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

GB/T 30205-2013

**General requirements for solid-state remote power controller of
aircraft**

(English Translation)

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Foreword

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

This standard uses redrafted law revision of international standards ISO 8816:1993 "Aircraft solid state remote power controllers - General requirements begging".

And ISO 8816:1993 as compared to, technical amendments made by this standard are as follows.

a) on normative references, this standard has been adjusted technical differences, in order to adapt our technical conditions, the adjusted situation Focus is reflected in the status of Chapter 2, "Normative references", the specific adjustments are as follows.

--- Using GB/T 2900.17, GB/T 2900.63 and GB/T 2900.64 instead of IEC 50 (446).1990 (GB/T 2900.17-2009 portion reference IEC/TC1/2033/CDV documentation. "International Electrotechnical Vocabulary Chapter 447 Chapter. Measuring relays ", GB/T 2900.63-2003 identical with IEC 60050-444:2002, GB/T 2900.64-2003 identical with IEC 60050. 445.2002);

--- Increasing the ISO 263. 1973.

b) the ISO 8816. "less than 10% to reach its steady state value of" 3.11 in 1993 "on time" is defined in the amended to "reach its steady State value of the 90% ", is consistent with Figure 1.

c) Remove the ISO 8816:1993 in 8.3.2 "stable baking", the pilot project is to select an item on our products not currently use.

This standard is made editorial changes as follows.

- a) increasing the number of formulas;
- b) modify the scope of the standard, and removed the provision note (see Chapter 1);
- c) The ISO 7137:1992 change to ISO 7137:1995 (see Chapter 2);
- d) Remove the 4.3, 4.4, Chapter 5, Chapter 8, section 8.3.8 suspension, and renumber the provisions;
- e) Remove the 8.3 "test methods" oscilloscope numbers CH1, CH2, the figure is not marked.

The standard proposed by China Aviation Industry Corporation.

This standard by the National Standardization Technical Committee on Aircraft (SAC/TC435) centralized.

This standard was drafted. Tianjin Aviation Electrical Co., Ltd., China Aviation Integrated Technical Institute.

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Aircraft state remote power controllers General requirements

1 Scope

This standard specifies the state remote power controllers used in aircraft power supply system (hereinafter referred to as power controller) and of universal design Energy requirements. Power controller from the solid state switching devices and related solid-state circuit, complete protection, control and drive signals to provide status information and other functions.

This standard applies to aircraft development state remote power controller.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 2900.17 Electrotechnical terminology measure relay GB/T 2900.63 Electrotechnical term basis relays (IEC 60050-444:2002, IDT) GB/T 2900.64 Electrotechnical terminology with or without time relay (IEC 60050-445:2002, IDT) ISO 263. 1973 ISO inch screw threads, bolts and nuts in general design and selection (ISO inchscrewthreads-Generalplanandselectionforscrews, boltsandnuts) ISO 2678. 1985 Aircraft Equipment Environmental testing for electrical insulation resistance and high voltage test equipment (Environmentaltestsforair-craftequipment-Insulationresistanceandhighvoltagetestsforelectric

alequipment) ISO 3389 Aircraft flexible coaxial audio specifications and electrical characteristics (Aircraft-radiofrequencyflexible coaxialcables-dimensionsandelectricalcharacteristics) ISO 7137:1995 aircraft airborne equipment Environmental conditions and testing methods (Aircraft-Environmentalconditionsand testproceduresforairborneequipment) (using EUROCAE/ED-14C and RTCA/DO-160C)

3 Terms and Definitions

GB/T 2900.17, GB/T 2900.63 and GB/T 2900.64 define the following terms and definitions apply to this document.

Remote power controller remotepowercontroler A load-side end to the ON state from the power present a low impedance, in the off state presents a high impedance when the power switching device.

Note 1: The power switch status and the last state of the power applied to a controller command signals coincide.

Note 2: When detected electrical overload or other provisions of the state, the power controller switches to the off state. After the reset operation will end the trip state. Free jump Shutter function can be prevented to maintain the on-state overload situations.

Note 3: The power switch state by the power controller indicates the signal indicator.

Note 4: The remote power controller can be a solid-state or hybrid circuits.

3.1.1

Solid state remote power controllers - solid-stateremotepowercontroler Completely solid state remote power controller technology.