

PFS series single/ three-phase power fail simulator



In Compliance with

- > IEC 61000-4-34
- > EN/IEC 61000-4-11
- > GB/T 17626.11
- > GB/T 17626.34

Introduction

PFS series single/ three-phase power fail simulator simulates voltage dip, interruption and variation which are caused by power grid and transformer devices due to malfunction or sudden large change of load. It is required to test this kind of phenomena to check whether electronic and electrical device can sustain safety operating condition. PFS series single/ three-phase power fail simulator is equipped with controllable semi-conductor switches with protection function as per IEC 61000-4-11/34, GB/T17626.11/34.

Features

- > 5.7 inch color touch screen
- > Full compliant test as per IEC 61000-4-11
- > Built-in multifunctional test module
- > Data acquisition of voltage and current
- > Programmable test procedures
- > Ethernet RJ45, PC remote control, test report

documentation and print

Application Areas

- > Communication
- > Telecom
- > Medical
- > Broadcast
- > Railway
- > Technology
 - > Military
 - > Avionics
 - > New energy
 - > Electrical Vehicle



Power supply (default AC 220 V, 50 Hz) Fuse 6 A Max. Power 300 W consumption 1nfinite (PC) Memory space Infinite (PC) Communication Ethernet LAN, RJ45 mode D-sub 25p External trigger BNC, 5 V TTL input BNC, 5 V TTL CRO output BNC, 5 V TTL Input BNC, 5 V TTL Varning LED 0-220 VAC 10 A / 0-48 V DC 3 A Depending on external signal lamp Depending on external signal lamp Safety circuit Test only can be started when it is closed Failure test Display on LCD and interrupt the work at failure case Working indicator LED, LCD front panel display Grounding Flat ground line cincetion S-core industrial plug Morking indicator LED, LCD front panel display Grounding Flat ground line cincetion S-core industrial plug inject		
Power supply110 V or 220 V, $\pm 10\%$, 50/60 Hz (default AC 220 V, 50 Hz)Fuse6 AMax. Power consumption 300 WMemory spaceInfinite (PC)Communication modeEthernet LAN, RJ45Auxiliary interfaceD-sub 25pExternal trigger inputBNC, 5 V TTLInputBNC, 5 V TTLInputBNC, 5 V TTLInputBNC, 5 V TTLInputBNC, 5 V TTLSynchronization $0-500$ V among dotted terminal o-500 V among dotted terminal, undotted terminal and caseWarning LED $0-220$ VAC 10 A / 0-48 V DC 3 A Depending on external signal lamp Test only can be started when it is closedSafety circuitLED, LCD front panel displayGrounding connectionFlat ground lineEUT power injection $5-core$ industrial plugOutput modeStandard 1 m coaxial cableSize19 inch 6U or 22U/35U cabinetWeightApprox. 35 Kg ~ 150 KgTemperature15 °C ~ 35 °CHumidity45% ~ 75%	General Param	eters
Power supply (default AC 220 V, 50 Hz) Fuse 6 A Max. Power 300 W consumption Infinite (PC) Memory space Infinite (PC) Communication Ethernet LAN, RJ45 mode D-sub 25p External trigger BNC, 5 V TTL input Display on LCD and interrupt the work at failu	Display	5.7 inch TFT touch screen
Fuse6 AMax. Power consumption300 WMemory spaceInfinite (PC)Communication modeEthernet LAN, RJ45ModeD-sub 25pAuxiliary interfaceD-sub 25pExternal trigger inputBNC, 5 V TTLInputBNC, 5 V TTLInputBNC, 5 V TTLInputCRO outputBNC, 5 V TTLInputO-220 VAC 10 A / 0-48 V DC 3 AO-220 VAC 10 A / 0-48 V DC 3 ADepending on external signal lampSafety circuitTest only can be started when it is closedFailure testDisplay on LCD and interrupt the work at failure caseWorking indicatorLED, LCD front panel displayGrounding connectionFlat ground lineEUT power injection5-core industrial plugOutput modeStandard 1 m coaxial cableSize19 inch 6U or 22U/35U cabinetWeightApprox. 35 % ~ 150 kgTemperature15 °C ~ 35 °CHumidity45% ~ 75%	Power supply	110 V or 220 V,±10%,50/60 Hz
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Temperature 15 °C ~ 35 °C Humidity 45% ~ 75%	Size	19 inch 6U or 22U/35U cabinet
Humidity 45% ~ 75%	Weight	Approx. 35 kg ~ 150 kg
Humidity 45% ~ 75%	Temperature	15 ℃ ~ 35 ℃
		45% ~ 75%
	Air pressure	86 kPa ~ 106 kPa

Load capacity

Peak impulse capacity		
Rated current	Withstand impulse current capacity	
Current no more than 50 A	500 A	
50.1 A ~ 100 A current	1000 A	
Current more than 100 A	More than 1000 A	
Simulator with rated current no more than 16 A meets the load capacity specified in IEC 61000-4-11		
Rated current	Load current capacity	
PFS 3810T1 PFS 3810T3V	12 A AC/DC continuous current; 15 A continuous 5 s; 25 A continuous 3 s;	
	18 A AC/DC continuous	
PFS 3816T1	current ;	
PFS 3816T3V	23 A continuous 5 s; 40 A continuous 3 s;	

Standard accessories

PFS test system, power cable, EUT supply cable,internet cable, factory test report, user manual

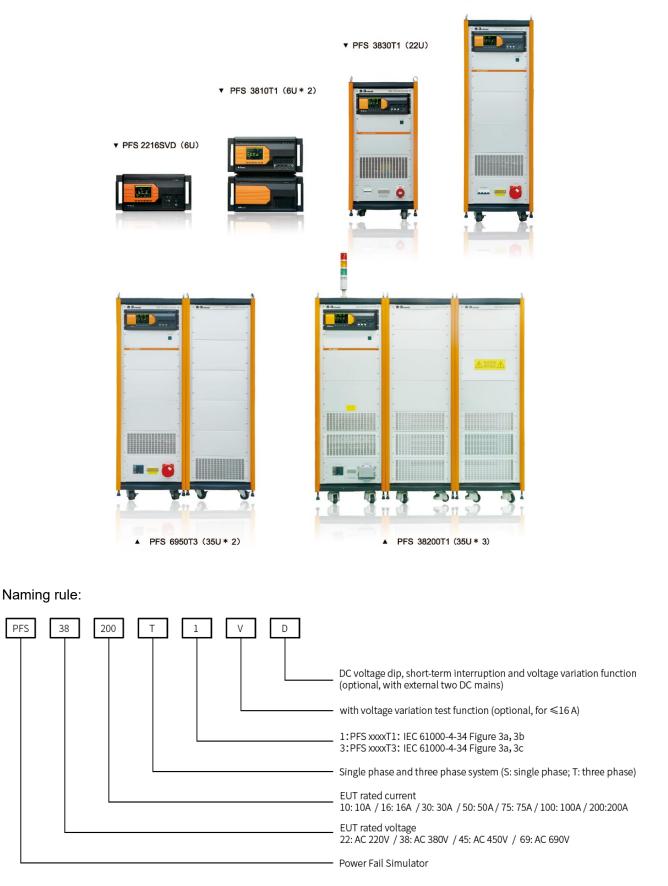


Power fail test as per IEC 61000 - 4 – 11 & IEC 61000-4-34 for single/three phase AC including voltage dips, short interruption and voltage variations

	nort interruption and voltage variations	
Technical parameters		
	12 A (PFS xx10xxx series)	
	18 A (PFS xx16xxx series)	
	33 A (PFS xx30xxx series)	
EUT max. Continuous current	55 A (PFS xx50xxx series)	
	80 A (PFS xx75xxx series)	
	110 A (PFS xx100xxx series)	
	220 A (PFS xx200xxx series)	
Withstand impulse current	Product's current no more than 50 A: 500 A; more than 50 A: 1000 A	
Protection	Internal over current, short circuit, over voltage, over heat, surge, burst, ESD	
	protection; Optional external accessories for Line in, Line out port	
EUT max. Input voltage	Single phase 250 V AC±5%, 50/60 Hz±5% (300 V DC optional)	
	Three-phase :	
	PFS 38xxxx series: 420 V AC, 50/60 Hz ± 5% (300 V DC optional)	
	PFS 45xxxx series: 480 V AC, 50/60 Hz ± 5% (300 V DC optional)	
	PFS 69xxxx series: 720 V AC, 50/60 Hz ± 5% (300 V DC optional)	
EUT current and voltage		
measurement	LCD display	
Interruption level	0%	
Voltage interruption mode	Optional one phase, two-phase or three-phase	
Dips level	0%-100%	
	Line to neutral & Line to line	
Voltage dips mode	PFSxxxxT1: IEC61000-4-34:Figure3a、3b	
	PFSxxxxT3:IEC61000-4-34:Figure3a、3c	
Repetition rate for dips and	0.3-9999 cycle or 5 ms-9999 ms (1 ms for PFS xxxxxD)	
interruption		
Duration for dips and interruption	50 ms-50000 ms	
Test time for dips and interruption	1 s-9999 s	
Rise and fall time for dips and	Generator rated current \leqslant 75 A: 1-5 μs (standard resistance calibration)	
interruption	Generator rated current $>$ 75 A: 1-50 µs (standard resistance calibration)	
Voltage variation level	0-100%	
(for generator rated current<16 A)	0-100 /0	
	500 ms - 9999 ms(50%-100%)or abrupt(same with rise and fall time for dips and	
Time for decreasing voltage	interruption)	
(for generator rated current<16 A)	1000 ms - 9999 ms(0%-100%)or abrupt(same with rise and fall time for dips and	
	interruption)	
Time for increasing voltage	500 ms – 9999 ms(50%-100%)	
(for generator rated current<16 A)	1000 ms – 9999 ms(0%-100%)	
Time for reduced voltage	10 ms – 99999 ms	
(for generator rated current<16 A)		
Synchronization	0°- 360°, 1° step or random	
Trigger mode	Automatic, manual, or external	
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PFS 3850T3 (35U)





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3ctest is always striving for product innovation and quality improvement.

Product appearance and technical specifications are subject to change without further notice.