



National Standards Authority of Ireland

IRISH STANDARD

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ICS 23.060.40

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**INTERNAL AND EXTERNAL FAULT
BEHAVIOUR OF SAFETY RELATED
ELECTRONIC PARTS OF GAS APPLIANCES.**

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Údarás um Chaighdeán Náisiúnta na hÉireann

EUROPEAN PRESTANDARD

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Descriptors: gas installation, gas appliances, safety devices, electronic equipment, specifications, classifications, safety, defects, failure

English version

Internal and external fault behaviour of safety related electronic parts of gas appliances

Comportement des parties électroniques intéressant la sécurité dans les appareils utilisant les gaz combustibles, en cas de défauts internes et sous des contraintes externes

Fehlerverhalten von elektronischen Bauteilen mit sicherheitstechnischen Anforderungen in Gasgeräten bei inneren und/oder äußeren Störungen

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

This European Prestandard has been prepared by Technical Committee CEN/TC 58 "Safety and control devices for gas-burners and gas-burning appliances", the secretariat of which is held by BSI.

This European Prestandard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to announce this European Prestandard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This prestandard applies to (programmable) electronic systems for gas installations including safety-relevant electronic actuators, sensors, converters, etc.

When an electronic safety system is designed to conform with the criteria stipulated in these requirements, it will have a safety class at least equal to that of a conventional (non-electronic) system.

For the purposes of evaluating the design of an electronic system, the present requirements recognise three distinct safety classes:

Class A: Control functions which are not intended to be relied upon for the safety of the equipment.

Class B: Control functions intended to prevent unsafe operation of the controlled equipment.

Examples of controls which may include Class B functions are: Thermal cut-outs, pressure cut-outs.

Class C: Control functions which are intended to prevent special hazards or whose failure could directly cause a hazard.

Examples of controls which may include Class C functions are: Automatic burner controls, thermal cut-outs for closed water heater systems (unvented), gas valve proving systems.

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