



# Automotive Power Failure Simulator

## PFSxxA1 Series

- BMW GS 95003-2
- BMW GS 95024-2-1
- Chrysler CS-11809
- Chrysler CS-11979
- Chrysler PF-9326
- Cummins 14269 (982022-026)
- DaimlerChrysler DC-10615
- DaimlerChrysler DC-10842
- DaimlerChrysler PF-10541
- Fiat 9.90110
- Ford EMC-CS-2009.1
- Ford ES-XW7T-1A278-AB
- Ford ES-XW7T-1A278-AC
- Ford WDR 00.00EA
- Freightliner 49-00085
- GMW 3172
- Hyundai/Kia ES 95400-10, Rev. D
- Hyundai/Kia ES 96100-02
- Hyundai ES 39110-00
- Iveco 16-2103 Rev.15
- EMC-CS-2010JLR V1.1
- VW80000-2013
- MBN LV 124-1: 2011

### Features

- > 5.7 inch color touch screen operation on front panel;
- > Standalone test equipment used for voltage dip and short interruption test;
- > Switching time:  $\leq 200\text{ns}$  (meets GM3172 9.2.18) and compatible with  $\leq 1\ \mu\text{s}$  (LV124, VW 80000, etc.);
- > Independent grounding circuit switch;
  - DC+power cord switch;
  - DC grounding wire switch;
- > Equipped with electronic short-circuit protection function;
- > Rated voltage 80 V DC;
- > Standard test procedure.

### Introduction

The PFS XXA1 series automotive power failure simulator is an independent testing device that utilizes semiconductor solid-state electronic switch technology to control the rapid rise or fall of voltage within  $1\ \mu\text{s}$  during simulated voltage dips and drops (micro interrupts). The unique output impedance variable technology can simulate power faults more realistically (including high impedance analog power open circuit and low impedance analog power short circuit), and ensure that the waveform meets standards under different loads (pure impedance).

The operation of the PFS XXA1 series automotive power failure simulator can be done manually or controlled by AutoLab software through an Ethernet interface. The DC switch can carry a maximum of 80V and support testing of 42V power supply systems.

### Application Areas



## Technical Parameters

Input Voltage	0–80 V
Switch	2 line switches DC+power cord DC grounding wire
Rated Current	PFS 6050A1 50A PFS 6075A1 75A PFS 60100A1 100A
Switching Time	≤ 200ns (meets GM3172 9.2.18) And compatible with ≤ 1us (LV124, VW 80000, etc.)
Peak Current	PFS 6050A1 100A duration 500 ms PFS 6075A1 150A duration 500 ms PFS 60100A1 200A duration 500 ms
Output Impedance	High resistance or low resistance
Protection Circuit	Overvoltage (80V), polarity reversal, overcurrent protection, short circuit protection
Fall Duration td	1us – 1 s
Repetition Rate	1 ms – 99.9s
Trigger Method	Automatic and manual

## General Parameters

Display	5.7-inch TFT touch screen
Scope of Working Power Supply	AC 110V/220V, ± 10%, 50/60Hz (default AC 220V in Chinese Mainland)
Dimension	19"/ 4 U
Weight	About 20Kg
Temperature	15-35°C
Humidity	45% - 75%

## Universal switch

Switching impedance	Power cord: < 50 mohm
Built in switch	Short circuit switch (DC+and DC -) Impedance < 100mohm
Built in switch	High resistance, low resistance

## Optional Components

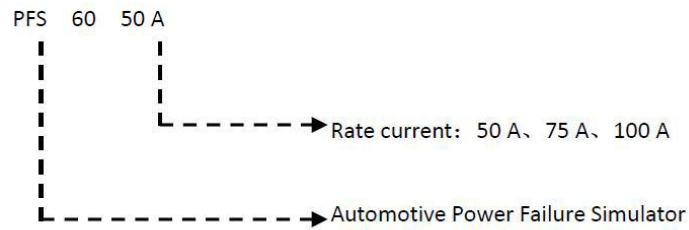
1. Input power voltage of 100V can be customized
2. The computer online control software Autolab supports Windows 7, Windows 8, and Windows 10. It is easy to use, has a beautiful and intuitive user interface, and various operation functions and standard testing libraries allow users to easily complete custom testing programs. It can automatically/manually identify the connected Auto Lab testing equipment and configure it automatically. The template based reporting function can help users flexibly generate test reports.
3. DFS 4002A signal line fault simulator can be used in conjunction with this instrument for signal line fault simulation tests

## Standard Accessories

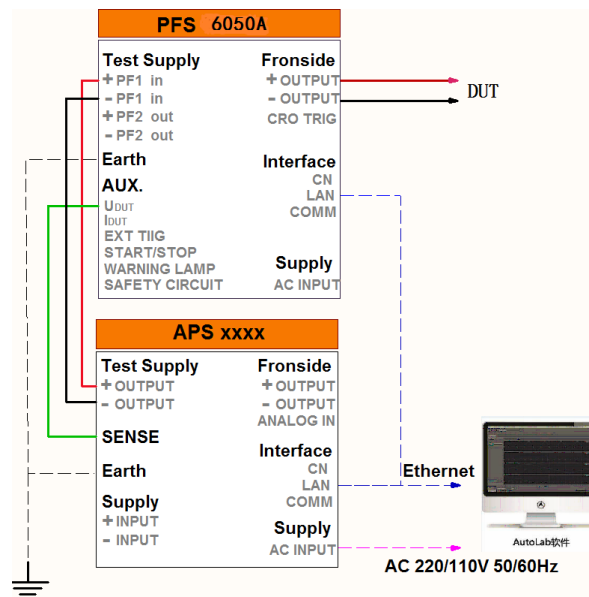
One host, instruction manual, inspection report, test line, fuse, calibration resistors PFS-R1 Ω, PFS-R100 Ω, PFS-R1000 Ω.

## Naming convention:

Naming rules:



## Test Connection Diagram:



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