

ER-SW Series Programmable AC Power Source



ERSW series Programmable AC Power Sources have the ability to simulate the AC voltage and frequency used in all countries. They are excellent instruments for R&D, design production testing/evaluation, and QA verification. In addition, the frequency range covers 500 Hz, making these products ideal for commercial and defense avionics applications.

The ERSW series delivers maximum rated power for any adjustable output voltage up to 300Vac (L-N) / 520Vac (L-L) for 3 phase units, and at any adjustable frequency between 40Hz to 500 Hz.

It integrates IGBT made by Mitsubishi, Siemens, and Infineon, and combines microprocessor and ARM & DSP control design together for quick response and higher reliability and parallel operation.

Main Features

10 memory locations for easy test setup and recall

Double protection with hardware and software

Free Instrument control software available

Simulate transient conditions

Programmable starting, voltage and current limit

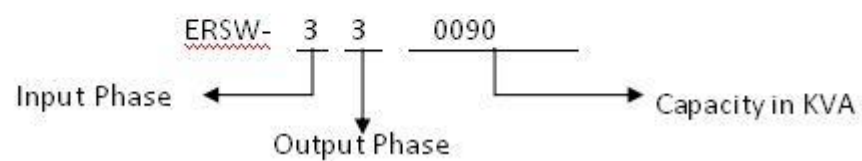
LCD to monitor voltage, current, frequency, power and power factor

Built- in RS232, RS485, communication port, suitable for remote monitoring

Capable for each phase unbalance loads

Models Selection

The ERSW series power supply model designation is shown below:



ERSW series power supply are available with the following capacities(parallel operation is available):

Single phase output: 1KVA ~ 100KVA

Triple phase output: 1KVA ~ 450KVA

Capacity: 1KVA to 450KVA

Overload: 110% 15Mins,125% 300s,150% 30s

Input Voltage:

1 phase 120V+/-20%,1 phase 220V+/-20%,3
x127V/220V+/-20%,

3 x220V/380V+/-20% or as per your specific requirement(select one individual voltage)

Frequency: 0-70Hz

Power Factor:

≥0.8 (Standard Type)

≥0.9 (12-pulse Type,option item)

Output Voltage:

1 phase 10-150V/20-300V adjustable

3 phase 17-260V/34-520V adjustable(L-L)

(Set your desired voltage)

Current: 0-Limit (Set your desired current)

Frequency: 50Hz/60Hz/400hz/40Hz-500Hz

Voltage Regulation: +/-1%≥100V

Frequency Regulation: +/-0.1%

Crest: 1.414+/-0.1

Distortion: THD<3%@ linear load≥100V

Phase Shift:

120°+/-1°(no load/ balance load)

120°+/-3°(33% unbalance load)

120°+/-4°(100% unbalance load)

Protection:

Over/under voltage

Over current,Over load

Over temperature,Short circuit

Voltage difference between each phase<3V

Additional output contactor(Option item)

Display:

Voltage,Current,frequency,Power/PF

Working condition

Temperature: -10 to 40°C

Humidity:10-95%

Noise: < 65dB within 1 meter

IP22/IP32

Altitude<1800m

Reliability&Efficiency

Mean Time Between Failure(MTBF) 50,000H

Mean time to restoration(MTTR)< 30 min

Overall efficiency≥85%

Standards

EN61010

IEC 62321

EN61326

EN62040-1-1