

Yenisei D 20.0



CLASS
D

THREE-PHASE
POWER SUPPLY
380V

Description

The amplifier "YENISEY D20.0" is designed to amplify the signal of the nominal level 0.775V (0dB) coming from the source of the sound program to the level of 240V (50dB) at the nominal load

The amplifier is made in the form of a 19" rack, which houses a set of blocks providing a power of 20000 W

Amplifier output transformer balanced, protected by a fusible link

The amplifier is powered from a three-phase AC network with a voltage of 3x380V, 50Hz, with the obligatory connection of the neutral and ground wires.

The amplifier has a protection system:

Thermal protection circuit implemented in the power amplifier unit

Circuit for monitoring the health of fuses in the audio signal path

Overload protection circuit in each PSU (power supply)

It is provided to turn off the amplifier when any of the phases is lost

Application

Wired broadcasting networks

As part of warning systems for civil defense and emergencies

As part of systems used to conduct vibration tests

Yenisei D 20.0

Specifications

Parameter name	Specification Norm	
	Rated value	Limit
Rated output voltage	240 V	± 12 V
Rated input voltage corresponding to the rated output	0,775 V	± 0,04 V
Rated output power when operating on an active load 92.16 Ohm	20000 W	±2000 W
Bandwidth transmitted frequencies	50-10000 Hz	-
Permissible deviations of the amplitude-frequency characteristic (AFC), relative to the frequency of 1000 Hz, max, at frequencies:		
- 25 Hz	-10,5 dB	±4,5 dB
- from 25 Hz to 75 Hz inclusive	-2,5 dB	±1,5 dB
- over 75 Hz up to and including 100 Hz	-1 dB	±1,0 dB
- over 100 Hz up to and including 6600 Hz	±0,6 dB	-
- over 6600 Hz up to and including 10000 Hz	1/-1,5 dB	-
- 20000 Hz	-9 dB	±3,0 dB
Harmonic coefficient, max:		
- at input voltage levels from minus 20 dB to the nominal value, at frequencies:		
- up to 100 Hz	4.0 %	-
- from 100 Hz to 200 Hz inclusive	3.0 %	-
- over 200 Hz	2.0 %	-
- when the input signal level is 12 dB above the nominal value at a frequency of 1000 Hz	2.0 %	-
Protection from unweighted noise, max:	60 dB	-
Increasing the output voltage level when the load is turned off, max:		
- within the frequency range from 50 Hz to 6000 Hz inclusive	3.0 dB	-
- over 6000 Hz	4.0 dB	-
Output voltage at load resistance two times lower than the nominal value, max	120 V	-
An increase in the output signal level when a voltage is applied to the input 4 times higher than the nominal, max	0.5 dB	-
Amplifier impedance module at the input intended for connecting the line		
- input 1	600 Ohm	±60 Ohm
- input 2	1200 Ohm	±120 Ohm
Output voltage at complex load with phase angle ±45 degrees, not less than:		
- at Kg 125 Hz, not more than	168 V	-
- at Kg 2000 Hz, not more than	3%	-
	2%	-
Power consumed from AC network with rated voltage 220 V, 50 Hz, not more than:		
- in nominal mode	32800 W	-
- with an output voltage equal to 0.3 of the nominal	4800 W	-
Dimensions and Weight		
- height	1360 mm	-
- width	1110 mm	-
- depth	630 mm	-
- weight	435 kg	-