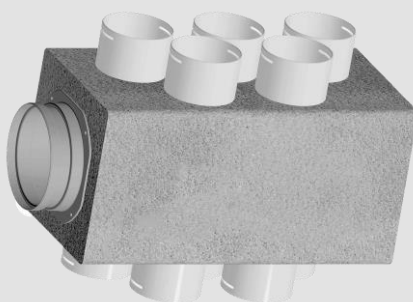


# "Smart Small" distribution box made of sheet metal - PVC

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## "SMART SMALL" DISTRIBUTION BOX IN SHEET METAL - PVC series VMSMART

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### FEATURES

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Box for distribution of fresh air to habitable rooms or extraction of exhausted air from humid rooms. The boxes have a main connection, with multiple diameters (Ø125 to Ø160 and Ø160 to 180) varying from model to model, to be connected to the unit ventilation via a rigid or flexible duct (possibly with the interposition of a silencer, not supplied).

They are equipped with connections to Ø75 or Ø90 round semi-rigid piping for distribution to the various rooms.

On the face opposite the main connection they have provision for adding a PVC plate (see accessories below).

#### Materials of construction:

Galvanized steel plate 1 mm thick for the body of all boxes; (the C-shaped plate is anti-condensation PVC thick. 4 mm).

Ø75 and Ø90 couplings are made with FITT Agix "GREY" collars PP threaded.

The Ø125/160 or Ø160/Ø180 connection is made with a PP collar equipped with a double gasket and fixed with screws, Ø125 or 160 in diameter, respectively. Models with Ø125/Ø160 connection have an additional EPE ring included for possible diameter increase from Ø125 to Ø160, while models with Ø160/180 connection have a PE strip included to upgrade to Ø180 diameter.

#### Outer coating:

With 6 mm thick polyethylene foam insulation (the PVC C-plate is not coated).

#### Partial interior cladding (on 2 sides):

With 10 mm thick polyester fiber coated with film; it is fit for air ducts.

#### Fixing methods:

Fixable to the wall or ceiling. They are complete with no. 4 adjustable "L" brackets for fixing, including self-tapping screws for fixing them on the box.

#### Operating temperature:

-50 ÷ 60°C.

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### ACCESSORIES (optional)

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- PVC plate with no.2 additional collars Ø75 "Grey" cod. VMSMPL275

- PVC plate with no.2 additional collars Ø90 "Grey" cod. VMSMPL290

For other accessories (especially of "GREY" collars and piping) see the relevant data sheets.

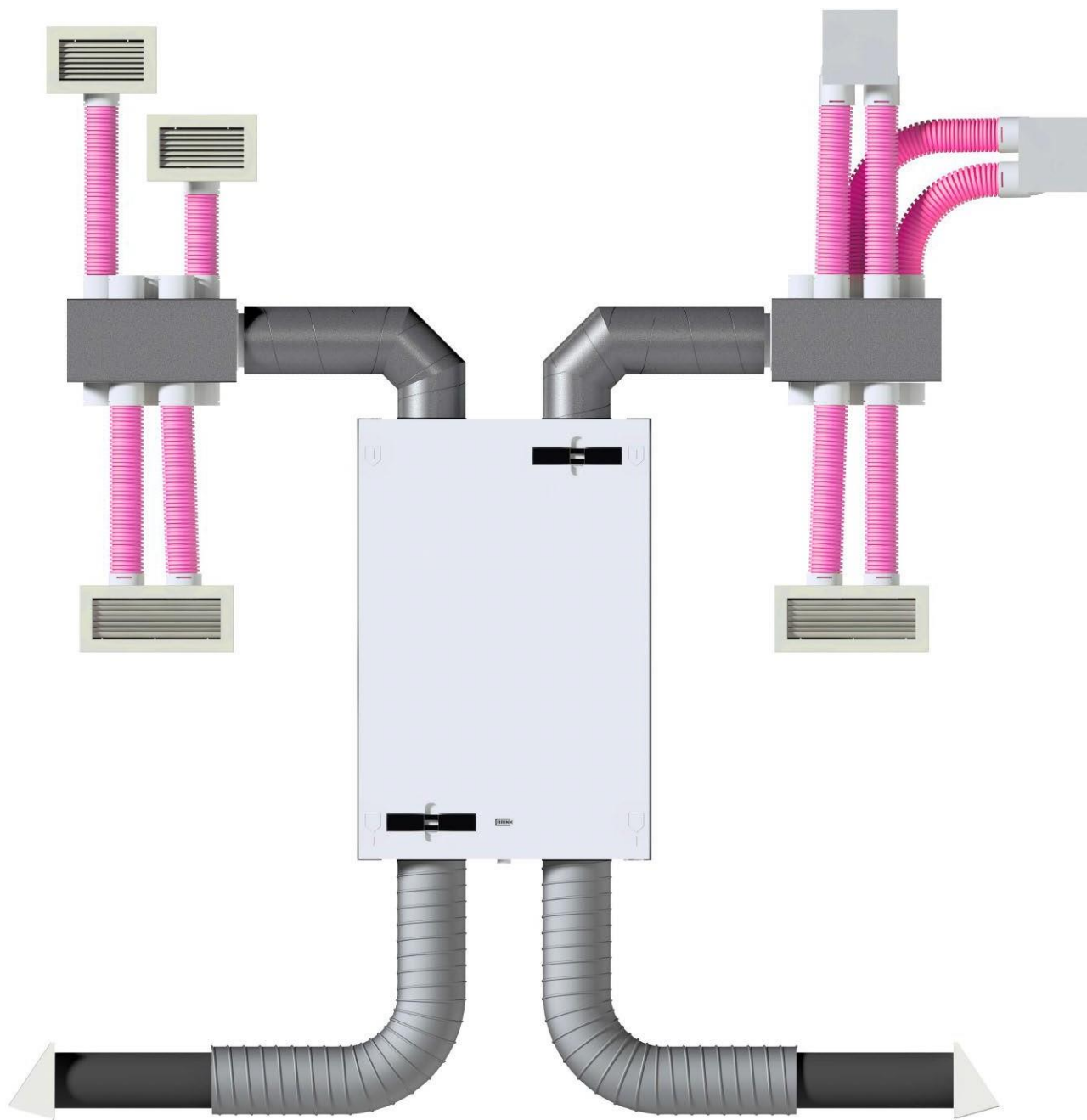
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## INSTALLATION EXAMPLE

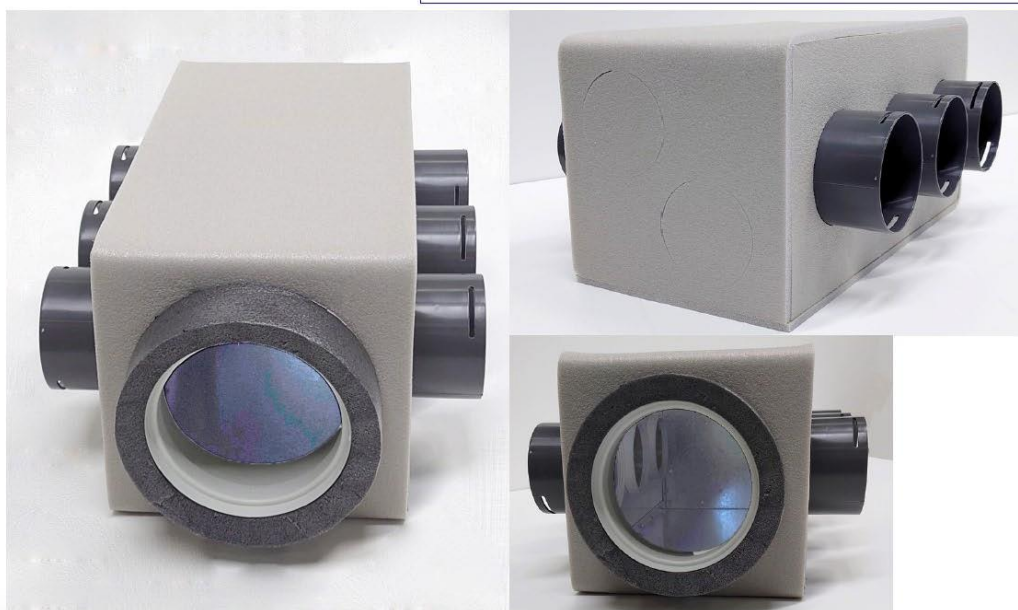
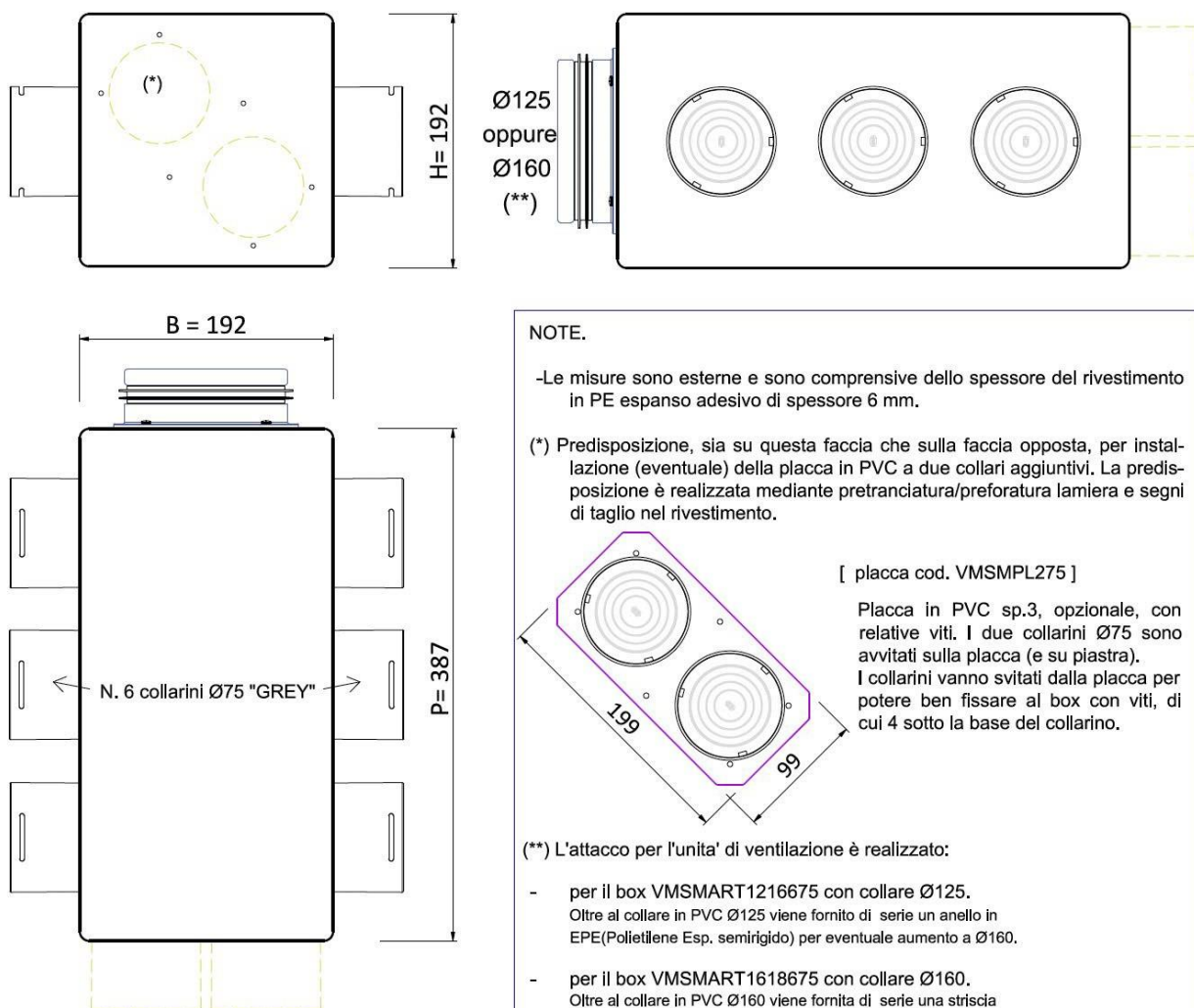
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Example of installation of two SMART Small boxes for VMC (one for supply and one for extraction) associated with a Renovent Sky series heat recovery unit



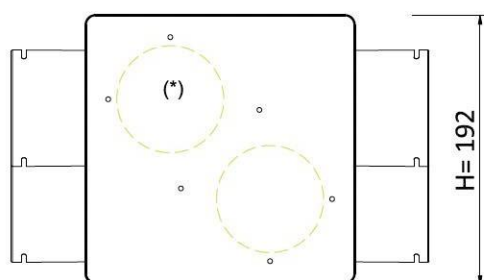
## DIMENSIONS

Distribution box mod. smart Small with 6 distribution connections  $\varnothing 75$   
cod. VMSMART1216675 and cod. VMSMART1618675

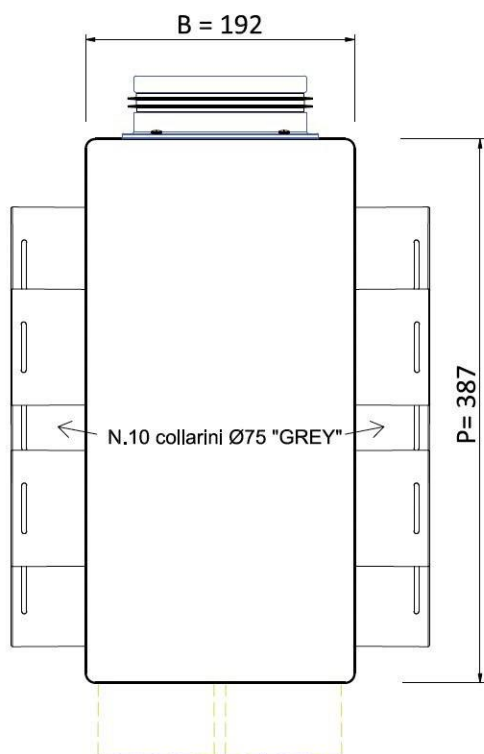
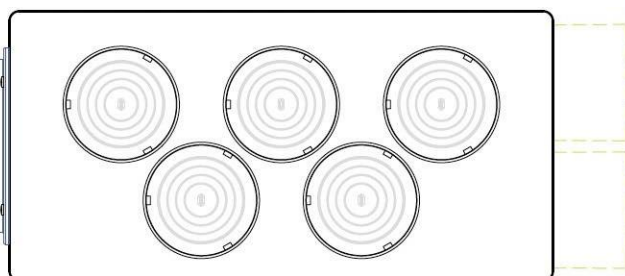


## DIMENSIONS

Distribution box mod. smart Small to 10 distribution connections  $\varnothing 75$  cod. VMSMART12161075 and cod. VMSMART16181075



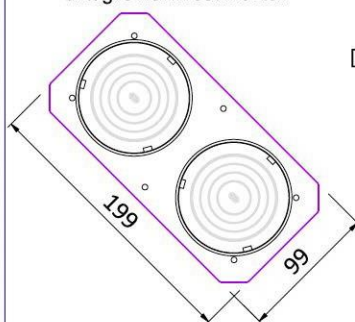
$\varnothing 125$   
oppure  
 $\varnothing 160$   
(\*\*)



### NOTE.

-Le misure sono esterne e sono comprensive dello spessore del rivestimento in PE espanso adesivo di spessore 6 mm.

(\*) Predisposizione, sia su questa faccia che sulla faccia opposta, per installazione (eventuale) della placca in PVC a due collarini aggiuntivi. La predisposizione è realizzata mediante pretranciatura/preforatura lamiera e segni di taglio nel rivestimento.

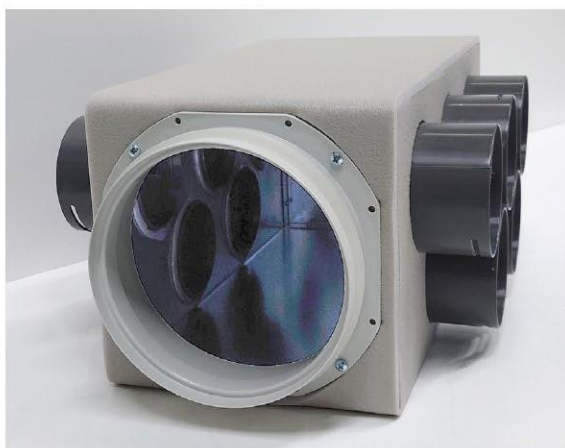


[ placca cod. VMSMPL275 ]

Placca in PVC sp.3, opzionale, con relative viti. I due collarini  $\varnothing 75$  sono avvitati sulla placca (e su piastra). I collarini vanno svitati dalla placca per potere ben fissare al box con viti, di cui 4 sotto la base del collarino.

(\*\*) L'attacco per l'unità di ventilazione è realizzato:

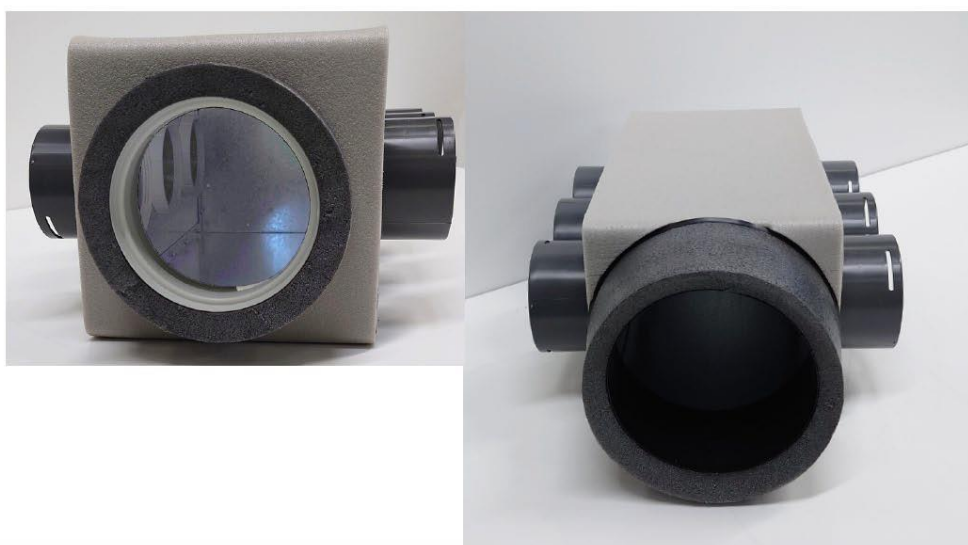
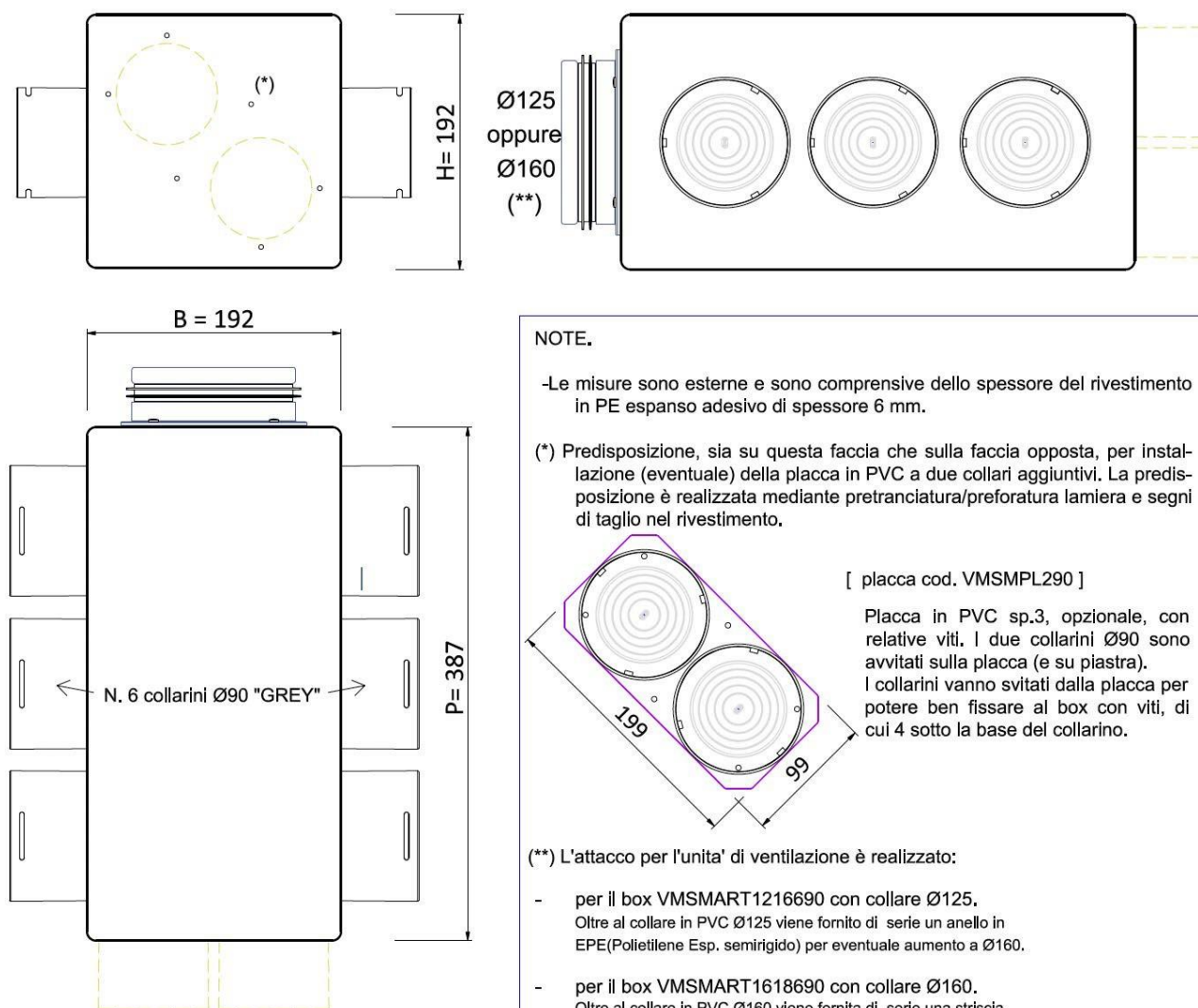
- per il box VMSMART12161075 con collare  $\varnothing 125$ . Oltre al collare in PVC  $\varnothing 125$  viene fornito di serie un anello in EPE (Polietilene Esp. semirigido) per eventuale aumento a  $\varnothing 160$ .
- per il box VMSMART16181075 con collare  $\varnothing 160$ . Oltre al collare in PVC  $\varnothing 160$  viene fornita di serie una striscia in polietilene espanso per eventuale aumento a  $\varnothing 180$ .





## DIMENSIONS

Distribution box mod. smart Small with 6 distribution connections  $\varnothing 90$   
cod. VMSMART1216690 and cod. VMSMART1618690



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**TABLES FOR QUICK CHOICE OF "Smart Small" BOXES**

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Code	Diam. attack for unit side of ventilation*	No. collars for distribution OF SERIES	Ext. diameter of semi-rigid pipe	Type of collars for distribution**	Max flow rate of the box with SERIES collars (m <sup>3</sup> /h) ***	Max No. of <u>additional</u> collars on plate in PVC (optional)	Max flow rate with <u>additional</u> collars (m <sup>3</sup> /h)
VMSMART1216675	Ø125 / Ø160	6	Ø 75	Ø75 GREY	204	2	272
VMSMART1618675	Ø160 / Ø180	6	Ø 75	Ø75 GREY	204	2	272
VMSMART12161075	Ø125 / Ø160	10	Ø 75	Ø75 GREY	340	2	408
VMSMART16181075	Ø160 / Ø180	10	Ø 75	Ø75 GREY	340	2	408
VMSMART1216690	Ø125 / Ø160	6	Ø 90	Ø90 GREY	288	2	384
VMSMART1618690	Ø160 / Ø180	6	Ø 90	Ø90 GREY	288	2	384

\* The connection is made with a PVC collar (with gasket) in the smaller of the two diameters.

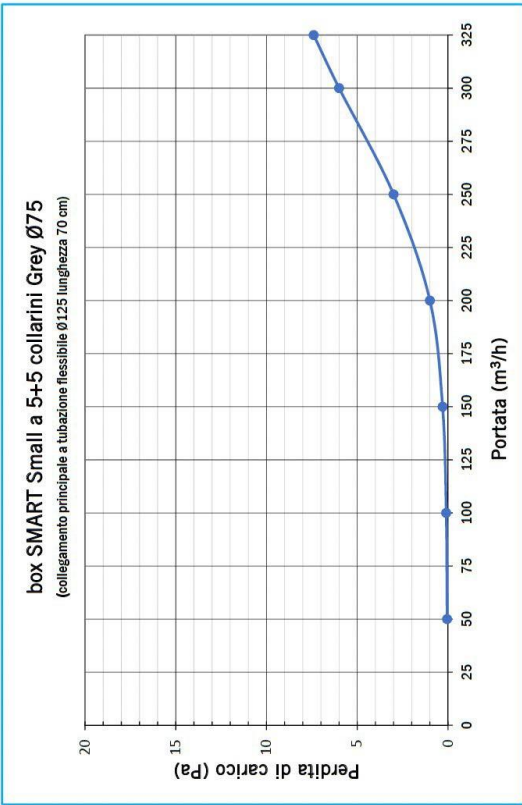
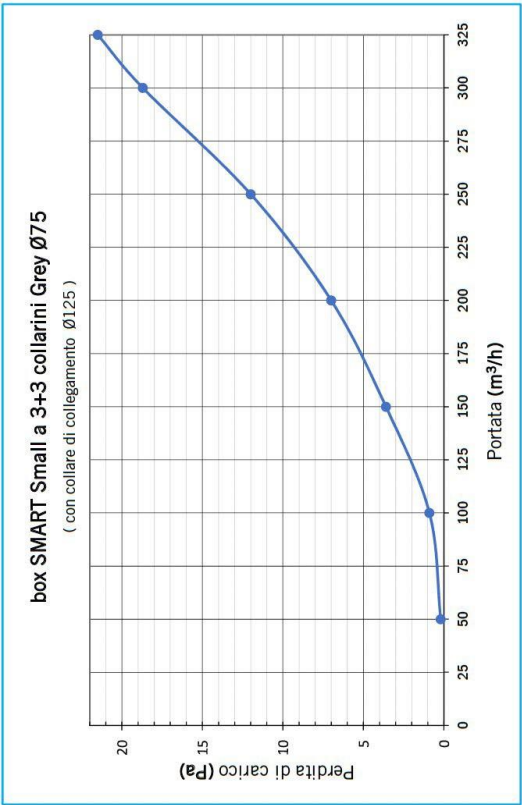
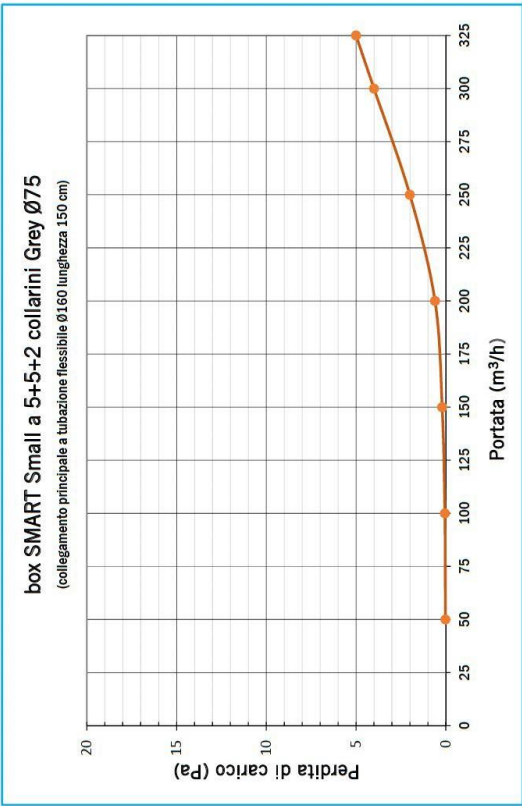
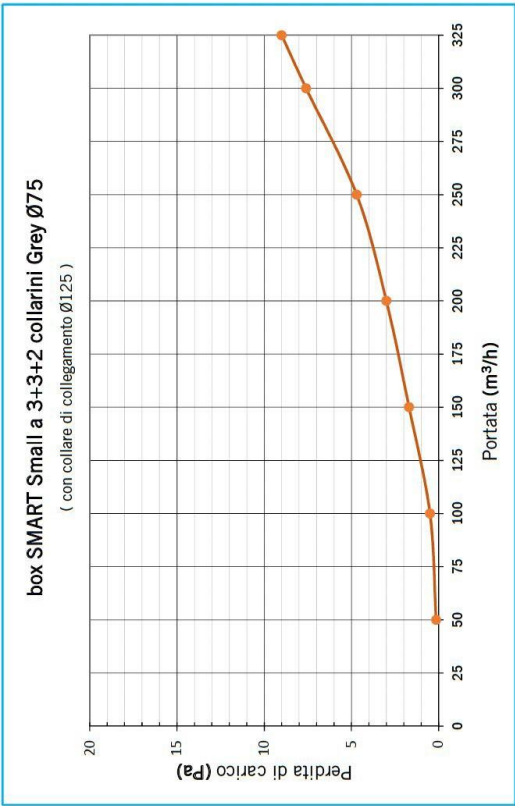
\*\* For GREY collars (Ø75 and Ø90), there is no need for any plug for unused attachments as these collars have an internal septum for total closure (to be removed in place). The inner septum is (always in place, easily) sectionable into sectors: the GREY collars also function as flow regulators. The additional collars (OPTIONAL) can possibly be Ø90 in diameter even if the remaining collars are Ø75, and vice-versa, as the PVC collar holder plate is unique for the two diameters.

\*\*\* Flow rate calculated based on the air flow rate of each distribution pipe for a velocity (max) of 3 m/s in each pipe.

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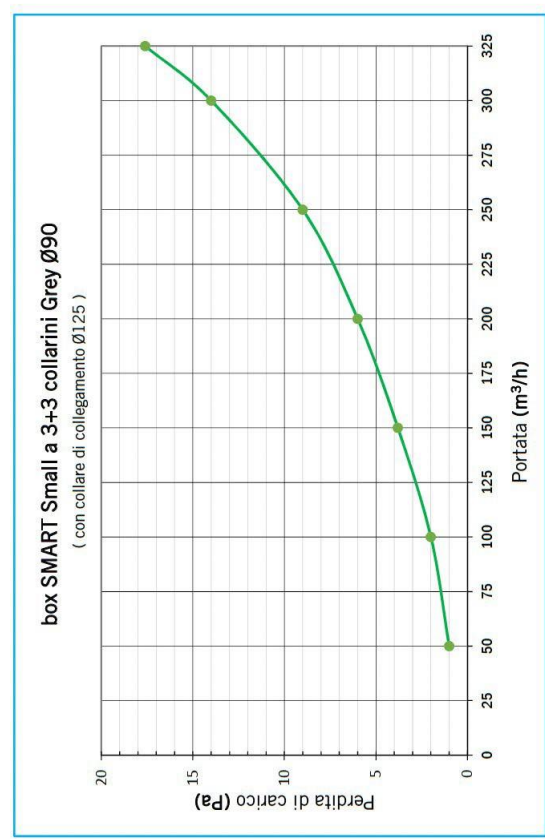
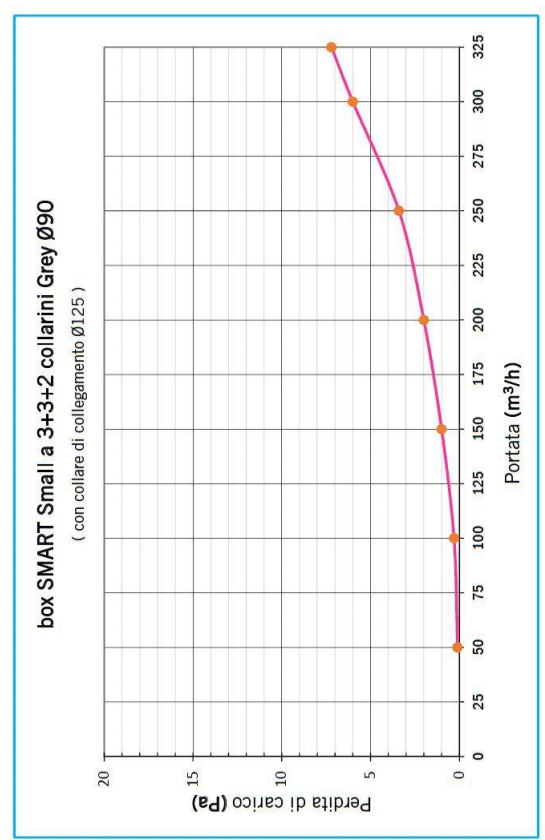
GRAPHI

Pressure drop graphs of SMART Small boxes mod. VMSMART12\_675 and VMSMART12\_1075  
(the “+ 2 collars” graphs refer to boxes with the addition of VMSMPL275 plate; in the total  $\Delta p$  (the Ø125 flexible hose section is included)



GRAPHI

Pressure drop graphs of SMART Small boxes mod. VMSMART12\_690 (the “+ 2 collars” graphs refer to boxes with the addition of VMSMPL290 plate; in the total  $\Delta p$  (the Ø125 flexible hose section is included)





Pressure drop graphs of SMART Small boxes mod. VMSMART12\_690 (the “+ 2 collars” graphs refer to boxes with the addition of VMSMPL290 plate; in the total  $\Delta p$  (the Ø125 flexible hose section is included)

