

AMERICAN NATIONAL STANDARD
ANSI/ISA-12.04.04-2012
Pressurized Enclosures

Approved 25 July 2012

ANSI/ISA-12.04.04-2012, Pressurized Enclosures

ISBN: 978-1-937560-58-4

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ISA
67 Alexander Drive
P.O. Box 12277
Research Triangle Park, North Carolina 27709

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1 Scope

1.1 This standard applies to equipment made suitable for use in hazardous (classified) locations by pressurizing.

1.2 This standard applies both to equipment with and without an internal release of a flammable gas or vapor.

1.3 This standard does not apply to occupied portions of buildings such as ventilated or pressurized control rooms.

2 Purpose

2.1 This standard provides guidance to those who employ pressurization for electrical equipment in hazardous (classified) locations, and should be used in conjunction with ANSI/NFPA 496, *Purged and Pressurized Enclosures for Electrical Equipment*.

2.2 This standard provides performance and test recommendations so that the enclosure and components mounted internally or protruding through the enclosure are unlikely to cause ignition of a surrounding flammable atmosphere.

2.3 This standard provides performance and test recommendations so that users are unlikely to be injured by rupture of the enclosure due to failure of the pressure-regulating devices in the PROTECTIVE GAS SUPPLY.

3 References

ANSI/ASME B36.10, *Welded and Seamless Wrought Steel Pipe*

C22.2 No. 0.17, *Evaluation of Properties of Polymeric Materials*

C22.2 No. 94.1, *Enclosures for Electrical Equipment, Non-Environmental Considerations*

IEC 60034-5, *Rotating electrical machines – Part 5: Degrees of protection provided by the integral design of rotating electrical machines (IP code) – Classification*

ANSI/ISA-12.01.01, *Definitions and Information Pertaining to Electrical Equipment in Hazardous (Classified) Locations*

ANSI/ISA-61010-1 (82.02.01), *Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements*

ANSI/NEMA 250, *Enclosures for Electrical Equipment (1000 Volts Maximum)*

ANSI/IEC 60529, *Degrees of Protection Provided by Enclosures, (IP Code)*

ANSI/NFPA 325M, *Properties of Flammable Liquids*

ANSI/NFPA 496, *Purged and Pressurized Enclosures for Electrical Equipment*

ANSI/UL50E, *Enclosures for Electrical Equipment, Environmental Considerations*

ANSI/UL 94, *Tests for Flammability of Plastic Materials for Parts in Devices and Appliances*

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