



(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: KEMA 98ATEX2542

(4) Equipment or protective system: Solenoid Valve Operator Type EM-M...

(5) Manufacturer: Asco Controls B.V.

(6) Address: Industrielaan 21, 3925 ZG Scherpenzeel, The Netherlands

(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, 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. 82542.

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

EN 50014 : 1992 + prA1

EN 50019 : 1994

EN50028 : 1987

(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 and construction of the specified equipment or protective system. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment or protective system.

(12) The marking of the equipment or protective system shall include the following:



EEx em II T3 ... T6

Arnhem, 17 February 2000  
by order of the Board of Directors of N.V. KEMA

L.M.J. Vries  
Certification Manager

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



## SCHEDULE

(13)

(14)

to EC-Type Examination Certificate KEMA 98ATEX2542

(15) **Description**

Solenoid Valve Operator Type EM-M... to be used for pushing or pulling valve action with mounted valve. Differences in models concern size, rated voltage and power.

Ambient temperature range -40 °C ... +90 °C.

**Electrical data**

Supply: dc or ac  
 Rated voltage: 6 ... 250 Vdc  
                   6 ... 380 Vac, 50/60 Hz  
 Rated power (maximum): see table

The relation between maximum ambient and medium temperature, rated power and temperature classification is shown in following table:

Temperature class	ambient/medium temperature (max., °C)	Nominal power (max., W) Type EM-M6	Nominal power (max., W) Type EM-MXX	Nominal power (max., W) Type EM-M12 I	Nominal power (max., W) Type EM-M12 II
ac operation only					
T3	40	9,2	11,0	13,6	16,1
	65	7,0	8,4	10,4	12,3
	90	4,3	4,5	6,4	6,6
dc or ac (rectified)					
T3	40	12,5	13,0	16,0	20,1
	65	8,7	9,4	10,9	13,5
	90	4,4	4,6	5,3	7,0
T4	40	7,0	7,7	9,0	11,3
	75	3,7	3,8	4,4	6,0
	90	2,3	2,6	3,0	3,9
T5	40	3,7	3,8	4,4	6,0
	55	2,3	2,6	3,0	3,9
	75	1,0	1,1	1,3	1,6
T6	40	2,3	2,6	3,0	3,9
	60	1,0	1,1	1,3	1,6

## SCHEDULE

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### Installation instructions

1. The degree of protection of at least IP 54 to EN 60529 is only achieved if a certified cable entry is used which is suitable for the application and correctly installed.
2. Under the conditions of ambient temperature and rated power as specified in following table, a special heat resistant cable must be used:

Ambient temperature	Rated power			
	Type EM-M6	Type EM-MXX	Type EM-M12 I	Type EM-M12 II
> 55 °C	> 3,7 W	> 3,8 W	> 4,4 W	> 6,0 W
> 60 °C	> 1,0 W	> 1,1 W	> 1,3 W	> 1,6 W
≥ 70 °C	-	-	-	-

### Routine tests

1. Each encapsulated coil shall be subjected to the routine test according to clause 7.1 of EN 50 028.
2. Each Solenoid Valve Operator shall be subjected to the routine tests according to clauses 7.2 and 7.3 of EN 50 028.

(16) **Report**

KEMA No. 82542

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

None

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

Essential Health and Safety Requirements not covered by standards listed at (9)	
Clause	Subject
1.0.5	Marking
1.0.6 (b)	Instructions

These Essential Health and Safety Requirements are examined and positively judged. The results are laid down in the report listed at (10).

**SCHEDULE**

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to EC-Type Examination Certificate KEMA 98ATEX2542

(19) **Test documentation**

1. Certificate of Conformity KEMA No. Ex-92.C.8386, including amendments 1 and 2

signed

2. Drawing No. 127650, rev. D (2 sheets)

14.02.2000

3. Samples



1 **QUALITY ASSURANCE NOTIFICATION**

2 **Equipment and protective systems intended for use in  
potentially explosive atmospheres Directive 94/9/EC**

3 Notification No. SIRA 02 ATEX M178

4 Equipment, protective system or components as listed in the schedule attached to this notification.

5 Applicant **Asco Joucomatic Limited**

2 Pit Hey Place  
West Pimbo  
Skelmersdale  
Lancashire WN8 9PG

6 Manufacturer **As above**

7 Sira Certification Service being a Notified Body No. 0518 for Annexes IV and VII in accordance with Article 9 of Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, notifies to the applicant that the manufacturer has a quality system which complies with the requirements of Annexes IV & VII of Directive 94/9/EC.

8 This notification is based upon Sira Audit Report No. AX4450 issued on 22 January 2003.  
This notification can be withdrawn if the manufacturer no longer satisfies the requirements of Annexes IV & VII.

Results of periodical re-assessment of the quality system form part of this notification.

9 This notification is valid until 23 February 2006 and can be withdrawn if the manufacturer does not satisfy the quality assurance re-assessment.

10 According to Article 10 [1] of directive 94/9/EC the CE marking shall be followed by the identification number 0518 of Sira Certification Service as the notified body involved in the production control stage.

Chief Executive

Date of Initial Issue: 25 July 2002  
Date of Current Issue: 28 February 2003  
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Certification Service

## QUALITY ASSURANCE NOTIFICATION

### SCHEDULE

**Explosion protection concepts for which the manufacturer has been assessed**

ia, ib	Intrinsic Safety
d	Flameproof
e	Increased Safety
m	Encapsulation
n	Non-Incendive
EN 50281-1-1:1998	Dust Protection

**Equipment categories for which the manufacturer has been assessed**

Electromagnetic Solenoid Valve Actuators  
Sensors, Transducers and Signalling Switches

### ADDENDUM

**Certificates included within the scope of this Notification**

BAS 98ATEX2167X	BAS 98ATEX2168X	BAS 02ATEX2157
KEMA 98ATEX2542	KEMA 98ATEX2544	
LCIE 00ATEX6008X	LCIE 01ATEX6050X	

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