

CATHODIC PROTECTION POWER SUPPLY

IMPRESSED CURRENT PROTECTION



APPLICATIONS

UNDERWATER TUNNELS

BRIDGES

OFFSHORE DRILLING PLATFORMS

UNDERWATER PIPELINES

Impressed Current Cathodic Protection

Impressed Current Cathodic Protection is used where the current requirements for corrosion protection are high. Online Power developed the impressed current protection power supply with a clear focus on the requirements of the 21st century. In the real world, the load impedance between the protected structure and the anode varies. Therefore, over a wide range of load impedance, our power supply works at high efficiency and also with high input power factor with the benefit of reduced electricity costs. Many installations require more than one power supply and the Ethernet connectivity of our power supply makes it easy to control and monitor input and output parameters from a remote location. This feature makes it possible to connect our power supply to an existing SCADA system.

The touch screen not only provides the means for setting the output current. It is also a powerful tool as it also offers the ability to set alarms and to monitor the data as well. The data can be graphically displayed or can be downloaded for analysis and future planning purposes.

The unique feature of our power supply is that it can measure the voltage between the protected structure and the anode with a flick of a switch. This data may be very valuable to our customers to plan their present and future protection needs.



FEATURES

Ethernet Connectivity for Remote PC Control

SCADA System Connectivity

Touch Screen for current setting and optional alarms and data logging

Touch Screen can also provide visual and downloadable graphical data

Field Proven Technology

Exceptional Reliability

Ability to accurately measure the Shell Voltage

High Efficiency over a wide range of Load Impedance

High Input Power Factor over a wide range of Load Impedance

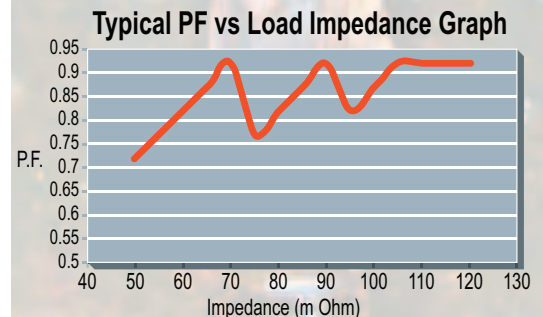
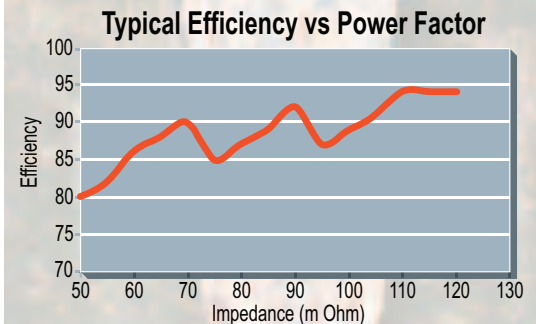
Output Short Circuit and Over Current Protection

Convection Cooling

NEMA 4X Enclosure

SPECIFICATIONS

Input Voltage	480 VAC, +10%, -15%; 3 Phase Other input voltages are available
Input Frequency	60 Hz Nominal (57-63 Hz) 50 Hz Optional (48-52 Hz)
Input Power Factor	Better than 0.8 Automatic primary tap switching to improve Power Factor when shell impedance changes
Input Transformer	Isolation, Delta/Delta
Rectification	6 pulse SCR
Output Mode	Current Controlled
Output Current	0 to 300 Adc, 20 Vdc to 32 Vdc Other current ranges available
Current Regulation	Better than 2%
Voltage Ripple	<5% peak to peak
Efficiency	>90% at rated max output voltage
Cooling	Convection
Shell Voltage Measurement ...	Standard (± 2 Vdc, 10mV accuracy)
Protection	Input Circuit Breaker AC Contactor Normally Closed DC Contactor Over Current / Short Circuit SCR & Main Transformer over-temp Door Interlock
Display	Black/White Touch Screen (3" x 6") Standard Color and other sizes optional
Control Switches ..	Local-Off-Remote (Remote for PC control) Shell Measurement Toggle Switch Alarm/Fault Reset Push Button
Input Metering	"SHARK-100" of Electro Industries Phase to Phase Input Voltages Phase Current KW, KVA, PF
Output Metering ..	With Touch Screen - Output Current, Output Voltage, Shell Voltage, Alarm/Event Log, Voltage/Current Trend Graphs
LED Indicators	AC ON (Green), DC Output ON (Green), Max. DC Voltage (Amber, Blinking), Over Current Shut Down (Red), Power Supply Over Temp. (Red), Door Open (Red), Low Current (Red), Power Supply Fault (Red), DC Contactor Open (Red), Anode Impedance above 25% (Red, Blinking), Shell Measurement in progress (Blue, Blinking)
Communication	Ethernet for Remote Control, SCADA Compatible (Input and Output parameters, Accessible for Remote Control)
Remote Control	GUI on Excel spreadsheet (Standard)
Optional Features	Power Limit Foldback Temperature Limit Foldback
Dimensions	26"W x 21"D x 55"H
Weight	1100 lbs



Specifications are subject to change without prior notification.