

## Shangyu Groupstar Electric Appliance Co., Ltd.

*January 23, 2013*

RDW rijksdienst voor het wegverkeer  
Certification and Supervision  
Europaweg 205  
2700 AT Zoetermeer  
The Netherlands

Subject for ECE-type approval

Dear Sir:

We hereby apply for type approval according to:

| Function             | ECE approval number | EEC approval number |
|----------------------|---------------------|---------------------|
| Side retro-reflector | E4-3R-023612        | ---                 |

Trade name or trade mark :  **Groupstar** ; **IRING**

Manufacturer's name for type of device : GS-LCL1101A

Name and address of manufacturer : Shangyu Groupstar Electric Appliance Co., Ltd.  
Wufu Industrial Park, Shangyu City,  
Zhejiang Province, P.R. China

We herewith declare that we have not applied and will not apply for approval with another Contracting Party of the ECE for the same type of product. Nor has any other member state granted a corresponding approval.

Sincerely

Signature:



Name: Mr. Xie Xinmiao / General Manager





THE NETHERLANDS  
(N E D E R L A N D)



COMMUNICATION

Concerning <sup>(1)</sup>:

- approval granted
- ~~- approval extended~~
- ~~- approval refused~~
- ~~- approval withdrawn~~
- ~~- production definitely discontinued~~

of a type of retro-reflecting device pursuant to Regulation No. 3

Approval No.: **E4-3R-023612**

Extension No.: **00**

Approval mark:

02 IB



3612

- |    |  |   |   |
|----|--|---|---|
| 1. | Trade name or mark of the device                                 | : | <b>Groupstar</b> ; <b>IRING</b>   |
| 2. | Manufacturer's name for the type of device                       | : | GS-LCL1101A   |
| 3. | Manufacturer's name and address                                  | : | Shangyu Groupstar Electric Appliance Co., Ltd.<br>Wufu Industrial Park, Shangyu City,<br>Zhejiang Province,<br>P.R. China |
| 4. | If applicable, name and address of manufacturer's representative | : | not applicable  |
| 5. | Submitted for approval on  | : | January 23, 2013  |
| 6. | Technical service responsible for conducting approval tests      | : | TÜV Rheinland Kraftfahrt GmbH<br>Technologiezentrum Verkehrssicherheit<br>Am Grauen Stein<br>D-51105 Köln (Poll)          |
| 7. | Date of test report  | : | February 2, 2013  |
| 8. | Number of test report  | : | 87-R3-085/13  |



9. Concise description
- In isolation/~~part of an assembly of devices~~<sup>(1)</sup> : class IB
- Colour of light emitted : ~~white / red~~ / amber<sup>(1)</sup>
- Installation as an integral part of a lamp which is integrated into the body of a vehicle : yes / ~~no~~<sup>(1)</sup>
- Geometric conditions of installation and relating variations, if any : see the attached information folder
10. Position of the approval mark : on the lens
11. Reason(s) for extension (if applicable) : ---
12. Approval : granted / ~~extended / refused / withdrawn~~
13. Place : Zoetermeer
14. Date : 08-FEB-2013
15. Signature :




R.F.R. Clement

16. The following documents, bearing the approval number shown above, are available on request.
- Information document
  - Test report

<sup>(1)</sup> Strike out which does not apply

Application date : January 23, 2013

## 1. Specification data

|  |                           |   |                |
|--|---------------------------|---|----------------|
| Type   |                           | <b>GS-LCL1101A</b>  |                |
| Function   |                           | Side retro-reflector  |                |
| Emitted color                                      |                           | Amber   |                |
| Rated  | Voltage                   | ---   |                |
|  | Wattage                   | -----   |                |
| Applicable Regulation (ECE)                        |                           | R3.02<br>Class IB   |                |
| Number and category of filament lamp(light source) |                           | ---   |                |
| Location of marking                                | Rated Voltage and Wattage | ---   |                |
|  | Trade mark                |  | Marked on Lens |
|  | Approval mark             | Marked on Lens  |                |

## 2. Construction and material

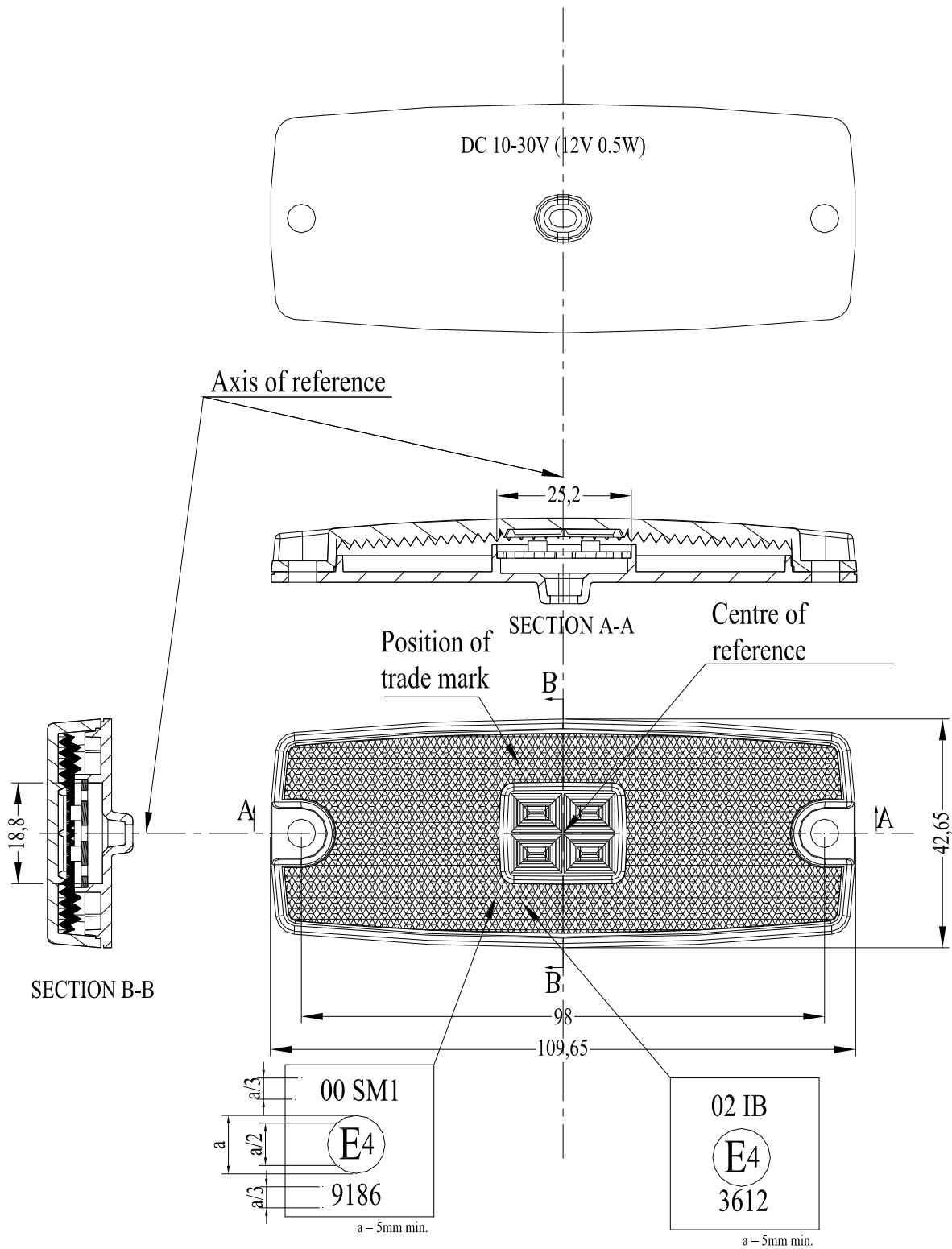
| Construction      | Material                       | Remarks |
|-------------------|--------------------------------|---------|
| Outer lens        | PC                             | Amber   |
| Housing           | ABS                            | -       |
| Electrical wiring | Copper covered with insulation | -       |

3. Name and address of manufacturer : Shangyu Groupstar Electric Appliance Co., Ltd.  
Wufu Industrial Park, Shangyu City,  
Zhejiang Province, P.R. China

4. Name and address of representative of manufacturer : Not applicable

This information document consists of 2 pages.





Manufacturer : Shangyu Groupstar Electric Appliance Co., Ltd.  
Type : GS-LCL1101A



## TEST REPORT

According to ECE-Regulation

**uniform provisions concerning the approval of retro reflecting devices  
for power-driven vehicles and their trailers**

**ECE-R3**

including all amendments until

**series of Amendments:02  
supplement 12**


|                    |       |
|--------------------|-------|
| Previously granted |       |
| ECE - certificate  | : --- |

Structure of report :

0. general information
1. Test object(s) and general test information
2. Test minutes
3. Remarks concerning tested object(s)
4. Appendices
5. Statement of conformity

Manufacturer : Shangyu Groupstar Electric Appliance Co., Ltd.  
 Type : GS-LCL1101A

## 0. General information

- 0.1. Trademark or trade name of the lamp : 
- 0.2. Manufacturer's name for the type of the lamp : GS-LCL1101A
- 0.3. Name and address of the manufacturer : Shangyu Groupstar Electric Appliance Co., Ltd.  
 Wufu Industrial Park, Shangyu City,  
 Zhejiang Province,  
 P.R. China
- 0.4. Name and address of manufacturer's authorized representative : not applicable
- 0.5. No. of information folder : GS-LCL1101A-00  
 date of issue : January 23, 2013  
 date of last amendment : ---

## 1. Test object(s) and general test information

- 1.1. Test object(s)
- identification number : ---
- version : ---
- 1.2. General test information
- 1.2.1. Order issued by (if different from manufacturer) : ---
- 1.2.2. Test object / test vehicle received on : not applicable
- 1.2.3. Test date : February 1, 2013
- 1.2.4. Test site : Automotive Component Testing Center of Ningbo  
 No. 99, Jingu South Road, Yinzhou Investment & Business  
 Incubation, 315104, Ningbo,  
 P.R. China
- 1.2.5. Remark : The results of the test refer exclusively to the object(s)  
 mentioned under point 1.1 of this report.

Manufacturer : Shangyu Groupstar Electric Appliance Co., Ltd.  
 Type : GS-LCL1101A

## 2. Test minutes

- 2.1. Test facilities : The test facilities are in compliance with the requirements of the regulation.
- 2.2. Test results : ~~The type has been examined according to the amendments mentioned in appendix O.~~  
 An actual test of the type was not required. The results of the previous tests are still valid.
- Markings : The trade mark is marked clearly legible and indelible on the lens ~~and on the housing~~ of the lamp.  
 Space for the approval mark and for additional symbols is provided on the lens of the lamp.
- 2.3. General specifications : The retro reflector is designed and made that under normal use their satisfactory operation is ensured and they retain the required characteristics.  
 The components are not capable of being easily dismantled, and the optical unit is not replaceable.  
 The shape and dimension of retro reflector is in accordance with the stated in Annex 5 of the Regulation.  
 The test samples have been tested in the chronological order indicated in Annex 12 of the Regulation, and in accordance with the test procedure stated in Annex 4 of the Regulation.



Manufacturer : Shangyu Groupstar Electric Appliance Co., Ltd.  
 Type : GS-LCL1101A

2.4. Special tests : class IB

| number of Annex | test  | test samples | result of examination | remark            |
|-----------------|---|--------------|-----------------------|-------------------|
| 5               | shape and dimensions                        | all          | complying             |                   |
| 6               | colormetry                                  | all          | complying             |                   |
| 10              | heat  | all          | complying             |                   |
| 7               | photometry                                  | all          | complying             | 20', V=H=0°       |
| 7               | photometry                                  | 6 and 7      | refer to 2.5.         | complete          |
| 8(1.2.)         | moisture and dust exposure                  | 8 and 9      | complying             |                   |
| 8               | motor fuels                                 | 8 and 9      | complying             |                   |
|                 | oils  | 8 and 9      | complying             |                   |
| 4               | colormetry                                  | 8 and 9      | complying             |                   |
|                 | photometry                                  | 8 and 9      | complying             | 20', V=H=0°       |
| 8               | corrosion                                   | ---          | ---                   | not applicable *) |
|                 | abraasive - strength                        | ---          | ---                   |                   |
| 9               | stability of optical properties with ageing | ---          | ---                   | not examined      |
| 11              | colour-fastness                             | ---          | ---                   | not examined      |

\*) Remark : the device does not incorporate any metal component, the rear face of the device is not accessible

Manufacturer : Shangyu Groupstar Electric Appliance Co., Ltd.  
 Type : GS-LCL1101A

2.5. Photometric tests : Results of photometric tests of reflex (retro) reflector, class IB coefficients of luminous intensity (CIL) in accordance with Annex 7 of the Regulation.

| Number of sample | CIL measured [mcd/lux]<br>(20', V=H=0°) | Minimum value required *) |
|------------------|---|---------------------------|
| 1                | 1009                                    | ≥ 750                     |
| 2                | 1027                                    |                           |
| 3                | 1015                                    |                           |
| 4                | 1038                                    |                           |
| 5                | 1026                                    |                           |
| 6                | 1006                                    |                           |
| 7                | 1054                                    |                           |
| 8                | 1016                                    |                           |
| 9                | 1026                                    |                           |
| 10               | 1035                                    |                           |

| distribution of the intensity of the retro reflector [mcd/lux] |      |              |       |       |              |       |       |                  |
|--|------|--------------|-------|-------|--------------|-------|-------|------------------|
|  |      | sample no. 7 |       |       | sample no. 6 |       |       | required min. *) |
| horizontal angle   |      | L20°         | V     | R20°  | L20°         | V     | R20°  |                  |
| vertical angle<br><br>$\alpha=20'$                             | U10° | -            | 833.5 | -     | -            | 798.5 | -     | 500              |
|  | U5°  | 595.8        | -     | 572.6 | 571.3        | -     | 549.1 | 250              |
|  | H    | -            | 1054  | -     | -            | 1006  | -     | 750              |
|  | D5°  | 601.6        | -     | 550.6 | 573.9        | -     | 537.3 | 250              |
|  | D10° | -            | 814.9 | -     | -            | 777.1 | -     | 500              |
| vertical angle<br><br>$\alpha=1°30'$                           | U10° | -            | 62.03 | -     | -            | 58.35 | -     | 7                |
|  | U5°  | 44.35        | -     | 37.94 | 40.70        | -     | 35.23 | 6.25             |
|  | H    | -            | 89.50 | -     | -            | 84.13 | -     | 12.5             |
|  | D5°  | 48.23        | -     | 41.80 | 44.91        | -     | 38.81 | 6.25             |
|  | D10° | -            | 66.68 | -     | -            | 63.62 | -     | 7                |

\*) Remark : minimum requirements for amber retro reflector of class IB.

Manufacturer : Shangyu Groupstar Electric Appliance Co., Ltd.  
Type : GS-LCL1101A



- 2.6. Colour : The requirements regarding the visual test for colorimetric specifications had been meet (Amber).
- 2.7. Explanatory note : not applicable
- 2.8. Variants and componenets : ---

### 3. Remark concerning tested object(s)

All versions of the reflectors as stated in the information document are covered with the tested version(s) and test object(s) respectively.

### 4. Appendices

- 0 List of modifications
- 1 Information folder no. : GS-LCL1101A-00

### 5. Statement of conformity

The information folder and the type described there comply with the requirements in the above mentioned regulation.

The test laboratory is accredited for the above mentioned tests by the RDW, Vehicle Technology and Information Centre, the Netherlands:

Designation Number: RDW-99050014-06.

The test report comprises the pages 1 to 7 (including appendix 0) and shall not be reproduced except in full without the written approval of the test laboratory.

Engineering Center Guangdong, February 2, 2013  
ND/HH

A handwritten signature in black ink, appearing to read 'N. Deng'.

B.S.M.E. N. Deng

Manufacturer : Shangyu Groupstar Electric Appliance Co., Ltd.  
Type : GS-LCL1101A



List of modifications

Appendix 0

Correction of : - --

Modification of : - --

Addition of : - --

Deletion of : - --

