SoftSwitching TECHNOLOGIES

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MEGA DySC®

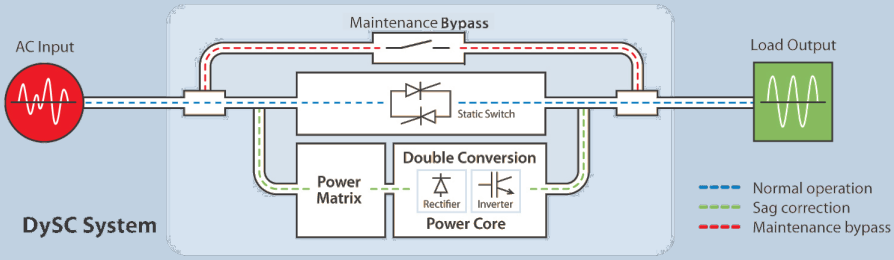
The highest level of protection. For the entire production process.

Our MegaDySC Dynamic Sag Corrector is designed to span your entire operation, protecting every facet of the process from voltage sags and momentary outages that account for 30% of all manufacturing downtime. MegaDySC will keep your equipment online and your plant functioning smoothly, maintaining the highest levels of productivity and profitability—without the high energy costs and battery care issues of other systems.

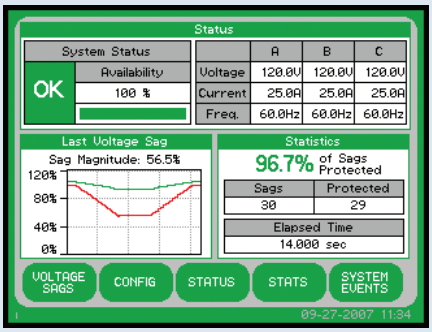
DySC Protection Features

- **Proprietary "Double Conversion" Power Core–dCPC**
- **Fastest Sag Detection and Response Time**
  - DySC is optimized for fast response at voltage peaks, with a typical peak voltage detect time (pVdT) of 1 ms.
  - Sags are corrected with a peak voltage response time (pVrT) of 1.5 ms–1/10th of a cycle, including detection time.
- **Adaptive Frequency Management (aFM) and auto-select of ~50 Hz or ~60 Hz with advanced digital phase locked loop synchronization (PLL)**
- **True Sinusoidal Reconstruction (tSR)**

Theory of Operation



DySC System



Touchscreen Operator Station provides:

- EVENT LOGGING (SAG COUNTER, SAVE COUNTER, UPTIME COUNTER, REAL-TIME STATUS)
- OPERATION LOG AND DETAILS
- GRAPHIC REPORTING DISPLAY
- ONLINE DIAGNOSTICS
- PASSWORD PROTECTION
- SCREEN SIZE (5.7" on 333kVA, 15" on larger systems)

Communication ports:

RS232, DRY CONTACTS, ETHERNET

Ideal plant-level protection for:

- MACHINING CELLS
- PROCESS TOOLS
- ASEPTIC PACKAGING
- HIGH-SPEED BOTTLING
- PAPER MACHINES
- CONVERTING
- TRANSFER LINES
- BATCH APPLICATIONS
- PAINT LINES
- PHARMACEUTICAL
- PAPER MACHINES
- DRY EXTRUSION
- WELD LINES
- FLEXIBLE MACHINING CENTERS
- MACHINING
- WEB APPLICATIONS

SoftSwitching Technologies®

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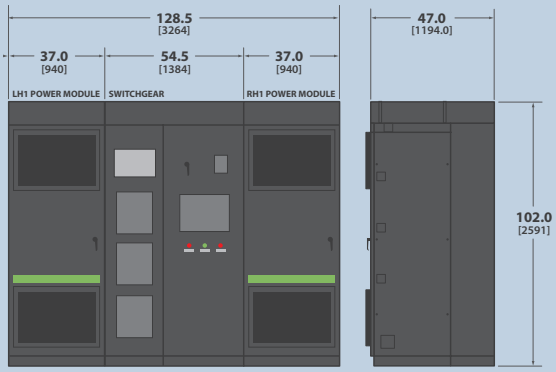
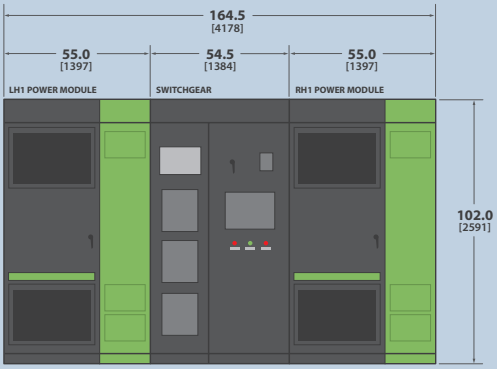
Middleton, WI 53562, USA

Dimensions (in inches; millimeters in brackets)

Standard Runtime (SR) DySC:



Extended Runtime (ER) DySC:



Technical Specifications

Electrical Specifications (Typical)*

Input/Output Voltage	380, 400, 415, 440, 460, 480
Frequency	50/60 Hz auto-sensing
Phase (Wiring)	3 phase (3- or 4-wire with ground)
Detection Voltage	-13% of rated input voltage
Response Time	.7 ms detection, 1.2 ms inverter reaction (<2 ms)
Current Distortion	Unchanged, determined by the load
Output Current	800 amps
Output Capacity	527–665 kVA
Output Overload *(Current)*	150% for 30 sec, 400% for 5 sec, 600% for 0.5 sec
Efficiency	>99%
Correction Time	3 phase (87% to 50% remaining): 5 sec 2 phase (30% remaining): 5 sec 1 phase (0% remaining): 5 sec 5 sec runtime in the first minute, followed by 2 sec per minute thereafter; 5 sec runtime is available again after 5 min idle. 3 phase (0% remaining): ≥ 50 ms (SR), 200 ms (ER)
Waveform	True sine wave

* Specifications are typical and subject to change without notice due to continuing product improvement programs.

Mechanical (Typical)*

Enclosure	NEMA 1 (IP20), see figures for dimensions (approx.)
Accessibility (Wiring)	Front of panel terminations, top and bottom access
Weight lbs (kg)	SR: 7,800 lbs (3538 kg); ER: 8,632 lbs (3915 kg)

Environmental

Ambient Temp.	0°–40°C (32°–104°F)
Storage Temp.	-40°–75°C (-40°–167°F)
Relative Humidity	0 to 95%, noncondensing
Heat Dissipation	22,900 BTU/hr. (max)
Cooling	Thermal controlled forced air
Altitude	1000 m (3,300 ft) without load derating
Audible Noise	<60 dBA at 1 m

Communications/User Interface

Display	Touchscreen LCD
Connectivity	RS232, dry contacts, Ethernet

Compliance

Agency Approvals	cULus Listed, SEMI F47
Surge Suppression	100 kA per mode, tested to IEEE C62.41.1/UL1449 2nd edition
Warranty	Standard 1 year (extended warranty available)

Catalog Number

DS30800A [ ][ ][ ][V] [ ][ ] H2000C

- [S][E] Standard or Extended Runtime
- [3][4] 3 Phase, 3 Wire (L1, L2, L3, G) or 3 Phase, 4 Wire (L1, L2, L3, N, G)
- [380V] [400V] [415V] [440V] [460V] [480V]