

Configuration of class 210 transmitters by keypad



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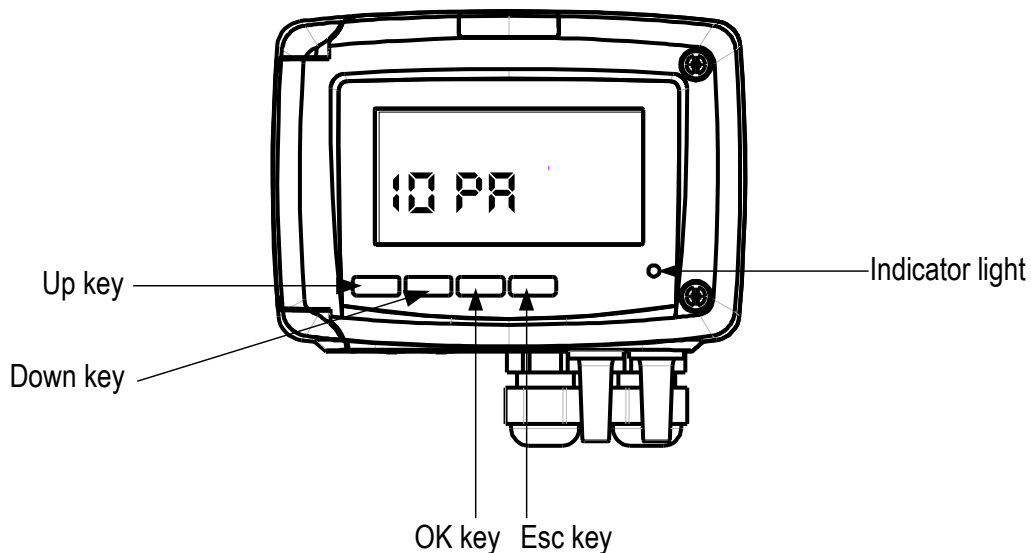
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1. Introduction

1.1. Description of the transmitter

Class 210 transmitters with display can be configured via keypad. It is possible to set measurement units, activate or not a channel,...

Principle : the configuration options are accessed via **folders and sub-folders**. Access is made via a **numerical code** (full details in this manual).



Trend indicator : on the screen, a trend indicator represented by a rising arrow, a going down arrow or a stable arrow is displayed above the measurement unit. It means the calculation of a moving average on the last hour (M1) to compare with a moving average on the last 5 minutes (M2) :

- If $M1 = M2$, the trend is stable.
- If $M1 < M2$ the trend is upwards.
- If $M1 > M2$ the trend is downward.

Indicator light : the indicator light blinks quickly during the initialization phase of the transmitter then becomes fixed when this phase has been completed.



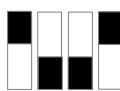
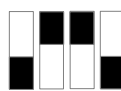
For the pressure transmitters with solenoid valve (CP211 and CP212), it blinks when the solenoid valve is activated.

1.2. Description of the keys

- **Up key** : increments a value or a level
- **Down key** : decrements a value or a level
- **OK key** : validates an input
- **Esc key** : cancels an input or backs to the previous step

1.3. Selection of the output signal

The selection of the output signal in voltage (0-10 V or 0-5 V) or in current (4-20 mA or 0-20 mA) must be performed with the transmitter **NOT ENERGIZED** and is made with the DIP switch of the electronic board putting the on-off switches as shown on the table below :

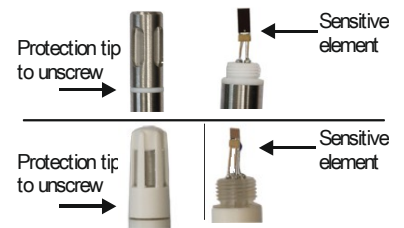
Configuration	4-20 mA	0-10 V	0-5 V	0-20 mA
Combinations				

1.4. Protection tip of the sensors



It's extremely unwise to remove the protection tip of our hygrometry probes as the sensitive element is very fragile even to light contacts. However, if you have to remove the protection tip, take all possible precautions and avoid any contact with the sensitive element.

To remove the protection tip, unscrew it or unclip it.



2. Access to the different functions



This step is compulsory for each configuration.

First, to access to the transmitter functions, and for safety, a safety code must be entered. This safety code is **0101 can not be modified.**

- The transmitter must be energized.
- Connect the transmitter.
- Wait for the initialization phase.
- Press **OK**.
The screen displays “Code” with « 0000 ». The first 0 blinks.
- Press OK to go to the second 0.
It blinks.
- Press Up key to display 1 then press OK.
The third 0 blinks.
- Press OK to go to the fourth 0.
- Press Up key to display 1 then press OK.
The following screen is displayed :



“F 100” is for the number of the configuration folder. There are 5 folders :

- **F 100** : folder of the transmitter configuration. See page 8
- **F 200** : folder of the channels and units of measurement. See page 10
- **F 300** : folder of the analogue outputs. See page 11
- **F 500** : folder of the measurement configuration. See page 14
- **F 600** : folder of the measurement configuration specific to the CO 212, CP210 and CTV210 transmitters. See page 17

To select required folder :

“F 100” is displayed and 1 is blinking.

- Press up key until the number of the required folder is display (F 100, F 200, F 300, F 500 or F 600 according to the type of transmitter).
- Press OK.



If a wrong code is entered, “CODE” blinks a few seconds on the bottom right of the screen then the measured values are displayed. It is necessary to enter the right code.

3. F 100 : Configure the transmitter

This folder allows to configure the following parameters of the transmitter : contrast, backlight and keypad locking. It also indicates the firmware version of the transmitter.

3.1. Access to the firmware version

The activation code is validated and "F 100" is displayed (see previous page).

- Press OK.
"F 101" is displayed with the firmware version number above. (Ex : 1.04)

3.2. Configure the screen

3.2.1 Set the contrast : F 110

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
F 100 folder is displayed.
- Press OK.
- Press Up key to go the F110 folder.
"F 110" is displayed with the number corresponding to the contrast level between 0 and 5.
- Press OK.
The contrast number blinks.
- Set it between 0 and 5 pressing Up and Down keys.



When pressing Up or Down key to change the contrast level, there is a lag time of 1 s where the digits disappear then they reappear with the new contrast.

- Press OK.

3.2.2 Set the backlight duration : F 111

It is possible to set the backlight duration :

- 0 : backlight is inactive
- 1 : backlight lasts 10 s.
- 2 : backlight lasts 30 s.
- 3 : backlight lasts 60 s.
- 4 : backlight is permanent.

Backlight is activated pressing any key (unless the level 0 is selected).

F110 sub-folder is displayed.

- Press Up key.
"F 111" is displayed with the number corresponding to the backlight duration between 0 and 4.
- Press OK.
The backlight duration blinks.
- Set it between 0 and 4 pressing Up and Down keys.
- Press OK.

3.2.3 Set the backlight

F111 sub-folder is displayed.

- Press Up key.
"F 112" is displayed with the number corresponding to the backlight level between 0 and 10.
- Press OK.
The backlight level blinks.
- Set it between 0 and 10 pressing Up and Down keys.

- Press OK.

3.3. Lock the keypad : F 140

For more safety and avoid any unwanted manipulation, it is possible to lock the keys of the transmitter.

F112 sub-folder is displayed.

- Press Up key.
“F 140” is displayed with “OFF” meaning that the locking is deactivated.
- Press OK.
“OFF” blinks.
- Press Up or Down key, “ON” blinks, then press OK.
*“LOCK” is displayed for a few seconds then the transmitter displays the measured values.
All the keys are inactive.
To reactivate them :*
- Press for 10 seconds on the OK key.
“LOCK” blinks for a few seconds then the measured values are displayed and the keys are activated.

4. F 200 : Configuration of the channels and measurement units

This folder allows to activate one two channels and to configure the measurement unit for each channel.

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to the folder F 200.
- Press OK.
- *“00” blinks and the unit corresponding to the channel 1 is displayed.*
- Press OK.
- *The unit blinks.*
- Press Up and Down keys to select the required unit according to the type of transmitter.
Or when “00” blinks :
- Press Up or Down key to select the sub-folder F 210 corresponding to the channel 2.
- Press Up and Down keys to select the required unit according to the type of transmitter.



“---” sign allows to deactivate the channel.

Units available according to the channel and the type of transmitter :

CP211-212-213 : Pa, mmH₂O, inWG, mbar, mmHg, daPa, kPa, hPa, m/s*, fpm*, m³/h*, l/s*, cfm*, m³/s*, dam³/h*, °C, °F

CP214-215 : Pa, mmH₂O, inWG, mbar, mmHg, daPa, kPa, hPa, PSI, °C, °F

CTV210 : m/s, fpm, km/h, m³/h, l/s, cfm, m³/s, dam³/h, °C, °F

COT210 : ppm, °C, °F

COT212 : ppm, °C, °F

TM210 : °C, °F, dT

TH210 : %RH, g/Kg, Kj/Kg, °C td, °F td, °C tw, °F tw, °C, °F

* : units regarding the air velocity and airflow calculation, available on CP211-212-213 transmitters with SQR3 option only.

5. F 300 : Management of the analogue outputs

5.1. Outputs diagnostic

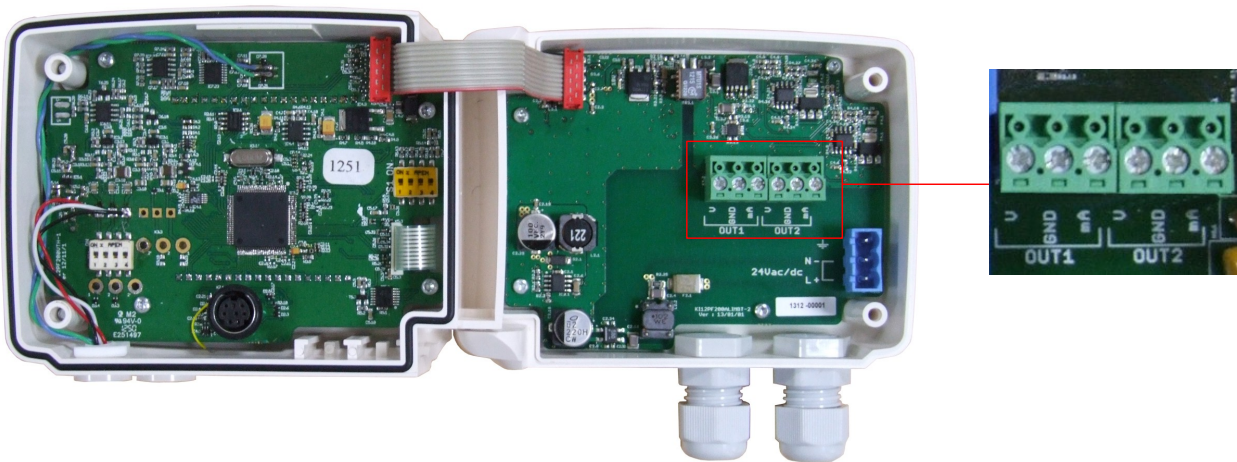
This function allows to check on a measurement device (multimeter, regulator or automate)s the proper functioning of the outputs. The transmitter will generate a voltage (between 0 and 10 V) or a current (between 0 and 20 mA) according to the setting of the DIP switch of the transmitter electronic board.

- For a 0-10 V output signal, the transmitter will generate 0 – 5 or 10 V.
- For a 0-5 V output signal, the transmitter will generate 0 – 2.5 or 5 V.
- For a 4-20 mA output signal, the transmitter will generate 4 – 12 or 20 mA.
- For a 0-20 mA output signal, the transmitter will generate 0 – 10 or 20 mA.

5.1.1 Connection configuration

Before carrying out the output diagnostics, all connections and configurations of the transmitter must be enabled, to avoid any damage on the transmitter and the measurement device !

- Select a channel for the outputs diagnostic.
OUT1 or OUT2, indicated on the electronic board above the terminal blocks.



- Connect a measurement device on the channel 1 or on the channel 2.

5.1.2 Perform the outputs diagnostic

Once the connection to the measurement device is complete, the outputs diagnostic on several check points can be performed :

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to the F 300 folder.
- Press OK.
- F 301 blinks, corresponding to the diagnostic of the **channel 1**.*
- Press OK.
- Press Up and Down keys to select the signal that the transmitter has to generate.

Screen	Generated output	Example
0	Deactivated	-
1	Simulates 0 % of the output range	On the 0-10V range, the transmitter will generate 0 V.
2	Simulates 50 % of the output range	On the 0-10V range, the transmitter will generate 5 V.
3	Simulates 100 % of the output range	On the 0-10V range, the transmitter will generate 10 V.



If the deviations are too large ($> 0,05V$ or $> 0,05mA$) between the signal issued and the value displayed on the multimeter, we recommend that you return the transmitter to our factory.

For the diagnostic of the **channel 2**, go to F 311 folder and do the same procedure as the channel 1.

5.2. Set the range of the analogue outputs

This function allows to modify the range of the analogue outputs.



Values to enter depend on the unit of measurement and not on the measurement range of the transmitter.

Ex : on a CP 211 pressure transmitter (0 to ± 1000 Pa) with a reading in mmH₂O, the minimum and maximum ranges must be configured on measuring range of 0 to ± 102 mmH₂O. **See conversion chart above.**

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to folder F 302 corresponding to the low range of the channel 1.
- Press OK.

The first digit of the low range blinks.

- Enter with Up and Down keys the figure value or the negative sign of the value then press OK.
- The second digit blinks.*
- Enter with Up and Down keys its value then press OK.
- Perform the same procedure for the following figures.
- Press OK when the last figure has been configured.
- F 302 blinks, the low range is configured.*

- Press Up key then press OK to enter in the folder F 303 corresponding to the high range of the channel 1.
- The first digit of the high range blinks.*
- Enter with Up and Down keys the figure value or the negative sign of the value then press OK.
- The second digit blinks.*
- Enter with Up and Down keys its value then press OK.
- Perform the same procedure for the following figures.
- Press OK when the last figure has been configured.
- F 303 blinks, the high range is configured.*



To set the low and high ranges of the channel 2, go to the folders F 312 (low range) and F 313 (high range) and follow the setting procedure of the channel 1.

Unit of measurement conversion chart

- **Pressure**

	Pa	mmH ₂ O	InWG	mbar	mmHG	kPa	PSI	daPa	hPa
CP211	± 100	± 10.2	± 0.40	± 1.00	± 0.75	± 0.100	-	± 10.0	± 1.00
CP212	± 1000	± 102.0	± 4.01	± 10.00	± 7.50	± 1.000	-	± 100.0	± 10.00
CP213	$\pm 10\ 000$	± 1019.7	± 40.14	± 100.00	± 75.00	± 10.000	-	± 1000.0	± 100.00
CP214	-	± 5099	± 200.7	± 500	± 375.03	-	± 7.25	± 5000	± 500.00
CP215	-	± 20394	± 802.9	± 2000	± 1500.12	-	± 29.00	± 20000	± 2000.00

- **Temperature**

TH210	°C	°F
Ambient model	From 0.0 to +50.0	From +32.0 to +122.0
Model with polycarbonate probe	From -20.0 to +80.0	From -4.0 to +176.0
Model with stainless steel probe	From -40.0 to +180.0	From -40.0 to +356.0

TM210	°C	°F
Ambient model	From 0.0 to +50.0	From +32.0 to +122.0
Terminal block model	From -100.0 to +400.0	From -148.0 to +752.0

CTV210 / COT210 / COT212	°C	°F
Ambient model	From 0.0 to +50.0	From +32.0 to +122.0

CP210	°C	°F
On terminal block	From -100.0 to +400.0	From -148.0 to +752.0

- **Air velocity**

CTV210	m/s	fpm	km/h
Standard	From 0 to 30	From 0 to 5905	From 0 to 108
Omnidirectional	From 0 to 5	From 0 to 984	From 0 to 18

6. F 500 : Setting of the measurement

In order to compensate a potential drift of the transmitter, it is possible to add an offset to value displayed by the transmitter. Adding an offset is only possible for the measured parameters (temperature, humidity, pressure, air velocity...). It is not possible to add it one for the calculated parameters (airflow, psychrometry..).


6.1. Autozero (CP210)


Class 210 pressure transmitters have an autozero which guarantees a good reliability of the measurement in high and low ranges.

The autozero compensates for any long-term drifts of the sensitive element, with the manual adjusting of the zero.

To perform a self-calibration :

- Unplug the 2 pressure connections tubes.
- Press autozero button. (See “**Connection**” on the datasheet).

 If the instrument has a display, it is possible to perform an autozero pressing for 3 seconds the “**Esc**” key. “**AutoZ**” is displayed briefly meaning the autozero has been well performed.

 On CP 211 and CP 212 transmitters, it is not necessary to unplug the 2 pressures connections tubes (see chapter 6.3).

6.2. Pressure measurement integration (CP210)



This function is available on CP210 transmitters only.

The pressure measurement element is very sensitive and reacts to pressure changes. When making measurements in unstable air movement conditions, the pressure measurement may fluctuate. The integration coefficient (from 0 to 9) makes an average of the measurements ; this helps to avoid any excessive variations and guarantees a stable measurement.

New displayed value = $(((10 - \text{Coef.}) \times \text{New value}) + (\text{Coef.} \times \text{Old value})) / 10$

Example : CP212 (0-1000 Pa) – Current measurement : 120 Pa – New measurement : 125 Pa

The pressure source being stable, the user selects a low integration. Integration : 1, maximum admitted variation ± 10 Pa.

The variation is lower than 10 Pa, it is possible to apply the integration calculation formula.

Next displayed value : $((9 \times 125) + (1 \times 120)) / 10 = 124.5$ i.e, 124 Pa. If the new measurement had been de 131 Pa, the next displayed value would have been 100% of the new value i.e, 131 Pa.

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to folder F 500.
- Press OK.
- Set the integration value with Up and Down keys.

This value must be between 0 and 9 with :

- **Coefficient 0** : no integration, important fluctuation of the displayed value.
- **Coefficient 9** : maximum integration, more stable measurement display.

6.3. Time-delay between two autozeros (CP211 and CP212)

On transmitters having a solenoid valve for autozero (CP 211 and CP 212), it is possible to set an interval between 2 autozeros :

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.

- Press Up key to go to folder F 500.
- Press OK.
- Press Up key to go to folder F 510.
- Press OK.
The duration between two autozeros is displayed.
- Set it with Up and Down keys.
This time-delay must be between 0 (no autozero) and 60 minutes.
- Press OK to validate the duration.

6.4. Air velocity measurement integration (CTV210)



This function is available on CTV210 transmitters only.

The air velocity measurement element of the class 200 is very sensitive and reacts to air velocity changes. When making measurements in unstable air systems, the air velocity measurement may fluctuate. The integration coefficient (from 0 to 9) makes an average of the measurement ; this helps to avoid any excessive variations and guarantees a stable measurement.

New displayed value = $(((10 - \text{Coef.}) \times \text{New value}) + (\text{Coef.} \times \text{Old value})) / 10$

Example : CTV210 with hot wire (0-30 m/s) – Current measurement : 2 m/s – New measurement : 8 m/s

The air velocity source being unstable, the user selects a strong integration. Integration : 7. The variation is lower than 10 m/s, it is possible to apply the integration calculation formula.

Next displayed value : $((2 * 8) + (7 * 2)) / 10 = 3 \text{ m/s.}$

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to folder F 501.
- Press OK.
- Set the integration value with Up and Down keys.

This value must be between 0 and 9 with :



- **Coefficient 0** : no integration, important fluctuation of the displayed value.
- **Coefficient 9** : maximum integration, more stable measurement display.

6.5. Add an offset

The transmitter is power on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to folder F 500.
- Press OK.
"F 521" blinks, corresponding to the setting folder for the main parameter.
- Press OK.
The first number of the offset blinks.
- Enter with Up and Down keys the number value or the negative sign of the value then press OK.
The second number blinks.
- Enter with Up and Down keys its value then press OK.
- Repeat the procedure for the following numbers.
- Press OK when the last number is set.
F 521 blinks, the offset for the main parameter is configured.
- Press Up key then press OK to enter in the F 531 folder corresponding to the offset of the second parameter.

The first number of the offset blinks.

- Enter with Up and Down keys the number value or the negative sign of the value then press OK.

The second number blinks

- Enter with Up and Down keys its value then press OK.
- Repeat the procedure for the following numbers.
- Press OK when the last number is set.

F 531 blinks, the offset for the main parameter is configured.



The unit of the offset is set by default and can not be modified. If this unit is not the same than the unit of measurement, a conversion must be done.

7. F 600 : Compensation, means of measurement and section settings

7.1. Temperature compensation (CP 210)

It is possible to modify the temperature compensation. Indeed the air velocity and airflow measured with a differential probe (such as Pitot tube, Debimo blade, orifice plate...) depends on the working temperature. Then, it is required to enter the **working temperature** to get more accurate results.

7.1.1 Set the unit

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to F 600 folder.
- Press OK.
- Select **0** for °C or **1** for °F then press OK.

7.1.2 Set the temperature compensation value temperature

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to F 602 folder.
- Press OK.
- The 1st digit blinks.*
- Press Up or Down key to set the temperature sign : **0** for a **positive temperature** ou **-** for a **negative temperature**.
- Press OK.
- The 2nd digit blinks.*
- Press Up or Down key to set the digit then press OK.
- Repeat the procedure for the following digits.
- Press OK when the last digit has been set to validate the temperature compensation value.

7.2. Altitude compensation (CO 212, CP 210 and CTV 210)

If measurements are performed at a specific altitude, it is advised to set the altitude in which the transmitter is.

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to F 605 folder.
- Press OK.
- The 1st digit blinks.*
- Press Up or Down to set the digit : **only 1 and 0 are available**
- Press OK.
- The 2nd digit blinks.*
- Press Up and Down key to set the digit then press OK.
- Repeat the procedure to set the following digits.
- Press OK when the last digit has been set to validate the altitude value.

7.3. Selection of the means of measurement (CP 210)

The calculation of air velocity being calculated from the pressure (for a CP 210 transmitter) and from a differential pressure element, the used differential pressure element must be selected to perform the measurements. The coefficient of this element and the air velocity correction coefficient must be then entered.

7.3.1 Select the means of measurement

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to F 610 folder.
- Press OK.
- Select **0, 1, 2 or 3** for :
 - **0** : Pitot L tube
 - **1** : Pitot S tube
 - **2** : Debimo blade
 - **3** : Factor

7.3.2 Set the coefficient value of the differential pressure element

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to F 611 folder.
- Press OK.
- Set the 1st digit with Up and Down keys then press OK to set the 2nd digit.
- Repeat the procedure to set the following digits.
- Press OK when the last digit has been set to validate the coefficient.



This coefficient is between 0.0000 and 9.9999.

7.3.3 Set the correction factor value of the air velocity

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to F 612 folder.
- Press OK.
- Set the 1st digit with Up and Down keys then press OK to set the 2nd digit.
- Repeat the procedure to set the following digits.
- Press OK when the last digit has been set to validate the factor.



This coefficient is between 0.000 and 2.000

7.4. Setting of the type of section and airflow coefficient



This function is available for CP210 transmitters with SQR3 option only.

7.4.1 Select the type of section (CP 210 and CTV 210)

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).

- Press OK.
- Press Up key to go to F 620 folder.
- Press OK.
- Select **0, 1, or 2** for :
 - **0** : rectangular section
 - **1** : circular section
 - **2** : coefficient

7.4.2 Select the unit if the section (CP 210 et CTV 210)

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to F 621 folder.
- Press OK.
- Select **0 or 1** for :
 - **0** : section in mm
 - **1** : section in inch

7.4.3 Set the size of the section (CP 210 et CTV 210)

For a rectangular section :

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to F 622 folder to set **the length of the rectangular section.**
- Press OK.
- Set the length with Up and Down keys.
- Press OK when the last digit has been set to validate the length.
- Press Up key to go to F 623 folder to set **the width of the rectangular section**
- Press OK.
- Set the width with Up and Down keys.
- Press OK when the last digit has been set to validate the width.

For a circular section :

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to F 624 folder to set the diameter of the circular section.
- Press OK.
- Set the diameter with Up and Down keys.
- Press OK when the last digit has been set to validate the diameter.

7.4.4 Set the airflow coefficient (CP 210)




This function is available on CP 210 with SQR3 option only.

This coefficient allows to calculate an airflow from the pressure. It is indicated by the manufacturer that supplies air vents with pressure connections (+ and -). From the square root of the measured pressure (Delta P), and this coefficient, you will get the airflow : $Airflow = C_D \sqrt{\Delta pressure}$

The transmitter is powered on.

- Press OK.
- Enter the activation code (see page 7).
- Press OK.
- Press Up key to go to F 625 folder to set the coefficient value.
- Press OK.
- Set the coefficient with Up and Down keys.
- Press OK when the last digit has been set to validate the coefficient.

 *This coefficient must be between 0000.0 and 9999.9.*

- Press Up key to go to F 626 folder to set the unit of measurement.
- Press OK.
- Select **0, 1, 2, 3 or 4** for :

	CP211	CP212	CP213	CP214	CP215
0	Pa	Pa	Pa	mbar	mbar
1	mmH2O	mmH2O	mmH2O	inWG	inWG
2	inWG	inWG	inWG	kPa	kPa
3	mbar	mbar	mbar	PSI	PSI
4	mmHG	mmHG	mmHG	mmHG	mmHG

8. Functions recap

8.1. F 100

Code	Description	Possibilities
F 101	Firmware version	-
F 110	Screen contrast	From 0 to 5
F 111	Backlight duration	From 0 to 4
F 112	Screen backlight	From 0 to 10
F 140	Keypad locking	Off

8.2. F 200

Code	Description	Possibilities
F 200	Change unit channel 1 / deactivation of the channel	According to the type of transmitter (see below)
F 210	Change unit channel 2 / deactivation of the channel	According to the type of transmitter (see below)

Units available according to the channel and the type of transmitter :

CP211-212-213 : Pa, mmH₂O, inWG, mbar, mmHg, daPa, kPa, hPa, m/s*, fpm*, m³/h*, l/s*, cfm*, m³/s*, dam³/h*, °C, °F

CP214-215 : Pa, mmH₂O, inWG, mbar, mmHg, daPa, kPa, hPa, PSI, °C, °F

CTV210 : m/s, fpm, km/h, m³/h, l/s, cfm, m³/s, dam³/h, °C, °F

COT210 : ppm, °C, °F

COT212 : ppm, °C, °F

TM210 : °C, °F, dT

TH210 : %RH, g/Kg, Kj/Kg, °C td, °F td, °C tw, °F tw, °C, °F

* : units regarding the air velocity and airflow calculation, available on CP211-212-213 transmitters with SQR3 option only.



“---” sign allows to deactivate the channel.

8.3. F 300

Code	Description	Possibilities				
F 301	Diagnostic of the channel 1 : generation of current or voltage	Display	Generation according to the output signal			
			0-10 V	0-5 V	0-20 mA	4-20 mA
		0	no generation			
		1	0 V	0 V	0 mA	4 mA
		2	5 V	2.5 V	10 mA	12 mA
3	10 V	5 V	20 mA	20 mA		
F 302	Low rang of the channel 1	According to the type of transmitter				
F 303	High range of the channel 1	According to the type of transmitter				
F 311	Diagnostic of the channel 2 : generation of current or voltage	Display	Generation according to the output signal			
			0-10 V	0-5 V	0-20 mA	4-20 mA
		0	no generation			
		1	0 V	0 V	0 mA	4 mA
		2	5 V	2.5 V	10 mA	12 mA
3	10 V	5 V	20 mA	20 mA		
F 312	Low rang of the channel 2	According to the type of transmitter				
F 313	High range of the channel 2	According to the type of transmitter				

8.4. F 500

Code	Transmitter	Description	Possibilities
F 500	Only CP 210	Integration of the measurement (pressure)	From 0 to 9
F 501	Only CTV 210	Integration of the measurement (air velocity)	From 0 to 9
F 510	Only CP 210 with solenoid valve	Time-delay between two auto-calibrations	From 0 to 60 min
F 521	All	Offset main parameter	According to the measurement range of the transmitter
F 531	All	Offset secondary parameter	According to the measurement range of the transmitter

8.5. F 600

Code	Transmitter	Description	Possibilities
F 600	CP 210	Temperature unit	0 : °C 1 : °F
F 602	CP 210	Temperature compensation	
F 605	CO 212, CP 210 et CTV 210	Altitude compensation	
F 610	CP 210	Means of measurement	0 : Pitot L 1 : Pitot S 2 : Debimo blade 3 : Factor
F 611	CP 210	Differential pressure coefficient	
F 612	CP 210	Factor of air velocity correction	
F 620	CP 210 et CTV 210	Type of section	0 : Rectangular 1 : Circular 2 : Coefficient
F 621	CP 210 et CTV 210	Unit of the section	0 : mm 1 : inch
F 622	CP 210 et CTV 210	Rectangular section length	
F 623	CP 210 et CTV 210	Rectangular section width	
F 624	CP 210 et CTV 210	Circular section diameter	
F 625	CP 210	Airflow coefficient	
F 626	CP 210	Unit of measurement	Pa, mbar, mmH2O, inWG, kPa, mmHG, PSI (according to the transmitter, see table below)

	CP211	CP212	CP213	CP214	CP215
0	Pa	Pa	Pa	mbar	mbar
1	mmH2O	mmH2O	mmH2O	inWG	inWG
2	inWG	inWG	inWG	kPa	kPa
3	mbar	mbar	mbar	PSI	PSI
4	mmHG	mmHG	mmHG	mmHG	mmHG

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