

Gas Appliances Directive (90/936/EEC)	
GUIDANCE B2	Approved by WG-GA 03-2009

Guidance related to:

ANNEX	I	Essential requirements
Section	1	General conditions
Paragraph	1.1	
Subject	Safety in relation to electromagnetic phenomena	

1. GENERAL CONDITIONS

Appliances must be so designed and built as to operate safely and present no danger to persons, domestic animals or property when normally used as defined in Article 1 (4) of this Directive

Question

For gas appliances incorporating electrical and/or electronic components, how are gas safety risks related to electromagnetic phenomena dealt with by the Directive?

Discussion

1. Gas appliances incorporating electrical and/or electronic components can be sensitive to electromagnetic phenomena. This may affect either the proper functioning of the appliance or the safety of the appliance.
2. Two related issues may be considered as being associated with gas appliances:

2.1. The proper functioning of the appliance in its environment and the disturbances caused by the appliance (EMC immunity and emissions).

2.2. The safety of the appliance towards persons, domestic animals and property.

The aspect in 2.1 is considered under the Directives 89/336/EEC and/or 2004/108/EC on electromagnetic compatibility (EMC Directive)

The aspect in 2.2 must also be considered under the GAD.

3. From the GAD point of view, the essential requirements do not specifically address the gas safety risks due to electromagnetic phenomena. This aspect has to be considered as part of the general essential requirement 1.1 which states *“appliances must be so designed and built as to operate safely and present no danger to persons, domestic animals and property when normally used”*.
4. When issuing an EC Type Examination certificate for gas appliances containing electrical and/or electronic components, the Notified Body must consider the influence of electromagnetic phenomena on the gas safety of the appliance and ensure that the safety of the appliance is not degraded when used normally and subjected to such phenomena.

This guidance is for information only; it has no formal status

Reference: 90/396/EEC “Gas appliances directive” O.J. L 196, 26.07.90, p. 15

Source of guidance document: GADAC

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B2	1	10/2008	03-2009	

Conclusion

1. Both the GAD and the EMC Directive apply to gas appliances incorporating electrical and/or electronic components. The issues associated with the proper functioning of the appliance are considered under the EMC Directive, whilst the risks associated with the safety of the appliance are considered under the GAD.
2. GAD essential requirement 1.1 implies that when used normally and subjected to electromagnetic phenomena, gas appliances shall operate safely.
3. The applicable requirements of EN 60335-2-102 clause 19.11.4 or EN 50165 clause 19.101 (until DOW 1 April 2009) can be considered as an adequate means to address the risks associated with electromagnetic phenomena for gas appliances with safety-related electrical or electronic systems.
4. The Notified Body has to verify that the applicable requirements are met.
5. Appropriate test documentation provided by the manufacturer may be used to avoid the duplication of testing.

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