

INTERNATIONAL STANDARD

**ISO
7651**

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Commercial vehicles and buses — Mounting dimensions for alternators of types 1, 2 and 3

iTeh STANDARD PREVIEW
*Véhicules utilitaires et autobus — Dimensions de montage des
alternateurs des types 1, 2 et 3*
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ISO 7651:1991

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Reference number
ISO 7651:1991(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 7651 was prepared by Technical Committee ISO/TC 22, *Road vehicles*.

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Commercial vehicles and buses — Mounting dimensions for alternators of types 1, 2 and 3

1 Scope

This International Standard specifies the mounting dimensions necessary for interchangeability of hinge-mounted alternators for reciprocating internal combustion engines in commercial vehicles and buses.

It applies to alternators of types 1, 2 and 3, where type 3 is designed only for mounting on rigid fixtures.

It may be used for other engine applications where no specific standards exist.

cation, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 7467:1987, *Commercial vehicles and buses — Cylindrical shaft ends and hubs for alternators.*

ISO 8854:1988, *Road vehicles — Alternators with regulators — Test methods and general requirements.*

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publi-

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3 Dimensions and tolerances

3.1.2 Alternator, type 2

3.1 Alternators with single hinge arm mounting

3.1.1 Alternator, type 1

An alternator with single hinge arm mounting of type 1 shall have the dimensions shown in figure 1 and table 1.

An alternator with single hinge arm mounting of type 2 shall have the dimensions shown in figure 2 and table 2.

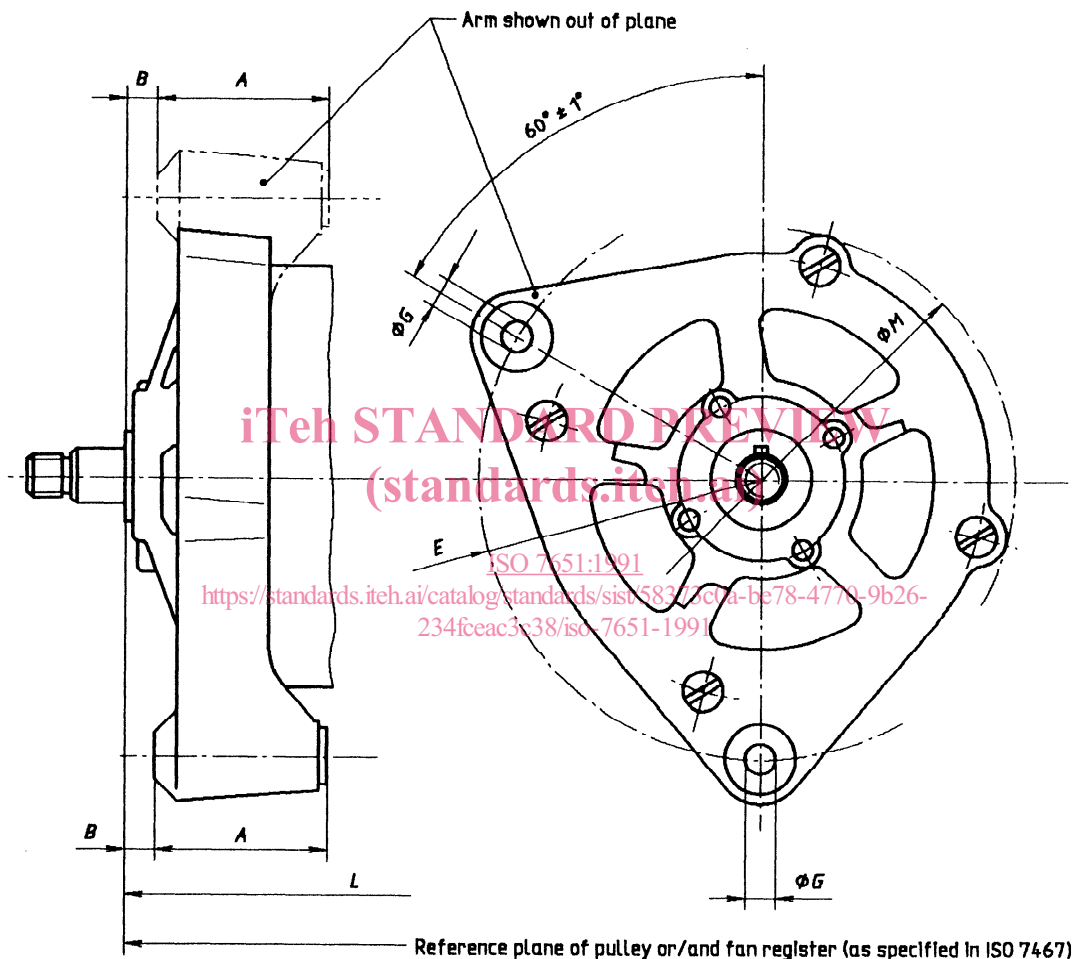


Figure 1 — Alternator, type 1

Table 1

Dimensions in millimetres

Type	A +0,2 -0,1	B ±0,4	E ±0,5	G H12	L ¹⁾ max.	M ¹⁾ max.
1 A	56	9,9	90	10,2	under study	under study

1) L and M are power-related dimensions and will be specified at a later stage.

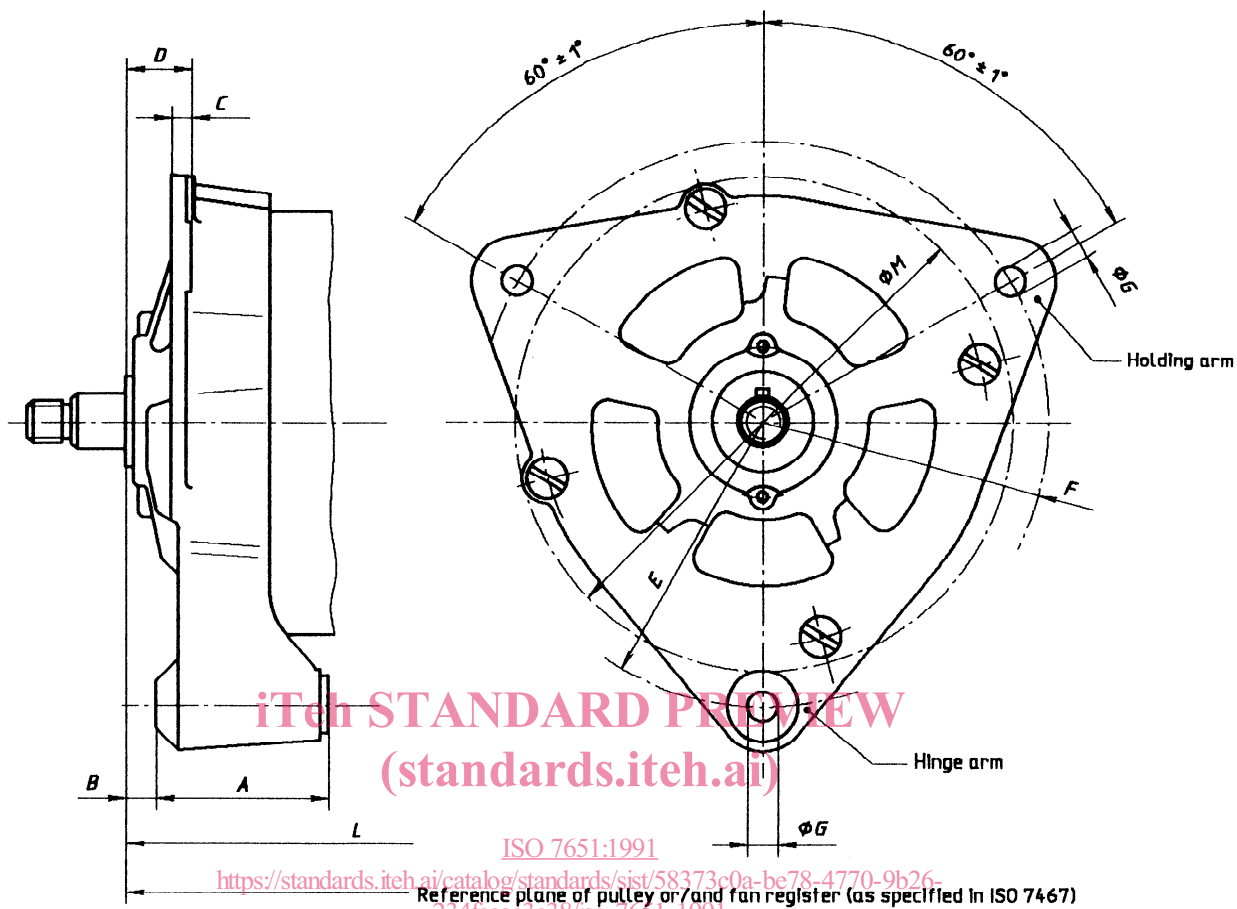


Figure 2 — Alternator, type 2

Table 2

Dimensions in millimetres

Type	A +0,2 -0,1	B ± 0,4	C +0,2 -0,7	D +0,5 -0,4	E ± 0,5	F ± 0,5	G H12	L ¹⁾ max.	M ¹⁾ max.
2 A	80	21	16	32	93	90	10,2	under study	under study
2 B	56 ²⁾				86	86			

1) L and M are power-related dimensions and will be specified at a later stage.

2) Only permitted for narrow mounting conditions and light-weight alternators.

3.2 Alternators with double hinge arm mounting: Alternator, type 3

An alternator with double hinge arm mounting of type 3 shall have the dimensions shown in figure 3 and table 3.

3.3 Other dimensions and specifications

Dimensions and requirements not given in this International Standard are left to the discretion of the manufacturer.

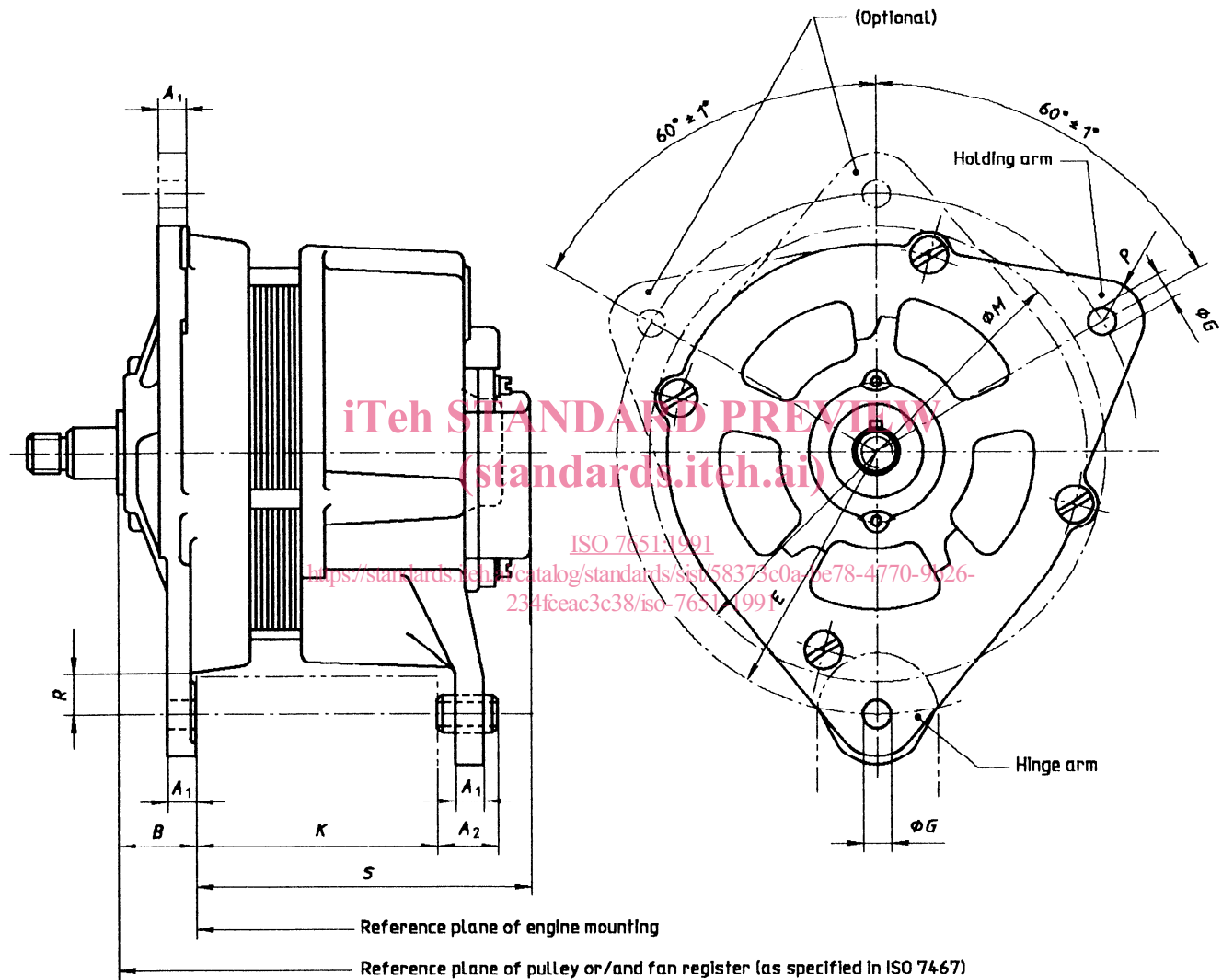


Figure 3 — Alternator, type 3

Table 3

Dimensions in millimetres

Type	A_1 $\pm 0,5$	A_2	B	E $\pm 0,5$	G H13	K ¹⁾	M ²⁾ max.	P max.	R min.	S ²⁾ max.	Approximate rated current ³⁾		
											12 V	24 V	
3 A	16	20 to 30	30 to 40	90	12,2	60,5 to 65	un- der study	20	18	un- der study	up to 110 A	up to 65 A	
3 B				110		85,5 to 90					20	—	between 65 A and 120 A
3 C ⁴⁾				120		85,5 to 90					20	—	between 65 A and 120 A
3 D				125	105,5 to 110	25					—	—	

1) K = space available to accommodate a range of mountings to allow interchangeability.

2) M and S are power-related dimensions and will be specified at a later stage. The value of S max. shall be agreed between engine manufacturer and alternator supplier with the definition of electric power output as stated in ISO 8854.

3) Electrical characteristics are given only for guidance.

4) For additional cooling facilities.

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