September 2020

# ATEX 2014/34/EU Operating and Safety Instructions

### Introduction

This Installation Sheet is applicable for regulators and accessories being used in a potentially explosive atmosphere under ATEX 2014/34/EU requirements.

# Marking

Marking of regulator and accessories shall be strictly in accordance with the requirements of ATEX 2014/34/EU, and includes:

- · CE and EX Mark
- · Equipment Group II
- · Equipment Category 2, as label
- · Type of explosive atmosphere, GD
- · Equipment protected by constructional safety "h"
- Explosion hazard group
  - a. IIC for gas atmosphere
  - b. IIIC for dust atmosphere
- · Surface temperature
  - a. Temperature class range for gas atmosphere
  - b. Maximum measured surface temperature range for dust atmosphere
- Equipment Protection Level (EPL)
  - a. Gb suitable for Zone 1 for gas atmosphere
  - b. Db suitable for Zone 21 for dust atmosphere

# Selection

- Ensure that the equipment is marked with the correct equipment group, category, type of atmosphere and temperature class according to hazardous area classification of the area of installation.
- 2. Ensure that the maximum temperature indicated on the product nameplate does not exceed the maximum temperature foreseen by the hazardous area classification.

# Installation

- 1. Ensure that the safety instructions are followed for each regulator.
- 2. Ensure that only non-sparkling tools are used, as per EN 1127-1, Annex A.
- 3. Ensure that no free flames are present near the regulator.
- 4. Be protected against other hazards using adequate gloves and glasses.
- Ensure that no metallic shocks/impacts are made to the regulator or the adjacent pipelines system during installation.
- 6. Strictly follow the operating and safety instructions provided for the regulator.
- 7. When the regulator is to handle hot fluids or fluids where exothermic reactions may take place, ensure that all the necessary measures are taken so that the hot surface of the regulator cannot provide a source of ignition to the surrounding gas, vapor, mist or dust atmosphere (including a periodical removal of the dust deposits from the hot surfaces of the regulator).
- 8. Before putting into use or during the operation with dangerous fluid, ensure that no release of the fluid to atmosphere can take place.
- 9. Make sure that the pressure regulator is connected to the local earthing system for the electric continuity.
- 10. Ensure a proper grounding of the regulator to mitigate the effects of lightning strikes.





# **Maintenance**

- The end user must ensure that only qualified personnel are allowed to carry out maintenance in a potentially hazardous area and the maintenance must be appropriate to the category of the equipment in use.
- 2. The end user must ensure that only tooling appropriate to the working area is used, as per EN 1127-1, Annex A.
- 3. The end user must ensure that the regulator is protected against vibrations during operation.
- 4. All equipment must only be fitted with manufacturer's original spare parts.

# **Temperature Limits**

- The regulator does not generate heat. The maximum temperature of the regulator is determined by the temperature of the process fluids.
- The ambient temperature does not influence the ATEX compliance.

TEMPERATURE CLASS	MAXIMUM SURFACE TEMPERATURE
T1	842°F / 450°C
T2	572°F / 300°C
Т3	392°F / 200°C
T4	275°F / 135°C
T5	212°F / 100°C
T6	185°F / 85°C

# Product With ATEX Equipment Category Approval

- Fisher™ Type 63EG
- · Fisher 67C Series
- Fisher 67D Series
- Fisher Type 92S
- Fisher 167D Series
- · Fisher 627 Series
- Fisher Type 1098-EGR
- Fisher 1190 Series
- · Fisher 1290 Series
- Fisher 1301 Series
- Fisher 1305 Series
- Fisher 2010B / 2020B / 3500B Series
- Fisher 3600B / 3650B Series
- Fisher 7100B Series
- Fisher ACE95 Series
- Fisher MR95 Series
- Fisher MR98 Series
- Fisher Type MR105
- Fisher Type MR108
- · Fisher T205 Series
- Fisher T205VB Series
- Fisher T208 Series
- Fisher T208VR Series
- Fisher Type Y692
- Fisher Type Y696

Webadmin.Regulators@emerson.com

Facebook.com/EmersonAutomationSolutions



LinkedIn.com/company/emerson-automation-solutions



Twitter.com/emr\_automation

### **Emerson Automation Solutions**

# Americas

Q Fisher.com

McKinney, Texas 75070 USA T +1 800 558 5853 +1 972 548 3574

### Europe

Bologna 40013, Italy T +39 051 419 0611

### Asia Pacific

Singapore 128461, Singapore T +65 6777 8211

#### Middle East and Africa

Dubai, United Arab Emirates T +971 4 811 8100 D103768X012 © 2014, 2020 Emerson Process Management Regulator Technologies. Inc. All rights reserved, 09/20.

The Emerson logo is a trademark and service mark of Emerson Electric Co. All other marks are the property of their prospective owners. Fisher™ is a mark owned by Fisher Controls International LLC, a business of Emerson Automation Solutions.

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available upon request. We reserve the right to modify or improve the designs or specifications of such products at any time without notice.

Emerson Process Management Regulator Technologies, Inc. does not assume responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use and maintenance of any Emerson Process Management Regulator Technologies, Inc. product remains solely with the purchaser.

