

- OUTPUT VOLTAGE FROM 0.5kV~70kV,MAX
- LOW RIPPLE, HIGH STABILITY
- SMALL SIZE AND HANDYTYPE
- OVERVOLTAGE,ARC,SHORTCIRCUITPROTECTION
- LOCAL AND REMOTE CONTROL
- ET, RS-232, RS-485 DIGITAL INTERFACE OPTIONAL
- SAFETY INTERLOCK
- OEM CUSTOMIZATION AVAILABLE



HANDY TYPE

## INTRODUCTION

The DEL Series is a line of small dimension high voltage power supplies, which is mainly applied to scientific research and Industry. It can actualized output voltage and current control remotely by External potentiometer. The DEL series provided with external voltage monitor and current monitor, safety interlock, short-circuit ,arc and over voltage protection.

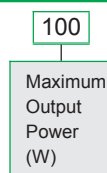
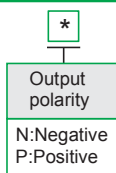
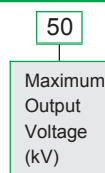
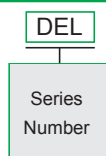
## TYPICAL APPLICATIONS

Capacitor Charging, Electronic Component Aging, Insulation Test, High Voltage Testing, Electron Beam /Ion Beam,Focus Ion Beam, Ion Impouring, Lithography Technology, Electrostatic Applications, Electrostatic Deflexion, Electrospinning, Electro-phoresis Capillary Electrophoresis, Microchip Electrophoresis, DNA sequencing, Piezoelectricity material Testing,Science, Laboratory Applications, Industrial Applications.

## DEL SELECTION TABLE

kV	mA	P(W)	model	kV	mA	P(W)	model	kV	mA	P(W)	model	kV	mA	P(W)	model	kV	mA	P(W)	model
0.5	3	1.5	DEL0.5*1.5	2	0.75	1.5	DEL2*1.5	5	0.3	1.5	DEL5*1.5	20	0.08	1.5	DEL20*1.5	40	0.04	1.5	DEL40*1.5
	10	5	DEL0.5*5		2.5	5	DEL2*5		1	5	DEL5*5		0.25	5	DEL20*5		0.13	5	DEL40*5
	20	10	DEL0.5*10		5	10	DEL2*10		2	10	DEL5*10		0.5	10	DEL20*10		0.25	10	DEL40*10
	30	15	DEL0.5*15		7.5	15	DEL2*15		3	15	DEL5*15		0.75	15	DEL20*15		0.38	15	DEL40*15
	40	20	DEL0.5*20		10	20	DEL2*20		4	20	DEL5*20		1	20	DEL20*20		0.5	20	DEL40*20
	60	30	DEL0.5*30		15	30	DEL2*30		6	30	DEL5*30		1.5	30	DEL20*30		0.75	30	DEL40*30
	80	40	DEL0.5*40		20	40	DEL2*40		8	40	DEL5*40		2	40	DEL20*40		1	40	DEL40*40
	100	50	DEL0.5*50		25	50	DEL2*50		10	50	DEL5*50		2.5	50	DEL20*50		1.25	50	DEL40*50
	120	60	DEL0.5*60		30	60	DEL2*60		12	60	DEL5*60		3	60	DEL20*60		1.5	60	DEL40*60
	150	75	DEL0.5*75		37.5	75	DEL2*75		15	75	DEL5*75		3.5	75	DEL20*75		1.88	75	DEL40*75
200	100	DEL0.5*100	50	100	DEL2*100	20	100	DEL5*100	5	100	DEL20*100	2.5	100	DEL40*100					
1	1.5	1.5	DEL1*1.5	3	0.5	1.5	DEL3*1.5	10	0.15	1.5	DEL10*1.5	30	0.05	1.5	DEL30*1.5	50	0.03	1.5	DEL50*1.5
	5	5	DEL1*5		1.67	5	DEL3*5		0.5	5	DEL10*5		0.17	5	DEL30*5		0.1	5	DEL50*5
	10	10	DEL1*10		3.33	10	DEL3*10		1	10	DEL10*10		0.33	10	DEL30*10		0.2	10	DEL50*10
	15	15	DEL1*15		5	15	DEL3*15		1.5	15	DEL10*15		0.5	15	DEL30*15		0.3	15	DEL50*15
	20	20	DEL1*20		6.67	20	DEL3*20		2	20	DEL10*20		0.67	20	DEL30*20		0.4	20	DEL50*20
	30	30	DEL1*30		10	30	DEL3*30		3	30	DEL10*30		1	30	DEL30*30		0.6	30	DEL50*30
	40	40	DEL1*40		13.3	40	DEL3*40		4	40	DEL10*40		1.33	40	DEL30*40		0.8	40	DEL50*40
	50	50	DEL1*50		16.7	50	DEL3*50		5	50	DEL10*50		1.66	50	DEL30*50		1	50	DEL50*50
	60	60	DEL1*60		20	60	DEL3*60		6	60	DEL10*60		2	60	DEL30*60		1.2	60	DEL50*60
	75	75	DEL1*75		25	75	DEL3*75		7.5	75	DEL10*75		2.5	75	DEL30*75		1.5	75	DEL50*75
100	100	DEL1*100	33.4	100	DEL3*100	10	100	DEL10*100	3.34	100	DEL30*100	2	100	DEL50*100					

## DELSELECTION EXAMPLE



Option	
SSX	Customized Slow start
A X	Arc Protection
DB	Double output
CC	Current Control
LRX	Low ripple option

## DEL SPECIFICATIONS

PARAMETER	DESCRIBE
Input	86~256VAC, Maximum 3.0A.
Output	0.5~50kV Maximum output Voltage option, 1.5W~100W power option.
Stability	0.02% per 8 hours after 1/2 hour warm-up.
Temperature Coefficient	≤25ppm/°C.
Ripple	0.1% p-p of maximum rated output voltage.
Voltage Programming	Front panel: voltage are continuously adjustable from 0 to maximum voltage by internal potentiometers . External remote: voltage are continuously adjustable from 0 to maximum voltage by 0 ~ + 1 0 V d c External voltage.
Current Programming (option)	Front panel: current are continuously adjustable from 0 to maximum c u r r e n t by internal potentiometers . External remote : current are continuously adjustable from 0 to maximum c u r r e n t by 0 ~ + 1 0 V d c External voltage.
Voltage/Current Monitor	0 ~ +10Vdc volt corresponds to 0 to maximum output, Zout=11k Ω , accuracy:±1%.
Remote Voltage Monitor	0 ~ +10Vdc voltage signal corresponds to 0~100% ourput
Voltage Remote Programming	Voltage is continuously adjustable from 0 to maximum voltage by External potentiometers.
Current Remote Programming	Current is continuously adjustable from 0 to maximum voltage by External potentiometers.
Voltage Load Regulation	0.01% ( no load to full load change).
Voltage Line Regulation	±0.01% (input voltage line change±10%).
Current Load Regulation	0.01% ( no load to full load change).
Current Line Regulation	±0.01% (input voltage line change±10%).
Connector	HV output connector:series output option(1m); input connector:DB15 connector,contain control and monitor signal.
Operating Temperature	0°C~+50°C.
Storage Temperature	-40°C~+85°C
Dimensions	5.51" H x 5.12" W x 9.45" D(140.00mm x 130.00mm x240.00mm).
Weight	3~5.56kg.

HANDY TYPE

## DEL ANALOG INTERFACE

PIN	SIGNAL	PARAMETER
1	Ground	SGND
2	Voltage Monitor	0~+10Vdc=0tomaximumoutput,Zout=10k Ω
3	Current Monitor	0~+10Vdc=0tomaximumoutput,Zout=10k Ω
4	Interlock Output	Alternate Interlock Configurations
5	+10Vdc Reference	+10 Vdc @ 1mA , maximum
6	NC	NC
7	Voltage Program Input	0~+10Vdc=0tomaximumoutput,Zin=10M Ω
8	Local Voltage Program	10 turn pot, screwdriver adjust
9	NC	NC
10	Current Program Input	0~+10Vdc=0tomaximumoutput,Zin=10M Ω
11	Local Current Program	10 turn pot, screwdriver adjust
12	N/C(+24VdcOutforInterlock)	Optional Interlock Configuration
13	N/C(Interlock Coil)	Optional Interlock Configuration
14	NC	NC
15	Ground	Ground

## DIMENSIONS

DIMENSIONS: in.[mm]

