DURAN 203 PLUS
Frecuently asked questions

HOW ARE DETECTORS CONNECTED?

They are connected in parallel by 3 unifilar 1.5 mm2 section wires. They need no end of line device as any type of derivation can be used: cross, T or L junction, etc. (we recommend the use of a register box in the first cases).

HOW CAN I FIGURE OUT THE TOTAL NUMBER OF EXISTING MODULE LINES IN THE INSTALLATION?

The total number of module lines depends on the number of ventilators and/or floors in the site. In addition, we have to take into account that each module line will control one of these ventilators and/or floors, together with the detectors; although the outputs of several module lines can be connected in parallel to control the same ventilation group. In this latter case, electricity consumption will be higher, as detection and ventilation areas are not in the same sector.

HOW CAN I CONNECT VENTILATION?

The module lines include C, NO, NC dry contact relay outputs, in order to activate the 230V contactor coil, which is located in the motor control box. These, if appropriately wired, work as a switch in series together with the contactor coil. Remember that relay outputs do not supply 230V.

HOW MANY DETECTORS CAN BE INSTALLED IN EVERY MODULE LINE? WHICH IS THE MAXIMUM DISTANCE BETWEEN THE CONTROL UNIT AND ITS DETECTORS?

Every module line can hold up to 14 detectors, and the maximum distance between the control unit and its detectors goes up to 300-500m. by using a 1,5 mm2 wire. The distance can be increased to 500-550m. if the cross section of the wire is increased to 2,5 mm2.

HOW CAN I CHECK THE CORRECT FUNCTIONING OF THE DURAN 203 PLUS DETECTOR?

The detector reads every 2,5 minutes. 15 seconds before carrying out the measuring, the detector LED blinks rapidly, and it is at this moment that you should apply Carbon Monoxide to the detector and cover it. Once the measurement has taken place the detector should continue covered for another 2.5 minutes and then, having carried out a second measuring with high concentration of Carbon Monoxide, it will give the control panel an action order. Although a gasoline engined vehicle can be used, it is advisable to use the CO bottles available for that end. Remember that diesel engined vehicles do not generate Carbon monoxide.

CAN BATTERIES BE INCORPORATED TO THIS EQUIPMENT?

DURAN 203 PLUS control units are not prepared to incorporate batteries due to the high consumption of the detectors. However, supplementary power supplies are available in order to give the system capacity to start up automatically in certain situations, such us a power faults, breakdowns, etc.

COULD THERE BE A PROBLEM IF I INSTALL DURAN 203 PLUS NEAR TO THE DISTRIBUTION BOARD IN THE GARAGE?

No. The control panel has a network filter incorporated to prevent inductive interferences produce by the distribution board. Remember to connect a good ground.

CAN I SHARE TUBE CANALS FROM EXISTING INSTALLATIONS?

No, in no case. Installation is carried out individually from the rest.

HOW MANY METERS FAR APART MUST CARBON MONOXIDE DETECTORS BE INSTALLED?

In Spain, and according to the current Spanish legislation UNE 100166:2004, a CO detector should be installed for every 200 m2.

WHAT HEIGHT AND WHERE SHOULD CARBON MONOXIDE DETECTORS BE INSTALLED?

The optimum installation height varies from 1.5m. and 2 m. (maximum) from the floor, on walls or columns. When these detectors are installed in underground car parks, their objective is to protect vehicle circulation lanes.

For reaching the above mentioned conclusions, we have considered the following criteria:

- Technical (carbon monoxide behavior)

CO molecular weight (28.01) is similar to the molecular weight of air (28,96), and therefore, CO will tend to rise up in the rooms forming gas bags.

- Experimental

The experimental tests carried out by DURAN ELECTRONICA show that the optimum installation height ranges from 1.5m to 2m.

- Peoples´ protection

Taking into account peoples´ average height, detectors must be installed in the range already mentioned, as this height fits in the breathing area of most people.

WHAT MAINTENANCE OPERATIONS ARE NEEDED FOR THESE DETECTORS? WHAT IS THEIR WORKING LIFETIME?

Under normal working conditions, the filter should be changed after 2.5 years. This change can be simply done by the installer on site. After 5 years, the sensor and filter should be changed and recalibrated with target gas.

IS THERE ANY ADDITIONAL SUPPORT NEEDED FOR FIXING DETECTORS ON WALLS OR COLUMNS?

No, the detector is designed to carry out accurate readings when it is placed perpendicularly to the floor (walls or columns).