COUNCIL DIRECTIVE

of 17 September 1984

on the approximation of the laws of the Member States relating to the permissible sound power level of welding generators

(84/535/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100 thereof,

Having regard to the proposal from the Commission (1),

Having regard to the opinion of the European Parliament (2),

Having regard to the opinion of the Economic and Social Committee (3),

Whereas the 1973 and 1977 action programmes of the European Communities on the environment (4) reflect the importance of the problem of noise nuisance and in particular the need for action to regulate the worst noise sources;

Whereas disparity between the measures already applicable or in preparation in the various Member States concerning the limitation of the sound emission level of welding generators creates unequal conditions of competition and thereby directly affect the functioning of the common market; whereas it is therefore appropriate to proceed in that field with the approximation of laws for which Article 100 of the Treaty provides;

Whereas Council Directive 84/532/EEC of 17 September 1984 on the approximation of the laws of the Member States relating to common provisions for construction plant and equipment (5) laid down, in particular, the procedure for EEC type-examination; whereas it is necessary, pursuant to that Directive, to prescribe the harmonized requirements which each category of equipment must satisfy;

Whereas Council Directive 79/113/EEC of 19 December 1978 on the approximation of the laws of the Member States relating to the measurement of the sound level of construction plant and equipment (6), as amended by Council Directive 81/1051/EEC of 7 December 1981 (7), laid down, in particular, the method which should be used for establishing the acoustic criteria for welding generators;

Whereas owing to the effect of the noise emitted by welding generators on the environment and, more particularly, on human well-being and health, it is necessary to bring about a progressive and appreciable reduction in the permissible sound power level of welding generators;

Whereas it is important to be able to regulate the use of welding generators in certain areas considered to be particularly sensitive so as to limit the nuisance caused by the airborne noise emitted by such welding generators;

Whereas technical provisions must be adapted rapidly to technical advances; whereas it is necessary to this end to provide for the application of the procedure set out in Article 5 of Directive 79/113/EEC,

HAS ADOPTED THIS DIRECTIVE:

Article 1

1. This Directive applies to the permissible sound power level of welding generators used to perform work on civil engineering and building sites.

2. It is a separate Directive within the meaning of Article 3 (2) of Directive 84/532/EEC, hereinafter referred to as the 'framework Directive'.

(1) OJ No C 54, 8. 3. 1976, p. 63.
(2) OJ No C 125, 8. 6. 1976, p. 43.
(3) OJ No C 197, 23. 8. 1976, p. 11.
(4) OJ No C 112, 20. 12. 1973, p. 1 and OJ No C 139, 13. 6. 1977, p. 1.
(5) See page 111 of this Official Journal.
(6) OJ No L 33, 8. 2. 1979, p. 15.
(7) OJ No L 376, 30. 12. 1981, p. 49.

Article 2

For the purposes of this Directive, 'welding generator' means any rotary device which produces a welding current.

Article 3

1. The approved bodies shall issue an EEC type-examination certificate for each type of welding generator for which the sound power level of airborne noise, measured under the conditions set out in Annex I to Directive 79/113/EEC, as amended by Annex I to this Directive, does not exceed the permissible sound power level given in the following table:

Nominal maximum welding current	Permissible sound power level in dB(A)/1 pW as from	
	18 months after notification of the Directive	5 years after notification of the Directive
Not greater than 200 A	104	101
Greater than 200 A	101	100

2. All applications for an EEC type-examination certificate in respect of the permissible sound power level of a welding generator shall be accompanied by an information document conforming to the model shown in Annex II.

3. For each type which it certifies, the approved body shall complete all the sections of the type-examination certificate conforming to the model given in Annex III to the framework Directive.

4. The period of validity of EEC type-examination certificates shall be limited to five years. This may be extended by five years, provided that application is made in the 12 months before the expiry of the first five-year period.

However, at the end of a period of five years from notification of the Directive, EEC type-examination certificates shall cease to be valid unless they were issued for welding generators which comply with the maximum level entering into force on that date.

5. By way of derogation from Article 19 (1) of the framework Directive, the advantages provided for in that Article shall, after a period of 5 1/2 years from notification of the Directive, no longer be available for welding generators supplied with certificates of conformity drawn up on the basis of an EEC type-examination certificate for the figures in the first period; the period of validity shall accordingly be shown on the certificates of conformity concerned.

6. For every welding generator built in conformity with the type certified by EEC type-examination, the manufacturer shall complete a certificate of conformity conforming to the model given in Annex IV to the framework Directive in the columns relating to the EEC type-examination certificate.

7. Each welding generator built in accordance with the type certified by EEC type-examination shall bear a clear and permanent mark indicating the sound power level in dB(A) to 1 pW guaranteed by the manufacturer and determined as laid down in Annex I to Directive 79/113/EEC, as amended by Annex I to this Directive, together with the symbol ε (epsilon). The model for this mark is given in Annex III to this Directive.

Article 4

Member States may take measures to regulate the use of welding generators in areas which they consider sensitive.

Article 5

Verification of the conformity of production models with the type examined, as provided for in Article 12 of the framework Directive, shall be carried out using the technical procedure stipulated in Annex IV.

Article 6

The Council shall act unanimously, within 18 months, on the proposal for a reduction in the noise levels which the Commission will present as soon as possible and no later than five years after the adoption of this Directive.

Article 7

The following shall be adopted in accordance with the procedure laid down in Article 5 of Directive 79/113/EEC:

— the technical procedure in Annex IV for checking the conformity of production models with the type examined,

— the amendments necessary to adapt the requirements of the Annexes to technical progress.

Article 8

Member States shall take all the necessary measures to ensure that welding generators as defined in Article 2 cannot be placed on the market unless they satisfy the provisions of this Directive and of the framework Directive.

Article 9

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive on the expiry of a period of 18 months as of its notification (1) and shall forthwith inform the Commission thereof.

2. Member States shall communicate to the Commission the texts of the provisions of national law which they adopt in the field governed by this Directive.

Article 10

This Directive is addressed to the Member States.

Done at Brussels, 17 September 1984.

For the Council

The President

P. BARRY

(1) This Directive was notified to the Member States on 26 September 1984.

ANNEX I

METHOD OF MEASURING AIRBORNE NOISE EMITTED BY WELDING GENERATORS

SCOPE

This measurement method shall be applicable to welding generators. It specifies the test procedures for use in determining the sound power level of such equipment for the purpose of EEC type-examination and checking as to conformity.

These technical procedures shall comply with the requirements of Annex I to Directive 79/113/EEC.

All the sections in Annex I to Directive 79/113/EEC shall apply to welding generators, subject to the following amendments:

4. CRITERIA TO BE USED FOR EXPRESSING RESULTS

4.1. The acoustic criterion for the environment of welding generators shall be their sound power level.

6. MEASURING CONDITIONS

6.2. **Operation of the sound source during measurement.**

6.2.1. Not applicable.

6.2.2. *Welding speed.*

The welding generator unit shall be used in accordance with the manufacturer's recommendations. It shall operate, as laid down in recommendation ISO/R700-1968, first edition, 1968, at its nominal speed producing the nominal welding current through a resistance.

6.3. **Measuring site.**

The welding generator unit shall be installed on a reflecting plane of concrete or non-porous asphalt. Skid-mounted welding generators shall be placed on supports 0,40 m high, unless otherwise required by the manufacturer's conditions of installation.

6.4.1. *Measuring surface.*

The measuring surface to be used for testing shall be a hemisphere. The centre of the hemisphere shall be the vertical projection on to the reflecting plane of the geometric centre of the welding generator. The radius shall be:

— 4 m, where the greatest dimension of the welding generator to be tested is not more than 1,5 m,

— 10 m, where the greatest dimension of the welding generator to be tested is more than 1,5 m but not more than 4 m,

— 16 m, where the greatest dimension of the welding generator to be tested is more than 4 m.

Table I in Annex I to Directive 79/113/EEC gives the coordinates of the measuring points.

6.4.2.1. The x axis of the set of coordinates, in relation to which the positions of the measuring points are fixed, shall be parallel to the main axis of the welding generator unit.

7. MEASUREMENTS

7.1.1. Only the background noise shall be taken into account for the purpose of corrections.

7.1.5. *Presence of obstacles.*

A visual check in a circular zone with a radius of three times that of the measurement hemisphere and the centre of which coincides with the centre of that hemisphere is adequate to ensure that the provisions of the third subparagraph of section 6.3 of Annex I to Directive 79/113/EEC are complied with.

7.2. **Measurement of the sound pressure level L_{pA}.**

If the sound pressure levels at the measuring points are determined from readings taken from a sonometer, there shall be at least five such readings, taken at regular intervals.

8. USE OF RESULTS

8.2. Not applicable.

8.6.2. In view of 6.3, section 8.6.2 shall not be applicable and C = 0.

ANNEX II

MODEL INFORMATION DOCUMENT FOR A TYPE OF WELDING GENERATOR TO BE SUPPLIED FOR EEC TYPE-EXAMINATION

1. **General**

1.1. Name and address of manufacturer .....

1.2. Name and address of manufacturer's authorized representative (if any) .....

1.3. Make (name of undertaking) .....

1.4. Trade name .....

1.5. Type .....

2. **Dimensions of the welding generator unit**

2.1. Length ..... m

Width ..... m

Height ..... m

Mass ..... kg

2.2. Unit lay-out: skid-mounted, trailer, other [1]

3. **Operating conditions**

3.1. *Operation of the drive motor*

3.1.1. Make and type .....

3.1.2. Energy source: petrol, diesel, electricity, gas [1]

3.1.3. Speed of rotation ..... rpm

3.2. *Operation of the generator*

3.2.1. Make and type .....

3.2.2. Speed of rotation ..... rpm

3.2.3. Nominal welding current ..... A

3.2.4. Maximum nominal current ..... A

4. Attach descriptive trade leaflet, if any.

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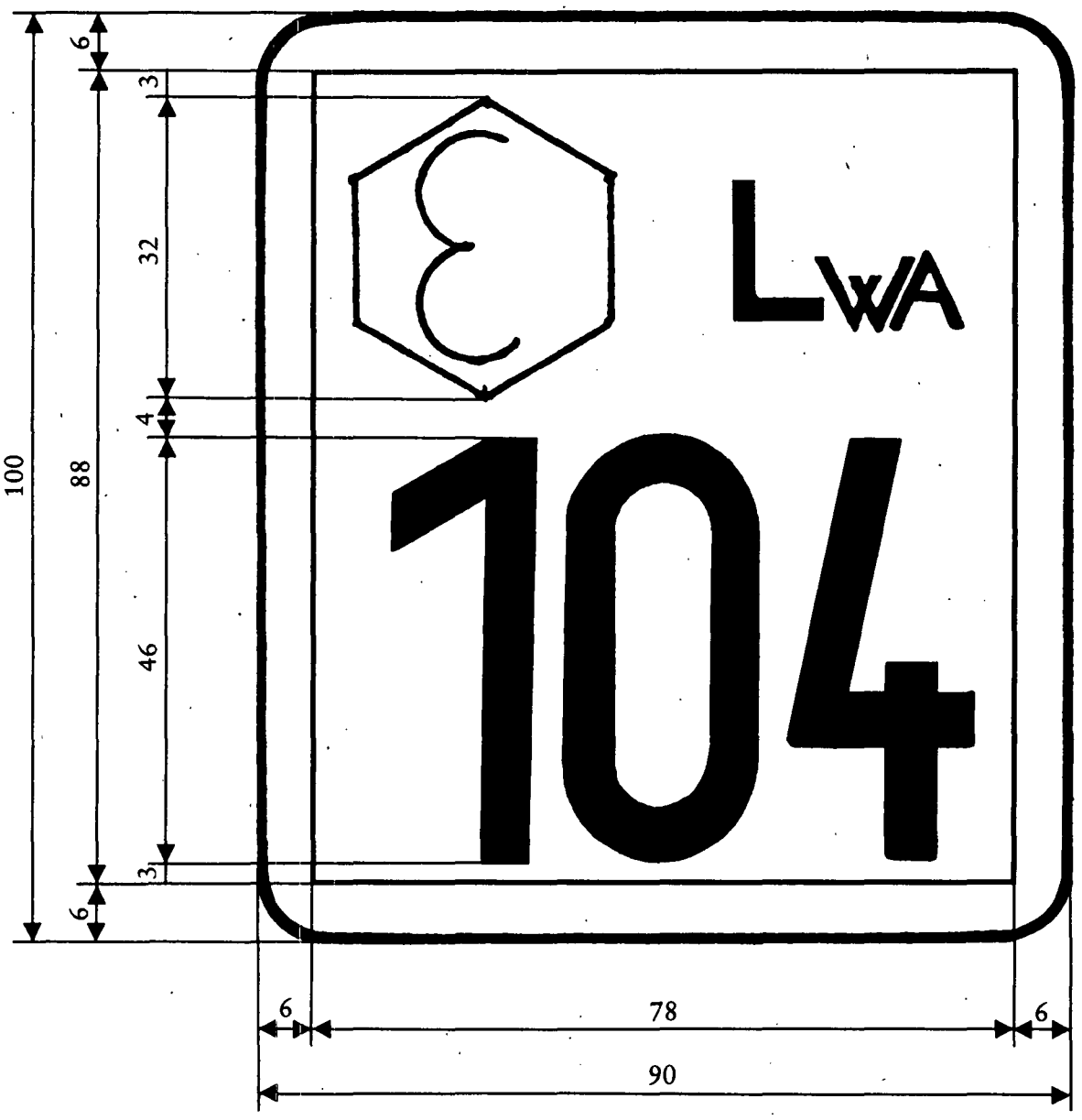
[1] Delete as appropriate.

ANNEX III

MODEL FOR MARK FOR SOUND POWER LEVEL



ANNEX IV

TECHNICAL PROCEDURE FOR CHECKING THE CONFORMITY OF PRODUCTION MODELS WITH THE TYPE EXAMINED

The conformity of production models with the type examined shall, if possible, be verified by spot checks.