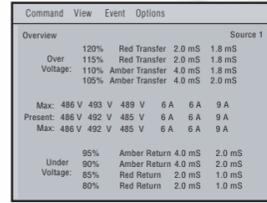
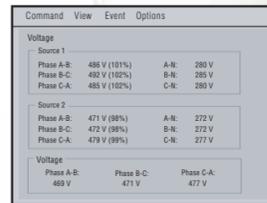
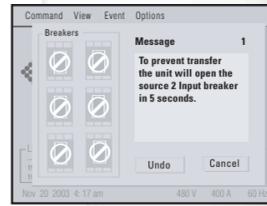
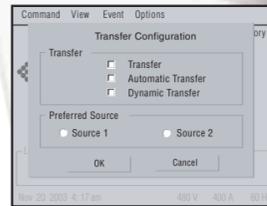
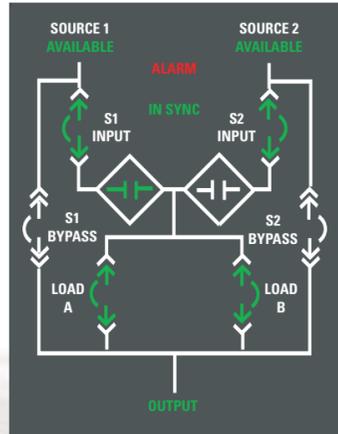


PATENT PENDING DYNAMIC INRUSH RESTRAINT LIMITS INRUSH CURRENT FOR 480V APPLICATIONS

Based on loading and power system parameters, SuperSwitch³™ can dynamically modify its standard transfer switching algorithm. This patent pending technology limits the load inrush current in situations where the switch must make an immediate transfer to preserve load power quality. This breakthrough technology not only restricts the stress on fuses and breakers in the power distribution train, but also minimizes the chance of load interruption. Ultimately, this capability provides the maximum possible power quality of the voltage output for mission critical applications.



EXPERT POWER MANAGEMENT

With ever-increasing power requirements and the necessity to ensure uptime, SuperSwitch³ provides exceptional power management.

Software-guided Breaker Operation and Bypass

Easy to follow command and indicator lights eliminate the causes of human error

Data and Alarm Management

With over 100 event types, 2500 events can be stored or downloaded for analysis

Remote Access

Compatibility with Building Management Systems provides access from any location at any time



ABOUT DANAHER POWER SOLUTIONS

Danaher Power Solutions, LLC., is the leading designer, manufacturer and provider of power quality and reliability products and services marketed under the brand names Cyberex®, United Power®, Current Technology®, Joslyn® and Superior Electric™. Danaher Power Solutions, LLC., is a wholly owned subsidiary of Danaher Corporation (NYSE: DHR).



5900 Eastport Blvd., Bldg. V
 Richmond, VA U.S.A. 23231-4453
 Toll free: (800) 238-5000
 Tel: (804) 236-3300
 Fax: (804) 236-4040
 Email: Info@DanaherPowerSolutions.com
 www.DanaherPowerSolutions.com



Toll free: (800) Cyberex, (800) 292-3739
 Email: Cyberex@Danaher-DPS.com
 www.Cyberex.com

© 2006, Danaher Power Solutions, LLC.

Cyberex® is a registered trademark of Danaher Power Solutions, LLC.

SuperSwitch³™ is a trademark of Danaher Power Solutions, LLC.

All other brand and product names are trademarks or registered trademarks of their respective companies.

Printed in U.S.A. All Rights Reserved.

SUPERSWITCH³
 TECHNOLOGY

Redefining Reliability



DID YOU KNOW?

Cyberex has over 30 years of experience, more than any other manufacturer.



DID YOU KNOW?

Cyberex invented the first stand-alone STS in 1971 and the first fully digital unit in 1994. Cyberex continues to lead the market with breakthrough technologies.

SUPERSWITCH₃ REDEFINES RELIABILITY

Thirty years ago, Cyberex revolutionized power distribution with its invention of the Static Transfer Switch. Since then, Cyberex has installed more units than any other manufacturer. It is from this experience and our customers' requirements that the SuperSwitch₃™ has evolved.

Designed with a 'true' fault-tolerant architecture, SuperSwitch₃ ensures there is truly no single point of failure through the use of our patented transfer algorithm and robust electrical components. With an increased MTBDE to an estimated 10 million hours, SuperSwitch₃'s reliability is unmatched. SuperSwitch₃ redefines power reliability with its exceptional design, serviceability and user-interface.

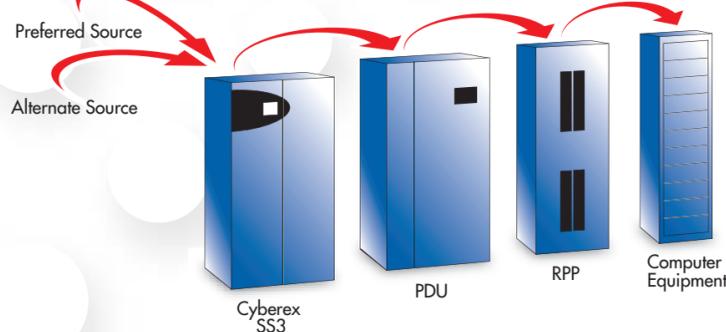
BREAKTHROUGH TECHNOLOGY

- **Fault-tolerant** architecture eliminates single point of failure
- **Patented SuperSwitch™** algorithm delivers unmatched transfer characteristics
- **Dynamic Inrush Restraint** protects system by minimizing downstream magnetizing currents
- **Three tiered user-defined thresholds** for power quality management
- **Software-guided breaker** operation eliminates human error
- **Graphical user-interface** and mimic panel for local system monitoring and configuration
- **Remote access** capability for system, event and alarm monitoring
- **Flexible access** for ease of cabling, operation and maintenance
- **Unparalleled alarms**, metering & diagnostics
- **Detailed Monitoring**, Reporting and Trending Capability
- **Advanced Communications** allow access at any time from any location
- **Unique modular design** reduces open-door time to 15 minutes for standard servicing
- **Ultra-dense footprint** reduces demand on valuable dataroom real estate
- **Reduced number of internal components** maximizes reliability



Rear View of SuperSwitch₃ Showing Top or Bottom Power Feed Access

SUPERSWITCH₃ PROVIDES ADDED RELIABILITY TO ANY ARCHITECTURE



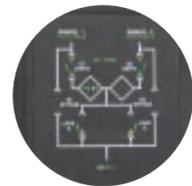
RELIABILITY THROUGH DESIGN EXCELLENCE

SuperSwitch₃ provides maximum reliability through its innovative design. The modular components, from the Power Stage to the Redundant Bus Architecture, have been engineered to unprecedented standards. With the fewest numbers, yet most reliable components, SuperSwitch₃ ensures the highest level of functionality and minimum open-door time.



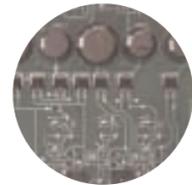
Small-Footprint Chassis

As much as 30% smaller than comparable industry models, the ultra-dense design maximizes floor space. Ease of installation and flexibility are ensured by flexible access from either the front, side or rear. Power connections are made from either the top or bottom.



Graphical User-Interface

User-friendly software and Rapid Response™ mouse allow for quick system configuration, power monitoring and response to alarms. Independent mimic panel provides redundancy to LCD data.



Printed Circuit Boards

Designed to eliminate a single point of failure, 10 robust boards are easily accessible (no stacking) and removed without load disruption. LED indication quickly provides comprehensive self-diagnosis status.



Power Stage Assembly

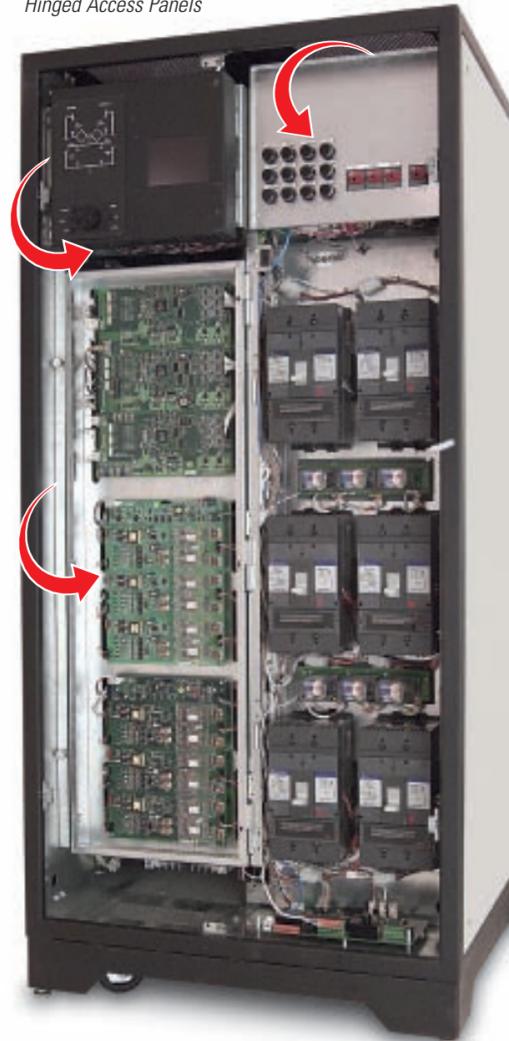
Fully rated SCRs are employed to prevent system damage after load faults. Infrared scans are easily accomplished without removal of assembly. Service friendly design permits removal in 15 minutes or less.



Main Logic Board

Integral design provides advanced diagnostics and management of three-tiered power quality. Separate boards are used for each source, while independent drive circuits, with high fault isolation, are used for each phase. Fiber optic communications between the Gate Drive Board improves noise immunity and fault isolation.

Hinged Access Panels



Gate Drive Board

Continuously monitors and reports the state of the SCRs and provides precision scaled voltage for power quality and metering. Independent of graphical user interface, board always remains in state last commanded by the main logic.

DID YOU KNOW?

Cyberex is the leading brand used by financial institutions. More than 6,000 units are installed worldwide.



Control Wiring

Electrical noise is mitigated by limited harnesses and signal interconnections, coupled with pre-defined cable routing and quick disconnects.



Power Wiring and Bus

Connections and maintenance are made easier by staggered phase connections and ample gutter space. 100% of connections are torqued ensuring maximum reliability.



Molded Case Switches

Provide maximum interruption for fault currents and eliminate nuisance trips. Plug-in style components designed for easy and quick exchange.



Power Supply

With each supply capable of supporting all control power, the Triple-redundant design ensures reliability. In the event of a fault, multiple alarms are activated.



Redundant Cooling

Smartly designed to ensure maximum cooling and reliability, the Double-redundant fans provide back-up cooling and notification of any fan failures.

FEATURES AND SPECIFICATIONS

Components	
SCR	Fully-Rated, Hockey-Puck Type
Mimic Panel	LED Current Flow
LCD	Graphical, Backlit (Std.) Color Display (Opt.)
Fans	Dual Redundant
Power Supplies	Triple Redundant
Internal Bus	Dual Redundant
TVSS	80kA

Communications and Software

Password Protection	Defined User Tiers
Remote Access	RS232, RS485 and Web-Based
Event Types	Information, Warnings and Alarms
Alarm Notification	Email (or Email to Pager)
Software Upgrades	Remote Downloadable
Emergency Power Off	Remote (Std.) Local (Opt.)
Relay Contacts	5 (Std.)

Power and Event Management

Metering 1	kVA, kW, Ipeak, Phase, Current, Voltage, Frequency
Metering 2	Power Factor, kVA Demand, Harmonic Analyzer
Event Alarm Log	2500 Events

Electrical Characteristics

Voltage/Frequency	208/480/600V, 3 Phase, 4 Wire, 60Hz
Current Rating	200/400/600/800A
Short-circuit Withstand	100kA
Overload Capability	125% (30 Min.) 150% (1 Min.) 1000% (3 Cycles)
Circuit Breakers	Non-Automatic or Automatic

Operational Characteristics

Controls	Full Digital
Type II	Fuseless Current Path
Bypass	System Assisted
PQ States	Preferred, Acceptable and Emergency
Transfer	Automatic or Manual
Sensing Time	2ms
Auto Transfer	4ms (or Less)
Reacquisition	3 Cycles
Transfer Angle	User-Defined Max180°
Temperature	0 to 40°C (Operating) 0 to 80°C (Storage)
Audible Noise	<65 dBA (6 Ft.)

Standards

NEMA	All Applicable Standards
UL	1008 Listed
FCC	Compliant (Part 15)
NEC	2002
ANSI/NFPA	70 (2002)
IEEE	587 (ANSI C62.41)

SELECTION (TYPE II MODELS)

Amps	Volts	Dim. (WxDxH)	BTU/hr.	Weight	Model #
200A	208V	34" x 34" x 76"	2400	1200lbs.	DSR-02002-326-208-6N100
200A	480V	34" x 34" x 76"	2400	1200lbs.	DSR-02002-326-480-6N100
400A	208V	34" x 34" x 76"	3600	1200lbs.	DSR-04002-326-208-6N100
400A	480V	34" x 34" x 76"	3600	1200lbs.	DSR-04002-326-480-6N100
600A	208V	34" x 34" x 76"	4800	1400lbs.	DSR-06002-326-208-6N100
600A	480V	34" x 34" x 76"	4800	1400lbs.	DSR-06002-326-480-6N100
800A	208V	46" x 34" x 76"	6000	1800lbs.	DSR-08002-326-208-6N065
800A	480V	46" x 34" x 76"	6000	1800lbs.	DSR-08002-326-480-6N065

For more information go to www.DanaherPowerSolutions.com