

EC-TYPE EXAMINATION CERTIFICATE

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

(2) EC-Type Examination Certificate Number: **KEMA 01ATEX2243**

(3) Equipment or protective system: **Terminal boxes type AJB and GWY**

(4) Manufacturer: **CO.SLIME. S.R.L.**

(5) Address: **Via Asiago, 51, 20128 Milan, Italy**

(6) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(7) 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.

(8) The examination and test results are recorded in confidential report no. 2016569.


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

EN 50014 : 1997 **EN 50019 : 2000**
EN 50020 : 2002 **EN 50281-1-1 : 1998**

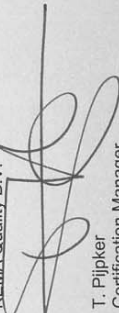
(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(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 e II, T4 ... T6**
EEx Ia IIC T4 ... T6
EEx e [Ia] IIC T4 ... T6
T 80 °C ... T 130 °C

Arnhem, 9 July 2003
KEMA Quality B.V.



T. Pijpker
 Certification Manager

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ACCREDITED BY THE
 DUTCH COUNCIL FOR
 ACCREDITATION

(13)

(14)

(15)

Description

Terminal boxes type AJB, made of aluminium and type GWY, made of stainless steel, for mounting of separately certified terminal blocks for non-intrinsically and/or intrinsically-safe circuits. The area intended for the terminals of intrinsically safe circuits is marked, e.g. in blue colour.

Maximum ambient temperature range: -50 °C to +80 °C.

Protection degree: IP54 (gas) or IP 65 (dust) according to EN 60529

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

Maximum ambient temperature	Temperature class	Maximum surface temperature "T"
+40 °C	T6	80 °C
+60 °C	T5	95 °C
+80 °C	T4	130 °C

The actual allowed maximum ambient temperature may be lower than specified above depending on the maximum operating temperature of the terminals used.

Electrical data

Rated voltage: max. 800 V

Rated current)

Number of conductors)

Nominal conductor cross section) to be taken from the installation

and maintenance instructions

Installation instructions

The degree of protection of at least IP 65 and/or IP 54 according to EN 60529 is only achieved if certified EEx e cable entries and blanking elements are used that are suitable for the application and correctly installed.

Routine tests

Each AJB and GWY terminal box which is ready for use, shall be subjected to routine tests according to EN 50019, clause 7.1 and/or EN 50020, clause 11.2, as applicable, using the applicable test voltage and test time, without breakdown.

(16) **Report**

KEMA No. 2016569

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

None

SCHEDULE

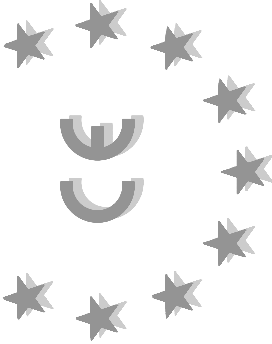
to EC-Type Examination Certificate KEMA 01ATEX2243

- (13)
- (14)
- (18) **Essential Health and Safety Requirements**
Covered by the standards listed at (9).
- (19) **Test documentation**
 - 1. EC-Type Examination Certificate KEMA 01ATEX2243 U
dated 08.08.2001
 - 2. Technical Note AC10021TN (7 pages) 08.08.2001
 - 3. Installation and maintenance instructions IU-AJB (2 pages) 08.08.2001
 - 4. Installation and maintenance instructions IU-GWY (3 pages) 08.08.2001
 - 5. Drawing No. AC10021 08.08.2001
 - 6. Drawing No. AC10024 08.08.2001



CO.SI.ME. Srl Milan - ITALY

Dichiarazione CE di conformità EC Declaration of conformity



Noi
We

CO.SI.ME. Srl
Via Asiago, 51
20128 Milan
ITALY

Dichiariamo sotto la nostra esclusiva responsabilità che i prodotti :
Declare under our sole responsibility that the products :

Custodie morsetti tipo **AJB**
Terminal boxes type **AJB**

ai quali questo attestato si riferisce sono conformi alla Direttiva comunitaria ATEX 94/9/CE
to which this attestation relates are in conformity with the community Directive ATEX 94/9/EC

e sono costruiti in accordo alle seguenti Norme :
and they are manufactured in conformity with the following Standards :

EN 50014 : 1997 +
A1/A2 : 1999
EN 50018 : 2000
EN 50019 : 2000
EN 50020 : 1994
EN 50281-1-1 : 1998

Certificato di esame del prodotto :
Examination certificate of the product :

KEMA 01ATEX2243

Nome dell' Organismo incaricato della sorveglianza ai fini della qualità : **CESI**
Name of Body involved in the production quality system surveillance :

N° dell' Organismo notificato
N° of the notified Body

0722

Milano, 09 July 2003
(luogo e data)

Ing. Massimo Tonetti


(nome e firma o timbratura equivalente della persona autorizzata)
(name and signature or equivalent marking of authorized person)

CO.SI.ME. S.r.l. Via Asiago N° 51 - 20128

CE-AB-PUB

Documento / Document			IU-AJB			
N° Pagine / Sheet N°			1	di / of	2	
REV	0	1	2	3	4	
DATA	08/08/01					
EXE by	M.T.					
CHK by	F.C.					
APP by	M.T.					

Custodie per morsettiere tipo AJB
Terminal boxes AJB type

Assistenza tecnica – Technical support
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Istruzioni di sicurezza

Queste istruzioni devono essere conservate in luogo sicuro per future consultazioni. Per personale esperto e qualificato in accordo alle Leggi nazionali, in accordo alle relative Norme e, dove applicabile, in accordo alla IEC-79-17 per costruzioni elettriche per atmosfere potenzialmente esplosive. Questa costruzione elettrica deve essere installata solo per l'utilizzo per il quale è destinata. Non è ammessa alcuna modifica alla costruzione elettrica. Rispettare le caratteristiche elettriche indicate sulla costruzione.

Safety instructions

These operating instructions must be kept in safe place for later consultations. For skilled and experienced personnel according with the national laws, the relevant standards and, where applicable, according with IEC-79-17 standards for electrical apparatus for potentially explosive atmospheres. This electrical apparatus must be used for its intended purpose. No modifications to the electrical apparatus shall be allowed. Observe the electrical features indicated on the apparatus.

Conformità alle Norme

La costruzione elettrica è conforme a Norme EN 50014, EN 50019, EN 50020, EN 50281-1-1 ed alla Direttiva 94/9/EC. zona 1, zona 2, zona 21 e zona 22 (IEC 79-14 / CEI EN 60079-14).

Conformity with standards

The electrical apparatus meet the requirements of EN 50014, EN 50019, EN 50020, EN 50281-1-1 and Directive 94/9/EC. Electrical apparatus for zone 1, zone 2, zone 21 and zone 22 (IEC 79-14 / CEI EN 60079-14).

Dati Tecnici – Technical data

Modo di protezione : <i>Protection mode :</i>	EEx e II (EN 50014) EEx ia IIC EEx e [ia] IIC	II 2 G D (Directive 94/9/EC)
Grado di protezione : IP 65 (EN 60529) <i>Protection degree :</i>	T6 ÷ T4 (EN 50014) T 80°C ÷ T 130°C (EN 50281-1-1)	
Certificato di esame CE del tipo : <i>EC-type examination certificate :</i>	KEMA 01ATEX2243	Temperatura immagazz. [°C] : -50 ÷ +80 <i>Storage temperature [°C] :</i>
Temperatura ambiente [°C] : -40 ÷ +40 <i>Ambient temperature [°C] :</i>	Temperatura ambiente speciale [°C] : <i>Special ambient temperature [°C] :</i>	-50 ÷ +80 con guarnizione al silicone <i>-50 ÷ +80 with silicon gasket</i>
Tensione nominale [V] : max 800 <i>Rated voltage :</i>	Corrente nominale [A] : vedi tabella <i>Rated current : see table</i>	Coppia di serraggio morsetti [Nm] : <i>Terminals torque :</i> Vedi istruzioni morsetti
Entrate di cavo : <i>Cable entry :</i>	EEx e II (EN 50019) almeno IP 54 <i>EEx e II (EN 50019) at least IP 54</i>	<i>see terminal instructions</i>



4 Installazione

La costruzione elettrica può essere installata solo se esente da danni. Rispettare le Norme nazionali in materia di costruzioni elettriche per atmosfera potenzialmente esplosiva. Utilizzare solo accessori forniti da CO.SI.ME. per l'installazione del componente. Prima di chiudere la custodia, verificare che la guarnizione sia correttamente posizionata nella sede e sia esente da difetti. Sostituire le guarnizioni utilizzando parti di ricambio fornite da CO.SI.ME.

4 Installation

The electrical apparatus shall be installed in absence of damages. Observe the national standards concerning electrical apparatus for potentially explosive atmospheres. Utilize the installation accessories supplied by CO.SI.ME. Before closing the enclosure, check that gasket were right installed inside the slot and free of defects. Replace gasket with spare parts supplied by CO.SI.ME..



5 Manutenzione

Le sostituzioni di parti danneggiate o non funzionanti possono essere effettuate solo da personale esperto e qualificato con parti di ricambio fornite da CO.SI.ME. Non sono ammesse riparazioni della custodia.

5 Maintenance

Replacements of damaged or faulty parts must be carried out by skilled and experienced personnel with spare parts supplied by CO.SI.ME. Repairs on the box are not allowed.



6 Eliminazione / Riciclaggio

L'eliminazione e riciclaggio del prodotto deve essere effettuata in accordo alle norme nazionali in materia di rifiuti.


ATTENZIONE : NON DISPERDERE IL PRODOTTO ED I SUOI COMPONENTI NELL'AMBIENTE.

6 Disposal / Recycling

Disposal and recycling of the product according to national regulations for waste disposal and recycling .
WARNING : DO NOT DISPOSE THE PRODUCT AND THE COMPONENTS IN THE ENVIROMENT.

Documento / Document			IU-AJB		
N° Pagine / Sheet N°			2	di / of	2
REV	0	1	2	3	4
DATA	08/08/01				
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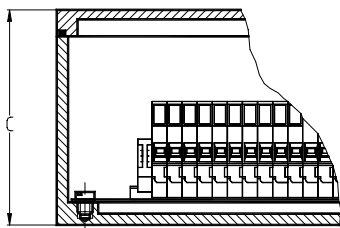
Custodie per morsettiere tipo AJB
Terminal boxes AJB type

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Ogni conduttore in ingresso ed ogni connessione interna deve essere considerata come un conduttore. Ponti di parallelo e morsetti di terra non sono considerati conduttori.
 I conduttori devono avere una temperatura di servizio >70°C (Tamb +40°C), >115°C (Tamb +60°C + Tamb +80°C).
 La massima lunghezza dei conduttori installati deve essere inferiore od uguale alla massima lunghezza lineare interna della custodia.
 I morsetti possono essere montati in combinazioni di sezioni differenti utilizzando proporzionalmente i valori indicati nelle tabelle (vedi esempio).
Every incoming conductor and every internal connection conductor counts as conductor. Bridges and earth conductors are not counted as conductors. Conductors must be suitable for operating temperature >70°C (Tamb+40°C), >115°C (Tamb +60°C + Tamb +80°C). The maximum length of the conductors must be shorter or equal to the maximum internal linear length. Mixed mounting of terminals with different section it's allowed respecting proportionally the values in the tables indicated (see example).

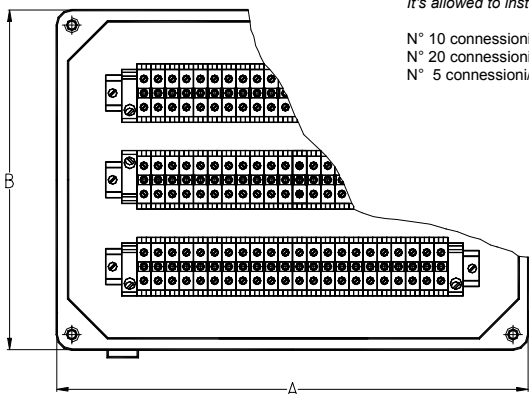


Esempio / Example

		N = numero di connessioni (numero di morsetti = N/2) / N = number of connections (number of terminals = N/2)														
Current [A]	Sezione [mm²] / Section [mm²]															
6	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
10	49															
16	16	32	126													
20	7	19	36													
25		9	20	40												

E' ammesso installare la seguente combinazione, poiché la capacità totale è inferiore a 100 :
It's allowed to install the following combination depending on total capacity minor than 100 :

N° 10 connessioni/connections	2,5 (16A) : capacità/capacity	31,25	%
N° 20 connessioni/connections	4 (20A) : capacità/capacity	55,56	%
N° 5 connessioni/connections	6 (25A) : capacità/capacity	12,50	%
Capacità totale/Total capacity		99,31	%



Codice custodia Code of enclosure	A	B	C	Peso max [Kg] Max Weight [Kg]
AJB 1	146	146	99	1.7
AJB 2	254	180	116	3.2
AJB 3	334	244	147	6.5
AJB 4	409	309	158	11.0

AJB 1		Dimensione/Dimensions [mm] : A=146, B=146, C=99		Spazio profilato inutilizzato/Space of rail not used : 20 mm												
N = numero di connessioni (numero di morsetti = N/2) / N = number of connections (number of terminals = N/2)																
Current [A]	Sezione [mm²] / Section [mm²]															
6	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
10	49															
16	16	32	126													
20	7	19	36													
25		9	20	40												
35			6	15	39											
50				2	12											
63					4											
80																
100																
125																
160																
200																
225																
250																
315																
400																
500																

AJB 2		Dimensione/Dimensions [mm] : A=254, B=180, C=116		Spazio profilato inutilizzato/Space of rail not used : 20 mm												
N = numero di connessioni (numero di morsetti = N/2) / N = number of connections (number of terminals = N/2)																
Current [A]	Sezione [mm²] / Section [mm²]															
6	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
10	62															
16	21	41	160													
20	8	24	46													
25		11	26	50												
35			7	20	49											
50				2	16	41										
63					5	19	67									
80						7	21	75								
100							9	20								
125								8								
160																
200																
225																
250																
315																
400																
500																

AJB 3		Dimensione/Dimensions [mm] : A=334, B=244, C=147		Spazio profilato inutilizzato/Space of rail not used : 20 mm												
N = numero di connessioni (numero di morsetti = N/2) / N = number of connections (number of terminals = N/2)																
Current [A]	Sezione [mm²] / Section [mm²]															
6	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
10	81															
16	27	54	209													
20	11	31	60													
25		15	34	66												
35			10	26	64											
50				3	21	53										
63					7	24	88									
80						9	27	98								
100							11	26								
125								10	26							
160									9							
200																
225																
250																
315																
400																
500																

AJB 4		Dimensione/Dimensions [mm] : A=409, B=309, C=158		Spazio profilato inutilizzato/Space of rail not used : 20 mm												
N = numero di connessioni (numero di morsetti = N/2) / N = number of connections (number of terminals = N/2)																
Current [A]	Sezione [mm²] / Section [mm²]															
6	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
10	94															
16	32	62	243													
20	13	36	70													
25		17	40	77												
35			11	30	75											
50				4	24	62										
63					8	29	102									
80						11	32	114								
100							13	30								
125								12	30							
160									10	27						
200										9	23					
225											3	13				
250												7				
315																
400																
500																