Ready for New Horizons

# **0 3CTEST**



### AC/DC Drop-Out Switch PFS 3875TDC

- IEC 61000-4-11:2020
- IEC 61000-4-29:2000
- IEC 61000-4-34:2009
- GB/T 17626.11:2023
- GB/T 17626.29:2006
- GB/T 17626.34:2012

#### - Features

- > Test the orchestration function
- > Current measurement and acquisition
- > 5.7-inch color touch screen front panel operation
- > Imported high-power IGBT semiconductor switch, safe and stable
- > Can perform voltage interruption and temporary drop tests on three phases simultaneously
- > Ethernet RJ45 interface, used for PC remote control and printing test reports

#### Introduction –

The PFS 3875TDC AC/DC drop switch is designed according to the testing requirements of IEC 61000-4-11, IEC 61000-4-29, and IEC 61000-4-34, and can simulate voltage dips and short-term interruptions caused by faults in the power grid, substation equipment, or sudden large changes in load.

This product is equipped with a controllable semiconductor switch that can withstand instantaneous surge currents and has electronic short-circuit protection function. It can be used to test whether electrical and electronic equipment can avoid unsafe operating conditions when encountering the above phenomena.

#### Application Areas



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Technical Parameters

| EUT Maximum<br>Continuous Current                             | 77 A  |  |
|---|---|--|
| Withstand Impact Current                                      | 1000 A  |  |
| Protect   | Built in overcurrent, short circuit, overvoltage, overheating,<br>surge, group pulse, electrostatic protection<br>Line in and Line out ports can be optionally equipped with<br>other external protective accessories   |  |
| EUT Maximum Input<br>Voltage                                  | AC: 380 V±10%, 50/60 Hz±5%<br>DC: 1000 V  |  |
| EUT Current<br>Measurement                                    | LCD display   |  |
| Interrupt Level   | 0%  |  |
| Voltage Interruption<br>Method                                | Choose one phase, two phases, or three phases for voltage interruption  |  |
| Voltage Sag Method  | Temporary voltage drop between phase and neutral lines<br>Temporary voltage drop between phase lines<br>GB/T17626.34 Figure 3a), 3c)/IEC61000-4-34: Figure 3a), 3c)<br>Note: The voltage sag and phase shift are determined by the<br>external linked power supply                    |  |
| Duration of Temporary<br>Descent and Interruption             | 0.3 ~ 9999 cycles or 1 ms ~ 9999 ms   |  |
| Temporary Reduction and<br>Interruption Interval Time         | 50 ms ~ 50000 ms  |  |
| Temporary Reduction and<br>Interruption of Test<br>Frequency  | 1 ~ 9999 times  |  |
| Temporary Descent,<br>Interruption of Ascent,<br>Descent Time | AC:<br>Generator rated current of 75A and below products: 1~5 μs<br>(standard specified resistance verification)<br>Generator rated current above 75A products: 1~50 μs<br>(standard specified resistance verification)<br>DC:<br>When the generator load impedance is 100 Ω: 1~50 μs |  |
| Synchronous   | 0 ° ~ 360 °, 1 ° step setting or random mode  |  |
| Trigger Mode  | Manual, automatic, external trigger input   |  |
| Input Output Port   | Coaxial terminal, three-phase four wire (L1, L2, L3, N)   |  |

General Parameters

|                                       | 1   |  |
|---------------------------------------|---|--|
| Display Screen                        | 5.7-inch TFT touch screen   |  |
| Power Supply                          | 220 V±10%,50/60 Hz  |  |
| Fuse                                  | 6 A   |  |
| Max. Power Consumption                | 300 W   |  |
| Memory Space                          | Infinite (PC)   |  |
| Communication Mode                    | Ethernet LAN, RJ45  |  |
| Auxiliary Interface                   | COMM serial interface   |  |
| External Trigger Input                | BNC,5 V TTL   |  |
| CRO Triggers Output                   | BNC,5 V TTL   |  |
| Operation Control Input               | BNC,5 V TTL   |  |
| External Synchronous<br>Input         | 45 ~ 65 Hz, Between 20 ~ 500 V between the terminals<br>with the same name and those with different names<br>Same name end, different name end and<br>chassis 0~500 V |  |
| Safety Circuit                        | Stop working when the safety circuit is open  |  |
| Failure Detection                     | When it fails, the front panel LCD displays and interrupts the instrument's operation   |  |
| Working Indicator                     | Front panel LED indication, LCD display   |  |
| Grounding Mode                        | Use a flat grounding wire   |  |
| EUT Power Supply<br>Voltage Injection | PF1 and PF2 both require external power supply  |  |
| Detecting Output Mode                 | Standard 1-meter coaxial line   |  |
| Dimension                             | 19 inches/6U 450 mm(W)*280 mm(H)* 620 mm(D)   |  |
| Weight                                | Approx.46 kg  |  |
| Ambient Temperature                   | 15 °C ~ 35 °C   |  |
| Relative Humidity                     | 45% ~ 75%, RH (no condensation)   |  |
| Atmospheric Pressure                  | 86 kPa ~ 106 kPa  |  |



| Standard<br>Accessories |   | ibration report              | est cable, Coaxial cable, Power cord, Fuse, Gr  | <b>J</b> |
|-------------------------|---|------------------------------|---|----------|
| Optional<br>Accessories | 1 | Immunity<br>testing software | Model: CoreLab<br>Compatible with Windows 7/8/10/11<br>operating systems<br>Supports Ethernet interface and serial<br>communication mode<br>Support parameter scheduling testing,<br>testing sequences, one click testing, easy<br>operation<br>Can set customer information, automatically<br>generate test reports, and support export of<br>test reports, making it convenient for users |          |

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