YUASA	**Yuasa Battery UK Ltd** **TECHNICAL BRIEF**	Technical Brief No:	04-2012
		Date:	23/05/2012

Subject:	**ELECTROMAGNETIC COMPATIBILITY REGULATIONS**

All electric devices or installations influence each other when interconnected or close to each other. The purpose of electromagnetic compatibility (EMC) is to keep all those side effects under reasonable control. EMC designates all the existing and future techniques and technologies for reducing disturbance and enhancing immunity.

The main objective of the **Directive 2004/108/EC** of the European Parliament and of the Council, of 15 December 2004, on the approximation of the Laws of Member States relating to electromagnetic compatibility (EMC) is thus to regulate the compatibility of equipment regarding EMC:

- equipment (apparatus and fixed installations) needs to comply with EMC requirements when it is placed on the market and/or taken into service;
- the application of good engineering practice is required for fixed installations, with the possibility for the competent authorities of Member States to impose measures if non-compliance is established.

The EMC Directive first limits electromagnetic emissions of equipment in order to ensure that, when used as intended, such equipment does not disturb radio and telecommunication as well as other equipment. The Directive also governs the immunity of such equipment to interference and seeks to ensure that this equipment is not disturbed by radio emissions when used as intended.

VRLA BATTERIES:

Rechargeable cells or batteries (*Valve Regulated Lead-Acid types*) are not sensitive to normal electromagnetic disturbances, and therefore no immunity tests shall be required. Free standing rechargeable cells or batteries electrically isolated from any associated electrical system are for all practical purposes electromagnetically inert, therefore any requirements for electromagnetic compatibility shall be deemed to be satisfied.

NOTE: Rechargeable cells or batteries are part of an electrical system, and the manner in which they are used could involve considerations of electromagnetic compatibility. In such cases, requirements for electromagnetic compatibility should be accommodated by the design of the electrical system.

(*With thanks to BRITISH STANDARDS INSTITUTE (BSI) for quotation from BS 6290 : Part 4 : 1997 Lead-acid stationary cells and batteries, Part 4. Specification for classifying valve regulated types, Annex F (informative) Electromagnetic Compatibility*).

VRLA Batteries are components to be installed into electrical and electronic equipment. They are not finished articles of electrical and electronic equipment in themselves. Thus, it is the finished electrical and electronic equipment which must be designed and tested for EMC.

Issued for and on behalf of Yuasa Battery UK Ltd,

P. Hollingworth

Peter Hollingworth
Technical Support Manager

ISO 9001:2008
Certificate: FM 10626

ISO 14001:2004
Certificate: EMS 55229

BS OHSAS 18001:2007
OHS 532991

YUASA	**Yuasa Battery UK Ltd** **TECHNICAL BRIEF**	Technical Brief No:	06-2012
		Date:	06/07/2012

Subject:	**Directive 2006/95/EC and "CE" Marking of VRLA Batteries**

CE Marking is the symbol: CE

The letters "**CE**" are the abbreviation of French phrase "**C**onformité **E**uropéene" which literally means "European Conformity". The term initially used was "EC Mark" and it was officially replaced by "CE Marking" in the Directive 93/68/EEC in 1993. "CE Marking" is now used in all EU official documents.

Directive 2006/95/EC, on the harmonisation of the laws of Member States relating to electrical equipment designed for use within certain voltage limits. Article 1 states: "For the purpose of this Directive, 'electrical equipment' means any equipment designed for use with a voltage rating between 50 and 1 000 V for alternating current and between 75 and 1 500 V for direct current, other than equipment and phenomena listed in Annex II."

YUASA Valve Regulated Lead-Acid (VRLA) Batteries are electrical components, not electrical equipment, and as individual battery monoblocs they do not exceed the minimum voltage for direct current equipment. Therefore, Directive 2006/66/EC does not apply to individual YUASA VRLA Batteries and the "CE Mark" is not required.

Furthermore, it is our opinion that the application of the "CE Mark" to VRLA Batteries would be illegal, implying conformance where no EC Directive applies.

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