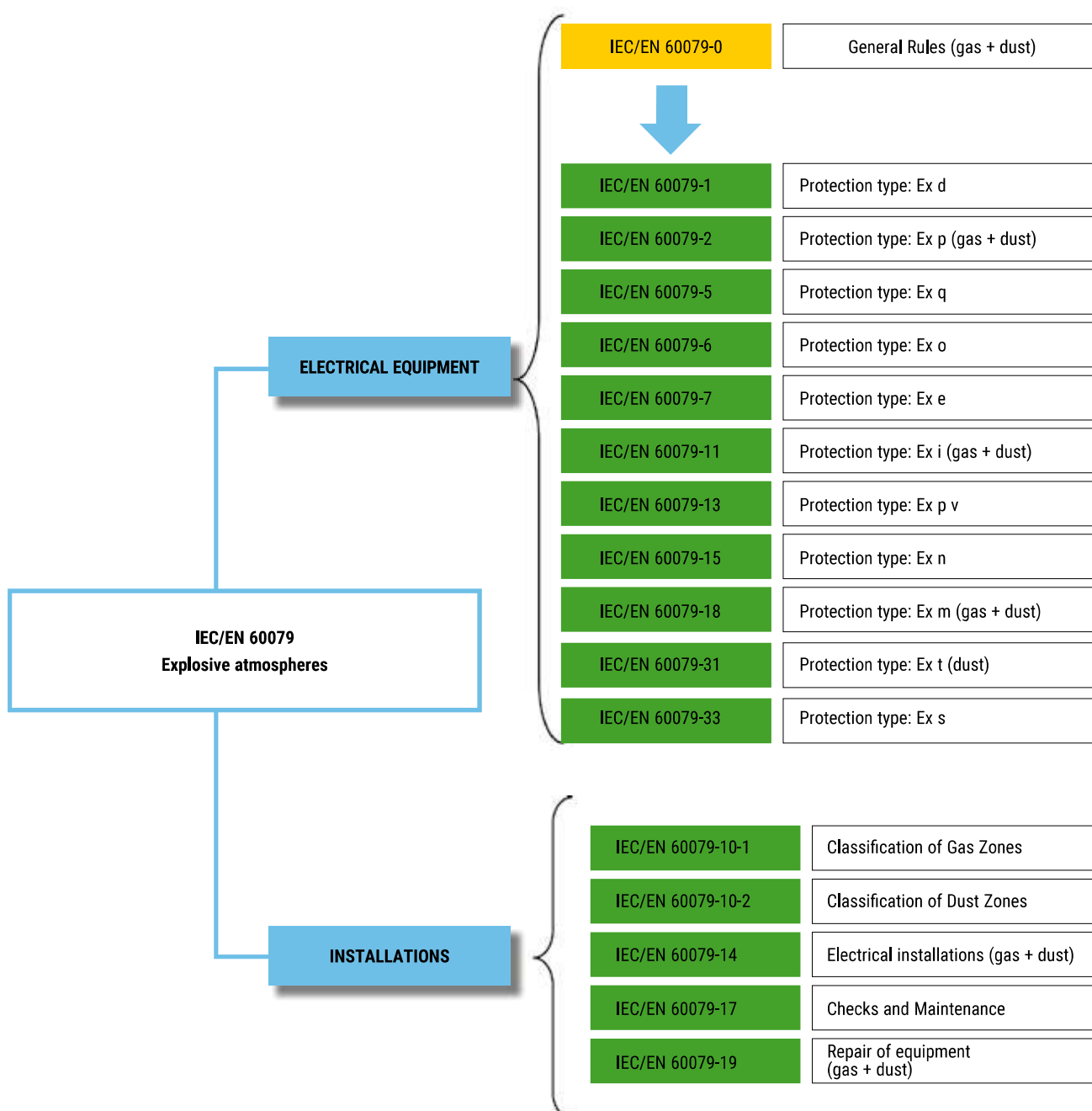




ATEX electrical equipment

The structure of IEC/EN 60079 standards is such that the series is divided into parts. Part 0 sets out the general requirements for all equipment. From part 1 onwards the requirements are set out for each specific protection method. In order to conform to safety requirements, equipment used in hazardous and partially explosive environments should be produced in a specific way to protect people on site. Therefore it should not be able to trigger explosive atmospheres during its normal functioning, in conditions of first fault and/or in conditions of rare fault according to the explosion-proof level (EPL).





Marking

CE marking is mandatory and must be affixed to any equipment, assembly or protection system (excluding components) before it is placed on the market or put into service. The manufacturer affixes the CE marking on the product that complies with the directive, in accordance with the following indications:

CE EU mark + identification number of the Notified Body responsible for supervision +  + Group + Category

For example: **CE0051  II 2GD**

As regards Category 3, as no intervention of a notified body is envisaged and therefore no CE type testing is required, nor production supervision, the marking will be as follows:

CE EU mark +  + Group + Category

For example: **CE  II 3G**

The purpose of marking is to inform those that purchase, install, use, maintain, check, etc., that the device has been constructed in compliance with the essential safety requirements, to the level established by the category.

In order to install equipment (whether electrical or not) in a potentially explosive area, it is necessary and sufficient that it is marked as above.

This means that electrical and non-electrical products which do not comply with the harmonised standards (e.g. Ex constructions) may be installed while still compliant with the law and with explosion protection principles.

In this case the equipment will be marked as shown in the examples above.

If, on the other hand, equipment (e.g. electrical equipment) is installed that is compliant with the directive as a consequence of the conformity with harmonised standards, i.e. Ex electrical equipment that are consequently presumed to comply with the Essential Safety Requirements, the ATEX marking requirements must be affixed in accordance with the following indications:

EU mark CE+ identification number of the Notified Body responsible for supervision +  + Group + Category + Ex mark

Example 1: **CE0051  II 2G Ex de IIC T5 Gb**

Example 2: **CE0051  II 2D Ex tb IIIC T 100°C Db IP66**

Example 3: **CE  II 3G Ex nR IIC T6 Gc**

A complete marking of an Ex electrical equipment, in conformity with directive 94/9/EC, must show the following:

ABCD SpA, Via Moro 2, Milan (manufacturer's name and address)
MRT – 1234 – 2004 (type, serial or batch number, year)
CE0051 (**CE** mark, identification number of the Notified Body responsible for manufacturing supervision)
 II 2G (group, category)
Ex d IIB T4 Gb (protection method, gas group, EPL temperature class)
CESI 02 ATEX 0999 (**CE** type test certificate number)
Characteristic parameters (supply voltage, frequency, etc.)