

# JIS

**JAPANESE INDUSTRIAL STANDARD**

**Synchros**

**JIS C 4906—1991**

**Translated and Published**

**by**

**Japanese Standards Association**

**In the event of any doubt arising,  
the original Standard in Japanese is to be final authority.**

## 1. Scope

This Japanese Industrial Standard specifies synchros to be used in circuits, at a frequency of 50, 60 Hz, or 50/60 Hz, at an a.c. voltage of 250 V or less, for the purpose of transmitting and indicating angular signals.

Remarks 1. The following Standards are cited in this Standard:

JIS C 0911-Vibration Testing Procedure for Electric  
Machines and Equipment

JIS C 0912-Shock Testing Procedure for Electric Machines  
and Equipment

JIS C 3306-Polyvinyl Chloride Insulated Flexible Cords

2. The units and numerical values given in { } in this Standard are based on the traditional unit system and are appended for informative reference.

## 2. Definitions

For the purposes of this Standard, the following principal definitions apply.

- (1) synchro A kind of analog converter between electrical and mechanical energies relating to the angle of rotation, namely to convert, by electromagnetic induction, a rotor angular position into an electric signal that is a function of the rotor angular position, or to make reverse conversion.
- (2) torque synchro A synchro used for obtaining mechanical output to operate a mechanical apparatus. This includes a synchro torque transmitter, synchro torque receiver, synchro torque differential transmitter, and synchro torque differential receiver.
- (3) control synchro A synchro used for obtaining an electric signal to control a mechanical apparatus. This includes a synchro control transmitter, synchro control differential transmitter, and synchro control transformer.
- (4) synchro torque transmitter A torque synchro to transmit an electric signal corresponding to the angular displacement.
- (5) synchro torque receiver A torque synchro to receive an electric signal from the synchro torque transmitter and to convert it into an angular displacement corresponding to the electric signal.
- (6) synchro torque differential transmitter A torque synchro that is connected to a synchro torque transmitter and transmits an electric signal corresponding to the sum or difference of angular displacements of the above transmitter and this machine.