

## II

(Acts whose publication is not obligatory)

## COMMISSION

## COMMISSION DIRECTIVE

of 1 August 1989

adapting to technical progress Council Directive 76/758/EEC on the approximation of the laws of the Member States relating to the end-outline marker lamps, front position (side) lamps, rear position (side) lamps and stop lamps for motor vehicles and their trailers

(89/516/EEC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

HAS ADOPTED THIS DIRECTIVE:

Having regard to the Treaty establishing the European Economic Community,

*Article 1*

Having regard to Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers <sup>(1)</sup>, as last amended by Directive 87/403/EEC <sup>(2)</sup>, and in particular Article 11 thereof,

The list of Annexes and Annexes 0, I, II and III to Directive 76/758/EEC are hereby amended as set out in the Annex to this Directive.

Having regard to Council Directive 76/758/EEC of 27 July 1976 on the approximation of the laws of the Member States relating to the end-outline marker lamps, front position (side) lamps, rear position (side) lamps and stop lamps for motor vehicles and their trailers <sup>(3)</sup>, as last amended by Directive 87/354/EEC <sup>(4)</sup>, and in particular Article 10 thereof,

*Article 2*

Whereas, in the light of experience, it is now possible to simplify the EEC component type-approval mark for lamps of this type when these are grouped together with, combined with or reciprocally incorporated in other lamps, and to amend certain provisions to take account of the technical progress made in the meantime;

1. With effect from 1 January 1990, no Member State may:

(a) — refuse, in respect of a type of motor vehicle, to grant EEC type-approval, to issue the document referred to in the third indent of Article 10 (1) of Directive 70/156/EEC, or to grant national type-approval, or

— prohibit the entry into service of the vehicles,

if the end-outline marker lamps, front position (side) lamps, rear position (side) lamps and stop lamps comply with the provisions of this Directive;

Whereas the measures provided for in this Directive are in accordance with the opinion of the Committee for the Adaptation to Technical Progress of Directives on the Removal of Technical Barriers to Trade in the Motor Vehicles Sector,

(b) — refuse, in respect of a type of end-outline marker lamp, front position (side) lamp, rear position (side) lamp and stop lamp, to grant EEC component type-approval or national type-approval, if these end-outline marker lamps, front position (side) lamps, rear position (side) lamps and stop lamps comply with the provisions of this Directive, or

— prohibit the placing on the market of end-outline marker lamps, front position (side) lamps, rear

<sup>(1)</sup> OJ No L 42, 23. 2. 1970, p. 1.

<sup>(2)</sup> OJ No L 220, 8. 8. 1987, p. 44.

<sup>(3)</sup> OJ No L 262, 27. 9. 1976, p. 54.

<sup>(4)</sup> OJ No L 192, 11. 7. 1987, p. 43.

position (side) lamps and stop lamps which bear the EEC component type-approval mark issued in accordance with the requirements of this Directive.

2. With effect from 1 July 1990 a Member State:

- (a) — shall not issue the document referred to in the third indent of Article 10 (1) of Directive 70/156/EEC in respect of a type of vehicle of which the end-outline marker lamps, front position (side) lamps, rear position (side) lamps and stop lamps do not comply with the provisions of this Directive,
- may refuse to grant national type-approval in respect of a type of vehicle of which the end-outline marker lamps, front position (side) lamps, rear position (side) lamps and stop lamps do not comply with the provisions of this Directive;
- (b) — shall not grant EEC component type-approval in respect of a type of end-outline marker lamp, front position (side) lamp, rear position (side) lamp and stop lamp if the latter does not comply with the provisions of this Directive,
- may refuse to grant national component type-approval in respect of a type of end-outline marker lamp, front position (side) lamp, rear position (side) lamp and stop lamp if the latter does not comply with the provisions of this Directive.

3. With effect from 1 October 1995, Member States may prohibit the entry into service of vehicles of which the end-outline marker lamps, front position (side) lamps, rear position (side) lamps and stop lamps do not comply with the provisions of this Directive and the placing on the market of those lamps which do not bear the component type-approval mark issued in accordance with the requirements of this Directive.

4. By way of derogation from the provisions of 2 (b) above, Member States shall continue to recognize EEC

component type-approval granted for a type of end-outline marker lamp, front position (side) lamp, rear position (side) lamp or stop lamp pursuant to the provisions of Directive 76/758/EEC in the case of devices intended to be mounted on vehicles already in service, and may also grant EEC component type-approval for a type of end-outline marker lamp, front position (side) lamp, rear position (side) lamp or stop lamp pursuant to the provisions of Directive 76/758/EEC provided that such devices are intended to be used as replacement parts for vehicles already in service and it is not technically possible for the said devices to comply with the provisions of this Directive.

*Article 3*

Member States shall bring into force the provisions necessary to comply with this Directive not later than 31 December 1989. They shall forthwith inform the Commission thereof.

The provisions adopted pursuant to the first subparagraph shall make express reference to this Directive.

*Article 4*

This Directive is addressed to the Member States.

Done at Brussels, 1 August 1989.

*For the Commission*  
Martin BANGEMANN  
*Vice-President*

## ANNEX

The list of Annexes is modified as follows:

The text of Annex I is replaced by the following text:

‘— Front position (side) lamps, rear position (side) lamps, stop lamps and end-outline marker lamps; minimum angles required for the light distribution in space’

The text of Annex 0 is modified as follows:

Item 1.4 is deleted:

Items 1.4.1, 1.4.2, 1.4.3, 1.5 and 1.6 are deleted

Insert new items 1.4 and 1.5 as follows:

**1.4. Definition of terms**

The definitions contained in Directive 76/756/EEC relating to:

- light source (for filament lamps),
  - independent lamps,
  - grouped lamps,
  - combined lamps,
  - reciprocally incorporated lamps,
  - device,
  - single-function lamps
  - single lamps
  - two lamps or an even number of lamps,
  - light emitting surface,
  - illuminating surface of a light-signalling device other than a reflex reflector,
  - apparent surface,
  - axis of reference,
  - centre of reference,
- apply to this Directive.

**1.5. Front and rear position (side) lamp, stop lamp and end-outline marker lamp of different types**

“Front and rear position (side) lamp, stop lamp and end-outline marker lamp of different types” means lamps which differ in each said category in such essential respects as:

- the trade name or mark,
- the characteristics of the optical system, (levels of intensity, light distribution angles, type of filament lamp, etc.),
- the system used to reduce illumination at night — in the case of stop lamps with two levels of intensity.’

Item 5.5., read:

‘5.5. Front and rear position (side) lamps which are grouped or combined or reciprocally incorporated may also be used as end-outline marker lamps.’

Items 6 to 9 are replaced by the following items:

**6. INTENSITY OF LIGHT EMITTED**

6.1. In the reference axis, the light emitted by each of the two devices supplied must be of not less than the minimum intensity and of not more than the maximum intensity specified below:

(1)	Minimum intensities cd	Maximum values in cd when used as:		
		Single-function lamp	Single function lamp marked "D" (Annex III item 4.3.6)	Total for the assembly of two lamps (Annex III item 4.3.6)
6.1.1. Front position (side) lamps, front end-outline marker lamp	4	60 (2)	42 (2)	84 (2)
6.1.2. Front position (side) lamps incorporated in headlamp	4	100 (2)	—	—
6.1.3. Rear position (side) lamps, rear end-outline marker lamp	4	12 (2)	8,5 (2)	17 (2)
6.1.4. Stop lamps				
6.1.4.1. with 1 level of intensity	40	100 (2)	70 (2)	140 (2)
6.1.4.2. with 2 levels of intensity				
6.1.4.2.1. by day	130	520 (2)	364 (2)	728 (2)
6.1.4.2.2. by night	30	80 (2)	56 (2)	112 (2)

(1) The installation of the devices referred to above in power-driven vehicles and their trailers is provided for in the Directive concerning the installation of lighting and light-signalling devices (Directive 76/756/EEC).

(2) The total value of maximum intensity for an assembly of two lamps is given by multiplying by 1.4 the value prescribed for a single-function lamp.

When two single-function lamps having the same function, whether identical or not, are grouped in one device such that the projections of the illuminating surfaces of those single-function lamps on a vertical plane perpendicular to the vehicle's median longitudinal plane occupy not less than 60% of the smallest rectangle circumscribing the projections of the said illuminating surfaces, such an assembly shall be deemed to be a single lamp for the purpose of installation of a vehicle. In such a case, each single-function lamp shall comply with the minimum intensity required, the admissible maximum intensity shall not be exceeded by both lamps together (last column of the table).

In the case of a single-function lamp containing more than one light source:

The lamp shall comply with the minimum intensity required when any one light source has failed, and when all light sources are illuminated the maximum intensity specified for a single-function lamp may be exceeded, provided that the single-function lamp is not marked "D" and the maximum intensity specified for an assembly of two lamps (last column of the table) is not exceeded.

- 6.2. Outside the reference axis and within the angular fields defined in the diagrams in Annex I the intensity of the light emitted by each of the two devices supplied must:
- 6.2.1. in each direction corresponding to the points in the light distribution table reproduced in Annex IV, be not less than the product of the minimum specified in paragraph 6.1 above by the percentage specified in the said table for the direction in question;
- 6.2.2. in no direction within the space from which the light-signalling device is visible, exceed the maximum specified in paragraph 6.1 above;
- 6.2.3. however, a luminous intensity of 60 cd shall be permitted for rear position (side) lamps reciprocally incorporated with stop lamps (see paragraph 6.1.3 above) below a plane forming an angle of 5° with and downward from the horizontal plane;
- 6.2.4. Moreover,
- 6.2.4.1. throughout the fields defined in the diagrams in Annex I, the intensity of the light emitted must be not less than 0,05 cd for front and rear position (side) lamps and end-outline marker lamps, not less than 0,3 cd for stop lamps with one level of intensity, and for stop lamps with two levels of intensity 0,3 cd by day and 0,07 cd by night.
- 6.2.4.2. if a rear position (side) lamp is reciprocally incorporated with a stop lamp, the ratio between the luminous intensities actually measured of the two lamps when turned on simultaneously and the intensity of the rear position (side) lamp when turned on alone should be at least 5:1 in the field delimited by the straight horizontal lines passing through  $\pm 5^\circ$  V and the straight vertical lines passing through  $\pm 10^\circ$  H of the light distribution table. Where a stop lamp has two levels of intensity this requirement must be met when the night-time use facility is actuated.
- 6.2.4.3. the provisions of paragraph 2.2 of Annex IV on local variations of intensity must be observed.
- 6.3. the intensities shall be measured while the filament lamp(s) continuously alight. In the case of devices emitting selective-yellow or red light, they shall be measured in coloured light.

- 6.4. In the case of a stop lamp providing two levels of intensity the time that elapses between electrical supply being switched on and the light output measured on the reference axis to reach 90 % of the value measured in accordance with paragraph 6.3 above shall be measured for both the day and the night conditions of use. The time measured for the night conditions of use shall not exceed that measured for the day conditions of use.
- 6.5. Annex IV, to which reference is made in paragraph 6.2.1 above, gives particulars of the methods of measurement to be used.

## 7. TEST PROCEDURE

- 7.1. All measurements shall be made with a white standard filament lamp of the category prescribed for the device, the supply voltage being so regulated as to produce the nominal luminous flux prescribed for that category of lamp.
- 7.2. However, in the case of a stop lamp for which an additional system is used to obtain the night-time intensity, the voltage applied to the system for measuring the night-time intensity shall be that which was applied to the filament lamp for measuring the daytime intensity <sup>(1)</sup>.
- 7.3. Where a rear position (side) lamp is reciprocally incorporated with a dual-intensity stop lamp and is designed to operate permanently with an additional system to regulate the intensity of the light emitted, measurement of the light emitted shall be performed with the same voltage applied to the system as would, if applied to the filament lamp, enable the lamp to produce the prescribed normal luminous flux.
- 7.4. The vertical and horizontal outlines of the illuminating surface of a light-signalling device other than a reflex reflector shall be determined and measured in relation to the centre of reference.

## 8. COLOUR OF LIGHT EMITTED

The colour of the light emitted shall be within the limits of the coordinates prescribed for the colour in question in Annex V to this Directive.

## 9. CONFORMITY OF PRODUCTION

Every device bearing an EEC component type-approval mark must conform to the approved type and comply with the photometric conditions specified in sections 6 and 8. Nevertheless, in the case of a device picked at random from series production, the requirements as to minimum intensity of the light emitted (measured with a standard filament lamp as referred to in section 7) may be limited in each direction to 80 % of the minimum values specified in 6.1 and 6.2.

<sup>(1)</sup> The functioning and installation conditions of these additional systems will be defined by special provisions.'

Annex I is modified as follows:

Title, read:

**'FRONT POSITION (SIDE) LAMPS, REAR POSITION (SIDE) LAMPS, STOP LAMPS AND END-OUTLINE MARKER LAMPS  
MINIMUM ANGLES REQUIRED FOR THE LIGHT DISTRIBUTION IN SPACE (\*)'**

'end outline marker lamps' is to be added after 'front position (side) lamps' and 'rear position (side) lamps' in the titles for the first two diagrams.

Annex II is replaced as follows:

### 'ANNEX II

#### MODEL EEC COMPONENT TYPE-APPROVAL CERTIFICATE

(Maximum format: A 4 (210 × 297 mm))

Name of administration
------------------------

Notification concerning the granting, refusal or withdrawal of EEC component type-approval, or the granting, refusal or withdrawal of an extension of EEC component type-approval for a type of end-outline marker lamp, front position (side) lamp, rear position (side) lamp or stop lamp

Component type-approval No .....

1. Type of lamp	Intended for use in a composition of two lamps
front position (side) lamp	yes/no (*)
rear position (side) lamp	yes/no (*)
stop lamp	yes/no, one/two (*) level(s) of intensity
end-outline marker lamp	yes/no (*)

2. Type and number of incandescent lamps .....
3. Colour of light emitted: red/selective yellow/white (\*) .....
4. Trade name or mark .....
5. Name and address of manufacturer .....
6. If applicable, name and address of manufacturer's authorized representative .....
7. Submitted for EEC component type-approval tests on .....
8. Technical service conducting EEC component type-approval tests .....
9. Date of report issued by that service .....
10. Number of report issued by that service .....
11. Date of granting/refusal/withdrawal of EEC component type-approval (\*) .....
12. Extension of EEC component type-approval to devices emitting a red/selective yellow/white light (\*) ....
13. Date of granting/refusal/withdrawal of the extension of EEC component type-approval (\*) .....
14. Single EEC component type-approval granted on the basis of paragraph 3.3 of Annex III for a lighting and light-signalling device comprising several lamps, and in particular .....
15. Where a rear position (side) lamp is reciprocally incorporated with a dual-intensity stop lamp, state whether a voltage-adapting system is provided, and if so what its characteristics are .....
16. Component type approval granted solely for use as a replacement part on vehicles already in service: yes/no (\*) .....
17. For stop lamps with two levels of intensity, indicate the system used to obtain the night-time intensity (give the main characteristics) .....
18. Date of refusal/withdrawal of single EEC component type-approval .....
19. Place .....
20. Date .....
21. Signature .....
22. The attached drawing No . . . . . shows the geometrical position in which the device is to be mounted on the vehicle and the axis of reference and centre of reference of the device.
23. Remarks .....

(\*) Delete where inapplicable.

Annex III is modified as follows:

Item 1.2, read:

- '1.2. The request for the EEC component type approval of a front position (side) lamp shall state whether that lamp is intended to emit white or selective yellow light, and in the case of an end-outline marker lamp, whether that lamp is intended to emit white or red light.'

Item 1.3, read:

- '1.3. For each type of front position (side) lamp, rear position (side) lamp, stop lamp, and end-outline marker lamp the request shall be accompanied by:'

Item 1.3.2, read:

- '1.3.2. drawings (three copies), in sufficient detail to permit identification of the type of device and showing geometrically the position in which the lamp is to be mounted on the vehicle, the axis of observation to be taken as the axis of reference in the tests (horizontal angle  $H = 0^\circ$ ), the point to be taken as the centre of reference in the said tests, the vertical and horizontal tangents to the illuminating surface and their distances from the centre of reference of the lamp'.

Add the following new item 1.3.3 after item 1.3.2:

- '1.3.3. In the case of a dual-intensity stop lamp, a diagram and statement of the characteristics of the systems providing the two levels of intensity;'.

Former item 1.3.3 becomes item 1.3.4, and the following is added to it:

'In the case of a dual-intensity stop lamp the request must, moreover, be accompanied by the samples of the components making up the system providing the two levels of intensity.'

Item 3.2, read:

- '3.2. This number is no longer assigned to another type of front position (side) lamp, stop lamp or an end-outline marker lamp except where EEC component type-approval is extended to another type of device which only differs in respect of the colour of the light emitted.'

Item 3.3, read:

- '3.3. Where EEC component type-approval is requested for a type of lighting and light-signalling device consisting of a front position (side) lamp, a rear position (side) lamp, a stop lamp or an end-outline marker lamp and other lamps, a single EEC component type-approval number may be granted, provided that the lamp fulfills the requirements of this Directive and that each of the other lamps forming part of the type of lighting and light-signalling device for which EEC component type approval has been requested complies with the separate directive applying thereto.'.....

Item 4.1, read:

- '4.1. All front position (side) lamps, rear position (side) lamps, stop lamps, or end-outline marker lamps conforming to a type that has been component type-approved pursuant to this Directive shall bear an EEC component type-approval mark'.

Item 4.2, read:

- '4.2. This mark shall consist of a rectangle surrounding the lower case letter "e" followed by the distinguishing letter(s) or number of the Member State which has granted the type-approval:
- 1 for Germany,
  - 2 for France,
  - 3 for Italy,
  - 4 for the Netherlands,
  - 6 for Belgium,
  - 9 for Spain,
  - 11 for the United Kingdom,
  - 13 for Luxembourg
  - 18 for Denmark,
  - 21 for Portugal,
  - EL for Greece,
  - IRL for Ireland,

It must also include the EEC component type-approval number which corresponds to the number of the EEC component type-approval certificate issued for the type of device in question (see Annex I), preceded by two figures indicating the sequence number assigned to the most recent major technical amendment to Council Directive 76/758/EEC on the date EEC component type-approval was granted. In this Directive the sequence number is 01.'

Item 4.3.3, read:

- '4.3.3. The letter "S" followed by the figure "1" where the device has one level of intensity, and by the figure "2" when it has two levels of intensity on devices fulfilling the requirements of this Directive in respect of stop lamps.'

Item 4.3.4, read:

- '4.3.4. Depending upon the case the letters "R" and "S 1" or "S 2", separated by a horizontal dash, on devices consisting, at the same time, of a rear position (side) lamp and a stop lamp fulfilling the requirements of this Directive in respect of these lamps';

After item 4.3.5, add the new item 4.3.6 as follows:

- '4.3.6. On lamps which may be used as single-function lamps as well as in an assembly of two lamps, the additional letter "D" on the right side of the symbol mentioned in paragraphs 4.3.1 to 4.3.4.'

Item 4.6, read:

- '4.6. Examples of EEC component type-approval marks and additional symbols are shown in Appendix 1.'

After item 4.7, the following new items 4.7.1 and 4.7.2 are added:

- '4.7.1. This mark may be placed anywhere on lamps that are grouped, combined or reciprocally incorporated provided that:
- 4.7.1.1. it is visible when the lamps have been installed;
  - 4.7.1.2. no light-transmitting component of the grouped, combined or reciprocally incorporated lamps may be removed without the component type-approval mark being removed at the same time.
- 4.7.2. The identification symbol for each lamp corresponding to each Directive pursuant to which component type-approval was granted, together with the two figures referred to in item 4.2, final indent, above and, where necessary, the additional letter "D" shall be entered:
- 4.7.2.1. on the appropriate light-emitting surface; or
  - 4.7.2.2. in a group, such a way that each of the grouped, combined or reciprocally incorporated lamps may be clearly identified'.

After item 4.8 the following new point 4.9 is added:

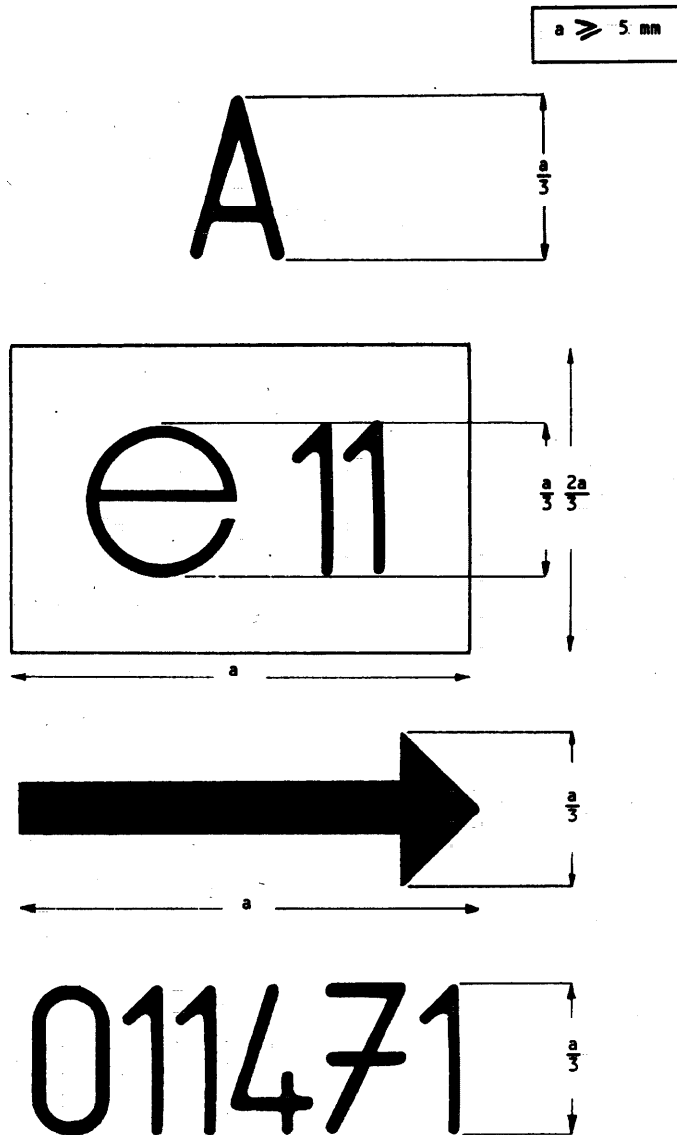
- '4.9. Examples of an EEC component type-approval mark for a lamp that is grouped, combined or reciprocally incorporated with other lamps are shown in Annex II.'

The Appendix is replaced by the following Appendix 1:

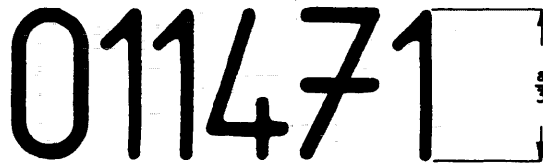
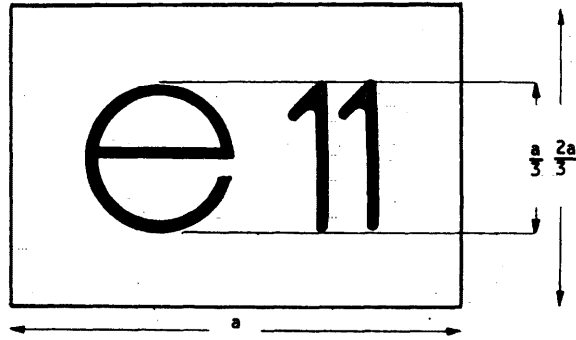
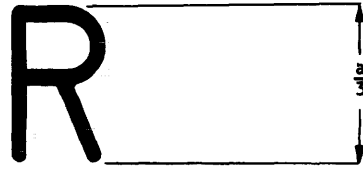


## Appendix 1

## EXAMPLES OF EEC COMPONENT TYPE-APPROVAL MARKS

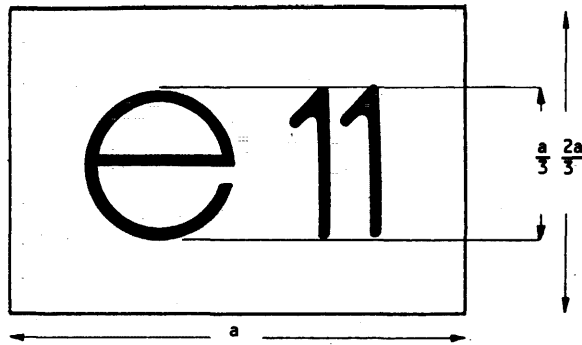
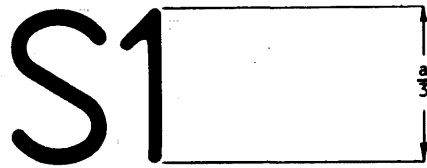


The device bearing the EEC component type-approval mark shown above is a front position (side) lamp, EEC type-approved in the United Kingdom (e 11) under the number 1471. The arrow indicates the side on which the photometric specifications are satisfied up to an angle of 80°H.

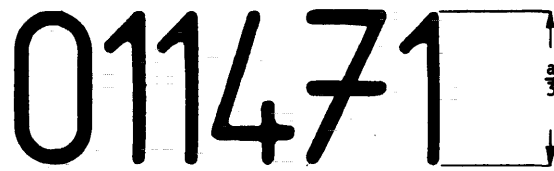


The device bearing the EEC type-approval mark shown above is a rear position (side) lamp, EEC type-approved in the United Kingdom (e 11) under the number 1471. The absence of an arrow means that, both right and left, the photometric specifications are satisfied up to an angle of 80°H.

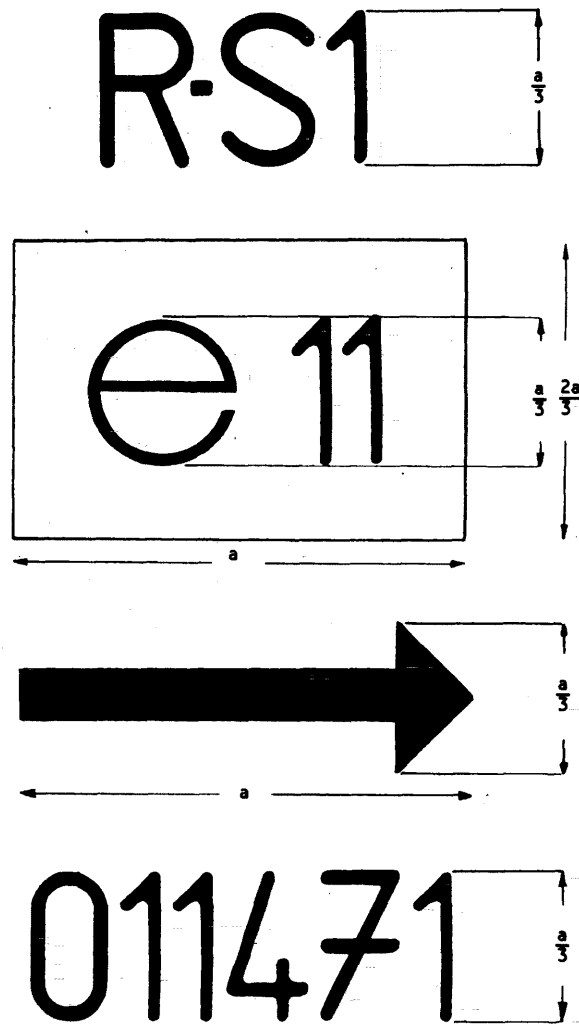
S1



011471



The device bearing the EEC type-approval mark shown above is a stop lamp, EEC type-approved in the United Kingdom (e 11) under the number 1471.



The device bearing the EEC type-approval mark shown above is a device comprising both a rear position (side) lamp and a stop lamp, EEC type-approved in the United Kingdom (e 11) under the number 1471. The arrow means that, on the side to which it points, the photometric specifications are satisfied up to an angle of 80°H.

The following new Appendix 2 is added after Appendix 1:

Appendix 2

EXAMPLES OF SIMPLIFIED MARKING FOR GROUPED, COMBINED OR RECIPROCALLY INCORPORATED LAMPS

Model A

	3333 e 4 →	IA 02	2a 01	R 01
	F 00	AR 00	S1 01	

Model B

	IA 02 F 00	2a 01 AR 00	R 01 S1 01	
	3333 e 4 →			

Model C

<table border="1"> <tr> <td>IA 02</td> <td>2a 01</td> <td>R 01</td> </tr> <tr> <td>F 00</td> <td>AR 00</td> <td>S1 01</td> </tr> </table>	IA 02	2a 01	R 01	F 00	AR 00	S1 01			
IA 02	2a 01	R 01							
F 00	AR 00	S1 01							
3333 e 4 →									

Note: In the above examples the vertical and horizontal lines indicate the general shape of a lamp unit and do not form part of the component type-approval mark. The three examples of EEC component type-approval marks, models A, B and C represent three possible variants of the marking of a light signalling device when two or more lamps are part of the same device.

The EEC component type-approval mark shows that the device was EEC type-approved in the Netherlands (e 4) under the number 3333 and comprises:

- a reflex-reflector of class 1A EEC component type-approved in conformity with Directive 76/757/EEC;
  - a rear direction indicator lamp of category 2a EEC component type-approved in conformity with Directive 76/759/EEC;
  - a red rear position lamp (R) EEC component type-approved in conformity with the present Directive;
  - a rear fog lamp (F) EEC component type-approved in conformity with Directive 77/538/EEC;
  - a reversing lamp (AR) EEC component type-approved in conformity with Directive 77/539/EEC;
  - a stop lamp (S 1) having one level of intensity EEC component type-approved in conformity with the present Directive.
-