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(IEC 68-2-40 : 1976)

Environmental testing Part 2 : Tests, Test Z/AM : Combined cold/low air pressure tests

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law:

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In the event of any doubts arising as to the contents, the original JIS is to be the final authority.

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Environmental testing Part 2 : Tests, Test Z/AM : Combined cold/low air pressure tests

Foreword as Japanese Industrial Standard

This Japanese Industrial Standard has been prepared based on the 1st edition issued in 1976 of **IEC 68-2-40** *Basic environmental testing procedure. Part 2: Tests, Test Z/AM: Combined cold/low air pressure tests* and Amendment 1 (1983) without changing the technical contents and the structural style of the original standard. But, Amendment is incorporated.

Furthermore, the matters that are indicated by underline (dotted line) do not appear in the original International Standard.

1 Scope and introduction

1.1 Scope and general This Japanese Industrial Standard deals with combined cold (with gradual or rapid change of temperature) and low air pressure tests for both heat-dissipating and non-heat-dissipating specimens (see Sub-clauses **8.2.2** and **8.2.8**).

The object of the test is to determine the ability of components or equipment or other articles to be stored and used under a simultaneous combination of low temperature and low air pressure.

This combined test should normally be used only if the effects of combined environments will not be revealed by subjecting the specimen to single environments. The procedures given in this Standard are limited to the case of specimens which achieve temperature stability during the test procedure.

In the case of testing heat-dissipating specimens, this procedure applies only to the testing of one specimen at a time.

1.2 Low air pressure The test procedure applies to air pressure down to about 1 kPa (10 mbar). At air pressures below 1 kPa (10 mbar), phenomena not taken into account in the design of this test procedure become important.

The relationship between altitude, pressure and temperature has not been indicated in this Standard. Such data should be obtained from special Standards.

1.3 Temperature

1.3.1 The guidance given in the introduction **2** and **3** of **JIS C 0020** : 1995, Tests A: Cold, for the application of tests for non-heat-dissipating specimens versus tests for heat-dissipating specimens shall apply.

Remarks : Non-heat-dissipating specimens are defined as in **4** of **JIS 0010**: 1993 *General and guidance*. The measurement of hottest spot temperature must not be made at low pressure.

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