

# Reduction of Hazardous Substances (RoHS) Directive

European directive 2002/95/EC regulates the Reduction of Hazardous Substances (RoHS) in electrical and electronic equipment and came into effect on 1st July 2006. The following substances are covered by the scope the directive:

- lead (Pb)
- mercury (Hg)
- cadmium (Cd)
- hexavalent chromium (Cr VI)
- polybrominated biphenyls (PBB)
- polybrominated diphenyl ethers (PBDE)
- decabromodiphenyl ether (DecaBDE)

Since it is evident that a total avoidance of heavy metals and brominated flame retardants is in some instances impossible to achieve, certain concentration values for lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE) in materials will be tolerated. The maximum concentration values are as follows:

lead 0.1 % of the weight	=	1000 mg/kg	=	1000 ppm
mercury 0.1 % of the weight	=	1000 mg/kg	=	1000 ppm
cadmium 0.01 % of the weight	=	100 mg/kg	=	100 ppm
chrom VI 0,1 % of the weight	=	1000 mg/kg	=	1000 ppm
PBB/PBDE/Deca BDE 0,1 % of the weight	=	1000 mg/kg	=	1000 ppm

We can confirm that the E-T-A range of Circuit Breakers for Equipment, controls and accessories do not contain any amount of mercury, hexavalent chromium, polybrominated biphenyls, or polybrominated diphenyl ethers. There is a low concentration of cadmium in the silver-cadmium-oxide contacts which are featured in some of our models. According to the EC directive 2005/747/EC of 21st October 2005 cadmium in electrical contacts is exempt from the RoHS directive. Nevertheless we have replaced cadmium contacts in most of our circuit breakers by cadmium-free contacts. The remainder will follow soon.

In addition all our products comply with the requirement which came into force on 1st July 2008 that electrical and electronic equipment has to be DecaBDE-free.

We are therefore pleased to announce that all E-T-A circuit breakers are **fully RoHS compliant**.