CH193VMC

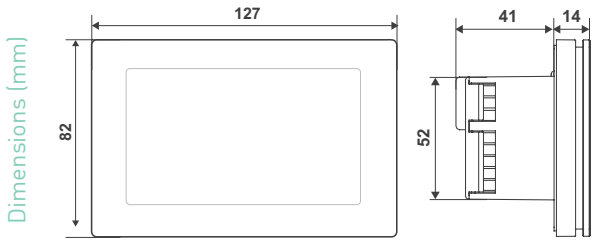
LCD remote panel for the advanced control of ventilation systems through VMC

Remote panel for the regulation and control of VMC panels with weekly program. Display ultra-flat negative LCD touch screen with white backlighting. Equipped with temperature, relative humidity and VOC sensors for the advanced control of ventilation and indoor air quality (IAQ).

- 3 fan speeds that can be set on weekly profiles

- Activatable boost speed if the room conditions require it

- Activation and control, on some VMC machines, of dehumidification and of the heating and cooling coils.



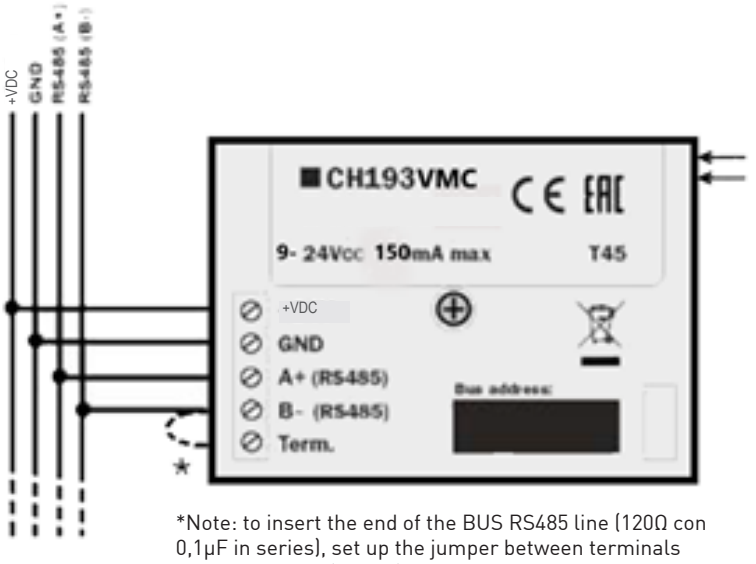
	Power supply	Fan speed	Scale view Humidity RH%	Scale view room temperature	IAQ
CH193VMC	9-24Vdc	3 + BOOST	0-100%	-50°C to 50°C	5 LEVELS

CHARACTERISTICS:

- Relative humidity adjustment scale 30-70%, resolution 1%
- Room relative humidity view scale 0-100%, increment of 1%
- Air quality view through VOC sensor
- Backlight switch-off: 60s after last touch
- Temperature regulation scale 2-40°C, increment of 0.1°C
- Room T view scale -50 - +50°C, resolution of 0.1°C
- Maximum room temperature 45°C
- Storage temperature -10°C - +60°C
- Communication mode: ModBus RTU (master)
- Data formats: 9600bps, 8bit, no parity, 1 bit stop
- IP30 protection rating
- Mounting on type 503 recessed box.
- Dimensions: 127 x 82 x 24 mm
- Weight: 0.100 kg

INSTALLATION

Semi-recessed installation, on type 503 3-module recessed box.



NOTE: The auxiliary input can be used for the connection of an outdoor temperature probe (mod. EC18, EC19, EC20), or of an alarm-armable ON/OFF contact

*Note: to insert the end of the BUS RS485 line (120Ω con 0,1μF in series), set up the jumper between terminals "Term." and "B-(RS485)".

All of the VMC machines code AP200xx feed remote control CH193VMC

ELECTRICAL CHARACTERISTICS

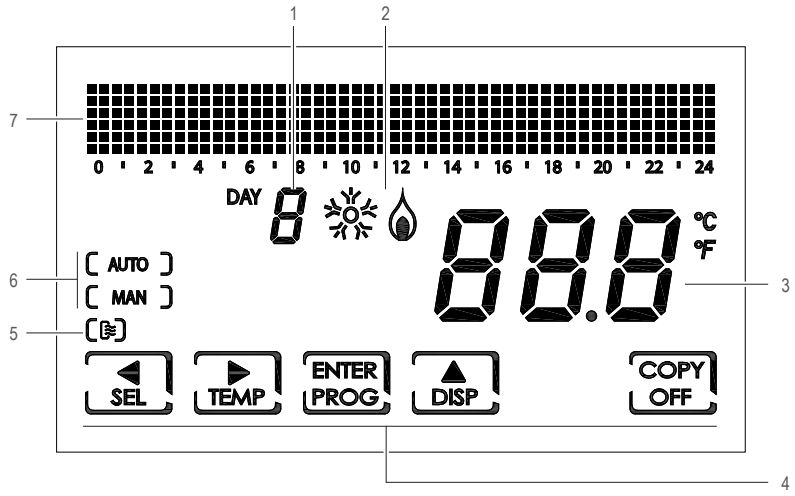
Rated power supply voltage: 9 - 24Vdc
Absorbed current: 150mA Max
Communication interface: RS485

HOMOLOGATION AND STANDARDS

Compliant with EN 60730-1 standards and second parts
Compliant with Directive 2014/30/EU (EMC) and Directive 2014/35/EU (LVD)

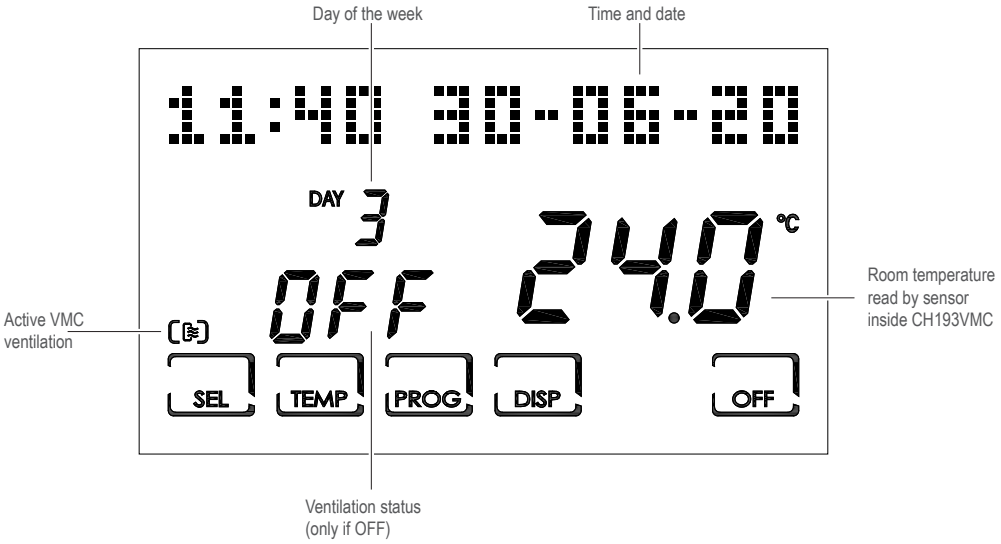
OPERATION

The mechanical ventilation system is managed by the environment control device CH193VMC, which allows the installer to set the functional parameters necessary to activate the system and to schedule the weekly ventilation program.
In daily operation, the device shows the user the current operating mode, any warnings to control/change filters and, by means of the fitted sensors, indicates the air quality level.
On the most advanced VMC machines that have a dehumidification system and/or heating and cooling coils, it is possible to check, in any season, in addition to ventilation and air quality, also the thermo-hygrometric conditions of the rooms and to guarantee the best wellbeing of occupants.



1 Day of the week
2 Heating/cooling coil activation state (if the VMC is set up for this)
3 Room temperature (Celsius/Fahrenheit) measured
4 Multi-function touch icons
5 VMC ventilation status
6 Operating mode
7 Bar graph to display messages and daily programming

Example of display:



OPERATING MODES

CH193VMC offers various operating modes for VMC ventilation regulation:

- MAN Manual program
- AUTO Weekly program
- OFF System off

It is possible to set 4 speed levels:
V1: settable from 10% to 50% of the fan speed
V3: settable from 50% to 90% of the fan speed
V2: calculated as the average speed between V1 and V3
BOOST: settable from V3 to 100%

Note:
V1‹V2‹V3‹BOOST

Vman: the speed can be set from V1 to V3
+ BOOST*

MAN

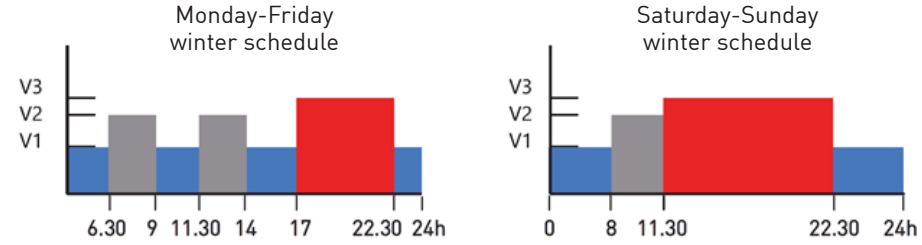
The remote panel regulates VMC speed using the speed set in the 24 hours

*NOTE: BOOST speed is timed

AUTO

The remote panel manages the set speeds depending on the hourly programs on a weekly profile
It has 7 predefined programs.
Automatic operation offers three settable speed levels V1-V2-V3
NOTE: in AUTO mode it is possible to activate the RH or VOC sensor for advanced control of air quality.

Examples:



OFF

This completely switches off the VMC ventilation system.

FUNCTION

CH193VMC function in combination with various codes of Fantini Cosmi VMC machines

	AP20050 AP20052	AP20054 AP20056 AP20058	AP20060 AP20062 (dH)	AP20064 AP20066 (iH)
Ventilation operating mode: MAN/AUTO/OFF	x	x	x	x
4 settable speeds V1, V2, V3 + boost	x	x	x	x
Manual summer/winter	x	x	x	x
Auxiliary heating coil	x	x		
Optimised IAQ through RH and VOC sensors	x	x	x	x
Filter change signal	x	x	x	x
UVC lamp change signal	x	x	x	x
Summer by-pass	x	x		x
Only VMC/ VMC + auxiliary coil mode	x	x		
Auxiliary coil temperature set point	x	x		
Max and min for the auxiliary coil temperature set point	x	x		
Temperature set point for cooling integration			x	x
Temperature set point for heating integration			x	x
Humidity set point for dehumidification integration			x	
RH and VOC set point for IAQ optimisation	x	x	x	x
Daylight saving / standard time	x	x	x	x
Display lock with password	x	x	x	x
Automatic E/I change over (through room temp/on off input)	x	x	x	x
External probe/auxiliary input	x	x	x	x
View of VMC system anomalies	x	x	x	x
View of consumption	x	x	x	x
Supply from VMC	x	x	x	x

SPECIAL FUNCTIONS

AIR QUALITY AND RELATIVE HUMIDITY
Through the VOC and RH sensors the air quality and relative humidity are constantly monitored and the CH193VMC, if these controls are enabled, modulates the speeds set by the user to always guarantee the right balance between thermo-hygrometric wellbeing and IAQ.
The indoor air quality IAQ is displayed with 5 incremental levels: 1 very unhealthy air; 2 unhealthy air; 3 moderate air; 4 good air; 5 excellent air.

These and other functions and parameters shared by all of the machines with code AP200xx, are settable by accessing the technical menus of the remote panel:

FREQUENT SETTINGS MENU:
- Date and time
- Summer/winter
- VMC profile for AUTO mode
- Default display (AUTO/date and time/RH + time/IAQ + time/ dew point + time profile)
- Screen lock with password

CONFIGURATION MENU:
- Celsius/Fahrenheit
- Temperature correction
- Time profile customisation
- Seconds display lighting stays on
- Display lighting intensity
- Language: Italian, English, French, Spanish, Russian
- Password protection to prevent unauthorised alteration of the settings/temperatures
- Default parameter resetting
- Electric heating coil activation
- Dehumidification system activation
- Integration system activation
- Activation of VMC control through RH
- Activation of VMC control through VOC
- By-pass management
- Filter management activation
- UVC lamp management activation
- Minimum and maximum temperature exceeding alarm management
- Summer/winter automatic change over

SPECIFICATION ITEMS

Ultra-flat remote panel with backlit LCD touchscreen, equipped with temperature sensors, relative humidity and VOC for the control and management of ventilation systems through VMC; ModBus RTU master communication with the VMC; 9-24Vdc @ 150mA power supply. VMC fan control: manual, automatic (settable on 3 speeds + boost); VMC control management through RH or VOC sensors; Auxiliary heating coil management; By-pass management; Dehumidification and heating and cooling integration management for the VMC machines supporting it; Filter change management; Summer/winter automatic change over; UVC lamp management activation. Semi-recessed installation, on type 503 3-module recessed box. Buffer battery; IP30 protection rating. Compliant with EN60730-1 standards and second parts. Compliant with Directive 2014/30/EU (EMC) and Directive 2014/35/EU (LVD)