EC-TYPE EXAMINATION CERTIFICATE

(1)

(2) Equipment or protective system intended for use in potentially explosive atmospheres - Directive 94/9/EC

(3) EC-Type Examination Certificate Number: **KEMA 01ATEX2244**

(4) Equipment or protective system: **Control units series EFDC**

(5) Manufacturer: **CO.SI.ME. S.R.L.**

(6) Address: **Via Asiago, 51, 20128 Milan, 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) KEMA Quality B.V., notified body number 0344 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 no. 2016570.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014 : 1997 **EN 50018 : 2000** **EN 50281-1-1 : 1998**

(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 according 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 GD EEx d IIC T3 ... T5
T 95 °C ... T 195°C

Arnhem, 9 September 2002
KEMA Quality B.V.

T. Pijpker
Certification Manager

*This Certificate may only be reproduced in its entirety and without any change

(13) # SCHEDULE

(14) ## to EC-Type Examination Certificate KEMA 01ATEX2244

(15) **Description**

The control unit series EFDC consists of an aluminimum body and aluminium cover. The control unit can be provided with several elements consisting of signal lamps with round cemented glass window or pushing and switching devices, which are to be taken from the manufacturer's installation and maintenance instructions.

The relation between the maximum dissipated power and the number of elements on the control unit is shown in the table below.

Code	Maximum dissipated power
EFDC with 1 element	10 W
EFDC with 2 elements	20 W
EFDC with 3 elements	30 W
EFDC with 4 elements	40 W
EFDC/Q with 1 element	10 W

The relation between ambient temperature range, temperature class and maximimum surface temperature "T" is shown in the table below.

Ambient temperature range	Temperature class	Maximum surface temperature "T"
-45°C ... +40°C	T5	95 °C
-45°C ... +60°C	T4	130 °C
-45°C ... +80°C	T3	195 °C

Electrical data

Rated voltage:	500 - 690 Vac, 110 Vdc, 50/60 Hz
Rated current:	10 – 16 A
Rated power:	See table above
Protection degree:	IP 66 according to EN 60529

Installation instructions

The cable and conduit entry devices shall be of a certified flameproof type EEx d, suitable for the conditions of use and correctly installed. With the use of conduit entries a sealing device shall be provided either in the flameproof enclosure or immediately on the entrance thereto.

Routine tests

Each control unit shall be submitted to an overpressure test according to EN 50018, clause 16 using the following test pressures:

- 22,5 bar during 1 minute in case the lower ambient temperature is -20 °C
- 32 bar during 1 minute in case the lower ambient temperature is -45 °C

(13) # SCHEDULE

(14) to EC-Type Examination Certificate KEMA 01ATEX2244

(16) **Report**

KEMA No. 2016570

(17) **Special conditions for safe use**

None

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at (9).

(19) **Test documentation**

	dated
1. Technical Note AC10020TN (3 pages)	08.08.2001
2. Installation and maintenance instructions IU-EFDC	08.08.2001
3. Drawing No. AC10020, Rev. 0	08.08.2001