



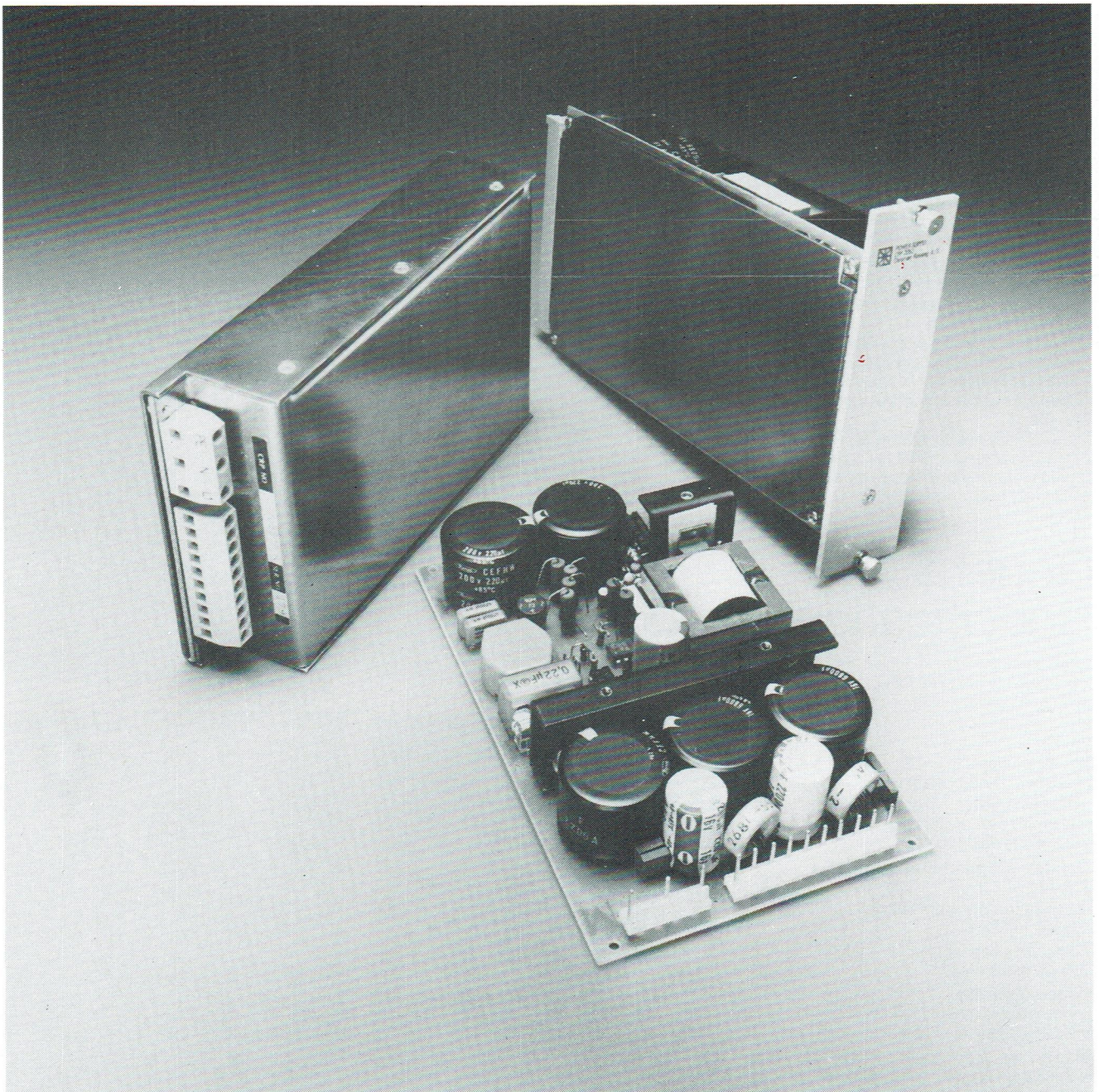
# Switching Power Supply

Christian Rovsing A/S Power Systems Department

## CRP 2053 50W

The CRP 2053 represent a new line of cost competitive Switch Mode Power Supplies.

It's sophisticated design result in a serie of extremely compact 50 W Power Supplies with unique electrical and mechanical features.



# Cost competitive Power Supplies

The standard family includes today 6 versions, a triple output voltages, a dual output voltages, and 4 single output voltage Power Supplies and other output versions can easily be implemented.

The CRP 2053 A has 3 outputs and can supply full power (50W) into any load combination between + 5V and + 12V output, and it also contains an isolated, regulated output, which can be used either as a negative supply or mounted on top of the + 12V in order to obtain higher output voltages.

The CRP 2053 B is a dual output Power Supply. It can deliver full power in any load combination between + 12V and - 12V and as it furthermore can be used as a 24V supply it is very well suited to be used as a universal Power Supply. The CRP 2053 C, D, E and F are cost effective single output Power Supplies.

As standard they all includes:

- an overvoltage, protection circuit in order to protect the user during fault conditions.

- a noise filtering circuit in order to meet VDE 0871, VDE 0875 and FCC requirements for conducted emission into power line without external filters.

- and they are strapable between 220 VAC and 110 VAC and has been designed to meet international safety requirements.

## General Specifications

Input voltage:  
94-132 VAC, 187-265 VAC,  
User selectable

Input frequency:  
45-66 Hz

Inrush current:  
Maximum 40 A at start up

Hold-up time:  
Minimum one cycle at full load, nominal input

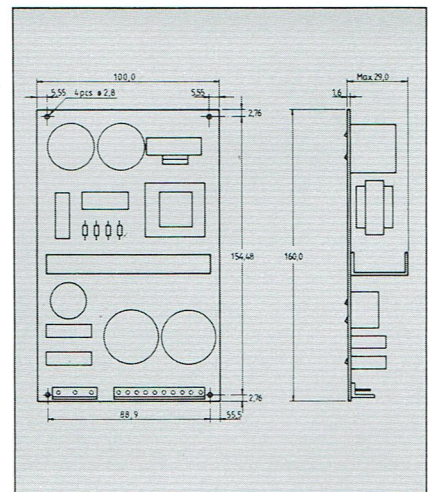
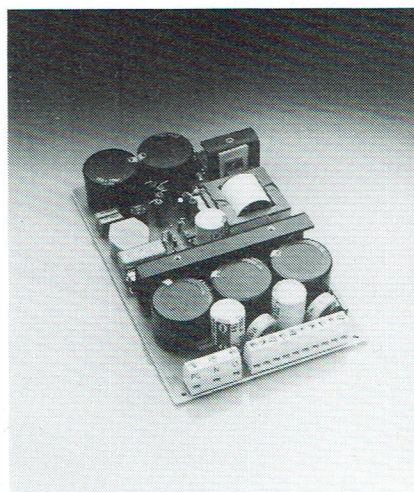
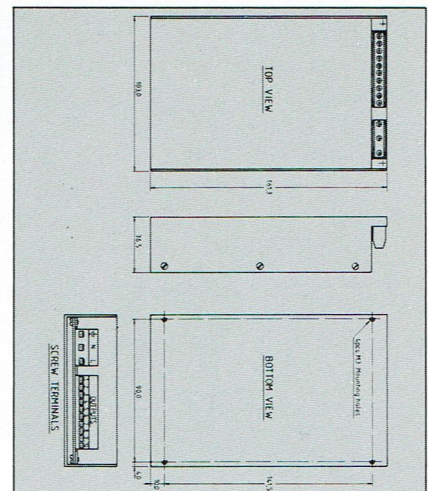
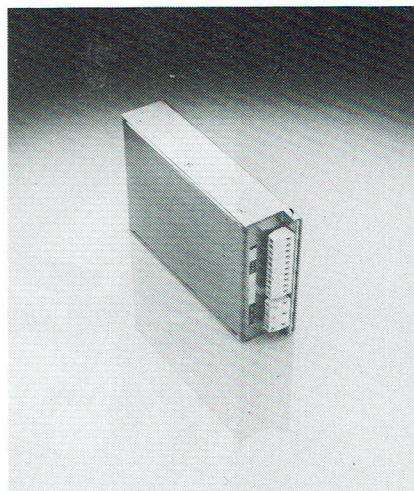
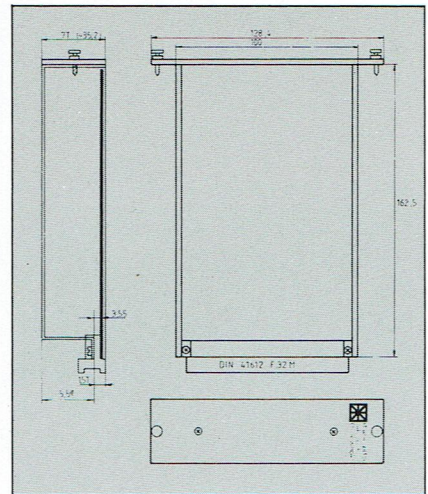
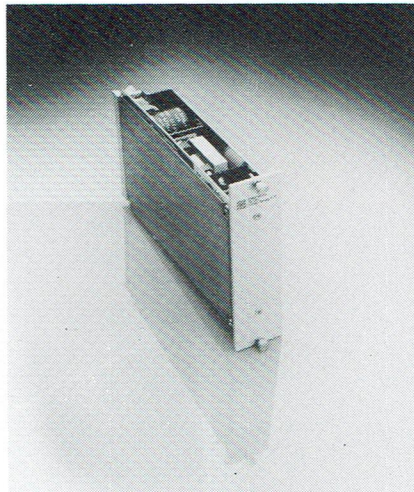
Operating temperature range:  
0°C - 55°C

Storage temperature range:  
+ 25°C - + 85°C

Temperature stability:  
250 ppm/°C

Conducted EMI:  
Is designed to meet VDE 0871,  
VDE 0875 and FCC requirements

Safety:  
Is designed to meet international requirements.  
Primary to earth 2000 Volt.



# Output Specifications

	CRP 2053 triple output	CRP 2053B dual output			
Voltage:	Primary 1 +5.1V/6A ±2% 10-100% load Primary 2 +12V/3A ±5% 10-100% load Primary 3 12V/1A ±2% 0-100% load	Output 1 +12V/4A ±2% 0-100% load Output 2 +12V/4A ±2% 1 Output 2 +12V/4A ±5% 1 =< 1x10 Output 1+2 24V/2A ±2% 0-100% load			
Maximum Current:	Primary 1 8A Primary 2 4A Auxiliary 15A All currents are electronically limited and restart	Output 1 4A Output 2 4A Output 1+2 2A Is electronically limited and restarts automatically.			
Output Power:	50W Electronically limited and restarts automatically	50W Electronically limited and restarts automatically.			
Ripple on outputs:	Maximum 25 mVrms at full load	Maximum 25 mVrms at full load.			
Transient response:	Output stays within regulation tolerance for a load change between 50%-100%-50%	Output stays within regulation tolerance for a load change between 50% - 100% - 50%			
Overvoltage protection:	On primary 1 & 2, factory set	On output 1 & 2, factory set			
Line regulation:	Maximum 0.1% at any load	Maximum 0.1% at any load			
CRP 2053C, D, E, F Single output	C	D	E	F	
Voltage	5V	12V	24V	48V	
Tolerance	2%	2%	2%	2%	
Current minimum	8A	4A	2A	1A	
Current limit*)	Electronic	Electronic	Electronic	Electronic	
Output power	40W	50W	50W	50W	
Ripple on output at full load	25mVrms	25mVrms	25mVrms	25mVrms	
Transient response 50% - 100% - 50% load change	within regulation tolerance	within regulation tolerance	within regulation tolerance	within regulation tolerance	
Overvoltage protection	factory set	factory set	factory set	factory set	
Line regulation at any load	0.1% max	0.1% max	0.1% max	0.1% max	

\*) Electronically limited and restarts automatically

# Christian Rovsing A/S

For many years, Christian Rovsing A/S has demonstrated exceptional professional talent in the field of computer related power distribution. Efforts have been dedicated to the design and production of Switching Power Supplies to meet specific customer requirements from space and military standards to high-volume office automation. State of the art technology and detailed understanding of systems requirements ensure products with a long technological lifetime. The exceptionally low component count makes the products highly reliable and price competitive. Several patents relating to power circuit design are held by the company.

Our products are under continuous research and development. Therefore, any information may change without prior notice.



Christian Rovsing A/S  
Marielundvej 46B  
DK-2730 Herlev  
Denmark  
Phone: +45 2 91 88 33  
Telex: 35193 cr dk  
Telefax: +45 2 65 43 73

Christian Rovsing Corp.  
1337 Thousand Oaks Blvd.  
Suite 220  
Thousand Oaks  
California 91 362  
U.S.A.  
Phone: 805-497-6722  
Telex: 910-336-5733  
Telefax: 805-497-8271

Local Representative: