



Power failure simulator

PFS series single/three-phase

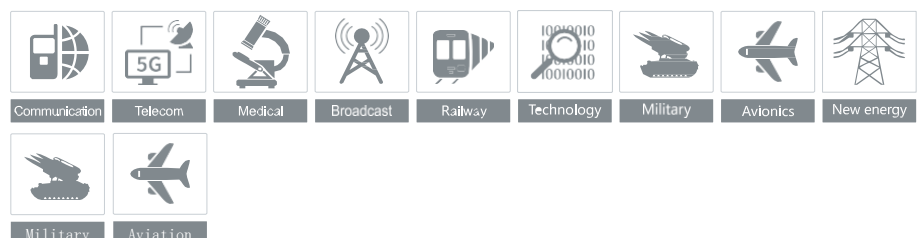
— Features

- IEC 61000-4-34
 - EN/IEC 61000-4-11
 - GB/T 17626.11
 - GB/T 17626.34
- > 5.7 inch color touch screen front panel operation
 - > Fully compatible with IEC 61000-4-11/34 testing
 - > Combination of built-in multifunctional testing modules
 - > Measurement and collection of voltage and current
 - > Test orchestration function
 - > Ethernet RJ45 interface, used for PC remote control and printing test reports

— Introduction

The PFS series single/three-phase power supply fault simulator simulates the impact of voltage dips, short-term interruptions, and voltage changes on electrical and electronic equipment in the power grid. The reasons for these voltage changes are due to faults in the power grid, substation equipment, or sudden large changes in load. Testing such phenomena is to verify whether electrical and electronic equipment can avoid unsafe operating conditions when encountering voltage fluctuations. The PFS series single/three-phase is equipped with controllable semiconductor switches, which can withstand instantaneous impulse currents and have electronic short circuit protection function. It is the first device in China that can meet the testing requirements of fully compatible IEC 61000-4-11/34 and GB/T 17626.11/34.

— Application Areas



General parameters

Display Screen	5.7-inch TFT touch screen
Power Supply for Battery Charger	AC 110 V / 220 V, ($\pm 10\%$), 50/60 Hz
Fuses	6 A
Maximum Power Consumption	300 W
User Storage Space	Infinite (PC)
Communication Methods	Ethernet LAN、RJ45
External Trigger Input	BNC, 5 V TTL
CRO Trigger Output	BNC, 5 V TTL
Operation Control input	BNC, 5 V TTL
External Synchronous Input	45-65 Hz, 20-500 V between homonymous and heteronymous ends
Failure Detection	When it fails, the front panel LCD displays and interrupts the instrument's operation
Instrument Working Status Indication	Front panel LED indication, LCD display
Instrument Grounding Connection Method	Using a flat grounding wire
EUT Power Supply Voltage Injection	5-core industrial socket
Detection Output Method	Standard 1-meter coaxial line
Dimension	19-inch 6U chassis or 19 inch/22U/35U cabinet
Weight	6U: approx 35kg 22U: approx 150kg 35U: approx 380~467kg
Ambient Temperature	15 °C - 35 °C
Relative Humidity	45% - 75%
Atmospheric Pressure	86 kPa - 106 kPa

Generator load capacity description

Generator peak impact capability description	
Rated generator current	The ability of the generator to withstand current shock
50 A and below current	500 A
50.1 A to 100A current	1000 A
More than 100 A current	Greater than 1000 A
Generators with rated current of 16 A and below comply with IEC 61000-4-11 load capacity specification	
Rated generator current	Generator load current capability
PFS 3810T1 PFS 3810T1V	12 A AC/DC continuous current; 15 A lasts 5 s; 25 A lasts for 3 s;
PFS 3816T1 PFS 3816T1V	18 A AC/DC continuous current; 23 A lasts 5 s; 40 A lasts for 3 s;

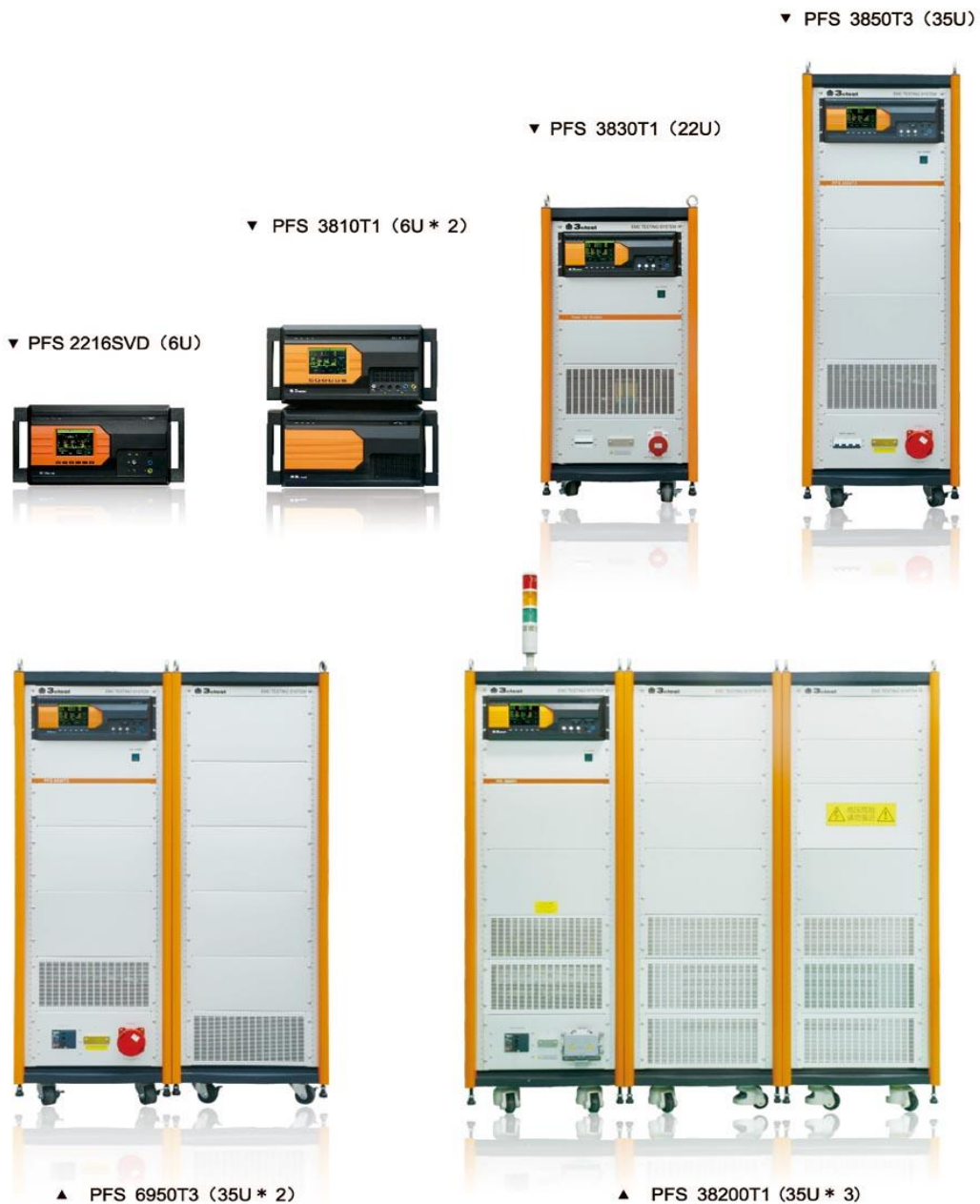
Power failure testing in accordance with IEC 61000-4-11&IEC 61000-4-34

IEC/EN 61000-4-11, GB/T17626.11&IEC 61000-4-34, GB/T16626.34 Technical parameters for single/three-phase AC power supply fault simulators with voltage dips, short-term interruptions, and voltage changes	
Maximum Continuous Current of EUT	12 A (PFSxx10xxx series) 18 A (PFSxx16xxx series) 32 A (PFSxx30xxx series) 52 A (PFSxx50xxx series) 77 A (PFSxx75xxx series) 102 A (PFSxx100xxx series) 202 A (PFSxx200xxx series)
Resistance to Impulse Current	50 A and below products: 500 A , Products above 50 A: 1000 A
Protect	Built in overcurrent, short circuit, overvoltage, overheating, surge, group pulse, and electrostatic protection Line in and Line out ports can be selected with other external protection accessories
Maximum Input Voltage of EUT	Single-phase 250 V AC $\pm 5\%$, 50/60 Hz $\pm 5\%$ (300 V DC optional) Three-phase: PFS38xxxx series: 420 V AC, 50/60 Hz $\pm 5\%$ (300 V DC optional) PFS45xxxx series: 480 V AC, 50/60 Hz $\pm 5\%$ (300 V DC optional) PFS69xxxx series: 720 V AC, 50/60 Hz $\pm 5\%$ (300 V DC optional)
EUT Current and Voltage Measurement	LCD display
Interrupt Level	0%
Voltage Interruption Mode	Optional voltage interruption for one phase, two phases, or three phases
Temporary Voltage Drop	0%-100%
Voltage Sag Method	Temporary voltage drops between phase line and neutral line Temporary voltage drops between phase lines PFSxxxxT1: GB/T17626.34 Figure3a、b/IEC61000-4-34: Figure3a、3b PFSxxxxT3: GB/T17626.34 Figure3a、c/IEC61000-4-34: Figure3a、3c
Duration of Temporary Suspension and Interruption	0.3-9999 cycles or 5 ms -99999 ms (1 ms for models with suffix D)
Temporary Lowering and Interruption Interval Time	10 ms - 50000 ms
Temporary Reduction and Interruption of Test Frequency	1 - 9999
Temporary Descent, Interruption of Ascent, Descent Time	Generator rated current of 75 A and below products: 1-5 μ s (standard resistance verification) Generator rated current above 75 A products: 1-50 μ s (standard resistance verification)
Voltage Variation Level (16A and below optional)	0-100%

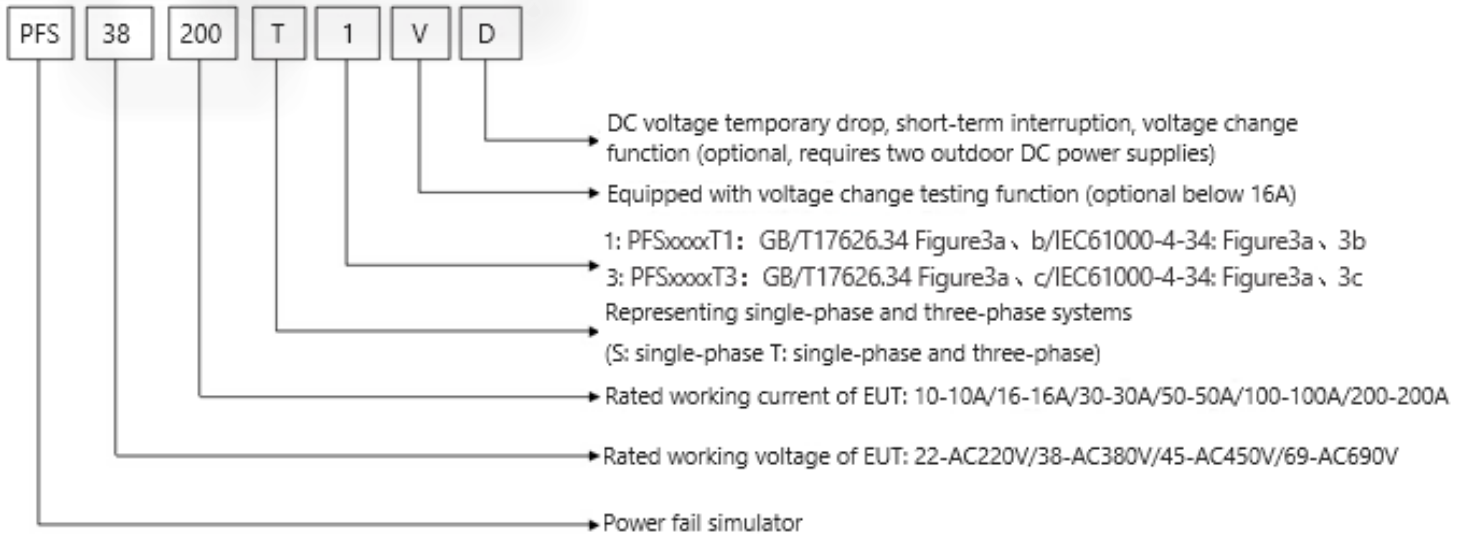
Voltage Change Reduction time (16A and below optional)	500 ms to 9999 ms (50% -100%) or mutation (same as temporary descent, interruption of ascent, descent time) 1000 ms to 9999 ms (0% -100%) or mutation (same as temporary descent, interruption rise, descent time)
Voltage Change increase time (16A and below optional)	500 ms – 9999 ms (50%-100%) 1000 ms – 9999 ms (0%-100%)
Duration of Voltage Change After Decrease (16A and below optional)	10 ms - 99999 ms
Synchronization	0 ° -360 °, 1 ° step setting or random mode
Trigger Method	Manual, automatic, external trigger input

Optional Accessories

Testing system PFS, expandable accessories, power cables, EUT power cables, network cables, factory inspection reports, manuals



Naming Eule:



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