

Synchro, Torque Receiver Transmitter, Type 37TRX6A

FSC 5990

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# SAE AS20708/74

This specification is approved for use by all Departments and Agencies of the Department of Defense. The requirements for acquiring the Synchros described herein shall consist of this specification and the latest issue of MIL-S-20708.

TABLE I. Requirements.

Requirement	Value	Unit	Tolerance
Frequency	60	Hz	±1%
Primary Voltage	115	volts	±1%
Primary Current	830.0	milliamps	maximum
Primary Power	9.25	watts	maximum
Impedance:			
Z <sub>ss</sub>	7.0–10.0	ohms	min.–max.
Impedance Angle:			
Z <sub>ss</sub>	30.0–40.0	degrees	min.–max.
Transformation Ratio	0.783	—	±2%
Phase Shift (Lead)	3.5	degrees	maximum
Electrical Error	10.0	minutes	maximum
Receiver Error	36.0	minutes	maximum
Null Voltage:			
Total	170.0	millivolts	maximum
Fundamental	35.0	millivolts	maximum
Synchronizing Time:			
30° ±2°	1.0	seconds	maximum
Synchronizing Time:			
177° ±2°	2.0	seconds	maximum
Torque Gradient.	0.90	ounce–inches per degree	minimum
Radial Play	0.0008	inches	maximum
End Play	0.0030	inches	±0.0020
Temperature Rise	35.0	degrees (C)	maximum
Variation of Voltage (+10%) and Freq. (–5%)	18.0	watts	maximum

This unit shall not be subjected to the altitude requirements of MIL-S-20708.