

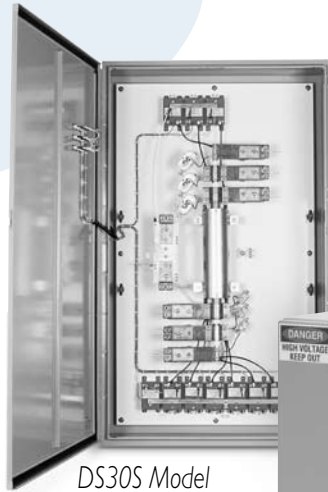
# Dyna System

## Description:

Modular Hybrid Series Connected Surge Protection Device

## Available Options:

- Dry Contacts
- Digital Surge Counter (with Reset Button and Battery Backup)
- Audible Alarm w/Silence Switch
- Remote Status Monitor
- Spare Module
- Panel Only for Internal Switchboard Mounting



DS30S Model



DS21S Model

## Applications:

- Critical Manufacturing Operations
- Schools and Public Works Facilities
- Service Entrance/Branch
- Broadcasting Stations
- Medical Facilities
- Data Centers
- 911 Centers

## Technology:

- MOV/SAD
- Wagon Wheel
- Inductors (Uses LC Filter for Superior Protection)

DS Model	Current Surge Capacity		Ampacity Range	Inductor Type	Dimensions and Weight
	per Phase	per Mode			
DS30s	337.5kA	L-N: 112.5kA L-L: 225kA L-G: 225kA N-G: 112.5kA	400-5000A	100µH TRIAX	See Chart on Next Page
DS20s	225kA	L-N: 112.5kA L-L: 112.5kA L-G: 112.5kA N-G: 112.5kA	300A		
DS21s	225kA	L-N: 112.5kA L-L: 112.5kA L-G: 112.5kA N-G: 112.5kA	150A, 225A	1µH coil	
	*200kA	L-N: 100kA L-L: 100kA L-G: 100kA N-G: 100kA	80A		

\*Uses LS Plus LCM Technology

## Electrical Specifications:

Nominal Operating Voltage: 120 - 480VAC  
 Operating Frequency: 47 - 63 Hz  
 Response Time: <1 nanosecond  
 Operating Humidity: 5% to 9%  
 Non-condensing  
 MCOV: 115%  
 EMI/RFI Noise Filtering:  
 100 kHz 67dB  
 1 MHz 68dB  
 10 MHz 64dB  
 100 MHz 56dB

## Standard Warranty:

5 Year Unconditional

## Standard Voltage Configurations:

120/240-SP	120/208-3Y
277/480-3Y	480-3D

*Consult Factory for Other Voltage Configurations*

## Enclosure:

NEMA 12 standard  
 Surface Mount

*Consult Factory for Other Enclosure Types*

## Sample Model Number:

Model-Voltage-Amps-Options

*Example: DS30S-120/208-3Y-600-A-B*

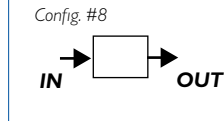
## Dimensions and Weight:

DS Model	Height	Width	Depth	Weight (lbs.)
DS21s-80Amp	18.9"	14.4"	7.9"	40
DS21s-150Amp	48"	24"	8.8"	80
DS21s-225Amp	30"			
DS20s-300Amp	48"	36"	10"	530
DS30s-400Amp	60"	36"	13.2"	330
DS30s-600Amp				494
DS30s-1000Amp	72"	36"	13.2"	948
DS30s-1200Amp				
DS30s-1600Amp				
DS30s-2000Amp				1250
DS30s-2500Amp				
DS30s-3000Amp				
DS30s-4000Amp	Consult Factory			

## Input/Output Configurations:

### DS20/21:

**DS20 300A  
and DS21**

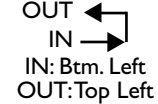


### DS30:

#### Config. #0



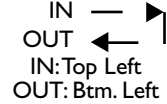
#### Config. #1



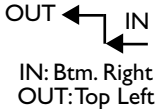
#### Config. #2



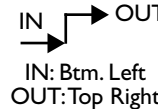
#### Config. #3



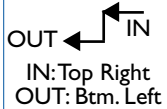
#### Config. #4



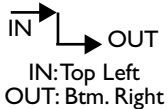
#### Config. #5



#### Config. #6



#### Config. #7



**NOTE:** For Applications 400A to 600A, use configurations: 0 through 7.  
For Applications 800A and above, use configurations: 0, 1, 2 or 3.

### Clamping Voltage:

Family	Voltage	Modes	UL SVRs
DS20/21/30	120/240	L-L	800
		L-N	400
		L-G	400
		N-G	400
	120/208	L-L	800
		L-N	400
		L-G	400
		N-G	400
	277/480	L-L	1500
		L-N	800
		L-G	800
		N-G	800
480	L-L	1500	
	L-G	1500	

### Installation Notes:

Family	Terminal Description	LUG Range	Recommended Wire Gauge
DS20/21/30	Phase/Neutral	Consult Factory	Consult Factory
	Safety Ground		
	Transient Ground	#14 - I/O	#6