

# CESI

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Capitale sociale 8 550 000 €  
interamente versato  
Codice fiscale e numero  
iscrizione CCIAA 00793580150

Registro Imprese di Milano  
Sezione Ordinaria  
N. R.E.A. 429222  
P.I. IT00793580150

Schema di certificazione

# CESI-ATEX

Il CESI è stato autorizzato dal governo italiano ad operare quale organismo di certificazione di apparecchi e sistemi destinati a essere utilizzati in atmosfera potenzialmente esplosiva con D.M. 1/3/1983, D.M. 19/6/1990, D.M. 20/7/1998, D.M. 27/9/2000 e D.M. 02/02/2006

ATEX E C-02 - 1

# CERTIFICATE



## [1] EC-TYPE EXAMINATION CERTIFICATE

[2] **Equipment or Protective System intended for use  
in potentially explosive atmospheres  
Directive 94/9/EC**

[3] EC-Type Examination Certificate number:

**CESI 06 ATEX 068X**

[4] Equipment: Three-phase asynchronous motors series M18

[5] Manufacturer: **FAGGIOLATI PUMPS S.p.A.**

[6] Address: Via Papa Giovanni XXIII, 31 – 62100 Macerata - Italy

[7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] CESI, notified body n. 0722 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report n. EX-A6032848.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0: 2006 EN 60079-1: 2004**

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

[12] The marking of the equipment or protective system shall include the following:

**II 2 G Ex d IIB, T4**

This certificate may only be reproduced in its entirety and without any change, schedule included.

**Date 5 December 2006 - Translation issued the 5<sup>th</sup> December 2006**

**Prepared**

Bruno Pavanati

**Verified**

Mirko Balaz

**Approved**

Fiorenzo Bregani

**CESI**

Centro Elettrotecnico Sperimentale Italiano  
Giacinto Motta SpA  
Business Unit GENERAZIONE  
Il Responsabile

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Schema di certificazione

# CESI-ATEX

# CERTIFICATE



## [1] EC-TYPE EXAMINATION CERTIFICATE

[2] **Equipment or Protective System intended for use  
in potentially explosive atmospheres  
Directive 94/9/EC**

[3] EC-Type Examination Certificate number:  
**CESI 03 ATEX 226X**

[4] **Equipment:** Three-phase and single-phase asynchronous motors series M3 and three-phase asynchronous motors series M6

[5] **Manufacturer:** FAGGIOLATI PUMPS S.p.A.

[6] **Address:** Via Papa Giovanni XXIII, 31 - 62100 Macerata - Italy

[7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] CESI, notified body n. 0722 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report n. EX-A3/027270.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 50014: 1997 + A1..A2**

**EN 50018: 2000 + A1**

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

[12] The marking of the equipment or protective system shall include the following:



**II 2 G**

**EEx d IIB T4**

This certificate may only be reproduced in its entirety and without any change, schedule included.

Date 31 July 2003 - Translation issued the 31<sup>st</sup> July 2003

**Prepared**

Bruno Pavanati

**Verified**

Mirko Balaz

**Approved**

Ulisse Colombo

**CESI**

CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO  
Business Unit Certificazione

3<sup>rd</sup> Responsabile

Il CESI è stato autorizzato dal governo italiano ad operare quale organismo di certificazione di apparecchi e sistemi destinati a essere utilizzati in atmosfera potenzialmente esplosiva con D.M. 1/3/1983, D.M. 19/6/1990, D.M. 20/7/1998 e D.M. 27/9/2000

[13]

## Schedule

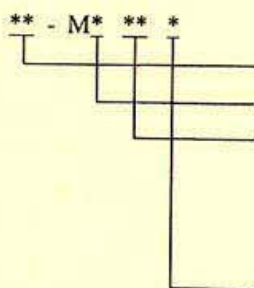
[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 226X

[15] **Description of equipment**

The three-phase and single-phase asynchronous motors series M3 and the three phase asynchronous motors series M6, subject of these certificate, are used to operate various hydraulic machines, such as submersible pumps and mixer, aerators and oxygenators.

The hydraulic machines, integrals with the motor shaft, are not subject of the valuations of this certificate; the manufacturer will carry out at the risk assessment and applying one of the procedures provided in the directive 94/9/CE.

The motors are identified by a code as follows:



Series of motors: **M3, M6**

Number of poles: **2, 4, 6**

Size of motors:

**71** = center height 71

**09** = center height 90

**10** = center height 100

Code indicating the type of supply: see documents annexed to this certificate

### Electrical characteristics

The rated power of the various types of motors as a function of size, type of duty, type of supply and all the other electrical characteristics of plate prescribed by EN 60034 standards series are reported in the descriptive documents annexed to this certificate.

- Maximum rated voltage :	690	V
- Maximum rated power:	5.5	kW
- Rated frequency:	50 / 60	Hz
- Insulation class:	F ( $\Delta t B$ )	
- Maximum rated speed:	3600	rpm
- Ambient temperature:	-20 ÷ +45	°C

Duty:	S1	with motor enclosure completely immersed in the liquid
	S3 20% - Cycle 60 min.	with motor enclosure not-immersed in the liquid

The motors series M3 and M6 are equipped, inside the stator winding, with thermal detectors. The thermal detectors are calibrated for an operation temperature of 130 °C.

The operation of the thermal detectors shall guarantee the disconnection of the supply; the resetting of the supply shall not be automatic.

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[13]

## Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 226X**

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[15] **Description of equipment (follows)**

The motors series M3 and M6 are provided with integral cable entries in the enclosure and the closing of unused hole is realised by the manufacturer by means of a plug blocked with threads sealant.

The cable gland with its sealing ring shall not exceed the maximum temperature in service of 80 °C.

### Warning label

“Do not use the feeding cable to move the pump”

[16] **Report n. EX-A3/027270**

### Routine tests

The manufacturer shall carry out the routine tests prescribed at clause 24 of the EN 50014 standard.

The manufacturer is exempted from the overpressure test on the motor enclosures series M3 and M6, since they have been submitted to an overpressure test at 23,5 bar, corresponding to 4 times the reference pressure.

### Descriptive documents (prot. EX-A3/027276)

- Technical note n. M21P01 Rev. 3 (4 pg.)	dated	30.07.2003
- Technical note n. M20P01 Rev. 3 (5 pg.)	dated	30.07.2003
- Drawing n. serie motori M3 Rev. 5	dated	26.07.2003
- Drawing n. serie motori M6 Rev. 7	dated	26.07.2003
- Drawing n. Targa_ATEX Rev. 3	dated	30.07.2003
- Safety instructions n. NETATEX002 (5 pg.)	dated	07.2003
- Declaration of conformity	dated	30.07.2003

One copy of all documents is kept in CESI files.

[17] **Special conditions for safe use (X)**

The motor provided with the cables permanently connected, shall have these cables protected against the risk of damage due to mechanical stresses. The end connections shall be made according to one of the types of protection indicated in the EN 50014 standard and in accordance with the installation rules in force in the site of installation.

[18] **Essential Health and Safety Requirements**

Covered by standards.

## EXTENSION n. 01/08

to EC-Type Examination Certificate CESI 03 ATEX 226X



Equipment: Three-phase and single-phase asynchronous motors series M3 and three-phase asynchronous motors series M6

Manufacturer: FAGGIOLATI PUMPS S.p.A.

Address: Via Papa Giovanni XXIII, 31 – 62100 Macerata

### Admitted variation

- Update to EN 60079-0 (2006), EN 60079-1 (2004) standards
- Update of nameplate

### Marking

The marking of the equipment shall include the following:



II 2 G Ex d IIB T4

### Description of equipment

The motors series M3 and M6 are provided with integral cable entries in the enclosure and the closing of unused hole is realised by the manufacturer by means of a plug blocked with threads sealant.

The cable gland with its sealing ring shall not exceed the maximum temperature in service of 80°C

### Electrical characteristics

Unchanged

### Constructional characteristics

Unchanged

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 03ATEX115.

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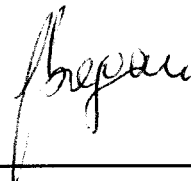
date 13 June 2008 - translation issued the 13 June 2008

prepared Nicoletta Penati

verified Mirko Balaz

approved Fiorenzo Bregani

  
  
**CESI** S.p.A.  
Divisione Energia  
"Area Tecnica Certificazione"  
Il Responsabile



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## EXTENSION n. 01/08

to EC-Type Examination Certificate CESI 03ATEX226X

Report n. EX- A8017216

### Routine tests

The manufacturer shall carry out the routine tests prescribed at par. 27 of the EN 60079-0 (2006).

The manufacturer is exempted from the overpressure test on the motor enclosures series M3 and M6, since they have been submitted to an overpressure test at 23,5 bar, corresponding to 4 times the reference pressure.

### Descriptive documents (prot. EX-A8017218)

- Technical Note No. M21P01 rev. 5 (4 pages)	dated	27 February 2008
- Technical Note No. M20P01 rev. 5 (5 pages)	dated	27 February 2008
- Drawing No. motor series M3 rev. 6	dated	26 February 2008
- Drawing No. Motor series M6 rev. 8	dated	26 February 2008
- Drawing n. TARGA_ATEX rev. 4	dated	27 February 2008
- EC Declaration of Conformity	dated	1 January 2007
- Safety Instructions NETATEX002 (9 pages)	dated	July 2007

One copy of all documents is kept in CESI files.

### Special conditions for safe use (X)

The motor provided with the cables permanently connected, shall have these cables protected against the risk of damage due to mechanical stress. The end connections shall be made according to one of the types of protection indicated in the EN 60079-0 standard and in accordance with the installation rules in force in the site of installation.

### Essential Health and Safety Requirements

The Health and Safety Requirements are assured by compliance with the following Standards:

- EN 60079-0 : 2006: Electrical apparatus for explosive gas atmospheres.  
General requirements
- EN 60079-1 : 2004 Flameproof enclosures "d".

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