

# Three phase 126 kVA / 144 kVA AC Power Source

Programmable AC Power Source DP series

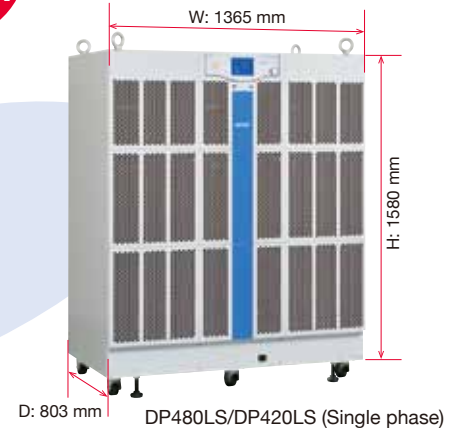
DP420LS: Single phase 42 kVA

DP480LS: Single phase 48 kVA

## High Efficiency / Smaller Package



Three  
phase  
144 kVA



### Features

- **High efficiency 77 % or more:** Due to less waste heat, the cost burden for air conditioning equipment is lower.
- **Smaller package :** Small bottom area means enhanced flexibility to install.
- **Superior transient stability and Low noise:** Due to Hybrid Power Control, DP series drive a wide range of load with very low noise.
- **Current limiter function:** Controlling the inrush current of the motor and transformer by the limiter, the exceeding current reduced. So the extra power capacity is not needed.
- **Reverse power flow 100 % (20 ms):** At the test of the inverter with PFC reactor, DP420LS/DP480LS can absorb instantaneous reverse power flow without external resistance.
- **Simple wiring:** Due to the input and output terminal at each phase, Less wiring required.
- **Low audible noise :** Variable speed fan work flexibly.

Rear of three phase 144 kVA



### Applications

- **Large scale grid-tied inverter test**
- **Power solution for EMC chamber and Open-Air test sites**
- **AC test power for large scale equipment / EMC testing**  
 Large scale air conditioning systems, Chillers, Medical system, Printing equipment, Semiconductor fab equipment, SMT placement equipment, Elevator/Escalator and Industrial robot

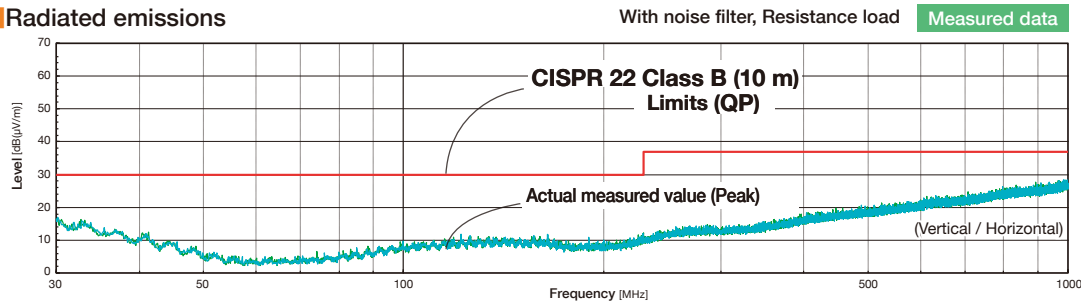


**NEW**

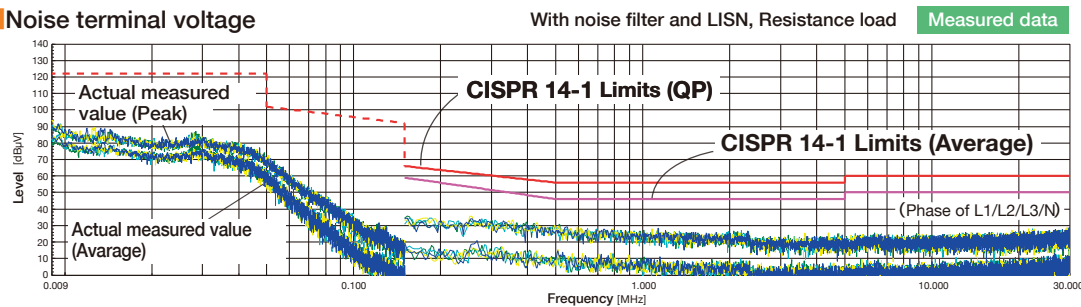
## Power solution for EMC chamber and Open-Air test sites

- The best power solution for measuring conductive noise. Due to a low noise output, the background noise is almost same as the ambient signal as just the measurement equipment working.

### Radiated emissions



### Noise terminal voltage



## Major specifications and Functions

More specific details, contact for us

### Power capacity :

DP420LS: Single-phase 42 kVA DP480LS: Single-phase 48 kVA  
Poly-phase system: Configure Single-phase three-wire by two products,  
Configure Three-phase four-wire by three products

### AC / DC mode :

AC, AC + DC, DC (Single-phase only)

### Output voltage and Frequency

		100 V range	200 V range	Resolution
AC	Voltage	0 V to 155 V	0 V to 310 V	0.1 V
	Frequency	AC : 40 Hz to 550 Hz	AC+DC : 1 Hz to 550 Hz	0.01 Hz
DC	Voltage	- 220 V to +220 V	- 440 V to +440V	0.1 V

### Maximum current : (100V range / 200V range)

DP420LS : 420 A / 210 A DP480LS : 480 A / 240 A

### Maximum peak current :

Peak value (Apk) which is three times of the maximum current

### Short reverse power flow :

Less than 100 % of Maximum current (RMS)  
(reverse power flow time  $\leq$  20 ms, discontinuous, less than 40 °C)

### Fluctuation with output current(100 V range / 200 V range) :

Within  $\pm 0.15$  V /  $\pm 0.30$  V  
(In the case that the output current is changed from 0 % to 100 % of the maximum current. DC or 45 Hz to 65 Hz.)

### Distortion of Output Voltage Waveform :

0.5 % or lower (40 Hz to 550 Hz)

### Power Input :

Voltage 200 V  $\pm$  15 % (Three-phase three wire), Frequency 50 Hz  $\pm$  2 Hz or 60 Hz  $\pm$  2 Hz, Power factor 0.90 or higher (typ.), Efficiency 77 % or higher (typ.), Maximum power consumption DP420LS: 63 kVA or lower, DP480LS: 72 kVA or lower

### Measurement function :

RMS / peak / average values of the output voltage / current, current peak-hold values, active / apparent / reactive power, the power factor, the crest factor, and harmonic current (40th max.), synchronization frequency

### Variable current limiter :

Effective value, positive/negative peak value

### Remote Sensing, AGC (Automatic Gain Control), Autocal (Output Voltage Compensation)

### Sequence function, Voltage fluctuation testing function, clipped sine wave, arbitrary waveform

### Power Unit Energization Setting

### External Control I/O :

Used to control Voltage Dip simulator and Reference impedance network

### External Interface :

Standard: RS-232, USB Selectable: GPIB or LAN

### Control Software included by default :

Enables control of basic parameters for output via a PC, including data logging, and creating/editing of sequence, simulation and arbitrary waveforms.

### Dimensions :

1365 (W)  $\times$  1580 (H)  $\times$  803 (D) mm

### Weight :

DP420LS: 600 kg approx. DP480LS: 650 kg approx.

\*Note: The contents of this catalog are current as of October 10, 2017

• Product appearance and specifications are subject to change without notice.

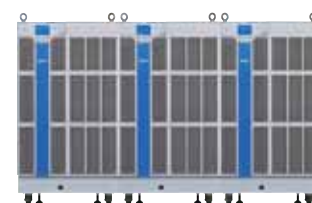
• Before purchase, contact us to confirm the latest specifications, price and delivery date.

## Lineup for High Power Applications



- DP240S : Single-phase 24 kVA
- DP360S : Single-phase 36 kVA
- A three-phase model can be configured by connecting 3 units.

Contact us for detailed specifications.



3-phase 72 kVA System

## NF Corporation

### Head Office

6-3-20 Tsunashima Higashi, Kohoku-ku, Yokohama 223-8508, Japan

<http://www.nfcorp.co.jp/english/>

## NF Techno Commerce Co., Ltd.

### International Sales Division

Meiko Building, 3-1-13 Nishi-Ikebukuro, Toshima-ku, Tokyo 171-0021, Japan

Phone : +81-3-5957-1809 Fax : +81-3-5957-1813