ACTS 2000 & 2002

CATHODIC PROTECTION
AUTOMATIC RECTIFIER SYSTEM

The **ACTS 2000 and ACTS 2002 Series** from AMETEK Solidstate Controls offers the latest in Automatic Rectifiers with Switching Technology for Cathodic Protection. They are designed and manufactured in accordance with maximum reliability criteria using modern manufacturing processes. The wide variety of available models cover most applications in Production, Transportation, Distribution and Storage of Water and Oil & Gas.

The most important characteristic of the ACTS Series Rectifiers is its capacity to operate within a wide variety of output voltages, unique in rectifiers of this type. This is accomplished by a variable switching frequency architecture.

Ultra Low Output Ripple

* Remote Control and Monitoring
* ON/OFF Test Synchronized by GPS
* Capacity 15-100 Amp/0-100V (expandable in ACTS 2002)
* Wide Current Voltage Range

Communication Capabilities

* Web Enabled
* Satellite
* UHF Radio/VHF
* Ethernet (ACTS 2002)
* Cellular Telephone
* Microwave
* RS232/RS485

Normal Operation

* Constant Current Operation
* Constant Voltage Operation
* Constant Potential Operation

Industrial grade manufacturing makes this equipment capable of continuous service, even under the most severe environmental conditions, even exceeding a high level of protection against severe atmospheric discharges. These characteristics of the **ACTS 2000/2002** products, combined with their great communication capabilities, permit users to obtain significant reductions of operational costs, and an optimization of maintenance resources.

AMETEK®
SOLIDSTATE CONTROLS

The Purpose of our business is to provide continuity of electrical power to keep businesses in business.

Technical Specifications

AC Supply

For AC powers of up to 5000 Watts:	Voltage: 2 wire 208/220/380/415/440/480/660 Vac, +15% -20%
For AC powers of more than 5000 Watts:	Voltage: 3 wire 208/220/380/415/440/480/660 Vac, +15% -20%
Frequency:	50/60 Hz +5% -5%

Regulation

Regulation Parameters:	+ 1% (Current, Potential, Voltage modes)

Adjustment of Parameters

Constant Current:	0 - 100%
Constant Voltage:	0 - 100%
Constant Potential:	-650 mV to -3,000 mV
On-Off:	T_{on}: 0.8 - 819, 1 Sec T_{off}: 0.2 - 819, 1 sec
V_{off} Time Delay (ACTS 2002)	from 190 msec beginning OFF to -10 msec beginning ON (max 65 sec)
V_{off} Time Delay (ACTS 2000)	from 1,5 sec beginning OFF to -10 msec beginning ON (max 65 sec)

Output Ripple

< 5% (at no-load; output voltage >10%)	< 3% (at full load; output voltage >10%)

Manufacturing Standards

IEC 146 (Current Converters)
IEC 255-4/76 Class III (High Tension Pulses)
IEC 255-4/68 Class III (High Frequency Disturbances)
IEC 68-2-1/2 (Cold and Hot Environment)
IEC 255-21/1 Class 1 Part 3 (Vibrations)

Environmental Conditions

Outdoor Installation	NEMA 3X with lightening protection
Wind	200km/h in any direction
Ambient Temperature	-30°C to +55°C operating
Relative Humidity	95% (not condensing)

Alarms

Energy Failure
GPS out of Synchronism
Protection Fault
Output Current Failure
Low Output Voltage
Low Battery Voltage
Door Open
Output Current Error
Output Voltage Error
Potential Error
High Output Voltage
Equipment Over Temperature

Controls

Current Set Point
Potential Set Point
Voltage Set Point
Time zone
ON-OFF Test end Date and hour
Setpoint Ton
Setpoint Toff
Minimum Output Voltage Control Mode (Potential, Current or Voltage)
Communication parameters
Maximum Output Voltage
Current Date and Hour
ON-OFF Test beginning Date and hour
ON-OFF Test in execution
ON-OFF Test prepared
OFF Potential Measurement Delay

Specifications subject to change without notice

AMETEK®
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