



Risk of ignition provided:

Protection afforded	Equipment Protection Level (EPL)	Performance of protection	Conditions of operation	T class or Max Surface Temp (°C)
	Group			
Very high	Ma Group I	Two independent means of protection or safe even when two faults occur independently of each other	Equipment remains functioning when explosive atmosphere present	150°C
Very high	Ga Group II	Two independent means of protection or safe even when two faults occur independently of each other	Equipment remains functioning in zones 0, 1 and 2	135°C
High	Gb Group II	Suitable for normal operation and frequently occurring disturbances or equipment where faults are normally taken into account	Equipment remains functioning in zones 1 and 2	135°C

**1. GENERAL**

The equipment is the hand held multigas detector type Altair 5X PID/IR. The equipment is designed to monitor gases in an ambient air and in a workplace. It is available with a maximum of five sensors which can display readings for six gases. The sensors have their own Ex component certificates. The equipment consists of four PCBs with display, three buttons and two charging pins. All PCBs with display are mounted inside a static dissipative moulded plastic enclosure. If the gas concentration reaches the alarm set points, a visual alarm, an audible alarm and a tactile alarm is given. The equipment is supplied by an encapsulated secondary Li-ion cell and includes one passive RFID tag.

This certificate does not include the performance test according to EN 60079-29-1 and other relevant standards.

**2. SAFETY PARAMETERS**

Degree of protection: IP 65, Ambient temperature: -20 to +50°C, Charging: Um = 6.7 V;

List of used Ex components:

Catalytic sensor MSA XCell Ex	certified FTZÚ 09 ATEX 0123U
El.chem. sensor MSA XCell eChem	certified FTZÚ 09 ATEX 0223U
PID sensor Baseline-MoconTech PiD-TECH eVx	certified DEMKO 13 ATEX 1304446U
PID sensor Tech sensor plus ZPP60180	certified DEMKO 06 ATEX 0547796U
IR sensor Dynament MSH2ia	certified FTZÚ 14 ATEX 0213U

**3. INSTALLATION INSTRUCTIONS**

It is the manufacturer's responsibility to supply installation instructions with each unit offered for sale as required by IEC/SANS 60079-0 Clause 30.

**4. SPECIAL CONDITIONS FOR SAFE USE**

- The equipment shall be charged by manufacturer's chargers only in an ambient temperature from 0°C to +45°C and opened when the hazardous area is not present.
- When using the equipment in a hazardous area, the equipment should be worn or carried on the body. It shall not be stored in a hazardous area. This prevents the possibility of the equipment building up an electrostatic charge. The measured capacitance of accessible metal parts: D-Ring 24pF and charge contact pins 17pF.
- The antenna used for activation of the internal RFID tag with the RF radiation power shall not exceed 6W for Group I and 2W for Group IIC.

Based on the following documentation: FTZU 15 ATEX 0038X.

