

## **E69F Current-to-Pneumatic Signal Converter and E69P Current-to-Pneumatic Valve Positioner**

### **Safety Information**

For safety information in English, refer to the web site listed below.

*(Note: A similar sentence in other languages follows)*

Se webstedet anført nedenfor for at få sikkerhedsoplysninger på dansk.

Ga naar het website-adres hieronder voor veiligheidsinformatie in het Nederlands.

Suomenkielisiä turvallisuustietoja on seuraavassa WWW-sivustossa.

Pour des informations de sécurité en français, consultez le site Web ci-dessous.

Sicherheitshinweise in deutscher Sprache finden Sie auf der unten angegebenen Website.

Για πληροφορίες ασφαλείας στα Ελληνικά, ανατρέξτε στο δικτυακό τόπο που αναγράφεται παρακάτω.

Per informazioni riguardanti la sicurezza in italiano, fare riferimento all'indirizzo Web indicato sotto.

For sikkerhetsinformasjon på norsk, se nettstedet angitt nedenfor.

Para obter informações sobre segurança em Português, consulte o Web site listado em baixo.

Visite nuestro sitio Web si desea obtener más información de seguridad en español.

För säkerhetsinformation på svenska tittar du på vår webbsida på adress enligt nedan.

[www.foxboro.com/us/eng/products/mnline/downloads/ecsafetyreport/ecsafetyreport.htm](http://www.foxboro.com/us/eng/products/mnline/downloads/ecsafetyreport/ecsafetyreport.htm) |



# Introduction

The E69F Current-to-Pneumatic Signal Converter is a field-mounted instrument that transforms a dc milliamperere input signal to a proportional pneumatic output signal. This output signal can be used either to operate such pneumatic devices as dampers, and valve actuators, and so forth, or as the input to various pneumatic instruments.

The E69P Current-to-Pneumatic Valve Positioner is a yoke-mounted instrument that converts a dc milliamperere input signal to a pneumatic output. The output is calibrated for a specific valve stroke rather than for a pneumatic output signal. The positioner delivers all the air required, limited to its supply pressure, to reposition the valve stem to satisfy a given input.

## Warnings

### General Warning

—  **WARNING** —

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Instruments must be installed to meet all applicable local installation regulations, such as hazardous location requirements, electrical wiring codes, and mechanical piping codes. Persons involved in the installation must be trained in these code requirements to ensure that the installation takes maximum advantage of the safety features designed into the instrument.

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### ATEX Warning

—  **WARNING** —

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Apparatus marked as Category 1 equipment and used in hazardous areas requiring this category must be installed in such a way that, even in the event of rare incidents, the versions with an aluminum alloy enclosure can not be an ignition source due to impact and friction.

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### Explosionproof and Enclosure Warning

—  **WARNING** —

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To prevent possible explosion and to maintain explosionproof and dust-ignitionproof protection, the threaded housing cover must be installed. Turn cover to seat O-ring into the housing and then continue to hand tighten until the cover contacts the housing metal-to-metal.

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## Intrinsically Safe Warning

—  **WARNING** —

Since Invensys Foxboro does not specify live maintenance, to prevent ignition of flammable atmospheres, disconnect power before servicing unless the area is certified to be nonhazardous.

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## Type n Warning

—  **WARNING** —

On instruments certified for ATEX protection n, CSA Class I, Division 2, or FM nonincendive for Class I, Division 2, the housing cover must be installed.

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## Parts Replacement Warning

—  **WARNING** —

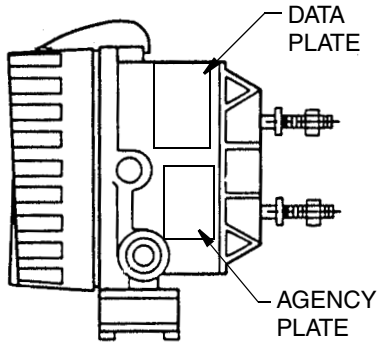
If replacing parts, do not use parts of other materials or that in any other way change the product as described on the data plate.

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## Instrument Identification

A typical data plate and agency plates are shown in Figure 1.

Refer to the data plate to determine the model number, hazardous location rating (CERT. SPEC.), origin code, and input. The hazardous location rating is also shown on an agency plate.



**AGENCY PLATES**

**FOXBORO**  
 An Invensys company  
 CE 0344  
 II 1 G EEx ia IIC T4...T6  
 02KEMA1201 X  
 SEE CERTIFICATE  
 FOR DATA

**FOXBORO**  
 An Invensys company  
 CE  
 II 3 G EEx nA II T4...T6  
 02KEMA1202 X SEE  
 CERTIFICATE FOR DATA  
 DO NOT OPEN WHEN  
 ENERGIZED

TYPE E69 CS-E/LD-E  
 CE 0344 Ex  
 II 2 G EEx d IIB 50°C (T5)  
 KEMA 04ATEX2296  
 -40°C ≤ Ta ≤ +80°C

**DATA PLATES**

<p><b>CURRENT TO AIR CONVERTER</b></p> <p>"This product and its components are protected by U. S. patent 4,213,478. Corresponding patents have been issued or are pending in other countries."</p> <p>CE</p> <p>invensys <b>FOXBORO</b> FOXBORO, MA, U.S.A. 02035</p>	<p>MODEL NO. E69F-T12 ST B</p>	<p>OUTPUT 3-15 PSI</p>
	<p>CERT. SPEC. CS-EKA-E</p>	<p>SUPPLY 18-23 PSI</p>
<p>REF. NO.</p>	<p>ORIGIN 2A0412</p>	<p>MAX. AMB. TEMP. 80 °C</p>
<p>INPUT 4-20 MA</p>	<p>WARNING: CABLES AND CABLE GLANDS SHALL BE SUITABLE TO 80°C</p>	<p>CUST. DATA</p>

<p><b>CURRENT TO AIR POSITIONER</b></p> <p>CE</p> <p>invensys <b>FOXBORO</b> FOXBORO, MA, U.S.A. 02035</p>	<p>MODEL NO. E69P-T1M ST B</p>	<p>OUTPUT 3-15 PSI</p>
	<p>CERT. SPEC. CS-EKA-E</p>	<p>SUPPLY 18-23 PSI</p>
<p>REF. NO.</p>	<p>ORIGIN 2A0412</p>	<p>MAX. AMB. TEMP. 80 °C</p>
<p>INPUT 4-20 MA</p>	<p>WARNING: CABLES AND CABLE GLANDS SHALL BE SUITABLE TO 80°C</p>	<p>CUST. DATA</p>

Figure 1. Sample Instrument Identification

## Electrical Rating

The electrical rating is printed on the data plate. For special requirements see Table 1.

*Table 1. Product Safety Specifications*

Testing Laboratory, Types of Protection, and Area Classification	Conditions of Certification	Electrical Safety Design Code
ATEX intrinsically safe EEx ia Gas Group IIC, Zone 0.	4 to 20 mA input only. Connect to an intrinsically safe circuit with a maximum current of 90 mA. Temperature Class T6.	CS-E/KA-E
ATEX nonincendive EEx nA for Gas Group II, Zone 2.	Temperature Class T6.	CS-E/KN-A
ATEX certified flameproof EEx d for IIB, Zone 1 (CENELEC).	4 to 20 mA and 10 to 50 mA input. Temperature Class T5. E69F-T only.	CS-E/LD-E

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### — NOTE —

These instruments have been designed to meet the electrical safety description listed in Table 1. For detailed information or status of testing laboratory approvals/certifications, contact Invensys Foxboro.

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## Operating Temperature Limits

The operating temperature limits of the electronics are -40°C and +80°C (-40°F and +180°F). Ensure that the instrument is operated within this range.

## Origin Code

The origin code identifies the area of manufacture and the year and week of manufacture. See the example shown in Figure 1. In the example, 2A means the product was manufactured in the Measurement and Instrument Division, 04 identifies the year of manufacture as 2004, and 12, the week of manufacture in that year.

## Hazardous Location Rating

The hazardous location code is printed on the data plate as the CERT. SPEC. See the example shown in Figure 1. See Table 1 to identify this code. The type of protection is also marked on the agency plate.

## Input Current

The input current is printed on the data plate. Ensure that a 4-20 mA signal (Input Signal Code I) is used with instruments certified as intrinsically safe.

## Reference Documents

The following documents describe the installation, calibration, and maintenance procedures for the respective products.

- ◆ E69F Converter: MI 018-430
- ◆ E69P Positioner: MI 018-440.

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Vertical lines to the right of text or illustrations indicate areas changed at last issue date.

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