

# Elmac Technologies Limited - Operating Instructions

Requirements to EN ISO 16852, ATEX Directive 2014/34/EU

## INSTALLATION AND MAINTENANCE INSTRUCTIONS

EC Type Examination Certificate No.	Sira 03ATEX9513X
Suitable for use with gas groups	IIA, IIB1, IIB2 and IIB3 only
Limiting Temperature	-20 / + 60 deg C
<i>Note: Safety Vents are not resistant to endurance burning</i>	

### INTRODUCTION

Safety Vent arresters are fitted with nameplates (refer to figure 1), stating the following information: -

- Full name, address, telephone and fax numbers of manufacturer.
- The specific marking of explosion protection.
- Notified body number.
- Model number of Safety Vent.
- Elmac serial number of Safety Vent (this is traceable to the year of construction and must be quoted when requesting spare parts).

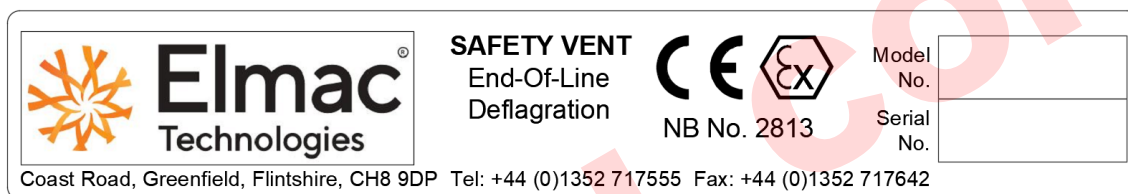


Figure 1 – Nameplate General Layout

**Caution! Always ensure that the system is at atmospheric pressure and there is no hazardous gas present including any flammable gas or vapor that could flash when either installing or maintaining a unit.**


### INSTALLATION

**Warning: Flame arresters have installation and application limits.**

**Flame arresters must be installed in accordance with this IOM. If there is any doubt, please contact Elmac Technologies Limited.**

#### **Caution!**

1. Please inspect the equipment when it is received and report any damage (if any).
2. The customer must check and remove any 'Transport Protection' prior to installation.

3	Third Issue (format updated, and additional cautions added relating to installation).	D.Greenough	28.09.2017
2	Second Issue (note added regarding special conditions for safe use).	D.Greenough	11.03.2013
1	First Issue (new document with latest Elmac Logo's and contact details).	D.Greenough	17.06.2009
Rev.	Description	Issued By	Date
Description: <b>Installation &amp; Maintenance Instructions for SV &amp; SVE Series Light Duty End-Of-Line Deflagration Safety Vent Arresters (ATEX)</b>		 <b>Elmac Technologies</b> Elmac Technologies Limited, Coast Road, Greenfield, Flintshire, CH8 9DP United Kingdom  Document No. <b>ETL-00182</b> Page 1 of 3  Revision <b>3</b>	
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## 3. Inspect the equipment for physical damage or internal contamination before installation and use of the equipment.

1. It is essential that Elmac end-of-line deflagration Safety Vents are only used in the application and with the gas group for which they were supplied (as stated within our written quotation). Materials of construction must be compatible with the gas mix and the environment in which the unit is to operate. This is particularly important if the Safety Vent is to be used in corrosive applications. Contact the Elmac technical sales department for advice.
2. Elmac Safety Vents are not suitable for situations where continuous burning of a flame could stabilise on or near to the surface of the element. Under these circumstances it is strongly recommended that a temperature sensor is installed combined with a shutdown system to turn off the gas flow.
3. Always ensure that the screw thread available on the pipe work is compatible with that on the safety vent.
4. **SPECIAL CONDITIONS FOR SAFE USE:**  
Denoted by 'X' after the EC Type-Examination Certificate Number.
  - If the sign 'X' is placed after the relevant certificate number, it indicates that the protective system is subject to special conditions for safe use.
  - The devices shall not be used in stabilised burning situations.
  - The user/installer shall be cognisant of the critical parameters which will be detailed on the fitted nameplates (refer to Figure 1 - Nameplate General Layout).

## MAINTENANCE

1. **Maintenance and inspection are the responsibility of the end user and not of Elmac Technologies Limited.**
2. Safety Vents should be inspected on a regular basis to ensure that no build-up of solids or liquids occurs in the element as this will adversely affect the performance of the unit during process flow conditions. The maintenance interval must be determined by the user and is governed by the amount and type of particulates in the system in which the unit is installed. The user should check the element in the first few months of operation to find out how quickly particulates accumulate. After cleaning, the element should be thoroughly inspected for damage and if damaged it must be replaced. Safety Vents should also be inspected if a flashback is known or suspected to have occurred.
3. Depending upon the particular installation, it may be possible to inspect the element with the Safety Vent in situ. However, if this is not possible, then the Safety Vent will need to be removed from the pipe work for inspection.


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4. Safety Vent elements may be cleaned with any suitable solvent followed by a blow through with compressed air. Steam cleaning may also be effective. If the Safety Vent element cannot be cleaned satisfactorily, the Safety Vent must be replaced. Elmac Safety Vents can withstand numerous flashbacks without damage but if any distortion is observed in the element, then the Safety Vent should be replaced. It is advisable to hold spare Safety Vents in stock, on-site.

**IN THE EVENT OF ANY QUERY PLEASE CONTACT OUR TECHNICAL SALES DEPARTMENT**

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