TUBO
the advanced
vacuum system.

Dynamic Control Display
CMT800

Installation and user instructions

AERTECNICA
think clean

Index

MODBUS MODE: PERFETTO INOX TXA - TPA - TX and CLASSIC TC central power units

2 Electrical connection
3 RS485 MODBUS configuration
3 Motor maintenance
4 Display with the central power unit on
5 Display with a central power unit anomaly
5 Display with the central power unit locked
6 Display with the central power unit in stand by

LM MODE: QB - STUDIO - CLASSIC central power units

7 Electrical connection of the QB central power unit
8 Electrical connection of the STUDIO and CLASSIC central power units
9 LM configuration
10 Setting maintenance cycles
10 Motor maintenance
11 Display with the central power unit on
12 Display with a central power unit anomaly
12 Display with the central power unit in stand by

TRBUS MODE: PERFETTO three-phase central power units

13 Electrical connection
14 TRBUS configuration
15 Display with the central power unit on
16 Display with the central power unit locked
16 Display of the self-cleaning cycle
16 Display with the central power unit in stand by

GENERAL INFORMATION

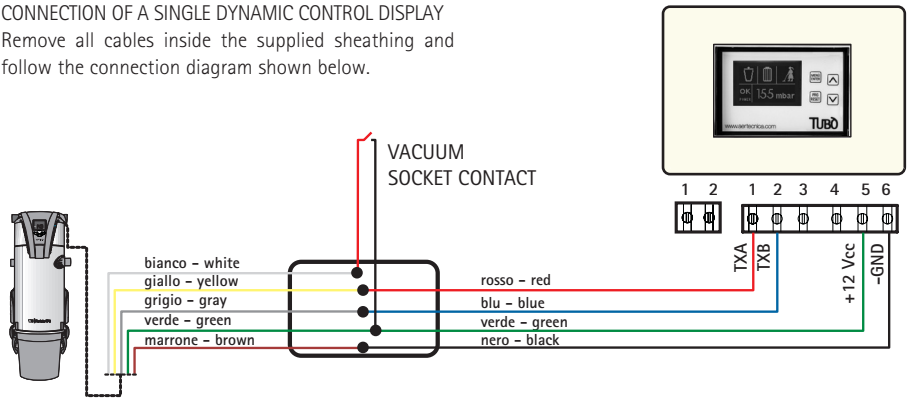
16 Compliance with the Directive 99/05/EC
16 Adjusting LCD contrast
16 Information
16 Registers
16 Installation in the 503 electric box
16 Electrical switch plate compatibility

MODBUS MODE FOR PERFETTO TXA, TPA, TP and CLASSIC TC CENTRAL POWER UNITS

ELECTRICAL CONNECTION

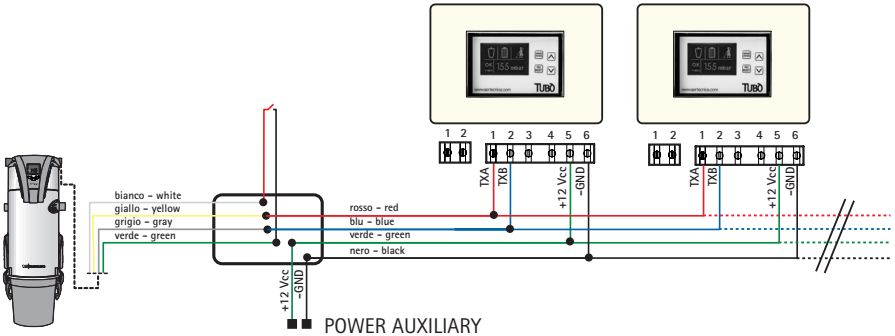
Central power units can power a single Dynamic Control Display.
The current draw of the device is 50 mA.

CONNECTION OF A SINGLE DYNAMIC CONTROL DISPLAY
Remove all cables inside the supplied sheathing and follow the connection diagram shown below.



PERFETTO TXA, TPA, TP and
CLASSIC TC CENTRAL POWER UNIT

CONNECTION OF TWO OR MORE DYNAMIC CONTROL DISPLAYS
If more than one Dynamic Control Display is installed, an auxiliary 12V DC power supply is necessary.



PERFETTO TXA, TPA, TP and
CLASSIC TC CENTRAL POWER UNIT

CONFIGURATION IN MODBUS MODE

The Dynamic Control Display CMT800 is set by AERTECNICA to MODBUS mode.

With this configuration (protocol RS485ModBus) it communicates directly with all PERFETTO INOX TXA, TPA, TP and CLASSIC TC central power unit models.

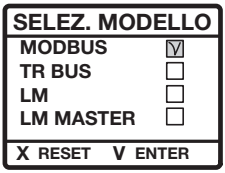
To reset the Dynamic Control Display to ModBus mode, power the device.
The central power unit's STAND BY screen will appear.

Hold down the PROG/RESET key for 10 seconds.

The SERVICE menu will appear.

Select MODELLO
Press MENÙ/ENTER to confirm.

The SELEZ MODELLO menu will appear



Select MODBUS
Press MENÙ/ENTER to confirm.

The Dynamic is now configured in MODBUS mode.

To exit the SERVICE menu, press the PROG/RESET key; the STAND BY screen will appear on the display.

The message ANOMALIA NO RETE will appear on the display check the electrical connection.

MOTOR MAINTENANCE

The hour counter relative to the effective hours of motor operation can be reset in MODBUS mode.

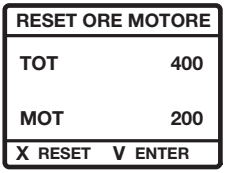
MOTOR RESET SETTING

In STAND BY mode, press the PROG/RESET key for 10 seconds.

The SERVICE menu will appear.

Select RESET MOTORE
Press MENÙ/ENTER to confirm.

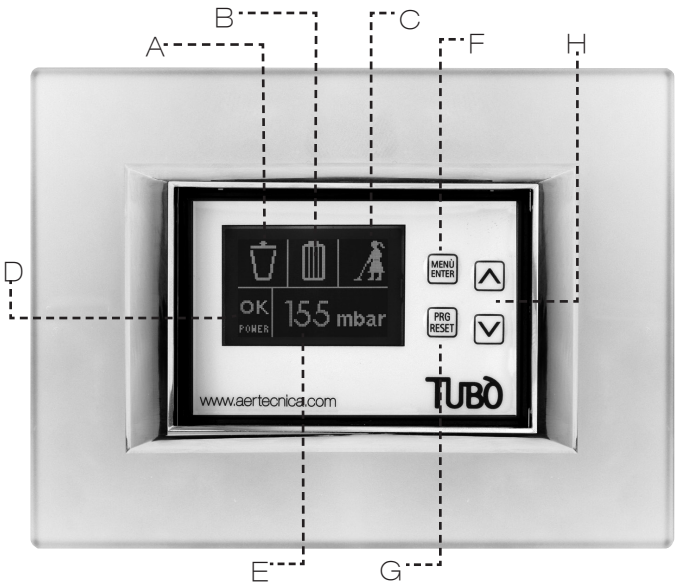
The RESET ORE MOTORE parameter will appear that displays the total hours of operation of both the central power unit and the motor in use.



To reset the motor hours press the PROG/RESET key for a few seconds: the parameter for motor operating hours will reset.

To exit the RESET ORE MOTORE menu mode, press MENÙ/ENTER and then PROG/RESET.

DISPLAY WITH THE CENTRAL POWER UNIT ON



DISPLAY

The following messages appear on the display:

A – CONTAINER FILLING LEVEL

The presumed filling level of the dust container is displayed with 5 progressive stages.

B – FILTER CARTRIDGE SATURATION

This displays the saturation level of the filter cartridge For the Perfetto TXA,TPA and TP central power units, it is based on the actual status of the filter cartridge.
For the Classic TC central power units, it is based on hours of operation.

C – CENTRAL POWER UNIT ON

This signals that the centralised vacuum system is operating.

D – OPERATING VACUUM RANGE

This displays the vacuum level at which the system is operating:
LO - OK - HI

E – OPERATING VACUUM

This displays the operating vacuum in mbar when the system is operating.

KEYBOARD

The keys on the Dynamic Control Display are not enabled while the central power unit is operating.
The keys are always enabled in STAND BY conditions.

F – MENÙ/ENTER

This is used to display the individual menu items or to confirm the set selection.

G – PROG/RESET

This is used to access the programming function or to reset any lock shown on the display.

H – ▲/▼

The up and down arrows are used to navigate the menu.

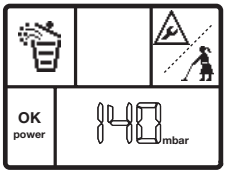
DISPLAY WITH A CENTRAL POWER UNIT ANOMALY/LOCK

CENTRAL POWER UNIT ANOMALY

The following anomalies can occur during central power unit operation:

ANOMALY DUE TO FULL CONTAINER

The following appears on the display:

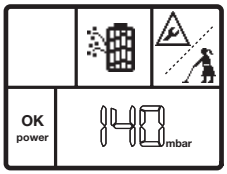


The presumed container level is full.
Perform the maintenance.

After performing the maintenance with the central power unit in STAND BY, press the MENÙ key, selecting the container symbol and press the RESET key for a few seconds.
This will reset the anomaly and reset normal operations.

ANOMALY DUE TO FILTER CARTRIDGE SATURATION

The following appears on the display:



For the Perfetto TXA, TPA and TP central power units, the saturation level of the filter cartridge has been reached.
Perform the maintenance.

For Classic TC central power units, the presumed saturation level of the filter cartridge has been reached.
Perform the maintenance.

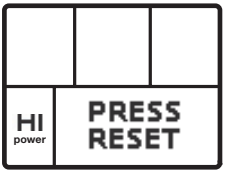
After performing the maintenance with the central power unit in STAND BY, press the MENÙ key, selecting the filter container symbol and press the RESET key for a few seconds.
This will reset the anomaly and reset normal operations.

CENTRAL POWER UNIT LOCKED

The following locks can occur during central power unit operation:

LOCK DUE TO MAXIMUM VACUUM

The following appears on the display:

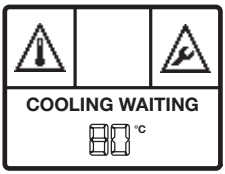


The operating vacuum exceeded 220 mbar for more than 15 seconds.

To reset normal operations, press the RESET key for a few seconds or turn the central power unit off and then on.

LOCK DUE TO TEMPERATURE

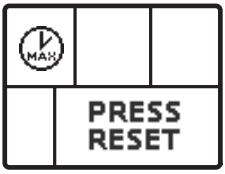
The following appears on the display:



The motor temperature exceeded 80 °C.
Wait for the motor to cool.
When PRESS RESET appears on the display, press the RESET key for a few seconds to reset normal operations.

LOCK DUE TO MAXIMUM TIME OF CONTINUOUS USE (only for the Perfetto TXA, TPA and TP central power units)

The following appears on the display:



The time of continuous use exceeded 30 minutes.

To reset normal operations, press the RESET key for a few seconds or turn the central power unit off and then on.

LOCK DUE TO FILTER CARTRIDGE SATURATION
(only for the Perfetto TXA, TPA and TP central power units)
The following appears on the display:

The lock level was reached due to filter cartridge saturation.
Perform the maintenance and press the RESET key for a few seconds to reset regular operation.

LOCK DUE TO TOO MANY STARTS
(only for the Perfetto TXA, TPA and TP central power units)
The following appears on the display:

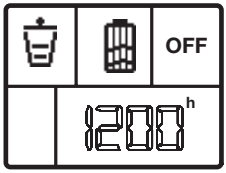
The number of consecutive starts in one minute exceeded 6.
Press the RESET button for a few seconds to reset regular operation.

DISPLAY WITH THE CENTRAL POWER UNIT IN STANDBY

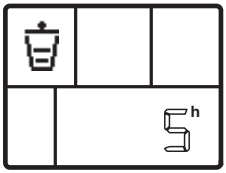
The display goes into STAND BY mode only when the central power unit is off. After 30 seconds of not being used it goes into energy saving mode, turning off the lights.

CENTRAL POWER UNIT STATUS DISPLAY

By pressing the MENÙ/ENTER key 1 time:
the container filling level, the saturation degree of the filter cartridge and the total hours of central power unit operation will appear together on the display.



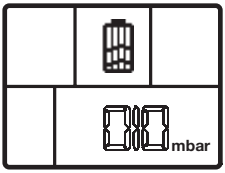
By pressing the MENÙ/ENTER key 2 times:
the dust container symbol will appear with an indication of the hours that have passed since the last maintenance.



When maintenance is performed on the dust container, press RESET to reset the counter.

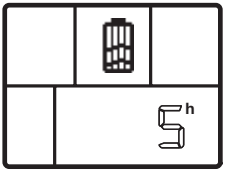
By pressing the MENÙ/ENTER key 3 times:

For Perfetto central power units
the saturation degree of the filter cartridge appears on the display, expressed in mbar according to this reference scale:
0 mbar = filter clean
10 mbar = filter saturated 50%
20 mbar = filter saturated 100%



When maintenance is performed on the filter cartridge, press RESET to reset the value.

For Classic central power units
the presumed saturation degree of the filter cartridge appears with an indication of the hours that have passed since the last maintenance.



When maintenance is performed on the filter cartridge, press RESET after the operation to reset the counter.

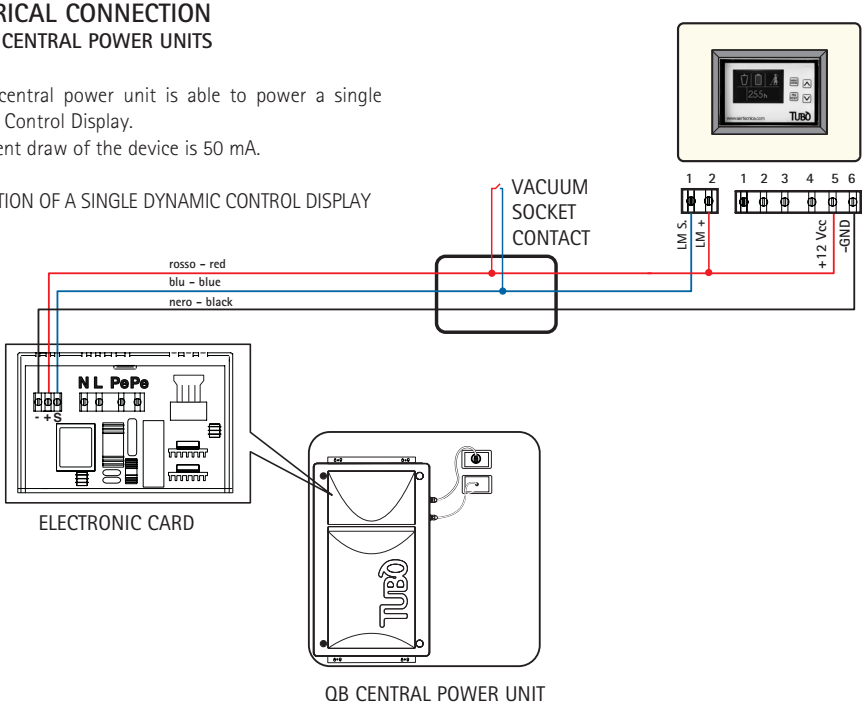
NOTE
The display will automatically return to the STAND BY screen after 5 seconds of not being used.

LM MODE – FOR QB, STUDIO AND CLASSIC CENTRAL POWER UNITS

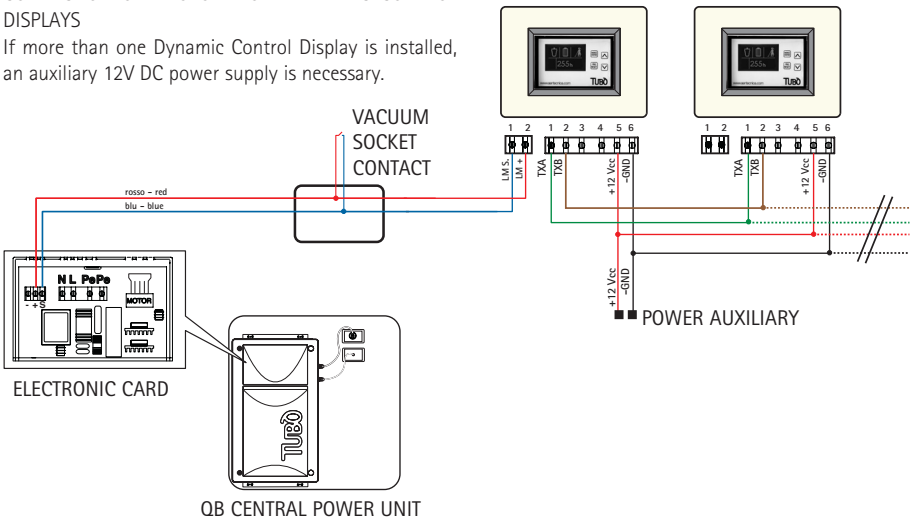
ELECTRICAL CONNECTION
FOR QB CENTRAL POWER UNITS

The QB central power unit is able to power a single Dynamic Control Display.
The current draw of the device is 50 mA.

CONNECTION OF A SINGLE DYNAMIC CONTROL DISPLAY



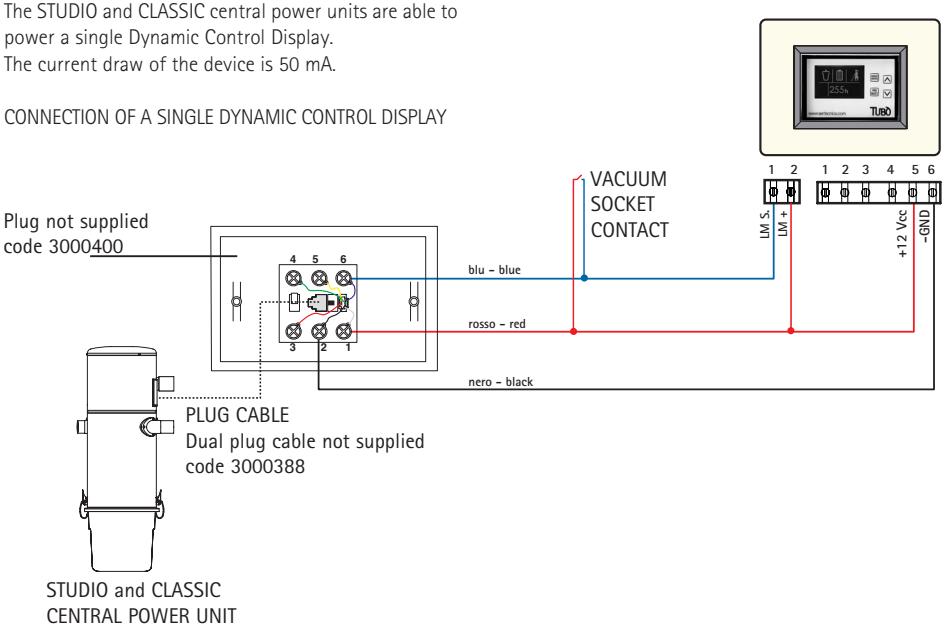
CONNECTION OF TWO OR MORE DYNAMIC CONTROL DISPLAYS
If more than one Dynamic Control Display is installed, an auxiliary 12V DC power supply is necessary.



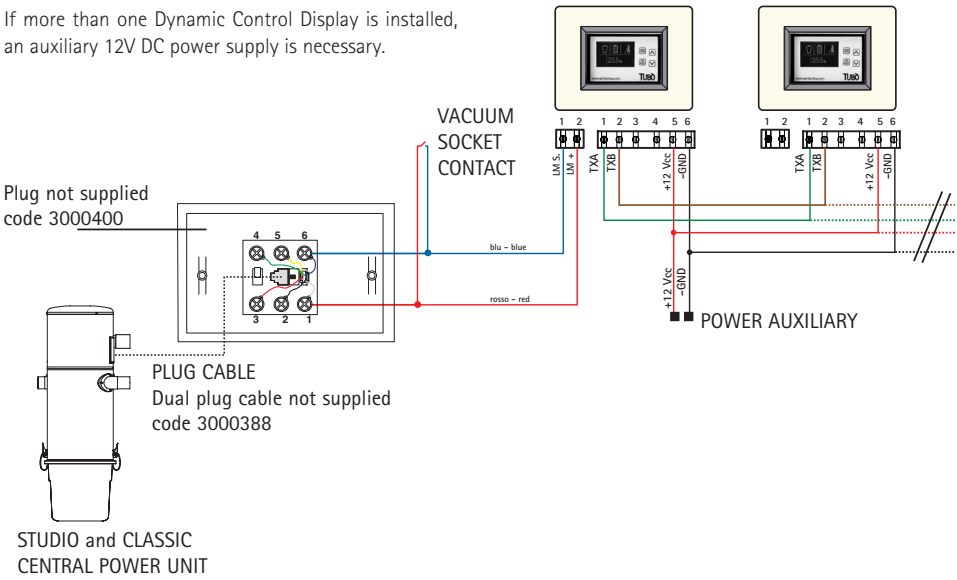
ELECTRICAL CONNECTION
FOR STUDIO AND CLASSIC CENTRAL POWER UNITS

The STUDIO and CLASSIC central power units are able to power a single Dynamic Control Display.
The current draw of the device is 50 mA.

CONNECTION OF A SINGLE DYNAMIC CONTROL DISPLAY



CONNECTION OF TWO OR MORE DYNAMIC CONTROL DISPLAYS
If more than one Dynamic Control Display is installed, an auxiliary 12V DC power supply is necessary.

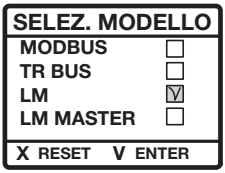


CONFIGURATION IN LM MODE

FOR A SINGOLE DYNAMIC CONTROL DISPLAY

To configure one Dynamic Control Display in LM mode, power the device and press the PROG/RESET key for 10 seconds.

The SERVICE menu will appear.
Select MODELLO
Press MENÙ/ENTER to confirm.



The SELEZ MODELLO menu will appear
Select LM
Press MENÙ/ENTER to confirm.

The Dynamic is now configured in LM mode.

To exit the SERVICE menu, press the PROG/RESET key; the STAND BY screen will appear on the display.

The message ANOMALIA NO RETE will appear on the display
check the electrical connection.

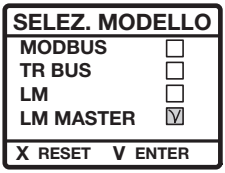
CONFIGURATION IN LM MODE

FOR TWO OR MORE DYNAMIC CONTROL DISPLAYS

To set the Dynamic Control Display in LM mode with 2 or more devices, the device connected to the system's socket cable must be set as the MASTER, whereas the other devices are configured in ModBus mode.

Power the device selected as the MASTER and press PROG/RESET for 10 seconds.

The SERVICE menu will appear.
Select MODELLO
Press MENÙ/ENTER to confirm.

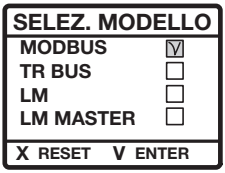


The SELEZ MODELLO menu will appear
Select LM MASTER
Press MENÙ/ENTER to confirm.

Now, the Dynamic selected as MASTER is configured in LM MASTER mode.

To exit the SERVICE menu, press the PROG/RESET key; the STAND BY screen will appear on the display.

The next Dynamics must be configured in MODBUS mode by selecting MODBUS in the SELEZ. MODELLO menu and confirming with the MENÙ/ENTER key.



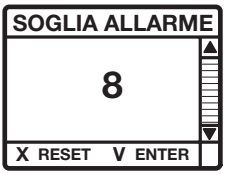
SETTING MAINTENANCE CYCLES

In LM or LM MASTER mode, the Dynamic Control Display can be used to customise the threshold relative to dust container and filter cartridge maintenance based on the actual use of the installed central power unit.

SETTING THE DUST CONTAINER MAINTENANCE THRESHOLD

In STAND BY mode, press the PROG/RESET key for 10 seconds.

The SERVICE menu will appear.
Select SOGLIA SACCO and press MENÙ/ENTER to confirm.



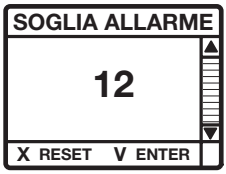
The SOGLIA ALLARME parameter will appear, expressed in hours (the default setting is 8 hours).
Use the arrows to change this parameter.
Press MENÙ/ENTER to confirm.

To exit the SERVICE menu, press the PROG/RESET key; the STAND BY screen will appear on the display.

SETTING THE FILTER MAINTENANCE THRESHOLD

In STAND BY mode, press the PROG/RESET key for 10 seconds.

The SERVICE menu will appear.
Select SOGLIA FILTRO and press MENÙ/ENTER to confirm.



The SOGLIA ALLARME parameter will appear, expressed in hours (the default setting is 12 hours).
Use the arrows to change this parameter.
Press MENÙ/ENTER to confirm.

To exit the SERVICE menu, press the PROG/RESET key; the STAND BY screen will appear on the display.

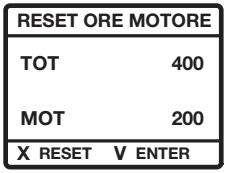
MOTOR MAINTENANCE

In LM or LM MASTER mode, the Dynamic Control Display can be used to reset the counter relative to the effective hours of motor operation if replaced.

MOTOR RESET SETTING

In STAND BY mode, press the PROG/RESET key for 10 seconds.
The SERVICE menu will appear.

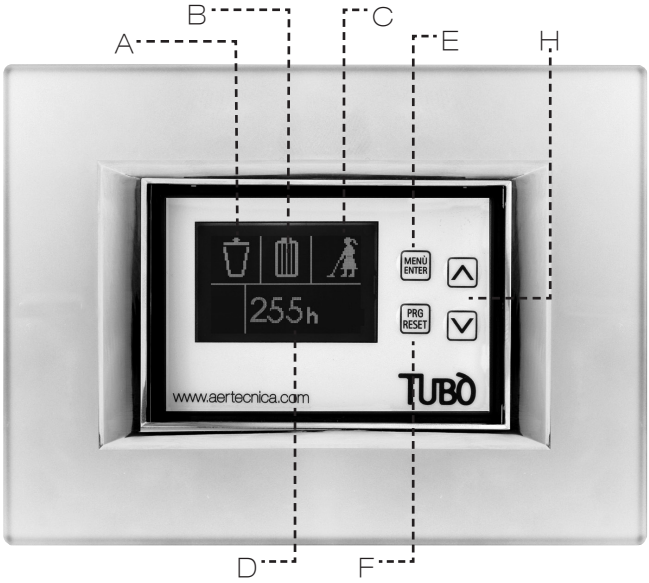
Select RESET MOTORE
Press MENÙ/ENTER to confirm.
The RESET ORE MOTORE parameter will appear that displays the total hours of operation of both the central power unit and the motor in use.



To reset motor hours, press the PROG/RESET key for a few seconds: the hours of motor operation parameter will reset.

To exit the RESET ORE MOTORE menu mode, press MENÙ/ENTER and then PROG/RESET.

DISPLAY WITH THE CENTRAL POWER UNIT ON



DISPLAY

The following messages appear on the display:

A – CONTAINER FILLING LEVEL
This calculates the presumed filling level of the dust container, using 5 progressive stages.

B – FILTER CARTRIDGE SATURATION
This displays the saturation level of the filter cartridge based on hours of operation.

C – CENTRAL POWER UNIT ON
This signals that the centralised vacuum system is operating.

D – CENTRAL POWER UNIT HOURS OF OPERATION
This displays the total hours of central power unit operation.

KEYBOARD

The keys on the Dynamic Control Display are not enabled while the central power unit is operating.
The keys are always enabled in STAND BY conditions.

E – MENÙ/ENTER
This is used to display the individual menu items or to confirm the set selection.

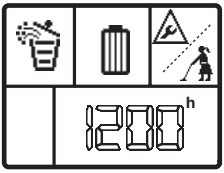
F – PROG/RESET
This is used to access the programming function or to reset any lock shown on the display.

H – ▲/▼
The up and down arrows are used to navigate the menu.

DISPLAY WITH A CENTRAL POWER UNIT ANOMALY

The following anomalies can occur during central power unit operation:

ANOMALY DUE TO FULL CONTAINER
The following appears on the display:

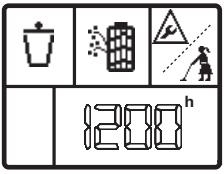


The presumed container level is full.
Perform the maintenance.

After performing the maintenance with the central power unit in STAND BY, press the MENÙ key, selecting the container symbol and press the RESET key for a few seconds.
This will reset the anomaly and reset normal operations.

ANOMALY DUE TO FILTER CARTRIDGE SATURATION

The following appears on the display:



The presumed saturation level of the filter cartridge was reached.
Perform the maintenance.

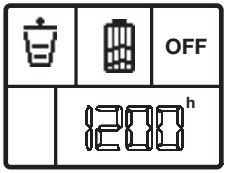
After performing the maintenance with the central power unit in STAND BY, press the MENÙ key, selecting the filter container symbol and press the RESET key for a few seconds.
This will reset the anomaly and reset normal operations.

DISPLAY WITH THE CENTRAL POWER UNIT IN STANDBY

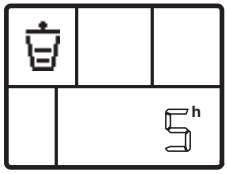
The display goes into STAND BY mode only when the central power unit is off. After 30 seconds of not being used it goes into energy saving mode, turning off the lights.

CENTRAL POWER UNIT STATUS DISPLAY

By pressing the MENÙ/ENTER key 1 time:
the container filling level, the saturation degree of the filter cartridge and the total hours of central power unit operation will appear together on the display.

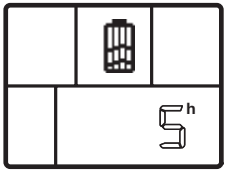


By pressing the MENÙ/ENTER key 2 times:
the dust container symbol will appear with an indication of the hours that have passed since the last maintenance.



When maintenance is performed on the dust container, press RESET after the operation to reset the counter.

By pressing the MENÙ/ENTER key 3 times:
the presumed saturation degree of the filter cartridge appears with an indication of the hours that have passed since the last maintenance.



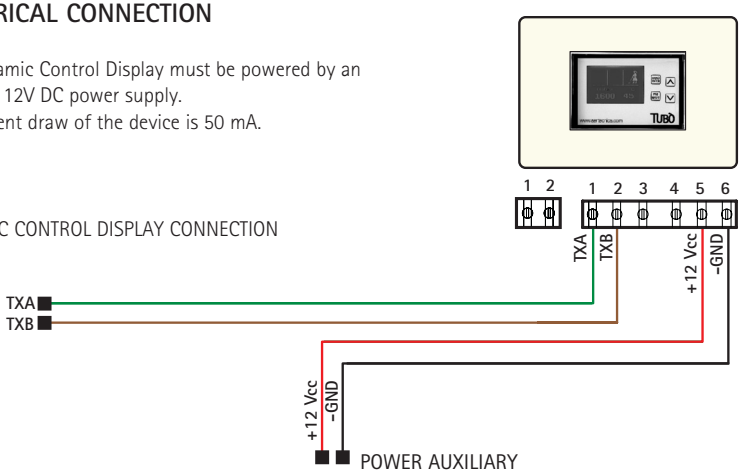
When maintenance is performed on the filter cartridge, press RESET after the operation to reset the counter.

TRBUS MODE – FOR PERFETTO THREE-PHASE CENTRAL POWER UNITS

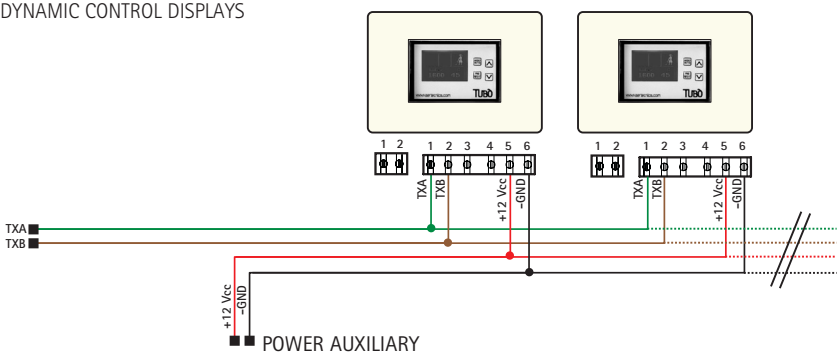
ELECTRICAL CONNECTION

The Dynamic Control Display must be powered by an auxiliary 12V DC power supply.
The current draw of the device is 50 mA.

DYNAMIC CONTROL DISPLAY CONNECTION



CONNECTION WITH TWO OR MORE DYNAMIC CONTROL DISPLAYS



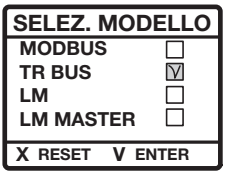
CONFIGURATION IN TRBUS MODE

To set the Dynamic Control Display to TR BUS mode, power the device and press the PROG/RESET key for 10 seconds.

The SERVICE menu will appear.

Select MODELLO
Press MENÙ/ENTER to confirm.

The SELEZ MODELLO menu will appear



Select TR BUS
Press MENÙ/ENTER to confirm.

The Dynamic is now configured in TR BUS mode.

To exit the SERVICE menu, press the PROG/RESET key; the following STAND BY screen will appear on the display.

The message ANOMALIA NO RETE will appear on the display check the electrical connection.

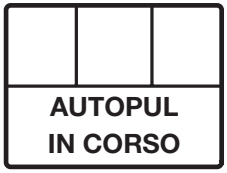
DISPLAY WITH A CENTRAL POWER UNIT LOCK

If the central power unit locks during operation, the following screen will appear on the Dynamic Control Display:

To identify the type of lock, consult the display on the Master vacuum model, where the type of lock will be displayed.

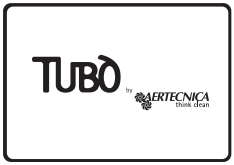
DISPLAY OF THE SELF-CLEANING CYCLE

The following screen appears on the Dynamic Control Display during a filter self-cleaning cycle for the central control unit:

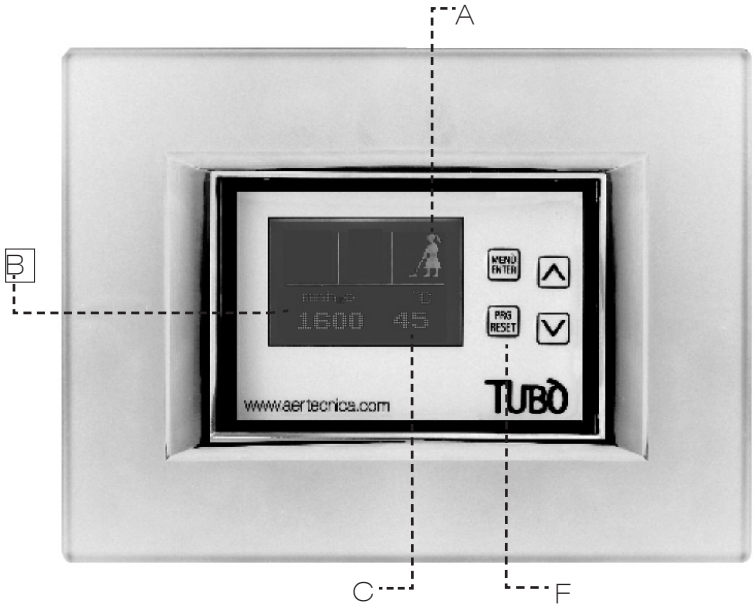


DISPLAY WITH THE CENTRAL POWER UNIT IN STANDBY

The display goes into STAND BY mode only when the central power unit is off. After 30 seconds of not being used it goes into energy saving mode, turning off the lights.



DISPLAY WITH THE CENTRAL POWER UNIT ON



DISPLAY

The following messages appear on the display:

A – CENTRAL POWER UNIT ON

This signals that the centralised vacuum system is operating.

B – OPERATING VACUUM

This displays the operating vacuum in mm H_20 when the system is operating.

C – CENTRAL POWER UNIT TEMPERATURE

Displays the temperature of the central power unit in °C.

KEYBOARD

In TRBUS mode, only the PROG/RESET key is enabled.

F – PROG/RESET

This is used to access the Display configuration menu.

GENERAL INFORMATION

COMPLIANCE WITH THE DIRECTIVE 99/05/EC

The equipment is compliant with the essential requirements determined by Directive 99/05/EC.
The following Technical Standards were applied to verify its compliance:
EN 60335-1, EN 301489-3, EN 300200-3

ADJUSTING LCD CONTRAST

To customise display contrast, press PROG/RESET for 10 seconds in STAND BY mode.

The SERVICE menu will appear.

Select CONTRASTO LCD
Press MENÙ/ENTER to confirm.
Use the up and down arrows to adjust the desired contrast.
Press MENÙ/ENTER to save the value

To exit the SERVICE menu mode, press PROG/RESET.

INFORMATION

To display the version of the programming software and the total hours of operation of the Dynamic Control Display, press PROG/RESET for 10 seconds in STAND BY mode.

The SERVICE menu will appear.

Select INFORMAZIONI
Press MENÙ/ENTER to confirm.
The screen with the requested information will appear on the display.

To exit the INFO menu mode, press PROG/RESET 2 times.

REGISTERS

This displays a series of coded information transmitted by the central power unit to the Dynamic Control Display.

WARNING

This menu is only to be used by a specialised technician.

INSTALLATION IN THE 503 ELECTRIC BOX

After making the electrical connection, insert the device inside the electric box and fix it using two suitable screws. Apply the electrical switch plate, using pressure.

To improve the coupling, it is recommended to place two sided adhesive tape between the Dynamic Control Display support and the electrical switch plate.

COMPATABILITY WITH ELECTRICAL SWITCH PLATES

The Dynamic Control Display is compatible with the following electrical switch plate series:

SWITCH PLATE MODEL	Cut switch plate centring squares
GEWISS series	
Chorus lux	NO
Chorus one	YES
Chorus art	YES
BTicino series	
Axolute	YES
Living (to be inserted with the BTicino support)	YES
Light (to be inserted with the BTicino support)	YES
Matix	NO
Vimar series	
Idea (insert the provided side straps)	NO
Rondò (insert the provided side straps)	NO
Plana	YES
Eikon	YES
Legrand series	
Vela	YES

Numero Verde
800-018312

It is prohibited to use the device for uses other than those described in this manual.
The descriptions and technical illustrations may change. AERTECNICA S.p.A. reserves the right to modify the product and the related technical documentation without incurring any obligation to third parties.

This version of the installation and user manual describes the features relative to the product on the date on which this publication was licensed for printing.

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