



## ELECTRICAL / COOLING / MECHANICAL DATA HARRIS 3DX50 - 50 kW AM TRANSMITTER

Unless otherwise noted, all table values referenced to 50kW output power + 100% sine tone modulation. Values are typical.

PARAMETER NAME	VALUE					
<b>ELECTRICAL</b>						
Nominal Carrier Output Power	50 kW					
FCC Type-notified Carrier Output Power Range	10 kW – 55 kW					
Max Modulation Factor	100%					
Max Asymmetrical Positive Peak Modulation Factor	145% at 55 kW carrier					
Power Consumption	86 kW at 50 kW carrier and 100% sine tone modulation					
AC Power Factor	0.97					
Overall Efficiency, AC Input to RF Output	87% Typical					
AC Mains Configuration	Three phase, 3-Wire Closed Delta or WYE plus safety ground			Three phase 4-Wire WYE plus safety ground		
AC Input Voltage	460	480	500	380	400	415
AC Fuse Size (Notes 1,2)	175A	175A	175A	200A	200A	200A
Possible AC Conductor Size, #THHN wire (Note 3)	3/0	3/0	3/0	4/0	4/0	4/08
Line Amps at Nominal Output	135	128	121	160	153	147
AC Entrances	Right rear corner of the left hand (Power Supply) cabinet top.					
Grounding/earthing	Grounding block on the Power Supply Cabinet base near the right corner. Use 2 inch (5 cm) wide copper strap of .020 in (5 mm) thick soft copper.					
Recommended Automatic Voltage Regulator, if used	Due to the wide variance in site requirements, AC mains configurations and available options, please consult with the Harris factory for assistance in selecting the correct unit that will satisfy specific site and user requirements.					
<b>COOLING</b>						
	60Hz Mains			50Hz Mains		
Cooling Air Volume	3800 CFM (107.6 CMM)			>3167 CFM (89.7 CMM)		
RF Cabinet Air Outlet Size	PA section 21.3 in (54.1 cm) X 14.0 in (35.6 cm) PS section 17.5 in (44.5 cm) X 22.5 in (57.2 cm)					
Heat Dissipation	13,800 Watts (47,088 BTUH)					
Air Conditioning Load	3.9 Tons					
<b>MECHANICAL (Note 4)</b>						
Cabinet Size	102 in (259 cm) W X 54.13 in (137.5 cm) D X 78 in (198 cm) H					
Weight	3625 lbs (1648 kg)					
RF Output Connector	3-1/8 in EIA flanged, Female with Bullet					
Remote Control Connections	Front right corner of the top of the Output Network (right hand) Cabinet					

**NOTES:**

1. Specifications are at full output power.
2. Circuit breakers may be used, however wall-mounted fused disconnects are recommended for improved long term reliability especially in high current applications. The reaction time of these devices for current surge overloads should be slow, similar to Buss FRN or REN fuse types. These are customer-supplied items.
3. All transmitter wiring should be done in conformance with local electrical codes.
4. See Harris drawing 852-9218-014 for complete dimensional information.