# **Technical Specification**

## AC400V-500kW Automatic Load Bank

### **1 Technical Parameter**

Technical Parameter	
Rated Voltage & Frequency	<b>400VAC</b> ; 3 phase 4 wire, 50Hz
Max Load Power	510kW
Load Steps	Resistive Load: 11 steps, 1, 2, 2, 5, 10, 20, 20, 50, 100, 100, 200kW
Power Factor	1
Load Tolerance (each step)	±5%
Load Tolerance (overall)	±3%
Display Meter	Multiple function meter
Fan Control Power	External power 400VAC 3 phase 4 wire 50Hz
Wire Connection	Load bank input—busbar (star coupling "Y") Control power input—terminal block
Communication Interface	RS232/RS485
Insulation	F
Way of Working	Continuous Working
Cooling	Forced air, horizontal air intake and upwards exhaust cooling
Transportation	With lifting eyes and wheel castors
Color	Gray RAL7035
Dimensions	1550*1250*1680mm L×W×H
Weight	690kgs
Operating Environment Parameter	
Ambient Temperature	-20°C∼+50°C
Altitude	≤ 2500 meters
Relative Humidity	≤ 95%
Atmospheric Pressure	86∼106kPa
Brands of Main Components	
Contactor	Schneider
Fuse	MIRO
PLC	Siemens
Alloy Resistor	Kaixiang
Data Processing Software	Kaixiang

#### 1. Functions

- a) 3- line LED multi-function meter can display real-time voltage and current of three phase and each phase, resistive power, power factor, apparent power, frequency and running time of generator set.
- b) User can pre-set the power then press the master load button.
- c) Control mode: user can choose local control or intelligent control (through PC with our data management software)
- d) Control mode interlock: there is switch in control panel to choose control mode, other control mode is invalid if user choose one control mode.

#### 2. Protection

- a) Emergency stop button.
- b) In case of **over-load**, **over-heat**, **short circuit**, load bank will automatically remove load and give alarm.
- c) Fan protection: Load bank cannot load before power of fan is on.
- d) Give alarm when any fan is abnormal or with insufficient air volume, etc.
- e) Protection button: there are some protection buttons can be switched off when false alarm or for special requirements.

#### 3. Data Processing Software

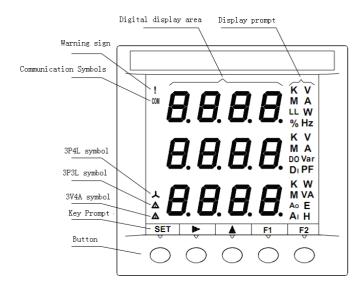
- a) Automatic load: User can set several periods of power and duration make automatic load testing.
- b) Can make parallel testing for several units.
- c) Data can be saved, can display real-time data and history data.
- d) Charts and graphs can be exported in format of JPG while testing data exported in Excel and Word format.



#### 4. Control panel

Meter Symbol Description: While testing, the machine can display real-time parameters.

Instrument has the upper, middle and lower three display windows, each value and unit symbol form the data. For example, the upper window shows 100.0V, it is to say phase A voltage is 100V.



#### **SYMBOLS:**

V: phase voltage symbol;

V LL: two symbols denote a line voltage;

A: Current Symbol;

W: active power symbol;

Var: reactive power symbol;

VA: Apparent power symbol;

Hz: Frequency Symbol;

E: energy symbols;

Ep (active power) kWh

Eq (reactive energy) kVAh,

Es (apparent power) kVA;

3P3L: 3-phase 3-wire two components 3V3A: 3-phase 3-wire three elements

3P4L: three-phase four-wire

Unit: V

Unit: V

Unit: A

Unit: W

Unit: Var

Unit: VA

Unit: Hertz;