

# Power Frequency Magnetic Field Simulator

# MFS xxx Series

## Datasheet



### In Compliance with

- > IEC/EN 61000-4-8
- > GB/T 17626.8

## Introduction

Power frequency magnetic field simulator MFS series is designed to conduct power frequency magnetic field immunity test of electrical and electronic products with high reliability as per IEC/EN 61000-4-8 and GB/T17626.8. It can offer accurate reference for EUT during power frequency magnetic field immunity test. It is mainly to simulate the magnetic environment in residence, commercial and industrial district, power station, and low and high substation.

## Features

- > 5.7" color touch screen front panel;
- > Fully in compliance with IEC 61000-4-8 test requirements;
- > Electromagnetic relay protection with voltage/current higher than rated values;
- > Over-temperature protection;
- > Test sequencing via control software AutoLab;
- > Ethernet RJ45 for PC remote control;
- > Easy test report generation;

## Application Areas

- > Automotive
- > Healthcare
- > Railway
- > Military
- > New energy Electricity
- > New energy automotive
- > Telecom
- > Broadcasting
- > IT
- > Avionics

Technical Parameters	
As per Standards	IEC/EN 61000-4-8, GB/T 17626.8
Magnetic field strength	<p><b>MFS 400</b>                      1 A/m – 100 A/m (continuous), 100 A/m – 400 A/m(1 s – 10 s, short-term)                      (with TCXS 111 single- turn 1,000*1,000 mm square coil);</p> <p><b>MFS 1200</b>                      1 A/m – 300 A/m (continuous),                      300 A/m – 1,200 A/m (1 s - 10 s, short-term)                      (with TCXS 113 three-turn 1,000*1,000 mm square coil);</p>
Output accuracy	less than 1 dB; (Minimal magnetic field strength such as 1A/m shall be calibrated manually before test)
Current waveform	50 Hz/60 Hz sinusoid
Current distortion	<5%
Pulse interval	1 s - 9,999 s
Test duration	1 s - 28,800 s
Triggering mode	Automatic, manual or external signal triggering
Coil size	1,000*1,000 mm or other
Coil shape	Square/circular

General Parameter	
Display screen	5.7 inch TFT touch screen
Operating power supply	110 V / 220 V, ±10%, 50/60 Hz (AC 220 V 50 Hz by default)
Fuse	6 A
Max. Power consumption	100 W
Memory space	Infinite (PC)
Communication method	Ethernet LAN, RJ45
Output method	Standard 1 m coaxial cable
Dimension	19 inch/6U/4U
Weight	Approx. 35 Kg + 68 Kg
Operating temperature	15–35 °C
Operating humidity	45%–75%
Operating air pressure	86 kPa – 106 kPa

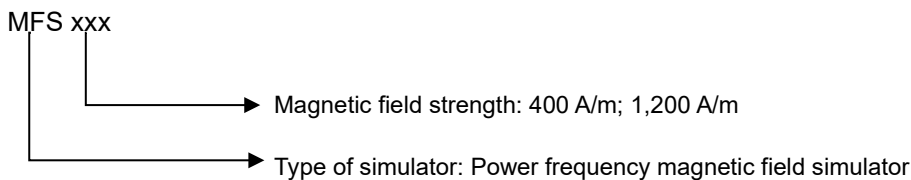
Standard Accessories
Magnetic field coil, power supply cable, EUT power supply cable, network cable, power cord, grounding wire 5 meters, factory test report, warranty report, user manual

Model Selection	
MFS 400	Magnetic field strength up to 400 A/m
MFS 1200	Magnetic field strength up to 1,200 A/m

MFS 400 - Optional Accessories	
MFT 400	Power frequency magnetic field regulator
TCXS 111	1,000*1,000 mm magnetic field coil
VMT 2216SV	220 V, 16 A, incl. voltage variation
VMT 2216S	220 V, 16 A, excl. voltage variation
EMSLab	Control software

MFS 1200 - Optional Accessories	
MFT 1200	Power frequency magnetic field regulator
TCXS 113	1,000*1,000 mm magnetic field coil
TCXH 1110	1,000*1,000 mm magnetic field coil, Helmholtz
VMT 2216SV	220 V, 16 A, incl. voltage variation
VMT 2216S	220 V, 16 A, excl. voltage variation
EMSLab	Control software

### Naming Rules



### Equipment Connection Diagram

