

## DIRECTIVES AND COMPLIANCE

### ATEX DIRECTIVE



The ATEX directive 94/9/EC applies to the equipment for use in potentially explosive atmosphere (AT-EX is from French: "atmospheres explosibles").

The directive requires that equipment and its components have to be approved for use in potentially explosive environments.

The **elmex** terminal blocks, offered for verification as per respective standards EN 50014 and EN 50019, have been verified, tested and approved by Det Norske Veritas (DNV) - Norway. Further, the ATEX-Directive also requires Quality System to comply with EN13980-Application of Quality System to Potentially Explosive Atmospheres. **elmex** quality system complies with EN13980.

The test requirements as per EN 50014 and EN 50019 are more severe particularly, Creepage Distances Dielectric Test Values and Range of Service Temperatures. Performance at sub Zero temperatures (-20°C) have also to be verified.

In Petroleum Industry, Oil and Gas Industry, Chemical Industry and such other Industries the probability of explosive materials in atmosphere is high and can also be present in some areas. The ATEX directive essentially aims at preventing mishaps in such industrial applications.

**elmex** terminal blocks have been approved for application in potentially explosive atmospheres, and are classified as follows:-

- ❖ for surface installation ❖ Group II ❖ Category II ❖ Zones 1 and 2
- ❖ Increased safety "e", type of protection "n".



### RoHS DIRECTIVE



The RoHS Directive No 2002/95/EC, issued by European Parliament and Council, is implemented by RoHS Regulations 2004 for restricting the use of certain hazardous substances in electrical and electronic equipment. The Directive is enforced by the Secretary of State for Trade and Industry in European Union with effect from July 1, 2006, and will apply to Electrical and Electronic Equipment (EEE) placed on European Union Market thereafter.

The Directive covers eight EEE upto 1000V AC (1500 V.DC) at present, and restricts the use of following materials in manufacture of EEE or parts there of : Lead, Mercury, Cadmium, Hexavalent Chromium, Polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE). The last two materials are usually employed for flame-retardant property. The Regulations restrict the percentage content of these materials, specify certain exemptions in applying the Regulations, and give guidelines on demonstrating compliance. The enforcement authority, namely, secretary of State for Trade and Industry, is empowered to conduct market surveillance to detect non-compliance with the RoHS Regulations, and may even carry out tests for this purpose. The Regulations provide for a specified fine, if the products fail to comply when checked by the enforcement authority.

When the concentration of the above referred substances exceeds the specified limits, their burning (in service, or for waste disposal), and recycling, create products which are hazardous to human health and environment. Strictly speaking, Terminals Blocks as a class of products do not fall under any of the groups of products specified in the RoHS regulations. However, as a responsible Corporate Citizen, **elmex** has introduced RoHS compliant terminal blocks, in line with global industry standards.

