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### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx UL 14.0051X Issue No: 2 Certificate history:

 Issue No. 2 (2019-08-20)

 Status:
 Current

 Issue No. 1 (2018-03-19)

Issue No. 1 (2018-03-19) Issue No. 0 (2014-06-27)

Date of Issue: 2019-08-20

Applicant: Baccara Geva Agriculture Corporation Society Ltd.

Kıbbutz Geva Kvutzat Geva. 18915

Israel

Equipment: Explosion Protected Coil for Magnetic Valve - GEM-BE-1-\*\*

Optional accessory:

Type of Protection: Encapsulation "mb"

Marking:

Ex mb IIC T6 Gb

-20°C ≤ Ta ≤ +50°C

Approved for issue on behalf of the IECEx Erin LaRocco

Certification Body:

Position: Staff Engineer

Signature:

(for printed version)

Date: 2019-08-20

- 1. This certificate and schedule may only be reproduced in full.
- 2. This certificate is not transferable and remains the property of the issuing body.
- 3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

UL LLC 333 Pfingsten Road Northbrook IL 60062-2096 United States of America





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Manufacturer: Baccara Geva Agriculture Corporation Society Ltd.

Kibbutz Geva Kvutzat Geva, 18915

Israel

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

### STANDARDS:

The apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-18: 2014 Explosive atmospheres – Part 18: Equipment protection by encapsulation "m"

Edition:4.0

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

### **TEST & ASSESSMENT REPORTS:**

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

US/UL/ExTR13.0021/02

**Quality Assessment Report:** 

US/UL/QAR12.0006/03



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Schedule

### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

The solenoid type GEM-BE-1-\*\* produces a magnetic field for magnetic valve. The coil and PWB is potted inside an overall polymeric housing.

Please see Annex for additional information.

### SPECIFIC CONDITIONS OF USE: YES as shown below:

- The solenoid must be protected against direct sunlight and other ultraviolet light sources.
- The solenoid shall always be mounted on the valve when the power is connected. When the valve is removed the solenoid shall be disconnected. If power is connected and the solenoid is without valve the temperature can exceed the temperature class.
- Fluid temperature shall be taken into account so the solenoidcoil and valve surface temperature do not exceed 70°C.
- In case of cleaning the solenoid, this must be done with a moist cloth, in order to prevent build-up of electrostatic charges.
- The coil shall be protected against any impact greater than 4 joule.
- The ambient temperature must be within the range of -20°C  $\leq$  Ta  $\leq$  +50°C.



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### DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1 - Upgraded IEC-60079-18, 3rd Ed. to IEC-60079-18, 4th Ed. Product name update. No change in the properties of the product.

Issue 2: Updated operating instructions to include updated Directive and update company name.



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Additional information:

Annex:

Annex to IECEx UL 14.0051X Issue 2.pdf



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### TYPE DESIGNATION

Nomenclature for type: GEM-BE-1-\*\*

Where '-xx' is electrical ratings

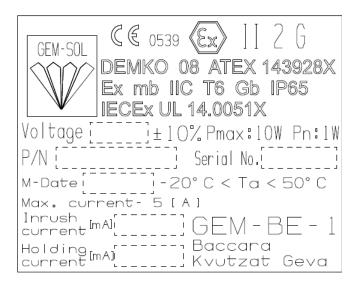
		······································
-21	12 V	AC/DC, inrush 8.6W (720 mA) / holding 0.8W (66 mA)
-31	24 V	AC/DC, inrush 9.6W (400 mA) / holding 0.9W (36 mA)
-41	4 8 V	AC/DC, inrush 9.6W (200 mA) / holding 0.9W (20 mA)
-51	115 V	AC/DC, inrush 9.7W (88 mA) / holding 0.9W (8 mA)
-71	230 V	AC/DC, inrush 9.2W (40 mA) / holding 0.9W (4 mA)

### PARAMETERS RELATING TO THE SAFETY

_**	Rating
-21	12V AC/DC, inrush 8.6W (720 mA) / holding 0.8W (66 mA)
-31	24 V AC/DC, inrush 9.6W (400 mA) / holding 0.9W (36 mA)
-41	48 V AC/DC, inrush 9.6W (200 mA) / holding 0.9W (20 mA)
-51	115 V AC/DC, inrush 9.7W (88 mA) / holding 0.9W (8 mA)
-71	230 V AC/DC, inrush 9.2W (40 mA) / holding 0.9W (4 mA)

### MARKING

Marking has to be readable and indelible; it has to include the following indications:





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### **ROUTINE EXAMINATIONS AND TESTS**

Routine tests according to IEC 60079-18 cl. 9 are required. A visual inspection shall be subjected to each piece followed by a dielectric strength test according to cl. 8.2.4 of IEC 60079-18.