

Power Failure Simulator

PFS 150100T1



■ IEC 61000-4-34:2005

/AMD1:2009

■ IEC 61000-4-34:2005

/AMD2:2025

■ EN 61000-4-34:2007/A1:2009

■ GB/T 17626.34:2012

— Features

- > 5.7-inch color touchscreen for front panel operation
- > Max. output voltage 1,500 V AC, Max. continuous current 102 A
- > Real-time voltage and current acquisition for comprehensive monitoring of test conditions
- > Built-in multifunctional test module combination
- > Built-in overvoltage, overcurrent, voltage limiting and current limiting protection
- > Ethernet RJ45 interface for PC remote control and test report printing
- > Optimized arc suppression and waveform control for accurate grid fault simulation and stable waveforms under high-voltage and high-current conditions.

— Introduction

The PFS 150100T1 power failure simulator is based on the company's new-generation control platform and designed according to IEC 61000-4-34. It simulates voltage dips and short interruptions at the power input port caused by grid or substation faults and sudden load changes.

The PFS 150100T1 is equipped with a controllable semiconductor switch that withstands inrush currents above 1,000 A and features electronic short-circuit protection. These tests evaluate whether electrical and electronic equipment can avoid unsafe operating conditions under sudden voltage changes.

— Application Areas



Technical Parameters

EUT Max. Input Voltage	1,500 V AC, 50 Hz /60 Hz
EUT Voltage and Current Measurement	LCD display
Max. Continuous EUT Current	102 A
Inrush Current Withstand Capability	>1,000 A
Protection	Built-in overcurrent, short-circuit, overvoltage, overtemperature, surge, EFT/burst and ESD protection. Optional external protection accessories for Line in/Line out ports (e.g. warning lights, emergency stop buttons)
Interruption Level	0%
Voltage Dip Level	0%, 40%, 70%, 80%
Voltage Dip and Interruption Duration	0.3 ~ 9,999 cycles or 10 ms ~ 99,999 ms
Voltage Dip and Interruption Interval	50 ms ~ 50,000 ms
Voltage Dip and Interruption Counter	1 ~ 9,999
Voltage Dip and Interruption Rise/Fall Time	Generator rated current >75 A: 1 μ s ~ 50 μ s (resistive calibration specified in the standard)
Synchronization	0° ~ 360°, 1° step setting or random mode
Trigger Mode	Manual, automatic, external trigger input

General Parameters

Display Screen	5.7-inch TFT touchscreen
Working Power	AC 220 V $\pm$ 10%, 50/60 Hz
Fuse	6 A
Max. Power Consumption	300 W
Storage Space	Infinite (PC)
Communication Mode	Ethernet LAN, RJ45
Auxiliary Interface	D-sub 25p
External Trigger Input	BNC, 5 V TTL, no contact, trigger to close
CRO Trigger Input	BNC, 5 V TTL
Operation Trigger Input	BNC, 5 V TTL
External Synchronization Input	45 Hz ~ 65 Hz 20 ~ 500 V between the same-polarity and opposite-polarity terminals 0 ~ 500 V between the terminals and chassis
Warning Lamp Output	0 ~ 220 V AC, 10 A / 0 ~ 48 V, DC 3 A Power supply depends on the type of external signal lamp
Safety Circuit	Stop work when safety circuit is open
Failure Detection	LCD display in front panel and stop work when failure occurs
Working Status Indication	LED indication and LCD display on the front panel
Grounding Method	Flat grounding wire
Dimension	800 (L) * 1,300 (W) * 1,500 (H) mm
Weight	Approx. 665 kg
Ambient Temperature	15°C ~ 35°C
Relative Humidity	45% ~ 75%
Atmospheric Pressure	86 kPa ~ 106 kPa

Standard Accessories

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

Optional Accessories

1	Immunity Test Software	Model: CoreLab > 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	Calibration Impedance box Box	Model: R100Ω/1134 Impedance: 100 Ω Accuracy: ± 10% Power: 2,000 W Generator rated current: ≤50 A Model: R50Ω/1134 Impedance: 50 Ω Accuracy: ± 10% Power: 3,000 W Generator rated current: 50 A<I≤100 A Model: R25Ω/1134 Impedance: 25 Ω Accuracy: ± 10% Power: 6,000 W Generator rated current: >100 A	

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