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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 36257-2018

**General requirements for hybrid remote power controllers of
aircraft**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses the translation method identical to the ISO 10296.1992 General Requirements for Aircraft Hybrid Remote Power Controllers.

Compared with ISO 10296.1992, the editorial changes made by this standard are as follows.

--- Standard name changed to "General requirements for aircraft hybrid remote power controller";

--- Added the corresponding metric specifications to the thread specifications in Table 1 and Table 2.

This standard is proposed and managed by the National Aircraft Standardization Technical Committee (SAC/TC435).

This standard was drafted by Tianjin Aero-mechanical Co., Ltd., China Aviation Comprehensive Technology Research Institute, and the first aircraft design and research institute of aviation industry.

Research institute.

1 Scope

This standard specifies the general requirements for the design and performance of aircraft hybrid remote power controllers. Hybrid remote power controller includes one

An electromagnetic device or an electromagnetic/solid state combination device for a load switch and a solid state control circuit for controlling a load switch device.

In airplanes, remote power controllers are used to switch circuits on and off and to protect the lines when the load is overloaded or short-circuited.

equipment.

The load switch device and the solid state control circuit may be installed in the same device or as two separate connected units.

Note. The hybrid remote power controller interface should be compatible with the solid state power controller as far as practicable.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 35856-2018 Test method for insulation resistance and withstand voltage of aircraft electrical equipment (ISO 2678.1985, IDT)

ISO 7137.1987 Aircraft Aircraft Equipment Environmental Conditions and Test Procedures (Aircraft-Environmental Conditions

Testproceduresforairborneequipment)

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1

Remote power controller remotepowercontroler

A device for providing a power switch is characterized in that, in an on state, a current input to a load terminal has a low current impedance and is in an off state

At this time, the current impedance from the power input terminal to the load terminal is high.

Note 1. The power switch state is usually consistent with the latest control commands.

Note 2. The remote power controller will transition to the off state and need to be reset when an electrical overload or other specified condition is detected, whether or not a control command is applied.

Operation will clear the trip condition. The trip hold function is to prevent the remote power controller from remaining on during an overload trip condition.

Note 3. The power switch status is indicated by the remote power controller's indication signal.

Note 4. The remote power controller can be either a solid state power controller or a hybrid remote power controller.

3.2

Hybrid remote power controller hybridremotepowercontroler

A combined device consisting of an electromagnetic device for load switching or an electromagnetic/solid state combination device and a solid state control circuit for load switching

control.

Note. The load switch device and the solid state control circuit can be installed in the same device, or as two separate connected units.

3.3

Trip keep tripfree

When the remote power controller trips due to an overload or short circuit, the remote power controller remains tripped unless a reset signal is applied

A feature of the state.