

Short-Circuit Fault Simulator

BOB 50C50



- ISO 16750-2
- ISO 21780
- GB/T 28046.2
- GB/T 45120

Features

- > 5.7-inch color touchscreen front-panel operation
- > Signal-channel maximum load capacity DC 60 V, 50 A
- > Short-circuit line impedance $\leq 20 \text{ m}\Omega$
- > Supports 50 test channels with built-in test sequence function for flexible testing
- > Support single short-circuit mode and multi short-circuit mode
- > Supports insulation failure and wire contact short circuit simulations
- > Support current, voltage monitoring and protection
- > Supports indicator lights for displaying line test status
- > Emergency stop automatically disconnects the DUT and power supply

Introduction

The BOB 50C50 Short-Circuit Fault Simulator is designed for short-circuit testing of signal lines and load circuits, in compliance with the short-circuit test requirements of ISO 16750-2 and ISO 21780. It uses high-voltage, high-power relays, with a maximum load capacity of 60 V DC and 50 A per channel. Higher load currents can be customized.

Application Areas



Technical Parameters

Network Type	Automatic three-phase coupling/decoupling network
Input Voltage	-60 V ~ 60 V
Rating Current	50 A
Test Circuit	50 channels
Test Modes	Single/multiple wire open circuit, Single/multiple wire short circuit to supply voltage (U_0), Single/multiple wire short circuit to ground (GND)
Control Modes	Individual control of single lines Simultaneous control of multiple lines
Short-Circuit Duration	10 s ~ 999 s
Interval	1 ~ 999 s
Counter	1 ~ 99
Short-Circuit Impedance	$\leq 20 \text{ m}\Omega$
Test Mode	Support test parameters sequence function
Voltage Display	Real-time display of power voltage
Current Display	Real-time display of short-circuit current

General Parameters

Display Screen	5.7-inch TFT touchscreen
Working Power	AC 220 V $\pm$ 10%, 50/60 Hz
Fuse	10 A
Max. Power Consumption	800 W
Communication Mode	Ethernet LAN, RJ45
Working Status Indication	Front panel LED indication and LCD display
Grounding Method	Flat grounding wire
Dimension	22U rack, 600 (W) *1,200 (H) *900 (H)
Weight	Approx. 175 kg
Ambient Temperature	15°C ~ 35°C
Relative Humidity	45% ~ 75%
Atmospheric Pressure	86 kPa ~ 106 kPa

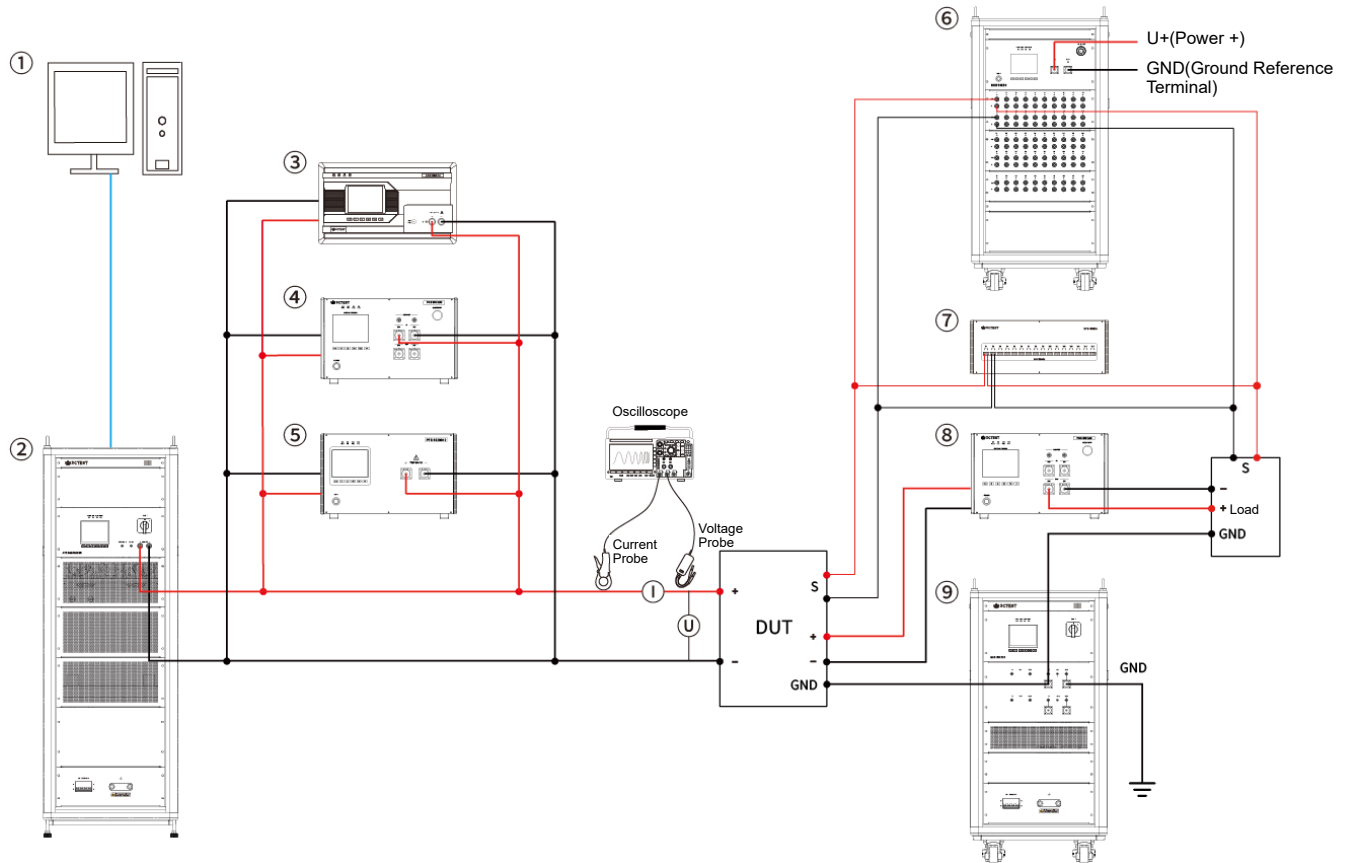
Standard Accessories

Power Cord, Test Cable, Grounding Wire, Fuse, Plug, Adapter, User Manual

Optional Accessories

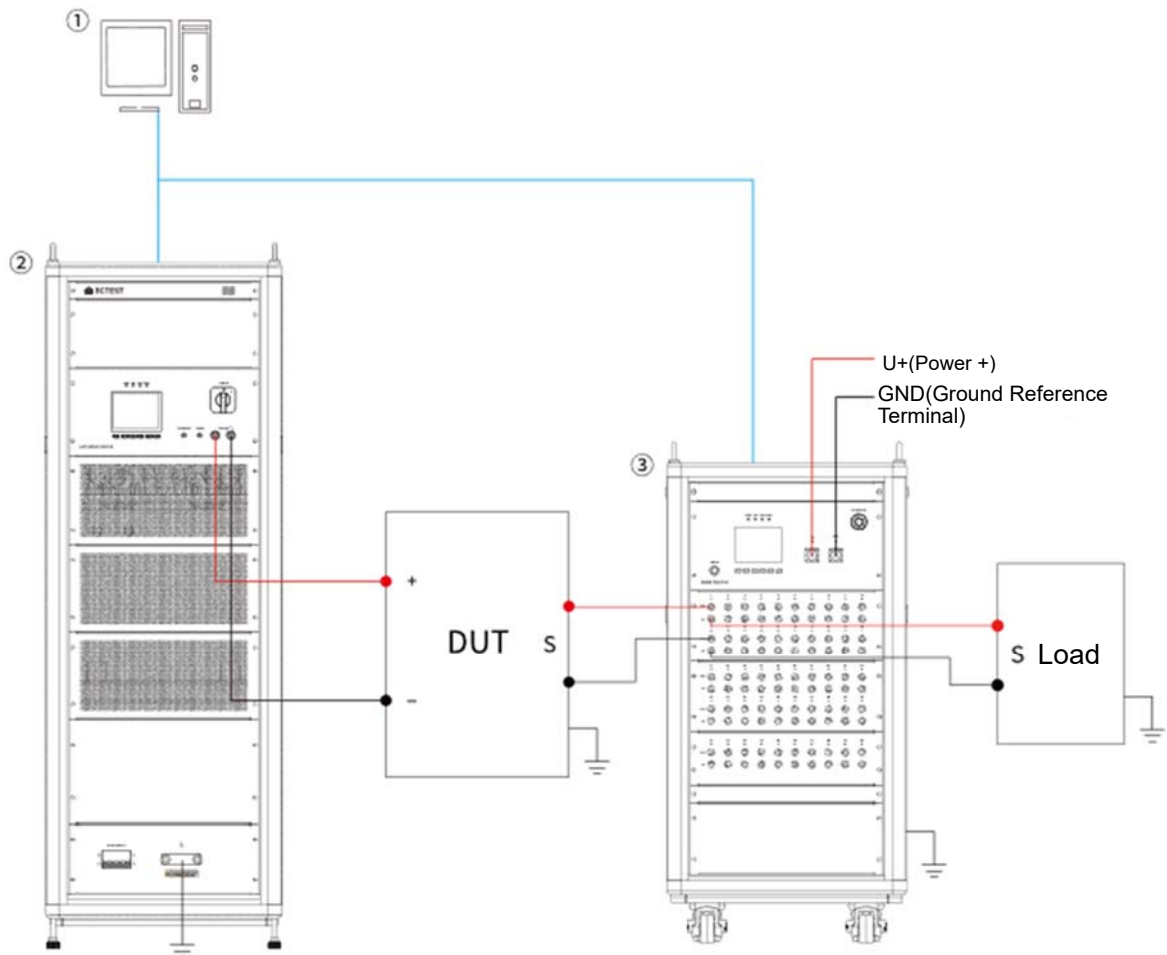
1	Immunity Test Software	Model: AutoLab > Compatible with Windows 7/8/10/11 > User-friendly operation with an intuitive UI > Supports customized test procedures with built-in standard test libraries > Comply with ISO 21498-2, VW 80300	
2	Four-Quadrant Power Supply Voltage Variation Simulator	Model: APS Series Standard: ISO 7637/16750-2 Max. test voltage: 80 V Max. test current: 400 A	
3	Load Dump Pulse Simulator	Model: LDS Series Standard: ISO 7637/16750-2 Max. test voltage: 60 V Max. test current: 200 A	
4	Power Network Simulator	Model: PNS Series Standard: ISO 21780 Max. test voltage: 80 V Max. test current: 200 A (higher current can be customized)	
5	Automotive Power Failure Simulator	Model: PFS Series Standard: ISO 21780 Max. test voltage: 80 V Max. test current: 200 A (higher current can be customized)	
6	Ground Offset Simulator	Model: GOS Series Standard: ISO 16750-2 Max. test current: 200 A Max. signal-channel power: 1 kW	
7	Signal/Data Line Failure Simulator	Model: DFS 4002A Standard: ISO 21780 Max. test current: 60 V Max. signal-wire test current: 2 A	

Test Setup



- ① PC software AutoLab
- ② Four-Quadrant Power Supply Voltage Variation Simulator APS Series
- ③ Load Dump Pulse Simulator LDS Series
- ④ Power Network Simulator PNS Series
- ⑤ Automotive Power Failure Simulator PFS Series
- ⑥ Short-Circuit Fault Simulator BOB 50C50
- ⑦ Signal/Data Line Failure Simulator DFS Series
- ⑧ Power Network Simulator PNS Series
- ⑨ Ground Offset Simulator GOS Series

Equipment Connection



- ① PC software AutoLab
- ② Four-Quadrant Power Supply Voltage Variation Simulator APS Series
- ③ Short-Circuit Fault Simulator BOB 50C50

SUZHOU 3CTEST ELECTRONIC CO., LTD.

Address: No. 99 E'meishan Road, SND, Suzhou, Jiangsu Province, China

E-mail: globalsales@3ctest.cn

Service: service@3ctest.cn

Tel: +86 - 512 - 68077192

Web: www.3ctest.com



3CTEST is always striving for product innovation and quality improvement. Product appearance and technical specifications are subject to change without further notice.