



Power Disturbance Simulator

PFS 42200T

- IEC 61000-4-34/AMD1
- IEC 61000-4-34/AMD2
- EN 61000-4-34/A1
- EN 61000-4-34/A2
- IEC 61000-4-11
- IEC 61000-4-11/COR2
- GB/T 17626.34
- GB/T 17626.11

Features

- > 5.7-inch color TFT touchscreen front panel operation
- > Max. output voltage 420 V AC; Max. continuous current 202 A
- > Support voltage and current real-time acquisition
- > Built-in multi-functional test modules
- > Support voltage-limiting, current-limiting, overvoltage and overcurrent protection
- > Ethernet interfaces for PC remote control and test reports printing
- > Optimized arc suppression and waveform control technology enables accurate simulation of power grid faults.
- > Strong shock resistance and adaptability to extreme operating conditions
- > Avoid waveform distortion under high voltage and high current,

Introduction

The PFS 42200T Power Fault Simulator adopts the company's new-generation control platform, in compliance with IEC 61000-4-11/34 and GB/T 17626.11/34 standards. Equipped with controllable semiconductor switches, it can withstand instantaneous inrush current exceeding 1,000 A, and is integrated with electronic short-circuit protection.

PFS 42200T simulates voltage dips and short interruptions at input ports. Such voltage variations are generally caused by power grid faults, substation equipment failures or abrupt large load changes. Relevant tests are performed to verify whether electrical and electronic equipment can avoid unsafe operating states when subjected to sudden voltage fluctuations.

Application Areas



Technical Parameters

Max. EUT Input Voltage	420 V AC, 50 Hz /60 Hz
EUT Voltage and Current Display	LCD display
Max. EUT Continuous Current	202 A
Withstand Inrush Current	> 1,000 A
Protection	Built-in overcurrent, short circuit, overvoltage, overheating, surge, burst and electrostatic discharge protection External protective accessories (e.g. warning light, emergency stop button) are available for Line in and Line out ports
Interruption Level	0%
Dip Level	0% ~ 120%, 2.5% step
Dip & Interruption Duration	0.3 ~ 9,999 cycles or 5 ms ~ 99,999 ms
Dip & Interruption Interval	50 ms ~ 50,000 ms
Dip & Interruption Test Counter	1 ~ 9,999
Dip & Interruption, Rise / Fall Time	For generator rated current ≤ 75 A: 1 μ s ~ 5 μ s For generator rated current > 75 A: 1 μ s ~ 50 μ s (calibrated by standard resistor)
Synchronization	0° ~ 360°, 1° steps or random mode
Trigger Mode	Manual, automatic and external trigger input

General Parameters

Display Screen	5.7-inch TFT touch screen
Power Supply	AC 220 V, $\pm 10\%$, 50 Hz /60 Hz
Fuse	6 A
Max. Power Consumption	500 VA
Storage Capacity	Infinity (PC)
Communication Interface	Ethernet LAN, RJ45
Auxiliary Interface	D-sub 25p
External Trigger Input	BNC, 5 V TTL (no contact, trigger on closure)
CRO Trigger Input	BNC, 5 V TTL
Run Control Input	BNC, 5 V TTL
External Synchronization Input	45 Hz ~ 65 Hz 20 V ~ 500 V between same-polarity and opposite-polarity terminals 0 V ~ 500 V between terminals and chassis
Warning Light Output	0 V ~ 220 V AC, 10 A; 0 V ~ 48 V DC, 3 A Power supply depends on the type of external indicator lamp
Safety Circuit	Stop operating when the safety circuit is open.
Fault Detection	In case of fault, the front panel LCD displays alarm information and the instrument shuts down.

General Parameters

Working Status Indication	Front panel LED indication and LCD display
Grounding Method	Flat grounding wire
Dimension	600 (W)*1,250 (H)*800 (D) mm
Weight	Approx. 470 kg
Ambient Temperature	15 °C ~ 35 °C
Relative Humidity	45% ~ 75%
Atmospheric Pressure	86 kPa ~ 106 kPa

Standard Accessories

Test Cable, User Manual, Grounding Wire, Power Cord, Fuse, Flat Grounding Wire, RF Cable

Optional Accessories

1	Immunity Test Software	Model: CoraLab > Support Windows 7/8/10 /11 > Supports Ethernet and serial communication modes > Supports parameter sequence, test sequences, easy for operation > Supports customer information configuration and automatic test report printing.	
2	Impedance Tester for Calibration	Model: R100Ω/1134 Resistance: 100 Ω Accuracy: ±10% Power: 2,000 VA For generator rated current: ≤50 A Model: R50Ω/1134 Resistance: 50 Ω Accuracy: ±10% Power: 3,000 VA For generator rated current: 50 A < I ≤ 100 A Model: R25Ω/1134 Resistance: 25 Ω Accuracy: ±10% Power: 6,000 VA For generator rated current: > 100 A	

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