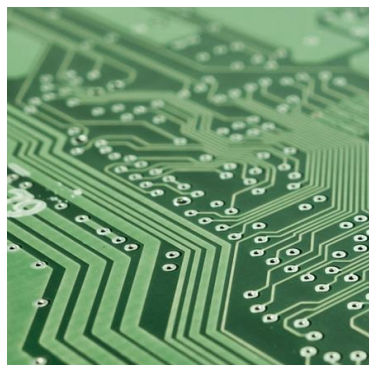


Electrical & Electronics Testing and Certification



Elettromagnetic Compatibility

Directive 2014/30/UE (EMC)

The Directive applies to equipment that can cause electromagnetic interference or whose operation can be affected by such disturbance.

Manufacturers of such equipment must certify the compliance of its products through evaluation or execution of tests by referring to harmonized standards, if any, related to the specific product.

Main types of tests:

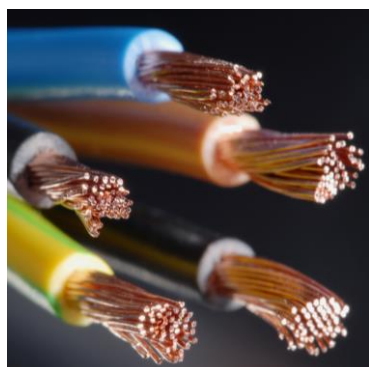
Emission

- ◆ Radiated emissions
- ◆ Conducted emissions
- ◆ Harmonic current emissions
- ◆ Flicker
- ◆ Click

Immunity

- ◆ Radiated immunity
- ◆ Conducted immunity
- ◆ Burst
- ◆ Surge
- ◆ Electrostatic discharge

Notified Body n° 0477 for the Directive 2014/30/UE
Elettromagnetic Compatibility(EMC)



Electrical Safety Low Voltage

Directive 2014/35/UE (LVD)

The Directive applies to electrical equipment intended to be used at a voltage between 50 and 1,000 volts alternating current and between 75 and 1,500 volts DC.

Manufacturers of such equipment must certify the compliance of its products through enforcement and evaluation of evidence by referring to harmonized standards, related to the specific nominal product including

Main types of tests:

- | | |
|-------------------------|------------------------|
| ◆ Power consumption | ◆ Heating tests |
| ◆ Leakage current | ◆ Thermal conditioning |
| ◆ Dielectric withstand | ◆ IP Grade |
| ◆ Insulation resistance | |

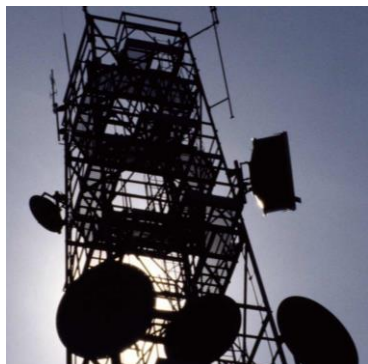


Voluntary Products Certification according to the Directive 2014/35/UE
Electrical Safety (LVD)



Tests on:

Household, measurement, control, ITE, toys, electro-medical devices, industrial machines, radio apparatus, inverters, etc.

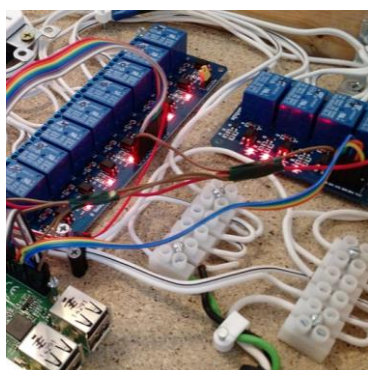


Radio equipment

Directive 2014/53/UE (RED)

The Directive applies to radio equipment listed in Annex I. Manufacturers of such equipment must certify the compliance of its products through evaluation or execution of tests by referring to harmonized standards, if any, related to the specific product.

Notified Body n° 0477 for the Directive 2014/53/UE
Radio equipment



Atmosfera Esplosive

Direttiva 2014/34/UE (ATEX)



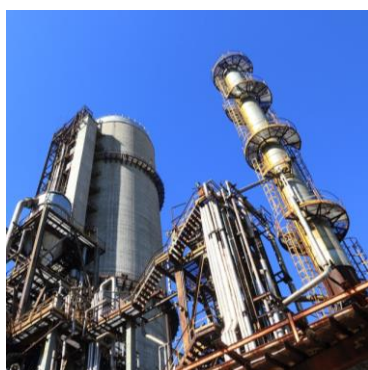
Electrical and non-electrical equipment for use in workplaces potentially at risk for explosive atmospheres must ensure a level of security appropriate to the area of installation.

Atex Directive includes in its scope the following type of products:

- ◆ Equipment and Protective Systems which may be used in potentially explosive atmospheres;
- ◆ Safety devices, controlling devices and regulating devices intended for use outside potentially explosive atmospheres but which are required for or contribute to the safe functioning of equipment and protective systems, with respect to the risks of explosion;
- ◆ Components defined as any item essential to the safe functioning of equipment and protective systems but with no autonomous function.

Main types of tests:

- ◆ Explosion tests
- ◆ Ignition tests
- ◆ Maximum temperature tests
- ◆ Electrostatic discharges tests
- ◆ Dust explosibility tests



Tests on:

Equipment and Protective Systems which may be used in potentially explosive atmospheres, dusts, etc.

Notified Body n° 0477 for the Directive 2014/34/UE
Explosive Atmospheres (ATEX) – International Certification IECEx

EN ISO 17025 accredited tests available on www.accredia.it (accreditation n. 0085)

