

DC Power Supply FZA series

FZA Series

High Power Programmable DC Power Supply 600W – 7200W / 10VDC – 120VDC



Zero voltage soft switching technique, low ripple and noise
Use of reliable digital encoder for voltage and current setting
Micro controller for digital programming
Constant Voltage / Constant Current Mode with auto mode crossover
LabView and LabWindows drivers
Active PFC at the input with wide input window
Four digit seven segment LED display for voltage and current read back
19" rack mount suitable for ATE and OEM applications
Parallel operation with active Current Sharing
RS232, RS485, GPIB interface for external programming
Galvanic isolated analog programming and mounting surface
Optional: Ethernet interface card-kit

Selection Table

Model Number	Max Power	Output Voltage	Output Current	Model Number	Max Power	Output Voltage	Output Current
FZA600/10/60	600W	0-10V	0-60A	FZA2400/60/40	2400W	0-60V	0-40A
FZA600/20/30	600W	0-20V	0-30A	FZA2400/80/30	2400W	0-80V	0-30A
FZA600/30/20	600W	0-30V	0-20A	FZA2400/120/20	2400W	0-120V	0-20A
FZA600/40/15	600W	0-40V	0-15A	FZA3600/20/180	3600W	0-20V	0-180A
FZA600/60/10	600W	0-60V	0-10A	FZA3600/30/120	3600W	0-30V	0-120A
FZA600/120/5	600W	0-120V	0-5A	FZA3600/40/90	3600W	0-40V	0-90A
FZA1200/20/60	1200W	0-20V	0-60A	FZA3600/60/60	3600W	0-60V	0-60A
FZA1200/30/40	1200W	0-30V	0-40A	FZA3600/80/45	3600W	0-80V	0-45A
FZA1200/40/30	1200W	0-40V	0-30A	FZA3600/120/30	3600W	0-120V	0-30A
FZA1200/60/20	1200W	0-60V	0-20A	FZA7200/30/240	7200W	0-30V	0-240A
FZA1200/80/15	1200W	0-80V	0-15A	FZA7200/40/180	7200W	0-40V	0-180A
FZA1200/120/10	1200W	0-120V	0-10A	FZA7200/60/120	7200W	0-60V	0-120A
FZA2400/30/80	2400W	0-30V	0-80A	FZA7200/80/90	7200W	0-80V	0-90A
FZA2400/40/60	2400W	0-40V	0-60A	FZA7200/120/60	7200W	0-120V	0-60A

Ripple (RMS)

Model Number	Output Ripple Voltage (mV)	Output Ripple Current (mA)	Model Number	Output Ripple Voltage (mV)	Output Ripple Current (mA)
FZA600/10/60	<10mV	<20mA	FZA2400/60/40	<10mV	<10mA
FZA600/20/30	<10mV	<10mA	FZA2400/80/30	<20mV	<10mA
FZA600/30/20	<10mV	<10mA	FZA2400/120/20	<20mV	<10mA
FZA600/40/15	<10mV	<10mA	FZA3600/20/180	<10mV	<20mA
FZA600/60/10	<10mV	<10mA	FZA3600/30/120	<10mV	<10mA
FZA600/120/5	<10mV	<10mA	FZA3600/40/90	<10mV	<10mA
FZA1200/20/60	<10mV	<20mA	FZA3600/60/60	<10mV	<10mA
FZA1200/30/40	<10mV	<10mA	FZA3600/80/45	<20mV	<10mA
FZA1200/40/30	<10mV	<10mA	FZA3600/120/30	<20mV	<10mA
FZA1200/60/20	<10mV	<10mA	FZA7200/30/240	<10mV	<20mA
FZA1200/80/15	<20mV	<10mA	FZA7200/40/180	<10mV	<20mA
FZA1200/120/10	<20mV	<10mA	FZA7200/60/120	<10mV	<10mA
FZA2400/30/80	<10mV	<20mA	FZA7200/80/90	<20mV	<10mA
FZA2400/40/60	<10mV	<20mA	FZA7200/120/60	<20mV	<10mA

Technical Data

Input:

Input voltage	600W, 1200W: 95..264VAC, 45..63Hz, p Phase, 2400W: 175..264VAC, 45..63Hz, 1 phase 3600W, 7200W: 300...457VAC, 45..63Hz, 3 phase, 4 wire 0,99 typ., full load, nominal line 45kHz nominal
Power Factor	
Switching frequency	

Output:

Output DC voltage	see table
Output DC current	see table
Time delay	7s max. from power ON until output stable
Output Noise (90-20MHz) Rippel (RMS)	voltage <45mV p-p see table
Efficiency	minimum 80%, typical
Hold up time	20ms
Constant Voltage (CV), constant current (CC) mode with auto crossover	

Regulation:

Line regulation	voltage 0.1% Vout current 0.1% Iout
Load regulation	voltage 0.1% Uout current 0.1% Iout
Voltage mode transient Response	<200µs, for load change 40..90%
Stability	0.05%
Temperatur Coefficient	Voltage 0.05% (Vmax/°C) Current 0.05% (Imax/°C)
Overvoltage control	yes

Protection:

Voltage differential	min. ± 600VDC, output to safety ground
Over temperature protection	Through 90°C thermal switch on heat sink
Over voltage control	yes
Over voltage protection	programmable through rotary encoder or digital interface
Remote sensing	yes

Environmental Conditions:

Operating temperature	0..+50°C, Derating>40°C, 2.5%/°C
Storage temperature	-20..+70°C
Humidity	≤ 90% RH non condensing
Cooling	Internal forced air cooling from front to rear side with zero stacking

Operation and Control:

Parallel operation	with active Current Sharing
Sense operation	possible
Meters	LED display Voltage: set voltage, set overvoltage 7 Segment, 4 Digit Current: set current, 7 Segment, 4 Digit Accuracy 0.2% +/-3 counts
Front panel controls	Digital rotary encoder for voltage, current and over voltage set
Last set memory	yes
Remote ON/OFF Display	LED for CV, CC, Remote, Output ON, Trip, Remote, Uset, Iset, OVset, Set Mode

Physical Specifications:

Dimensions,	
weight	600W, 1200W: 19"x1Ux450mm (wxhxd), 7kg 2400W: 19"x2Ux450mm (wxhxd), 13kg 3600W: 19"x3Ux550mm (wxhxd), 22kg 7200W: 19"x6Ux550mm (wxhxd), 30kg