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Australian Standard 2229, Part 2—1982

ELECTRICAL EQUIPMENT FOR EXPLOSIVE ATMOSPHERES

ELECTRICAL SYSTEMS OF DISPENSING EQUIPMENT

Part 2—LIQUEFIED PETROLEUM GAS DISPENSING EQUIPMENT

STANDARDS ASSOCIATION OF AUSTRALIA
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The following interests were represented on the committee responsible for the preparation of this standard:

Australian Coal Association

Australian Electrical and Electronic Manufacturers Association

Australian Institute of Petroleum

Confederation of Australian Industry

Department of Industrial Relations, N.S.W.

Department of Industry and Commerce

Department of Mineral Resources, N.S.W.

Department of Minerals and Energy, Vic.

Department of Mines, Qld

Electrical Contractors Associations of Australia

Electricity Supply Association of Australia

Independent testing interests

Insurance Council of Australia

State electricity regulatory authorities

AUSTRALIAN STANDARD

ELECTRICAL EQUIPMENT FOR EXPLOSIVE ATMOSPHERES

ELECTRICAL SYSTEMS OF DISPENSING EQUIPMENT

Part 2

LIQUEFIED PETROLEUM GAS DISPENSING EQUIPMENT

AS 2229, Part 2—1982

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PREFACE

This edition of this standard was prepared by the Association's Committee on Electrical Equipment in Hazardous Locations to supersede AS 2229, Part 2—1979.

This standard applies to dispensing equipment for liquefied petroleum gas; dispensing equipment for flammable liquids is specified in AS 2229, Part 1. It prescribes requirements in respect of design, construction and marking and includes a section on testing. It is intended for the guidance of manufacturers, users, statutory authorities and associated interests and for use in association with the SAA Wiring Rules.

The major differences between this edition and the 1979 edition are as follows:

(a) Reference is made to AS 2380, Part 1, for grouping of apparatus, temperature classification and marking.

(b) The prohibition on fitting of pump motors within the dispensing equipment.

(c) The introduction of a dispensing unit designated Type A which contains several mandatory safety features.

(d) The recognition of the use of flexible cords within a dispensing unit.

The classification of hazardous areas is described in AS 2430, Classification of Hazardous Areas, Part 1—Explosive Gas Atmospheres.

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PART 2—LIQUEFIED PETROLEUM GAS DISPENSING EQUIPMENT

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard specifies requirements for electrical systems of liquefied petroleum gas dispensing equipment and for the electrical components and hydraulic components which may be used inside the housing of such dispensing equipment or with dispensing equipment without a housing.

The tests specified herein are intended as type tests to prove a particular design for compliance with this standard.

1.2 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

AS 1076	Code of Practice for Selection, Installation and Maintenance of Electrical Apparatus and Associated Equipment for Use in Explosive Atmospheres (Other than Mining Applications) Part 1—Basic Requirements
AS 1530	Methods for Fire Tests on Building Materials and Structures Part 1—Combustibility Test for Materials
AS 1596	SAA LP Gas Code
AS 1826	Special Protection of Electrical Equipment for Explosive Atmospheres
AS 1829	Electrical Equipment for Explosive Atmospheres—Intrinsically Safe Apparatus—Type of Protection i
AS 1939	Classification of Degrees of Protection Provided by Enclosures for Electrical Equipment
AS 2380	Electrical Equipment for Explosive Gas Atmospheres—Explosion Protection Techniques Part 1—General Requirements
AS 2420	Fire Test Methods for Solid Insulating Materials and Non-metallic Enclosures Used in Electrical Equipment
AS 3000	SAA Wiring Rules
AS 3100	Approval and Test Specification for Definitions and General Requirements for Electrical Materials and Equipment
AS 3191	Approval and Test Specification for Electric Flexible Cords

1.3 DEFINITIONS. For the purpose of this standard, the following definitions apply:

1.3.1 Housing—the enclosure which provides mechanical protection for the electrical equipment used in liquified petroleum gas dispensing equipment. The housing may contain apparatus other than electrical equipment.

1.3.2 Liquefied petroleum gas (LPG)—a material which is composed of any of the following hydrocarbons or mixtures of all or any of them:

propane (C_3H_8), propylene (C_3H_6), butane (C_4H_{10}) or butylene (C_4H_8).

NOTE: See AS 1596 for requirements governing the storage and handling of LPG.

1.3.3 Liquefied petroleum gas dispensing equipment (hereinafter referred to as 'dispensing equipment')—an assembly of equipment intended for the delivery of LPG. The assembly may include a metering device, a counter, a delivery hose, a control nozzle and electric lighting.

1.4 GROUPING. Dispensing equipment shall be grouped in accordance with the relevant requirements in Section 1 of AS 2380, Part 1.

1.5 TEMPERATURE CLASSIFICATION. Dispensing equipment shall be temperature-classified in accordance with the relevant requirements in Section 1 of AS 2380, Part 1.