



RITENGA DESIGN LTD

Haere Mai, Main Street, Sawdon, Scarborough, YO13 9DY

Tel:01723 859074 Email: Ritengades@aol.com

URL: www.Ritenga.co.uk

SPECIFICATION OF 24V 400A (pulse) HIGH FREQUENCY POWER SOURCE: Chassis mounted

Electrical:	24V 400A(p)	
Input Voltage	400V, +/-10% - three phase, three wire supply (Public Low Voltage network)	
Input Current	~ 18.7Amax / phase (@24V 400A load) for 1min	
Power Factor	typically >0.95 at nominal load	
Efficiency	>90% at full load, with mains at 400Vac	
Output Voltage (Switch selectable)	12.0 @ voltage sensing point	24.0 @ voltage sensing point
Cable Drop	3V max (1.5V/cable) @ 400A	
Ripple Voltage	<5% peak – peak (dependant upon load characteristic)	
Output Current	125A nominal / 400A pulse for 1 min (see below), 15A minimum	
Transient Response 1	+/-20A step (between 20A and 100A) Voltage < 0.24Vpk; Recovery time < 20mS	
Transient Response 2	+/-100A step (between 200A and 400A) Voltage < 2.4Vpk; Recovery time < 50mS	
Ripple Current	<5% peak – peak (dependant upon load characteristic)	
Load regulation	<1% for output current = 10 – 100%	
Line regulation	< +/-0.5% for +/-10% mains variation	
Mains Input Protection	20A Fuse x 3 (Recommend fitting of 3 pole 20A MCB type B for mains isolation)	
Output Current Protection	Internal electronic control of current limit Short circuit protection	
Indication:	Green Led = Mains On	
	Green Led = Unit ON	
	Red Led = Unit Overheating	
	Amber Led = Low current Alarm (Output Current <55A)	
	Red Led = Under Voltage/ Over Voltage	
Control Connections:		
Voltage Monitor	0-10V (reference -ve output) ⇒ 0-24V output voltage Accuracy <=1%	
Current Monitor	0-10V (reference -ve output) ⇒ 0-400A output current Accuracy <=1%	
Over Voltage Limit	32V	
Alarm	Low Current alarm – Normally closed volt free contacts	
Stop / Start (Enable)	Closed contact ⇒ Start (Enable)	
	All isolated to +/-1kV from DC output	

(cont)

Environment:	
Temp range	0 – 40°C
Max Altitude	1000m (max output current to be reduced above 1000m)
Cooling	Forced convection from lower face to upper face of unit.
EMC & Safety:	
Conducted & Radiated EMI	EN55011 / EN55022, level B
Safety Approvals	EN61010-1:2001
Mechanical:	
Dimensions	311.9mm wide x 110.0mm high x 392.4 deep
Finish	Zinc Passivated
Weight	15kg
Input Connection	Terminals – on lower face of unit – Cable Max = 4mmsq
Output Connection	Busbar – on lower face of unit – M10 hole
Control Connection	Terminal block – on lower face of unit – Cable max 1.0mmsq

Layout

