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ULC/ORD-C132-92 (R2018)

SAFETY RELIEF VALVES FOR ANHYDROUS AMMONIA AND PROPANE

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ULC/ORD-C132-92 (R2018)

SAFETY RELIEF VALVES FOR ANHYDROUS AMMONIA AND PROPANE

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FOREWORD

Certification organizations are periodically requested to promptly provide certification services for devices, constructions, materials and systems where Canadian recognized Standards do not currently exist or are not entirely applicable. Accordingly, the certification organization utilizes its experience, existing specifications and requirements in related areas, together with assistance from its advisory councils to develop and prepare Other Recognized Documents (ORDs) for use in conducting the necessary tests and evaluation investigation.

Underwriters Laboratories of Canada has prepared many ORDs in response to requests from, and in conjunction with, industry, code writing bodies, regulatory agencies and others prior to promulgating a certification program. In many instances such documents have become published ULC Standards and subsequently National Standards of Canada. It is the intention of Underwriters Laboratories of Canada to continue this practice, as appropriate.

Comments on the content of this ORD should be directed to the Head Office of Underwriters Laboratories of Canada, 7 Underwriters Road, Toronto, Ontario, Canada, M1R 3A9.

NOTE: These Other Recognized Documents are accepted under the National Standards System of Canada. Reference may be made to the Document ″Guidelines for the Development and Maintenance of Other Recognized Documents (ORDs)″, published by the Standards Council of Canada located at 55 Metcalfe Street, Suite 600, Ottawa, Ontario, Canada, K1P 6L5.

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SAFETY RELIEF VALVES FOR ANHYDROUS AMMONIA AND PROPANE

PREFACE

This is the First Edition of the Other Recognized Document for Safety Relief Valves For Anhydrous Ammonia And Propane, ULC/ORD-C132-92 (R2018).

Only metric SI units of measurement are used in this ORD. If a value for measurement is followed by a value in other units in parentheses, the second value may be approximate. The first stated value is the requirement.

In Canada, there are two official languages, English and French. All safety warnings must be in French and English. Attention is drawn to the possibility that some Canadian authorities may require additional markings and/or installation instructions to be in both official languages.

This First Edition ORD has now been Reaffirmed.

Attention is drawn to the possibility that some of the elements of this ORD may be the subject of patent rights. Neither Underwriters Laboratories of Canada, nor ULC Standards, shall be held responsible for identifying any or all such patent rights.

Requests for interpretation of this ORD should be sent to the ULC Mark Program Owner of Underwriters Laboratories of Canada. The requests should be worded in such a manner as to permit a “yes” or “no” answer based on the literal text of the requirement concerned.

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This ORD is intended to be used for conformity assessment.

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1. SCOPE

1.1 These requirements cover safety relief valves and hydrostatic relief valves for anhydrous ammonia and propane for use in nonrefrigerated systems in facilities covered by the following Standards:

A ANSI K61.1, Storage and Handling of Anhydrous Ammonia;

B CAN/CGA-B149, Propane Installation Code; and

C NFPA No. 59, Storage and Handling of Liquefied Petroleum Gases at Utility Plants.

1.2 These requirements do not apply to safety and relief valves for use on containers constructed in accordance with Canadian Transport Commission (CTC) Specifications.

2. GLOSSARY

2.1 BLOWDOWN PRESSURE - The value of decreasing inlet static pressure at which no further discharge is detected at the outlet of a safety relief valve of the resilient disc type after the valve has been subjected to a pressure equal to or above the operating pressure.

2.2 FLOW RATING PRESSURE - The inlet static pressure at which relieving capacity of a safety valve is measured for rating purposes.

2.3 HYDROSTATIC RELIEF VALVE - A pressure relief valve actuated by hydrostatic inlet pressure which opens in proportion to the increase in pressure over the opening pressure.

2.4 MEASURED RELIEVING CAPACITY - (Flow Capacity) - The flow capacity of a safety valve measured at the flow rating pressure, expressed in cubic metres per minute of air at a temperature of 15.5°C and at a pressure of 100 kPa.

2.5 POPPING PRESSURE - The value of increasing inlet static pressure at which the disc moves in the opening direction at a faster rate as compared with corresponding movement at higher or lower pressures. It applies only to safety valves on compressible fluid service.

2.6 PRESSURE RELIEF VALVE - A pressure relief device which is designed to reclose and prevent the further flow of fluid after normal conditions have been restored.

2.7 RELEASING PRESSURE - The value of decreasing inlet static pressure at which leakage ceases through a specified water seal on the outlet of a pressure relief valve after the valve has been subjected to a pressure above the start-to-discharge pressure, but below the popping pressure. It applies only to relief valves of the resilient disc type.

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