



AEROSPACE STANDARD	AS20708™/66	REV. B
	Issued 1997-07 Revised 2011-07 Stabilized 2017-04 Superseding AS20708/66A	
Synchro, Torque Receiver Transmitter, Type 31TRX6A FSC 5990		

RATIONALE

This document has been determined to contain basic and stable technology which is not dynamic in nature.

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TABLE 1 – REQUIREMENTS

Requirement	Value	Unit	Tolerance
Frequency	60	Hz	±1%
Primary Voltage	115	volts	±1%
Primary Current	440.0	milliamps	maximum
Primary Power	6.6	watts	maximum
Impedance:			
Z _{ss}	24.0-33.0	ohms	min.-max.
Impedance Angle:			
Z _{ss}	16.0-24.0	degrees	min.-max.
Transformation Ratio	0.783	-----	±2%
Phase Shift (Lead)	6.5	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	0.40	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%)	9.4	watts	maximum

This unit shall not be subjected to the altitude requirements of SAE AS20708.

TABLE 2 – MILITARY PART NUMBER VARIANT CHARACTERISTICS

Military Part No. <u>1</u> /	A ± .010	B ± .010	G Maximum	Shaft Style	Terminal End	U + .0000 - .0002
M20708/66-01A	.700	.730	3.380	Splined	Terminal Board	.2405

1/ Military Part number M20708/66-01A shall be the NATO standard.

1/ The suffix letter following the numerical dash number corresponds to the latest modification letter in the type designation.