

# Ventilation Box with CO<sub>2</sub> priority

## SPECIFIED USAGE

*These devices which operate on a compressed air source, allow comfort local opening or closing of NSHEV (Natural Smoke and Heat Exhaust Ventilators) from a remote position. NSHEV can be located on building roof or frontage. NSHEV are also connected to one Safety Pneumatic energy supply (APS) which allows the fire open position of remote controlled NSHEV.*

*A priority coming from the Security/Safety Pneumatic Supply disables the "comfort" controls. Optional: the opening and closing controls can be remote controlled via sluice gates brought under control by a wind detector, a rain detector or a clock system.*

*Optional: these devices can be supplied with a compressed air filtration system, the compressed air being required to operate remote controlled ventilation devices.*

*Particular care has been taken with the aesthetics and dimensions of these products.*



## COMFORT OPERATION

2 easily recognizable push-buttons located on the box front allow a manual transmission of the opening or closing orders to remote controlled NSHEV. In case of presence of automatic options (Rain, wind, etc...), the manual controls are disabled.

Reminder : the overriding fire open position order transmission to the NSHEV will disable any « comfort » order.

## DESCRIPTION

- beige epoxy coated metal box.
- 2 buttons on box door for OPENING and CLOSING.
- Door with lock and triangle-shaped key.
- Output for remote control tube to the remote-controlled ventilators located on top and sides of the box.
- Pneumatic and electric input located in lower part of the box.
- Detailed drawing of the connections is supplied with the each box.

## USE

These "ventilation box with CO<sub>2</sub> priority" devices will be used to ventilate a room/space when a compressed air source is available and when installed NSHEV are supplied with the "ventilation" option.

A manual action on the 2 buttons located on the box front commands the opening or closing of the remote controlled NSHEV.

When a detection system (rain, wind, etc...) has been installed, opening and closing automatic orders have priority over comfort manual controls.

These boxes must not be installed in a corrosive environment.

The compressed air coming directly from a compressor must be filtered (40 microns), its dew point must be less or equal to 10% under service pressure, and its oil concentration must be less or equal to 25 mg/cubic meter.

## NOTES

- Box energy supply must be done with a tube diameter corresponding to the standard compressed air supplies.
- The link diameter between compressed air source and the boxes to be supplied must be adequate in order to avoid pressure drop (provide for required reducers to be mounted on Ø 6 mm input tubes).
- Air supply pressure must be from 5 to 8 bars.

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## DIMENSIONS (in mm)



### Power supply specifications :

- Filtered compressed air
- input pressure from 5 to 8 bars

## REFERENCES / SPECIFICATIONS

**Ventilation box with CO<sub>2</sub> priority**

Ref. 2246

### Ref. 2270

#### Sluice gate specifications (to be ordered separately) :

- 230 VAC – power 8/11 W
- Other voltages: **consult us**



## MADICOB RECOMMENDS

- Always run some tests before handover.
- Never cut a copper tube already in place: copper filings or chips may fall in the product and damage the joints. This would lead to some dysfunction.
- Make sure that the network pressure will be high enough to operate the opening / closing operations.

- When the operation cannot be carried out, check the following points:
  - there is no leak on the remote control links.
  - there is no inversion between the copper tube connections.
  - the compressed air pressure is high enough.
  - The CO<sub>2</sub> bottle has the correct dimensions (check the calculation again)
  - there is no mistake in the opening weight calculation.
  - the opening is not blocked and does not jam (operate it by hand).

## EXAMPLES OF USE

(Box + electric release on ventilation)

