

# INSTRUCTIONS

Manufacture Name: **Amisco S.p.A.**  
 Web site: **www.amisco.it**  
 Address: **Via Piaggio, 70 – Paderno D. – MI – ITALY**  
 Type: **EVI 7 Ex**  
 Group: **II**  
 Category: **3G and 3D**  
**GAS AND COMBUSTIBLE DUST ATMOSPHERE EQUIPMENT**  
 Explosion Protection for:  
 - Gas Atmosphere: **Protection “n”, level nA (non sparking)**  
 - Combustible Dust: **Enclosure “t”, level tc**  
 Voltage Tolerance: **±10%**  
 Duty Cycle: **100% ED**  
 Ambient Temperature: **-15°C ≤ Ta ≤ +50 °C**

## ASSEMBLY CONDITIONS:

- The connector must guarantee IP65 protection (complying to IEC 60529).
- The M3x31 screw must be tight with a maximum torque of 0.6Nm.
- Assembling and commissioning must only be carried out by qualified and authorized persons.
- Make sure that the assembly is done in clean conditions.

## INFORMATION FOR SAFE USE AND RESIDUAL RISKS

### Before Installing and using product, read carefully the following notes:

#### Respect of maintenance indications:

It is requested to follow carefully the indications about maintenance reported in the paragraph “PERIODICAL INSPECTION AND MAINTENANCE”, with particular reference about product cleaning. If it is not respected, it could cause an overheating, and an ignition source for explosion could be created.

#### Use not allowed of product:

It is requested to use the product at ambient conditions indicated in general information, reported below:

- Tmin and Tmax: -15°C and +50°C

- Voltage tolerance **±10% of Nominal Voltage**

A use not in compliance with the conditions reported above could cause an ignition source.

The devices are not resistant to exposure to direct sunlight or exposure to other sources of UV radiations for extended periods. If necessary, provide the use of suitable protective shield and proper measure to prevent their removal.

#### Product encapsulation deterioration, due to mechanical impact:

Coil encapsulation in plastic material is a protection system from explosion.

It is therefore required to install the product in a zone protected from mechanical impacts.

#### Product Wrong connection or disconnection:

In order to prevent the creation of electrical arcs, it is necessary to connect and disconnect the product when power supply is off.

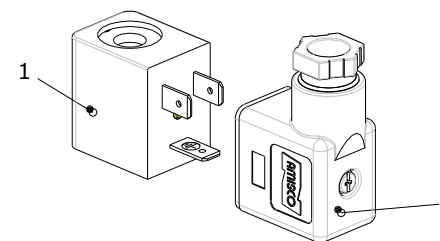
## PERIODICAL INSPECTION AND MAINTENANCE

In order to prevent failures and risks, respect the following indications:

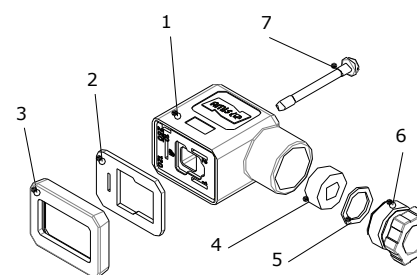
CONTROL DESCRIPTION	FREQUENCY
Verify visually integrity of the product surface. If the product is damaged, deformed or has been corrupted by any modification from original shape and aspect, substitute it.	Weekly
Clean the surface with wet clothes or antistatic products with power supply switched off, in order to prevent electrostatic charges.	Weekly

## ASSEMBLY CONDITIONS

The connector must guarantee IP65 protection (complying to IEC60529)



Position	Designation	Quantity
2	Connector	1
1	Coil EVI7-Ex	1



Position	Designation	Quantity
7	M3x31 Mounting screw	1
6	Strain relief	1
5	Washer	1
4	Cable gland	1
3	Integrated "self retaining" front gasket	1
2	Rubber seal	1
1	Connector body	1

### ATEX Marking

Product is designed and constructed to respond on requirements of **category 3** (as defined by Directive 2014/34/EU) to be used in the following zones, in compliance to Directive 99/92/EC):



Zone (Dir. 99/92/EC)	Category (Dir. 2014/34/EU)	Description
2	3G	Equipment in category 3 is intended for use in areas in which explosive atmospheres caused by gases, vapors, mists, or air/dust mixtures are unlikely to occur or, if they do occur, are likely to do so only infrequently and for a short period only.
22	3D	Equipment in this category ensures the requisite level of protection during normal operation.

The resulting Marking is:



**II 3G Ex nA IIC Tx Gc**  
**II 3D Ex tc IIIC Tx°C Dc**

Where:

	Marking for Product included in EC product Directives
	Specific marking of explosion protection
<b>II:</b>	Group II - Electrical apparatus for places with a potentially explosive atmosphere, other than mines susceptible to firedamp
<b>3:</b>	Category 3 - see the board below
<b>G:</b>	Explosive gas atmospheres
<b>D:</b>	Explosive atmosphere in the presence of combustible dust
<b>Ex:</b>	The symbol Ex indicates that the electrical apparatus corresponds to one of the protection type reported in EN 60079 - 0
<b>nA:</b>	Type of protection for explosive gas atmospheres - non-sparking
<b>tc:</b>	Type of protection for explosive dust atmospheres - protection by enclosure
<b>IIC:</b>	Electrical equipment of Group II is subdivided according to the nature of the explosive gas atmospheres - IIC, a typical gas is hydrogen
<b>IIIC:</b>	Electrical equipment of Group III is subdivided according to the nature of the explosive dust atmospheres - IIIC, conductive dust
<b>Tx:</b>	Temperature class: T5/T6 for Gas, T 95°C / 80°C for Dust
<b>Gc:</b>	Equipment protection level [EPL] for explosive gas atmospheres
<b>Dc:</b>	Equipment protection level [EPL] for explosive dust atmospheres
<b>X:</b>	Specific conditions of use (see "ASSEMBLY CONDITIONS")

Paderno Dugnano, April 20, 2016

Authorized Person  
Ing. Emanuele Mauri

### UE DECLARATION OF CONFORMITY



We declare under our sole responsibility that the product:

**Coil type: EVI 7S9 Ex**  
**II 3G Ex nA IIC Tx Gc**  
**II 3D Ex tc IIIC Tx°C Dc**

Nominal voltage: up to 240V

Nominal Power: up to 6.5W [DC] or 8.5VA [AC]

Ambient temperature: -15 ÷ +50 °C

Tolerance range on nominal values: ±10 %

Type of connection and other information are available on Amisco catalogue or on request.

*Is in conformity with the following directives:*

- **2014/34/UE ATEX**
- **2014/35/UE LV**
- **2011/65/UE RoHS**

With reference (if applicable) to the following harmonized standards:

- |                            |                             |
|----------------------------|-----------------------------|
| • <b>EN 12100</b> [2010]   | • <b>EN 60079-0</b> [2012]  |
| • <b>EN 60204-1</b> [2006] | • <b>EN 60079-15</b> [2010] |
| • <b>VDE 0580</b> [2011]   | • <b>EN 60079-31</b> [2014] |
| • <b>EN 60664-1</b> [2007] |                             |

Ing. Emanuele Mauri  
Amisco Technical Manager  
Paderno Dugnano, 20 April 2016

The data supplied in Amisco Catalogues are to be consulted, and pertinent accident prevention regulations have to be followed during product installation and use. Any unauthorized work performed by purchaser or by third parties can impair its functions, and relieves Amisco of all warranty claims and liability for any resulting damage.