

Symmetra Megawatt II[®]

High Performance 3 phase Modular, Scalable Power Protection with Industry leading Efficiency, Capacity and Performance.

Symmetra MW II[®] 400KW-1600KW

Ultra High Efficiency for Medium to Large Data Centers, Buildings and Facilities.

Modular, scalable power protection with industry leading efficiency, capacity and performance for large scale mission critical environments and data centers.

- > Ultra-high Efficiency means low TCO
- > Modular
- > Right Sized
- > Fault tolerant
- > Scalable Power
- > Parallel Capable for Capacity or Redundancy
- > Robust platform design
- > Universal Battery Support
- > Network Manageable



Symmetra Megawatt II®

High Performance 3 phase Modular, Scalable Power Protection with Industry leading Efficiency, Capacity and Performance.

Symmetra MW II® 400-1600KW



- 1 Modular, scalable power to right size the UPS to existing and future loads.
- 2 Inverter section modules are easily added or replaced by one person.
- 3 Touch screen LCD displays System status, power flow and metering information.
- 4 Static Switch is rated for continuous duty @ 125% overload, and 200kAIC withstand rating.
- 5 Fault tolerant design insures that individual component failures don't affect the load.
- 6 Over 94% Efficiency at 25% load. 97% efficiency at Full Load.

The Symmetra Megawatt II is easily paralleled for increased capacity and/or redundancy. Up to 8 Symmetra Megawatt II units may be paralleled, depending on the availability of adequately sized circuit protection devices.

UPSync™ is an available option that allows multiple Symmetra Megawatt II modules to maintain synchronous operation regardless of the availability of an input power source while in parallel operation.

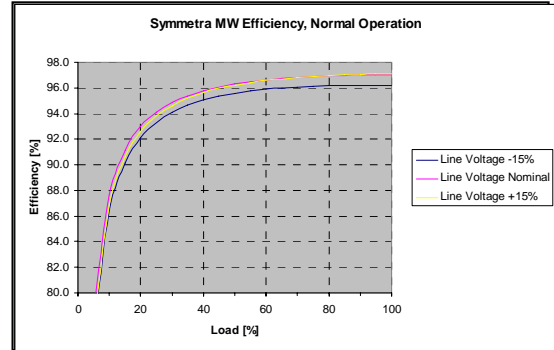
MegaTie™ allows maintenance on connected modules without power interruption to the critical load.

Enterprise Power Protection Efficiency and Reliability

Ultra High Efficiency

High Efficiency means lower power cost per watt delivered to critical equipment. This also means less heat rejection, and a lower cooling costs.

- > 94% Efficient at > 24% load (240 KW load on 1 MW)
- > 96% Efficient at > 45% load (450 KW load on 1 MW)
- > 97% Efficient at > 85% load (850 KW load on 1 MW)



Scalable Power Capacity

Available power can be scaled to optimize loading, or to allow expansion as needed.

- > Ampacity can be scaled for Redundancy or Capacity
- > Buy for the future, populate for current load
- > Easily parallel multiple units of mixed sizes

Fault Tolerance, and Simplified Maintenance

Modular inverters insure robust performance, easy maintenance, and rapid repairs without jeopardizing the critical load.

- > Power modules can be added or changed by one person
- > Individual containment assures isolation of components.
- > Standardized modular components simplify stocking spares.



Symmetra MW II Standard Specifications

| Symmetra MW | SYMF400 to SYMF1600 |
|--|--|
| Input Specifications | |
| Input Voltage | 3 x 400/230v (KH), 3 x 480v (KG) |
| Input Configuration | 3 phase + N + PE (G) for KH, 3 phase + PE (G) for KG |
| Input Frequency | 50 Hz or 60 Hz |
| Input Power Factor | ~1 |
| Input (Utility) Voltage Tolerance | +/- 15% |
| I THD | < 5% at full load |
| Maximum Short Circuit Withstand Rating | 200 kA |
| Backfeed Protection | Built-in Backfeed Contactor |
| Output | |
| Output Voltage | 3 x 400/230v (KH), 3 x 480v (KG) |
| Output Voltage Distortion | Maximum 3% Linear Load |
| Efficiency Battery Operation | > 95% |
| Efficiency Full Load | 97% |
| Battery System | |
| Nominal Battery Voltage | 2 x 384 VDC |
| Typical Float Voltage | 2 x 432 VDC (2.25 Volts Per Cell) |
| Communications and Management | |
| Communication Interface | Web/Network interface (Ethernet, SNMP) |
| Control Panel | Advanced 10" Color LCD Touch Screen User Interface |
| Audible Alarms | Audible and Visual Alarms, Prioritized by Severity |
| Indicators and Controls | Self Diagnosing with Surveillance of Critical Components |
| Environmental | |
| Operating Temperature | 0-40 C (32-140 F) |
| Operating Relative Humidity | 0-95% Non-Condensing |
| Storage Relative Humidity | 0-95% Non-Condensing |
| Operating Altitude | 0-1000M (0-3300') |
| Storage Altitude | 0-15000M (0-49,500') |

Symmetra MW II 400 V (KH) Specifications

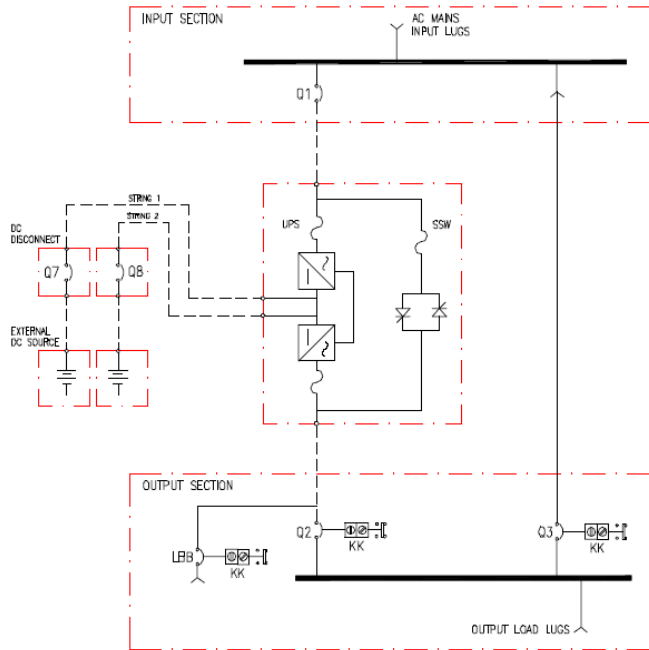
| Series Specific Specifications | SWMF400-1600 KH | | | | | | |
|--|--|---------|---------|----------|----------|----------|----------|
| Model | SYMF400 | SYMF600 | SYMF800 | SYMF1000 | SYMF1200 | SYMF1400 | SYMF1600 |
| Nominal Input Voltage | 3 x 400/230 V | | | | | | |
| Nominal Input Current | 595 A | 893 A | 1191 A | 1488 A | 1849 A | 2156 A | 2464 A |
| Nominal Output Voltage | 3 x 400/230 V | | | | | | |
| Nominal Output Current | 577 A | 866 A | 1155 A | 1443 A | 1793 A | 2091 A | 2390 A |
| Battery System | | | | | | | |
| Nominal Battery Voltage | 2 x 384 VDC | | | | | | |
| End of Discharge (EOD) Battery Voltage | 2 x 326 VDC | | | | | | |
| Max. Battery Current @ EOD | 638 A | 957 A | 1277 A | 1596 A | 1917 A | 2337 A | 2556 A |
| Physical | | | | | | | |
| Dimensions HxD (mm) | 2032 H x 1067 D | | | | | | |
| Dimension L (mm) | 2114 | 2536 | 3716 | 4138 | 4646 | 5068 | 5490 |
| Weight (kg) | 2500 | 3200 | 4270 | 5090 | 6310 | 7016 | 7722 |
| Minimum Clearance Around UPS | Top Clearance 500 mm (W/IP21 Drip Cover 200 mm). Front Clearance 1000 mm | | | | | | |
| Environmental | | | | | | | |
| Altitude | 1000 m = 100%load; 1500 m = 95% load; 2000 m = 91% load; 2500 m = 86% load; 3000 m = 82% load | | | | | | |
| Audible Sound, nominal Max. @1 m from unit (db(A)) | 74 | 74 | 75 | 75 | 75 | 75 | 75 |
| Heat Rejection BTU/Hr | 41,000 | 61,420 | 81,900 | 102,360 | 122,840 | 143,310 | 163, 780 |
| Protection Class | IP20 Standard, IP21 Optional | | | | | | |
| Regulatory | | | | | | | |
| Safety | IEC60950 3 rd edition; EN50091-1-1 | | | | | | |
| EMC/EMI/RFI | EN50091-2, IEC62040-3 | | | | | | |
| Approvals | CE, ISO 9001, ISO 14001 | | | | | | |
| Additional Equipment and Options Available | | | | | | | |
| Ancillary Equipment | Input and Output Switchboard, Maintenance Bypass Switchboard, Battery Systems and Disconnect Equipment | | | | | | |
| Professional Services | Project Consultation, Project Management | | | | | | |
| Service, Maintenance and Repair | Services available from the Schneider Service Solution Team for the Symmetra MW II include startup and the new Advantage Plus Plan and Advantage Ultra Plan. These services packages are designed to provide system maintenance at a predictable and affordable price. | | | | | | |

Symmetra MW II 480 V (KG) Specifications

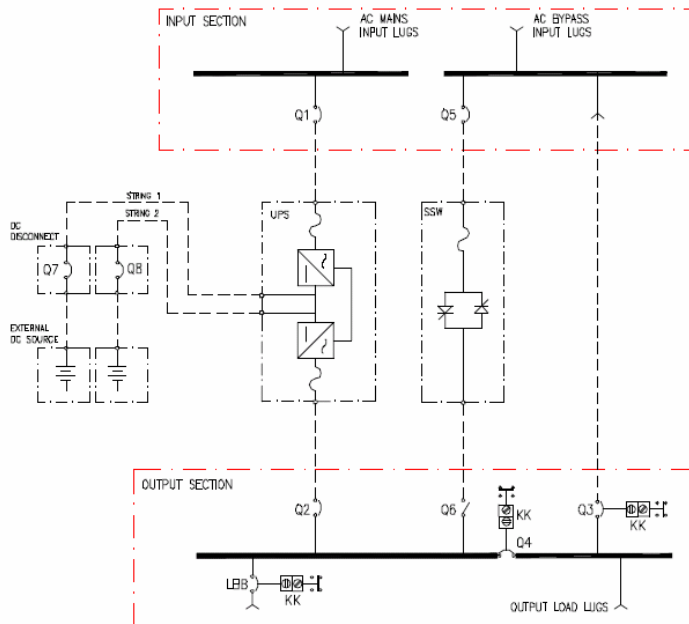
| Series Specific Specifications | SWMF400-1600 KG | | | | | | |
|--|--|---------|---------|----------|----------|----------|----------|
| Model | SYMF400 | SYMF600 | SYMF800 | SYMF1000 | SYMF1200 | SYMF1400 | SYMF1600 |
| Nominal Input Voltage | 3 x 480 V | | | | | | |
| Nominal Input Current | 595 A | 893 A | 1191 A | 1488 A | 1849 A | 2156 A | 2464 A |
| Nominal Output Voltage | 3 x 480 V | | | | | | |
| Nominal Output Current | 577 A | 866 A | 1155 A | 1443 A | 1793 A | 2091 A | 2390 A |
| Battery System | | | | | | | |
| Nominal Battery Voltage | 2 x 384 VDC | | | | | | |
| End of Discharge (EOD) Battery Voltage | 2 x 326 VDC | | | | | | |
| Max. Battery Current @ EOD | 638 A | 957 A | 1277 A | 1596 A | 1917 A | 2337 A | 2556 A |
| Physical | | | | | | | |
| Dimensions HxD (mm) | 2032 H x 1067 D | | | | | | |
| Dimension L (mm) | 2114 | 2536 | 3716 | 4138 | 4646 | 5068 | 5490 |
| Weight (kg) | 2500 | 3200 | 4270 | 5090 | 6310 | 7016 | 7722 |
| Minimum Clearance Around UPS | Top Clearance 20" (W/NEMA 3 Drip Cover 8"). Front Clearance 42" | | | | | | |
| Environmental | | | | | | | |
| Altitude | 3000 Ft. = 100%load; 4500 Ft. = 95% load; 6000 Ft. = 91% load; 7500 Ft. = 86% load; 9000 Ft. = 82% load | | | | | | |
| Audible Sound, nominal Max. @1 m from unit (db(A)) | 74 | 74 | 75 | 75 | 75 | 75 | 75 |
| Heat Rejection BTU/Hr | 41,000 | 61,420 | 81,900 | 102,360 | 122,840 | 143,310 | 163, 780 |
| Protection Class | NEMA 1Standard, NEMA 3 Optional | | | | | | |
| Regulatory | | | | | | | |
| Safety | IEC60950 3 rd edition; EN50091-1-1 | | | | | | |
| EMC/EMI/RFI | EN50091-2, IEC62040-3 | | | | | | |
| Approvals | UL 1778, CE, ISO 9001, ISO 14001 | | | | | | |
| Additional Equipment and Options Available | | | | | | | |
| Ancillary Equipment | Input and Output Switchboard, Maintenance Bypass Switchboard, Battery Systems and Disconnect Equipment, | | | | | | |
| Professional Services | Project Consultation, Project Management | | | | | | |
| Service, Maintenance and Repair | Services available from the Schneider Service Solution Team for the Symmetra MW II include startup and the new Advantage Plus Plan and Advantage Ultra Plan. These services packages are designed to provide total system maintenance at a predictable and affordable price. | | | | | | |

System One Line Diagram

Internal Bypass System with Single Utility Input



External Bypass System with Dual Utility Input





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