

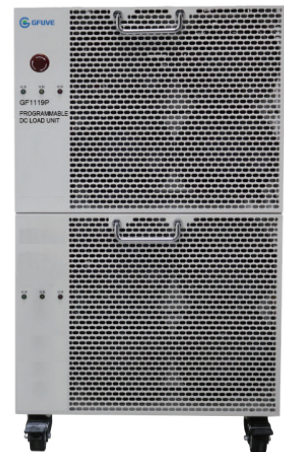
GF1119P

PROGRAMMABLE DC LOAD UNIT

GF1119P programmable DC load unit is an electronic load specially designed for the DC charging pile verification. The single power reaches 30kW. It has large power density, small volume, convenient operation, programmable and automatic shift electronic resistive load, and has the working characteristics of stepping on demand and multi box cascade; Meet the load requirements of relevant test items of DC charging pile in the process of charger laboratory or field verification, and cooperate with our GF1119 DC charging pile field test set to realize the AC / DC charging pile laboratory and field detection process; The whole testing process meets the requirements of relevant national testing standards and measurement standards JJG 1149-2018 verification regulation for off board electric vehicle charger and JJG 1148-2018 verification regulation for AC charging pile of electric vehicle. The GF1119P is applicable to national charging point verification institutions, charging point manufacturers, and related electric vehicle manufacturers.

Applications

1. Electrical laboratory;
2. EV & Charging pile factory;
3. Metrological service center;
4. Laboratories of power utilities;
5. Third party testing organization;
6. National Metrology and testing department;
7. Electricity power bureau & power company;
8. Charging pile operation and maintenance organization;



Features & Functions

1. As an AC load box of 48kW, the rated working current is 70A;
2. The capacity can be expanded through cascade, with the maximum DC power of 240kw and the maximum AC power of 48kW;
3. It has emergency stop leakage protection, overcurrent, overvoltage and short-circuit protection functions, as well as automatic resistance shift function;
4. When the DC load box is 240kw, the voltage is 0~1000v, and the constant current 240A and constant power 240kw can be realized within the full voltage range;
5. AC / DC bus input and safety anti electric shock interface for cascading shall be provided. Safety shall be fully considered for all interfaces to avoid touching relevant live conductors with hands;

6. In terms of communication, it can communicate with the host computer through RS232, and also can transmit internal data with BMS equipment through CAN bus. At the same time, it has the function of real-time data monitoring serial port and USB upgrade burning program;
7. The equipment has the ability to simulate the whole charging process of various electric vehicle power batteries, such as constant current mode, constant voltage mode, constant power mode, constant resistance mode, etc;
8. The equipment is equipped with voltage and current calibration and correction function, which can calibrate and correct the measured value of the instrument at any time, so as to ensure the measurement accuracy of the instrument used for a long time;
9. Under the rated voltage, the minimum current step is 0.005a, and a single device has 65536 gears;
10. It has the function of insulation grounding protection inspection, and anti reverse grounding protection measures are added at the same time;
11. It has an emergency stop switch to cut off the charging circuit immediately in case of an accident, and disconnect the loading gear of the equipment. At the same time, it can realize the continuous operation and heat dissipation of the fan, prevent the internal components from being damaged due to excessive temperature, and ensure the personal and property safety of the staff;
12. Built in temperature sensor, with over temperature protection system and fan intelligent control system, when the temperature in the box is too high, the load is actively disconnected for high temperature protection, and an alarm is sent out at the same time. In addition, the temperature in the box can be monitored through the debugging serial port;
13. Forced air cooling is adopted, and the motherboard control relay with armcortex-m4 as the core is used to control the fan of the cooling system, which can efficiently realize the equipment cooling and save the power cost;
14. With overcurrent, overvoltage and short circuit protection;
15. 80A fuse single box short circuit protection;

Parameters

Electrical parameters	
Power supply	One Phase AC 220V±10%, frequency 50/60Hz;
Load operating voltage	
Input voltage	0-1000V AC /DC
Rated working current of load	
DC current input	0-75A
AC current input	0-42A
Load power range	
DC power input	0-30KW
AC power input	0-9KW

Electrical parameters - continued
Load gear

Gear number	65535 pcs
Number of cascable	8 PCS
Min current step	0.001A(@220V)
Min power step	0.025W(@220V)

AC constant current mode

Range	1-40A
Resolution	0.1A(@220V)
Accuracy	±(0.1%+0.5% FS)

AC constant power mode

Range	9KW
Resolution	1VA(@220V)
Accuracy	±(0.2%+0.5% FS)

AC constant resistance mode

Range	5.3-5000Ω
Resolution	1Ω
Accuracy	0.1%+0.0008 FS)

DC constant voltage mode

Range	10-1000V
Resolution	0.1V
Accuracy	±(0.1%+0.5% FS)

DC constant current mode

Range	1-30A
Resolution	0.1A(@220V)
Accuracy	±(0.1%+0.5% FS)

DC constant power mode

Range	0-30KW(400-1000V)
Resolution	1VA(@220V)
Accuracy	±(0.2%+0.5% FS)

DC constant resistance mode

Range	5.3-5000Ω
Resolution	1Ω
Accuracy	0.1%+0.0008 FS)

Standard

Standard	IEC 62053-21,22, 23; IEC 60736; ANSI C12.20-2002; JIG-842-2017; JIG596-2012; JIG 1085-2013; JIG 1049-2018; JJF 68-2019; DL/T 1478-2015; DL/T 448-2016; GB/T 33708-2017; JIG 1148-2018; GB/T 34657.1-2017
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Electrical parameters - continued**Safety**

Isolation protection	IEC 61010-1:2001
Measurement Category	300 V CAT III, 600 V CAT II
Degree of protection	IP42
Declaration of conformity	CE & CNAS certified

Mechanical parameters

Dimensions (W×H×D) (mm)	485×485×355
Weight (kg)	28

Environmental conditions

Ambient temperature	-20°C to +50°C
Storage temperature	-30°C to +65°C
Relative humidity	10%-85%