

Insert the filters as shown in the figure.





Wiring diagrams (EU version)

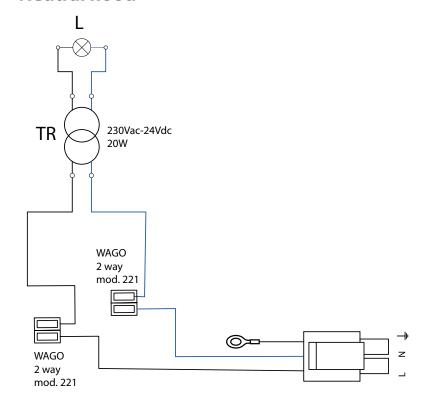


Abbreviation	Description
M	Hood motor
С	Motor start capacitor
CTRL	Speed variation board
L	LEDs
TR	LED transformer

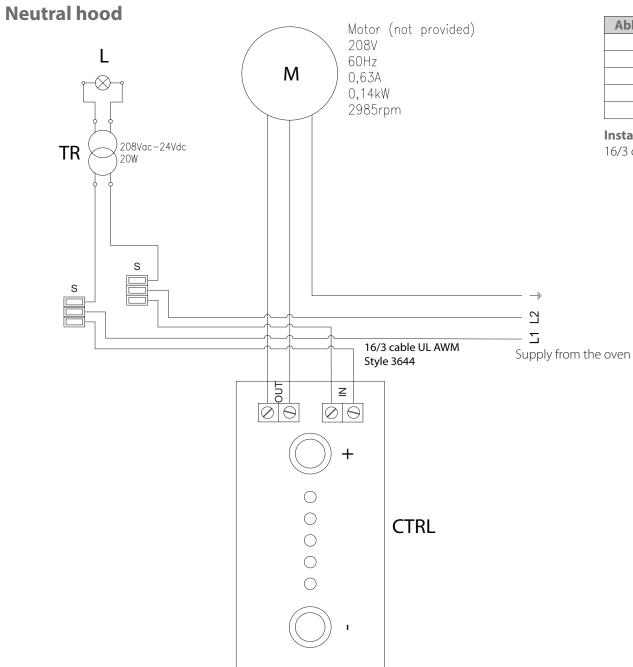
Installed cable type

3x1 mm² silicone cable, H07RN-F three-pole cable for single-phase cabling

Neutral hood



Wiring diagrams (UL/CSA version)



Abbreviation	Description
M	Hood motor (not supplied)
S	Connector
CTRL	Control board
L	LEDs
TR	LED transformer

Installed cable section:

16/3 cable UL AWM Style 3644

Installation

Smoke extraction

The oven is fitted with an adjustable exhaust in the top to get rid of the steam from the cooking chamber.

This steam, together with the one from the door during the work phases, **must be conveyed outside** through the hood.

There are two hood variants: the **ventilation** versions have a built-in 5-speed suction motor while the user's exhaust system can be installed in **neutral** versions.

Fig. 11

The pipe (A) and connection (B) (both supplied by the Manufacturer) must be installed during installation.

Fig. 12

It is then necessary to install a flue **D** blocking it with a metal clamp **C** (neither is supplied by the Manufacturer).

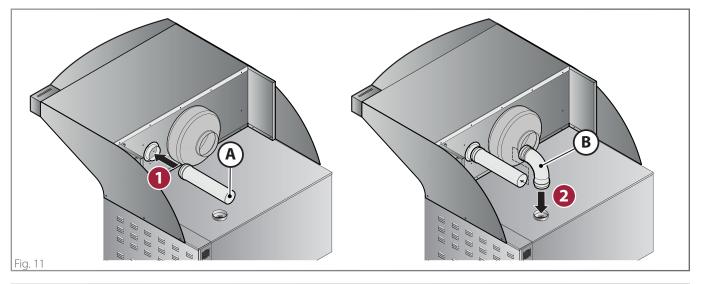
The flue **D** must:

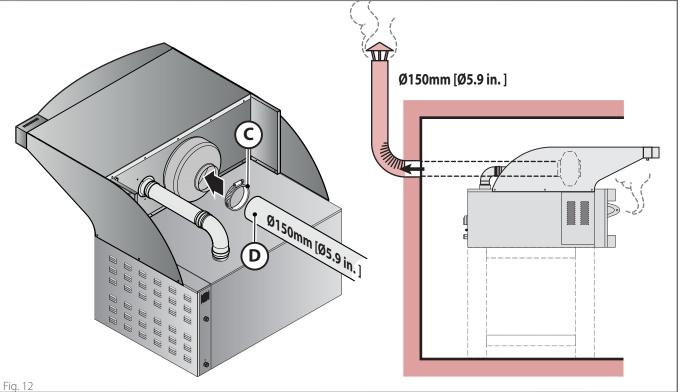
- be exclusively used by the equipment,
- have a **150 mm [Ø5.91 in.]** diameter (to guarantee correct draught up to a maximum of 20 linear metres [787.4 in.], three curves and a terminal on the roof),
- meet current regulations.

The recommended material is stainless steel resistant to high temperatures.



Provide a condensate drain (not supplied) to permit normal control and draining operations.





Installation

Pre-testing and final inspection

Before delivery to the customer, the hood is checked and tested in the Manufacturer's factories.

The "production process check sheet" enclosed with it guarantees that **each** step in the production process, from assembly to packaging, was carefully checked from both the operating and safety standpoints.

After installing the appliance, check and mark with a " $\sqrt{}$ " all the boxes of the table on the side: this will confirm the installation is complete and correct.

Checking the operation

Start the appliance following the instructions in the "Use and Maintenance" manual: monitor it during the whole test and check that all the electrical components work properly.

Finish off explaining to the user how to use the appliance in an optimal and safe way and how to carry out ordinary maintenance and cleaning.

√	Positioning checks	Reference chapter on page
	Has the protective film been removed from the surfaces?	<u>Preliminary operations</u> on page <u>21</u>
	Is the equipment perfectly bound to the underlying oven?	Positioning and connection to the oven below on page 22
	Is the current chimney flue adequate and does it complies with the current regulations?	Smoke extraction on page 26
√	Electrical checks (ventilated hoods only)	Reference chapter
	Has the hood connector been inserted correctly into the socket located in the oven electrical panel?	Positioning and connection to the oven below on page 22
√	Miscellaneous	Reference chapter
	Does the user have all the documentation relative to the hood?	-
	Has the user been correctly trained on the use and maintenance of the hood?	-

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The original language used to prepare this manual is English: the Manufacturer is not responsible for any translation/interpretation or print errors.

