INTERNATIONAL STANDARD 2315

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Aircraft — Two- and four-pole sealed electromagnetic relays, 2A and 3A — Clearance and fixing dimensions

Aéronefs — Relais électromagnétiques étanches, bipolaires et tétrapolaires, 2A et 3A — Dimensions d'encombrement et de fixation

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2315 was drawn up by Technical Committee ISO/TC 20, *Aircraft and space vehicles,* and circulated to the Member Bodies in August 1971.

It has been approved by the Member Bodies of the following countries :

Belgium	France	Spain
Brazil	Italy	Turkey
Canada	Netherlands	United Kingdom
Czechoslovakia	Romania	U.S.A.
Egypt, Arab Rep. of	South Africa, Rep. of	U.S.S.R.

The Member Body of the following country expressed disapproval of the document on technical grounds :

Germany

Printed in Switzerland

Aircraft — Two- and four-pole sealed electromagnetic relays, 2A and 3A — Clearance and fixing dimensions

1 SCOPE

This International Standard specifies the clearance and fixing dimensions of two- and four-pole change-over sealed electromagnetic relays with a rated breaking capacity equal to 2A or 3A.

2 FIELD OF APPLICATION

This International Standard applies to the relays currently used for aircraft electrical power systems. The characteristics of these relays are defined in ISO ... .[1)]

3 DIMENSIONS

The dimensions of 2A relays shall be in accordance with figures 1 and 2.

The dimensions of 3A relays shall be in accordance with figures 3 and 4 for two-pole relays and with figures 5 and 6 for four-pole relays.

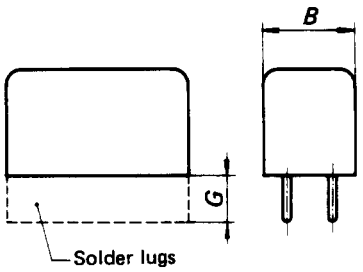
The dimensions of 2A and 3A plug-in base relays shall be in accordance with figure 7.

1) In preparation.

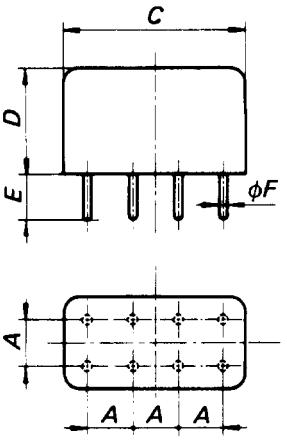
3.1 Two-pole change-over relays 2A

3.1.1 *Unit and connections*

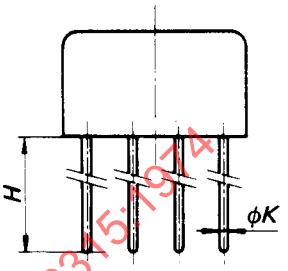
a) Solder lugs



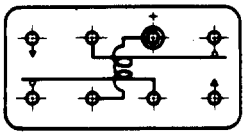
b) Pins



c) Wires



Circuit diagram of the base connections



NOTES

1 All connections shall be shown. In addition, at least one coil connection shall be identified by a coloured bead or any other appropriate marking.

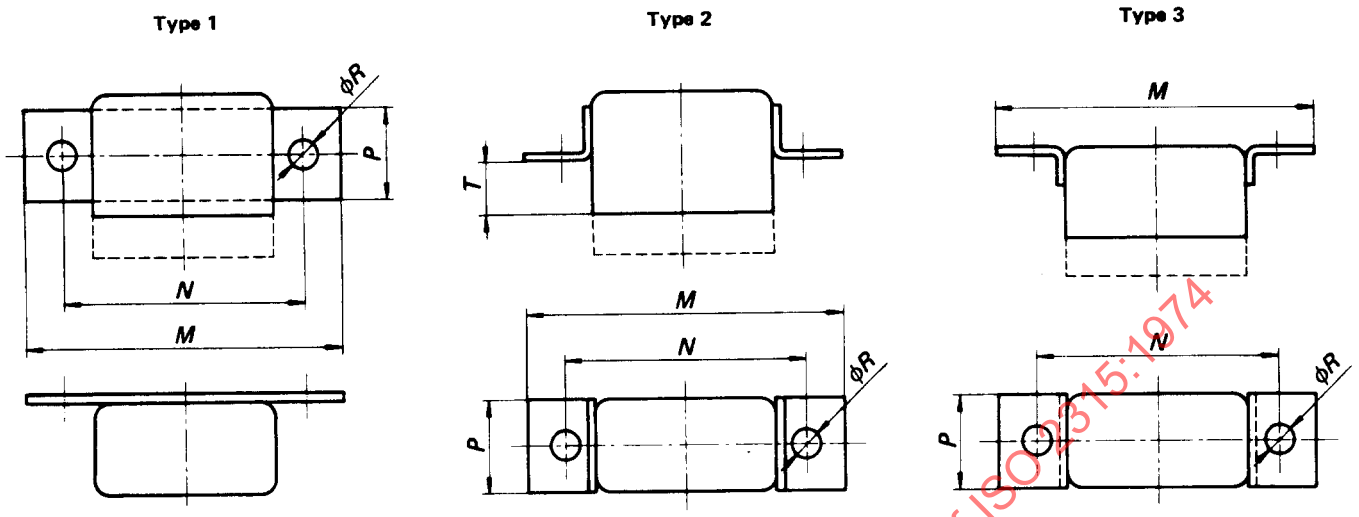
2 Pin type relay units should be provided with mechanical means of polarization, as the preferred method.

3 If it is necessary to indicate the preferred polarity, the sign plus (+) shall be used as indicated on the diagram.

Dimension	mm	in
A	5,08	0.200
B	10,2 max.	0.400 max.
C	20,4 max.	0.800 max.
D	11,7 max.	0.461 max.
E	5,2 ± 0,5	0.205 ± 0.02
F	$0{,}8\ ^{+0{,}01}_{-0{,}07}$	$0.032\ ^{+0.000\ 4}_{-0.003}$
G	$4{,}5\ ^{+0{,}5}_{-1}$	$0.177\ ^{+0.02}_{-0.04}$
H	38 min.	1.5 min.
K	$0{,}8\ ^{+0{,}01}_{-0{,}07}$	$0.032\ ^{+0.000\ 4}_{-0.003}$

FIGURE 1 — **Dimensions of unit and connections**

3.1.2 *Methods of fixing*



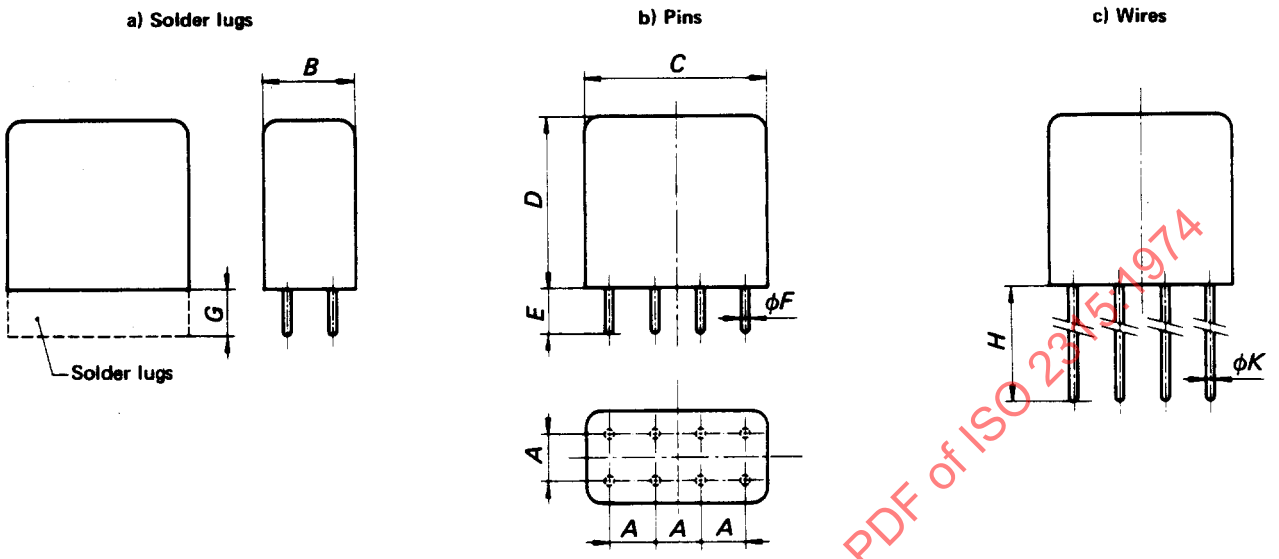
Dimension	mm	in
M	35 max.	1.378 max.
N	27 ± 0,4	1.063 ± 0.016
P	10,2 max.	0.400 max.
R	3,17 ± 0,1	0.125 ± 0.004
*T**	6 ± 0,4	0.236 ± 0.016

* Typical value.

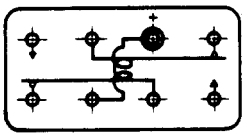
FIGURE 2 – **Dimensions of fixings**

3.2 Two-pole change-over relays 3A

3.2.1 *Unit and connections*



Circuit diagram of the base connections



NOTES

1 All connections shall be shown. In addition, at least one coil connection shall be identified by a coloured bead or any other appropriate marking.

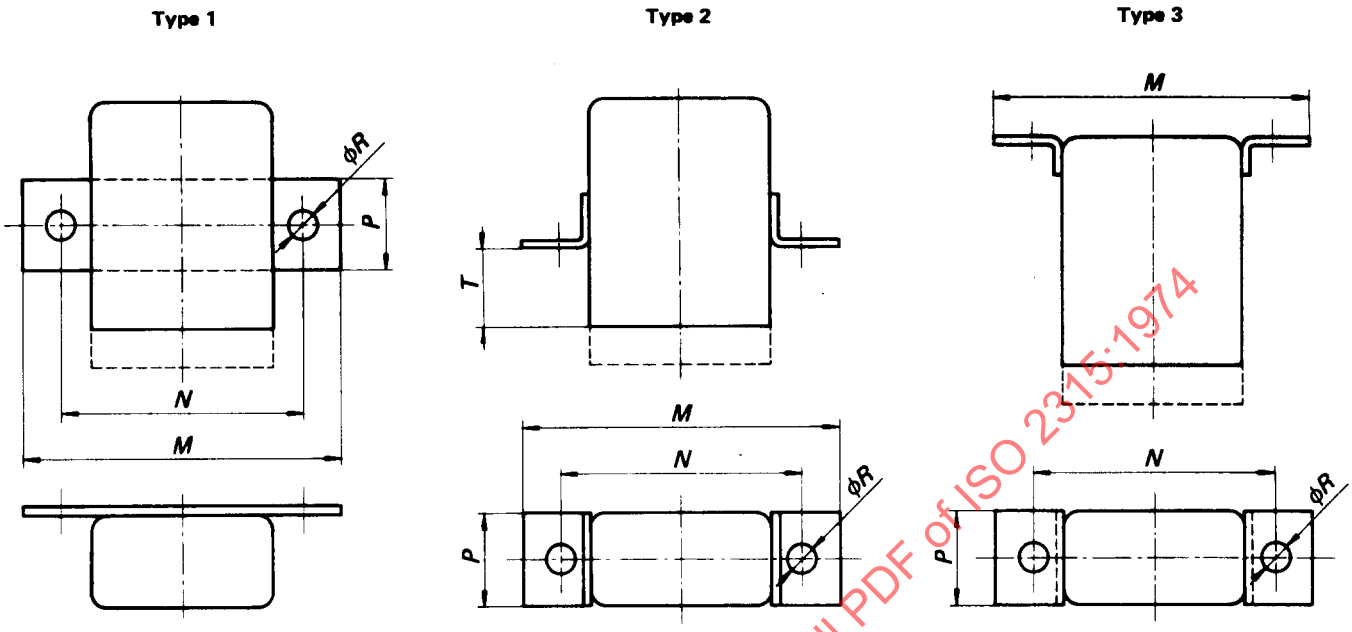
2 Pin type relay units should be provided with mechanical means of polarization, as the preferred method.

3 If it is necessary to indicate the preferred polarity, the sign plus (+) shall be used as indicated on the diagram.

Dimension	mm	in
A	5,08	0.200
B	10,2 max.	0.400 max.
C	20,4 max.	0.800 max.
D	32 max.	1.260 max.
E	5,2 ± 0,5	0.205 ± 0.02
F	$0{,}8\ ^{+0{,}01}_{-0{,}07}$	$0.032\ ^{+0.000\ 4}_{-0.003}$
G	$4{,}5\ ^{+0{,}5}_{-1}$	$0.177\ ^{+0.02}_{-0.04}$
H	38 min.	1.5 min.
K	$0{,}8\ ^{+0{,}01}_{-0{,}07}$	$0.032\ ^{+0.000\ 4}_{-0.003}$

FIGURE 3 – **Dimensions of unit and connections**

3.2.2 *Methods of fixing*



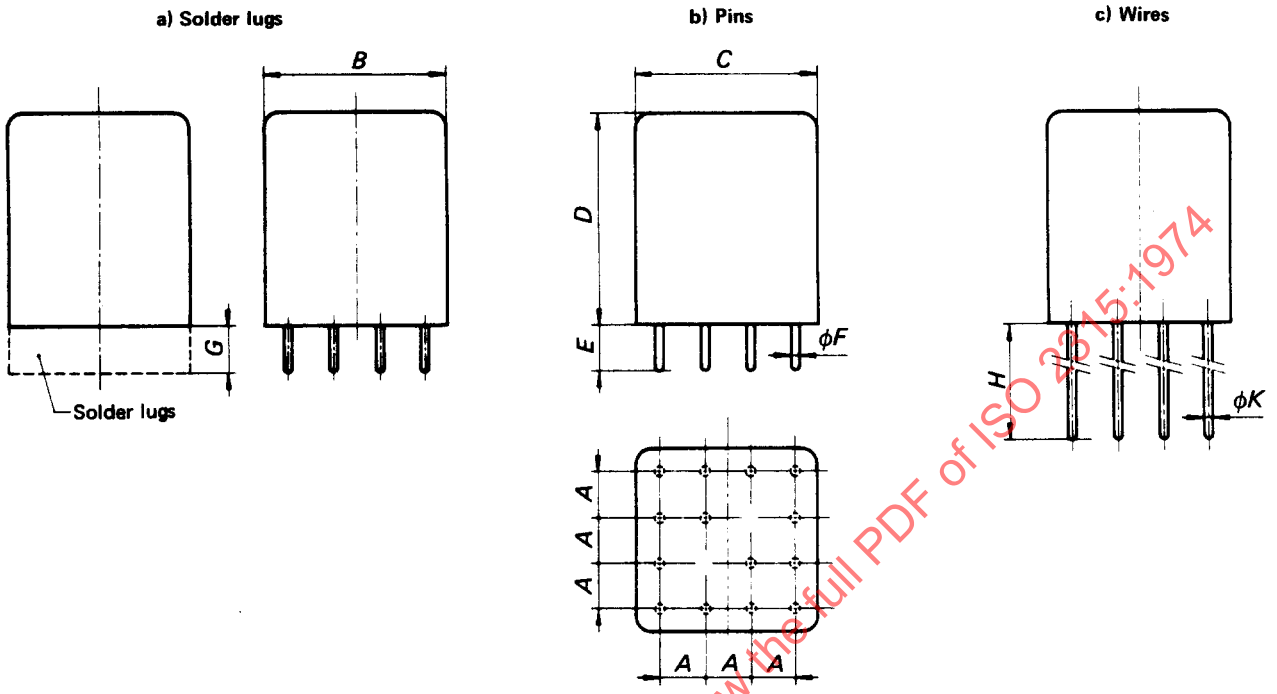
Dimension	mm	in
M	35 max.	1.378 max.
N	27 ± 0,4	1.063 ± 0.016
P	10,2 max.	0.400 max.
R	3,17 ± 0,1	0.125 ± 0.004
*T**	6 ± 0,4	0.236 ± 0.016

* Typical value

FIGURE 4 — **Dimensions of fixings**

3.3 Four-pole change-over relays 3A

3.3.1 *Unit and connections*



NOTES

1 All connections shall be shown. In addition, at least one coil connection shall be identified by a coloured bead or any other appropriate marking.

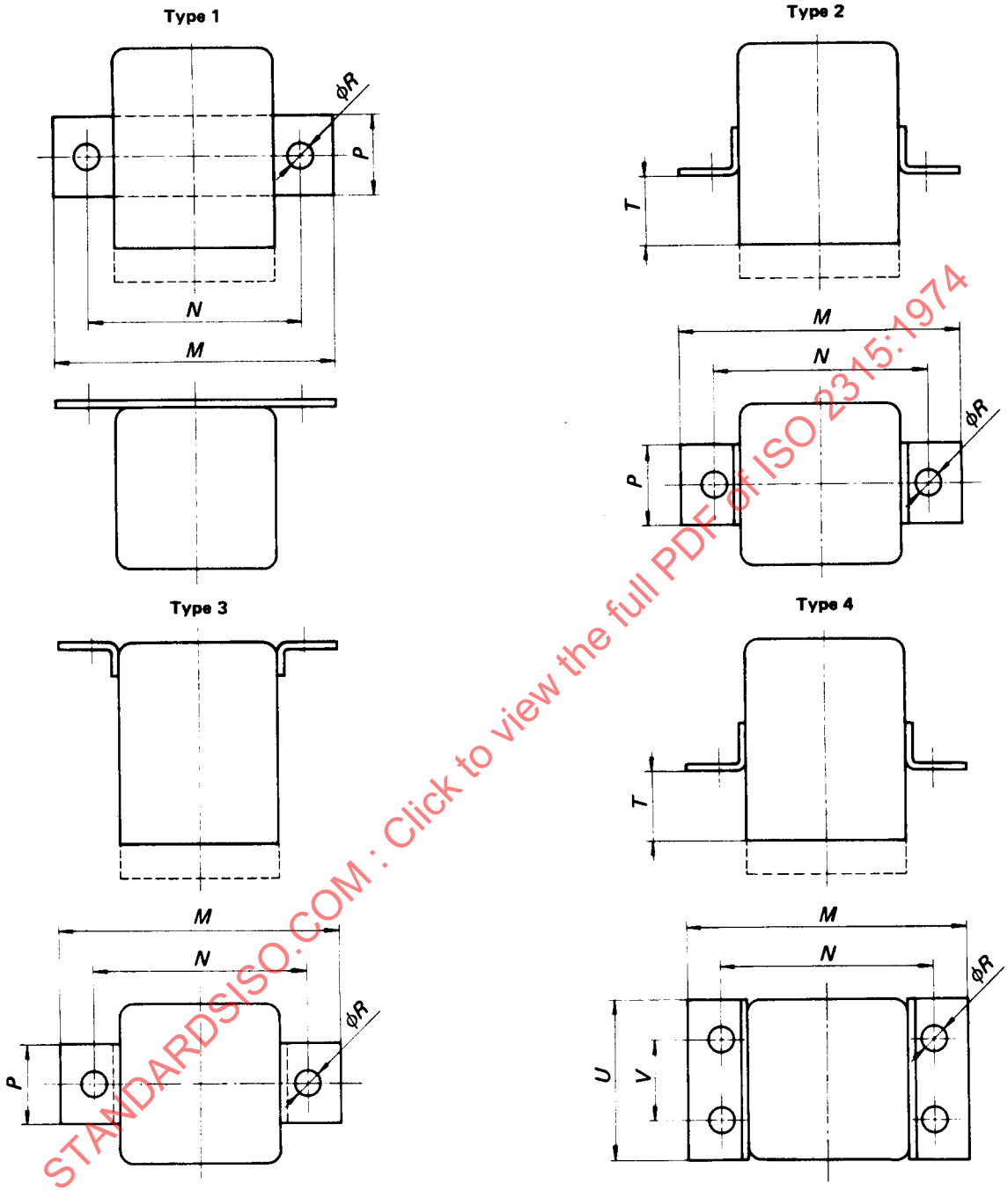
2 Pin type relay units should be provided with mechanical means of polarization, as the preferred method.

3 If it is necessary to indicate the preferred polarity, the sign plus (+) shall be used as indicated on the diagram.

Dimension	mm	in
A	5,08	0.200
B	20,4 max.	0.800 max.
C	20,4 max.	0.800 max.
D	32 max.	1.260 max.
E	5,2 ± 0,5	0.205 ± 0.02
F	$0{,}8\ ^{+0{,}01}_{-0{,}07}$	$0.032\ ^{+0.000\ 4}_{-0.003}$
G	$4{,}5\ ^{+0{,}5}_{-1}$	$0.177\ ^{+0.02}_{-0.04}$
H	38 min.	1.5 min.
K	$0{,}8\ ^{+0{,}01}_{-0{,}07}$	$0.032\ ^{+0.000\ 4}_{-0.003}$

FIGURE 5 – **Dimensions of unit and connections**

3.3.2 *Methods of fixing*



Dimension	mm	in
M	35 max.	1.378 max.
N	27 ± 0,4	1.063 ± 0.016
P	10,2 max.	0.400 max.
R	3,17 ± 0,1	0.125 ± 0.004
*T**	6 ± 0,4	0.236 ± 0.016
U	20,4 max.	0.800 max.
V	10,2 ± 0,1	0.400 ± 0.004

* Typical value

FIGURE 6 – **Dimensions of fixings**