



ELECTRICAL / COOLING / MECHANICAL DATA
HARRIS ZX10, 10 kW FM TRANSMITTER

All table values referenced to 10,000 watt output power. Values are typical for PA only and do not include exciter(s).

| PARAMETER NAME | VALUE | | | | | | | | | |
|--|---|---------------|---------------|---------------|-------------|-------------|-------------|-------|-----|--|
| ELECTRICAL | | | | | | | | | | |
| Nominal output power | 10,000 W (FM) | | | | | | | | | |
| FCC type-notified output power range | FM | FM+HD | | | HD | | | | | |
| | | -20 dBc | -14 dBc | -10 dBc | -20 dBc | -14 dBc | -10 dBc | | | |
| | 2.5KW – 11KW | 2.1KW – 8.5KW | 1.5KW – 6.2KW | 1.3KW – 5.3KW | 1000W – 4KW | 970W- 3.8KW | 855W- 3.4kW | | | |
| Power consumption (10 kW output in FM mode.) | 16667W typical 18182W max | | | | | | | | | |
| AC power factor | 0.98 typical | | | | | | | | | |
| Overall efficiency, AC input to RF output | FM | | FM+HD | | | HD Only | | | | |
| | Minimum | Typical | Typical | | | Typical | | | | |
| | 55% | 60% | 50% | | | 35% | | | | |
| AC mains configuration | AC distribution chassis provides in-rack voltage breakout and breaker protection. One 3PH or two 1PH feeds connect to labelled WAGO connection blocks inside the AC distribution chassis. | | | | | | | | | |
| AC input voltage (nominal) | 190-380VAC | | | | | | | | | |
| AC protection size (Notes 1) | 1PH 230 | | 3PH 208 | | | 3PH 380Y | | | | |
| | 2 X 50C | | 63C | | | 40C | | | | |
| Recommended AC conductor size, #THHW wire (Note 2) | 8awg (6mm) | | 6awg (10mm) | | | 8awg (6mm) | | | | |
| Line amps at nominal output each feed (approx.) | FM | | FM+HD | | | HD | | | | |
| | 3PH | | 1PH | 3PH | | 1PH | 3PH | | 1PH | |
| | 208D | 380Y | 230 | 208D | 380Y | 230 | 208D | 380Y | 230 | |
| | 56 | 32 | 40 | 52 | 28 | 36 | 26 | 14 | 18 | |
| Grounding / earthing | AC safety ground via third wire of mains inlets (PE green wire). AC safety ground should have unbroken connection back to earth post at mains distribution panel. Threaded ground stud provided on internal buss-bar. RF ground via copper low-inductance strap to internal buss-bar. Connection should be via unpainted surfaces and soldered/brazed for low resistance. | | | | | | | | | |
| COOLING | | | | | | | | | | |
| Cooling air volume | 1200cfm (34 m ³ /min) | | | | | | | | | |
| Air inlet/outlet size See note 3 for dimensions | Cool air enters via front panel doors with integral air filters. Heated air exhausts via top or bottom vents, user configurable. Two replacement inlet air filters shipped with each unit. Air inlet plenum with top or bottom ducted air input available as option. | | | | | | | | | |
| Heat dissipation and cooling requirements. (MAX TPO) | FM | FM+HD | | | HD | | | | | |
| | | -20dBc | -14dBc | -10dBc | -20dBc | -14dBc | -10dBc | | | |
| | Watts | 9000 | 8520 | 6280 | 5340 | 7429 | 7206 | 6351 | | |
| | BTU / h | 30735 | 29096 | 21446 | 18236 | 25369 | 24608 | 21690 | | |
| Tons | 2.56 | 2.42 | 1.79 | 1.52 | 2.11 | 2.05 | 1.81 | | | |
| MECHANICAL | | | | | | | | | | |
| Cabinet size | See Harris drawing 8398464033 for complete dimensional information | | | | | | | | | |
| Weight | 562.1 mm (22.13") W x 914.4 mm (36") D x 2111.5 mm (83.13") H (44RU rack) | | | | | | | | | |
| Harmonic filter | 250kg 550lbs | | | | | | | | | |
| RF output connector | Internal | | | | | | | | | |
| Remote control connections | 3-1/8" EIA flanged, male | | | | | | | | | |
| Remote control connections | Parallel remote control interface via terminal board. Optional remote web control/SNMP available via RJ45 connector. QTY 2 web remotes required. Both interfaces located at top rear of rack. | | | | | | | | | |

NOTES:

1. Wall-mounted circuit breakers are customer-supplied item. Note: IEC "C" curve = 5x-10x inrush current.
2. All transmitter wiring should be done in conformance with prevailing electrical codes.