

Coil Type EVI 7 Ex INSTRUCTIONS



INSTRUCTIONS

Manufacturer 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 "e", Level "ec" (increased safety)
- Combustible Dust	Enclosure "t", Level tc
Voltage Tolerance:	±10%
Duty Cycle:	100% ED
Ambient Temperature:	-10°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 0.6 Nm.
- Assembling and commissioning must only be carried out by qualified and authorized persons.
- Install away from heat sources that can affect its thermal class.
- 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: -10°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. Do not energize the coil if not correctly assembled with its own valve; incorrect assembly can increase power absorption and therefore generate abnormal overheating.

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 off and when explosive atmosphere is not present.



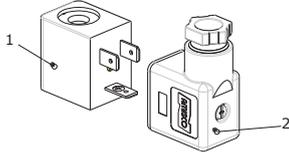
PERIODICAL INSPECTION AND MAINTENANCE

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

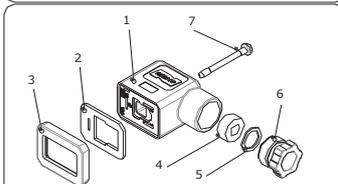
CONTROL DESCRIPTION	FREQUENCY
Verify visually integrity of the product surface. If the product is damaged, deformed or has been corrupted by any modification from original shape and aspect, substitute it.	Weekly
Clean the surface with wet clothes or antistatic products with power supply switched off, 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	Locking 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 **Group II and 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. Equipment in this category ensures the requisite level of protection during normal operation.
22	3D	

The resulting Marking is:

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

Where:

	Specific marking of explosion protection
II:	Group II - Electrical apparatus for places with a potentially explosive atmosphere, other than mines susceptible to firedamp
3:	Category 3 - see the board above
G:	Explosive gas atmospheres
D:	Explosive atmosphere in the presence of combustible dust
Ex:	The symbol Ex indicates that the electrical apparatus corresponds to one of the protection type reported in EN 60079 - 0
ec:	Type of protection for explosive gas atmospheres – increased safety
tc:	Type of protection for explosive dust atmospheres – protection by enclosure
IIC:	Electrical equipment of Group II is subdivided according to the nature of the explosive gas atmospheres – IIC, a typical gas is hydrogen
IIIC:	Electrical equipment of Group III is subdivided according to the nature of the explosive dust atmospheres – IIIC, conductive dust
Tx:	Temperatura class: T5/T6 for Gas, T 95°C / 80°C for Dust
Gc:	Equipment protection level [EPL] for explosive gas atmospheres
Dc:	Equipment protection level [EPL] for explosive dust atmospheres

Paderno Dugnano, December 11, 2022

Authorized Person
Ing. Emanuele Mauri

EU DECLARATION OF CONFORMITY

We declare under our sole responsibility that the product:

Coil type: EVI 7 Ex
II 3G Ex ec IIC Tx Gc
II 3D Ex tc IIC Tx°C Dc

Nominal voltage: up to 240V

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

Ambient temperature: -10°C ÷ +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/EU [ATEX]***
- ***2011/65/EU [RoHS]***

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

- | | | | |
|-------------------------|---------------|-------------------------|---------------|
| • EN 1127-1 | [2019] | • EN IEC 60079-0 | [2018] |
| • EN 60204-1+EC | [2018] | • EN 60079-7 | [2015] |
| • VDE 0580 | [2011] | • EN 60079-31 | [2014] |
| • EN IEC 60664-1 | [2020] | | |



Ing. Emanuele Mauri

Authorized person

Paderno Dugnano, December 11, 2022

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.