

HF-HG-310

High Current Temperature Rise Tester



High Current Temperature Rise Tester provides continuously adjustable large alternating current. It is widely applied to temperature rise tests on switchgears, bus bars, contactors and circuit breakers to examine heat generation performance under rated current.

Key features

- HF-HG-310 supports automatic and manual test modes. Users only need to set test current and duration. Built-in automatic current stabilization system.
- Custom test modules and software upgrades available upon request.
- Integrated power compensation system.

Technical specifications

Parameter	Value
Model	HF-HG-310 Three-Phase Temperature Rise High Current System
Max. Output Current	3 groups of AC 3000A
Circuit Configuration	Electric voltage regulator with special manufacturing process
Phase	3Phi4W+G
Voltage	380V±10%, 50Hz±2% three-phase four-wire
Input Current	78A
Phase	3Phi4W
Voltage	Phase voltage: 0-10V; Line voltage: 17.732V
Current	AC 0-3000A continuously adjustable, stepless speed regulation; Simultaneous three-phase output, single-phase output or separate phase output; Manual / automatic operation modes
Rated Capacity	90kVA
Current Stabilization Precision	Output current ±0.5%
Output Terminal	Connection terminals
Protection	Electronic circuit fast detection for overvoltage, overcurrent, overtemperature, phase loss; auto tripping & alarm. Voltage and current return to zero under standby status
Source Effect	≤0.3% of rated value
Time Drift	≤1% of rated value
Temperature Drift	≤0.04% rated value / °C
Load Effect	≤1% rated value (output voltage variation when output current changes from zero to rated)
Ripple Voltage	≤1% rated value +10mV
Line Regulation Rate	0.1%
Load Regulation Rate	0.1%
Voltage Display	True-color LCD & digital meter (Accuracy: 0.1V, Error ≤0.2%±1 digit)
Current Display	True-color LCD & 6-digit digital meter (Accuracy: 0.1A, Error ≤0.2%±1 digit)
Adjustment Setting	Touch screen current setting

Parameter	Value
Overall Efficiency	≥90%
Withstand Voltage Insulation Resistance	AC 1800V / 1min, 20Mohm
Cooling	Forced air cooling
Noise	<60dB (1m in front of unit)
CT Accuracy	0.2 class
Protection Class	IP20
Operation Mode	Long-duration temperature rise test
Ambient Temp	-10°C ~ 50°C
Humidity	0~90% (non-condensing)
Altitude	Below 1500m
Structure	Integrated unit
Size	To be confirmed
Weight	Approx. 3 tons
Busbar	Calculated at 1-1.2A per square millimeter
Temperature Measuring Points	64 channels, expandable
Sensor Cable	5m; PT1000 adopted for high precision
Rated Capacity	90kVA
Phase	Three-phase four-wire
Input Voltage	3-phase 380V
Output Voltage	3-phase four-wire 0-420V
Frequency	50/60Hz
Motor Power	ND-4.5 100W
Insulation Class	Class B
Insulation Resistance	5Mohm
Withstand Voltage Test	2000V/min
Waveform Distortion	≤0.1%
Cooling Method	Air cooling
Rated Capacity	(30×3) kVA
Phase	Three-phase
Input Voltage	3-phase 0-420V
Output Voltage	0-10V per phase
Output Current	3000A per phase
Insulation Class	Class B
Insulation Resistance	5Mohm
Withstand Voltage Test	2000V/min
Waveform Distortion	≤0.1%
Cooling Method	Air cooling

Compliance and documents

Applicable standards	[TO BE CONFIRMED] standard applied to this model
Calibration certificate	[TO BE CONFIRMED]
Optional accessories	[TO BE CONFIRMED]

Warranty and support

12-month warranty on every exported instrument. English operation manual and remote video guidance at commissioning. T/T, L/C at sight and deposit terms for bulk orders; sea, air or rail shipping.