

9800A Series

UNINTERRUPTIBLE POWER
SUPPLY SYSTEMS



Where Reliability
Breeds Confidence

ISO 9001
CERTIFIED

 MITSUBISHI ELECTRIC

Superior Performance, Reliability and Safety Come from Experience. Our Uninterruptible Power Supply Systems Ensure All Three.

Mitsubishi Electric has been developing and manufacturing Uninterruptible Power Supply (UPS) components and systems for more than three decades. This experience, and the continuous application of new power device technologies to further improve products in the industry, clearly explain why Mitsubishi Electric has dominated a large portion of the world UPS market for years.

When purchasing a UPS system, the key word is “dependability.” And there’s one company that many rely on. Uninterruptible Power Supply systems by Mitsubishi Electric.



IGBT - Transistors - Excellent Performance Characteristics

Mitsubishi Electric is the leading manufacturer of Insulated Gate Bipolar Transistors (IGBT). We utilize IGBTs in the 9800A Series UPS systems. These advanced, high-performance transistors provide a variety of intelligent features.

- Large power capabilities
- High speed switching
- Low control power consumption

Low Input Current Harmonics (THD)

- 6 % typical (100% load)

Low Heat Loss/High Efficiency

Use of the IGBTs for inverter permits efficient high speed switching (6kHz), thus reducing heat dissipation in the UPS. (Higher efficiency means lower cost per kilowatt to the customer.)

Operator-Friendly Control Panel

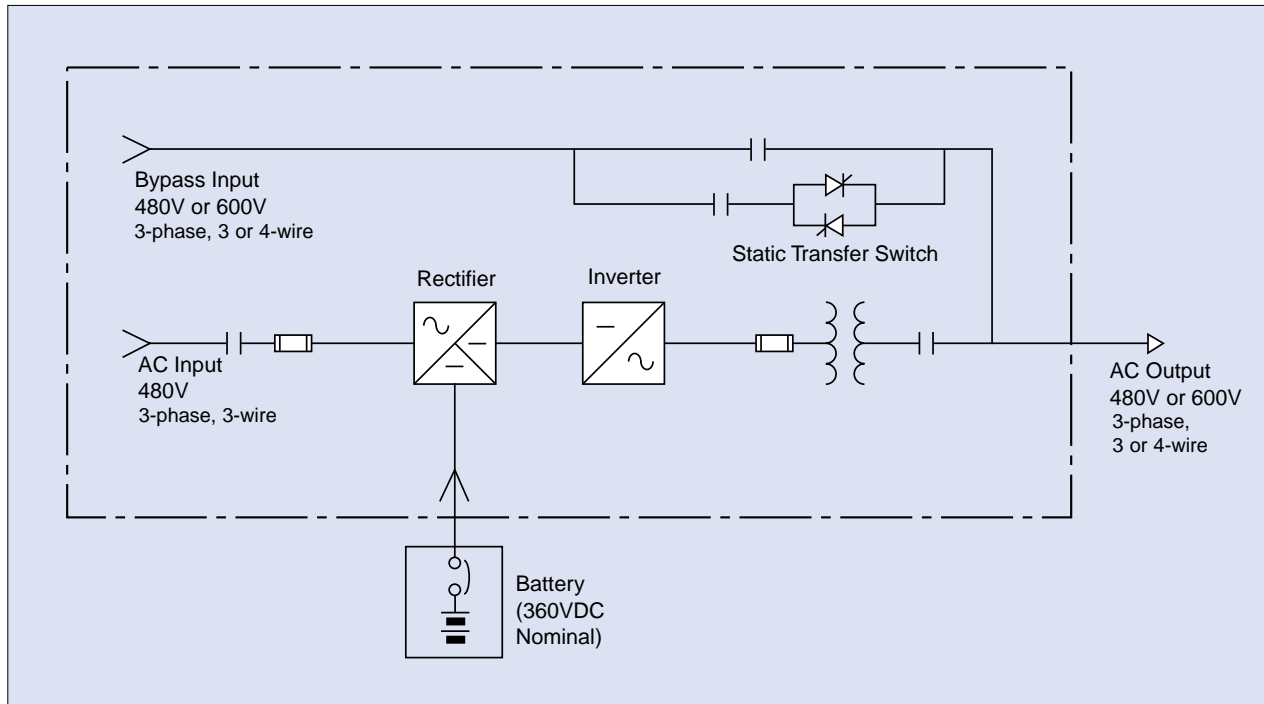
Features:

- Mimic flow diagram
- Operator control station
- Touch panel input

LCD monitor displays:

- System metering
- Voltage / Current / Power status levels
- Simple start / stop operation
- History of events

ONE-LINE DIAGRAM



S O F T W A R E

What is DiamondLink™?

DiamondLink is user-customizable power monitoring, management and shutdown software, designed to provide information about the power condition of the UPS system.

How does DiamondLink work?

DiamondLink is designed to run on network server or workstations in any office environment. The software will monitor the status of your UPS and, when critical events occur, will perform a graceful unattended shutdown.

Features

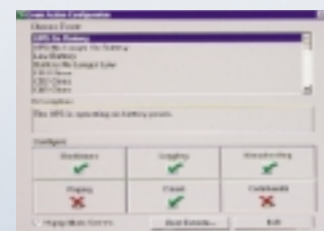
- Automatic unattended shutdown
- Smart messages can be user-defined
- User-defined actions for a specific list of power-events
- Color coded power event logging
- Built-in graphing routines allow customized graphs to be created on-line
- DiamondLink can be used with all Mitsubishi single-phase and three-phase products

Specifics

- Power history graphs
- Custom user defined events
- Data log viewer
- E-mail configurations
- E-mail options for power events
- Event action
- Events log file
- Modem alert notification
- Pager notification
- Paging option

Supported Operating Systems

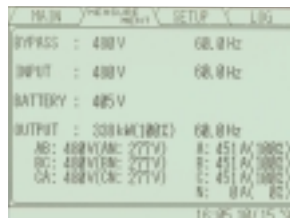
- Microsoft Windows®
- Microsoft Windows NT
- Microsoft Windows '95
- Microsoft Windows '00
- OS/2
- Novel NetWare®
- SVR4
- SCO UNIX
- SCO XENIX
- Solaris™
- IBM® AIX®-RS/6000™
- HP-UX
- SGI
- Digital UNIX
- Red Hat (LINUX)



THING IS POSSIBLE



MEASUREMENT MENU



LOG MENU



Extended Battery Life

Quick response diode rectifier provides step load applications (0-100%) without the use of batteries, thus ensuring maximum battery service life (i.e. lower lifetime cost of UPS system).

Isolated Redundant System

- The 9800A Series is designed for isolated redundant applications
- Lower cost to customer, small footprint, less components, higher reliability
- Different kVA sizes and different series can be used for greater flexibility of the overall system

Paralleling Features

- The 9800A (300-500 kVA) is designed for paralleling applications (2 x 500 MMS)
- For redundancy only (Largest load: 250 kVA)

Additional Features

- Password protected start/stop operation
- Covered EPO button
- Conformal coated control boards (industrial environment)

Real-Time Battery Monitoring

- Remaining battery charge displayed for operator
- Software algorithms continuously calculate and update actual remaining battery charge
- “DiamondSense” battery self-test to detect unexpected battery failures

Superior Functions

- Automatic restart after low battery inverter stop
- Automatic retransfer
- Converter walk-in function
- 1 set “Form A” dry contacts
- Large overload/overcurrent capacity
- Battery current limit
- Battery self-test

Quiet Operation

- 100kVA → 63 dB (A scale, 1 m)
- 150 - 225kVA → 65 dB (A scale, 1 m)
- 300, 375kVA → 72 - 74 dB (A scale, 1 m)
- 500kVA → 75 dB (A scale, 1 m)

Software

- RS-232C serial interface (standard)
- DiamondLink application software (optional) 95% of all operating systems are compatible with DiamondLink
- Multiple server shutdown software (V. 1.50)
 - Multilingual
 - Paging, E-mail capability during power events
 - SNMP Interface (optional)

Warranty

Standard warranty is two years, including parts and labor. (NOTE: All information subject to change without prior notice.)

GSA Contract Number

GS-07F-9526G

SPECIFICATIONS

UPS Cabinets

kVA	480V/480V Dimensions (W x D x H) (in)	Weight (lbs.)	600V/600V Dimensions (W x D x H) (in)*	Approx Weight (lbs.)
100	43.3 × 29.9 × 79.7	1,970	73.3 × 29.9 × 79.7	3,245
150	47.2 × 29.9 × 79.7	2,480	79.2 × 29.9 × 79.7	3,805
225	55.1 × 29.9 × 79.7	3,160	99.1 × 29.9 × 79.7	5,160
300	76.8 × 37.8 × 79.7	4,277	120.8 × 37.8 × 79.7	6,890
375	76.8 × 37.8 × 79.7	4,718	130.8 × 37.8 × 79.7	7,730
500	114.2 × 37.8 × 79.7*	8,000	168.2 × 37.8 × 79.7	11,100

* 480/208V weight and dimensions are the same as 600/600V.

500kVA width includes two cabinets. Cabinet 1: 55.1W x 37.8D x 79.7H (3,000 lbs.); Cabinet 2: 59.1W x 37.8D x 79.7H (5,000 lbs.)

For 600V input: Cabinet 3: 54.0W x 37.8D x 79.7H (3,100 lbs.)

Battery Cabinets

Part Number	Quantity	Dimensions (W x D x H) (in)	Weight (lbs.)	Back-Up Time in Minutes					
				100kVA	150kVA	225kVA	300kVA	375kVA	500kVA
BC43-PH300-360	3	120 × 29.5 × 79.7	7,518	40	22	10	5		
BC43-PH350-360	3	120 × 29.5 × 79.7	8,580	52	28	13	8		
BC43-PH440-360	4	144 × 29.5 × 79.7	14,680	90	55	31	20	13	
BC55-PH440-360	4	160 × 29.5 × 79.7	14,340						7
BC55-PH440-360	5	200 × 29.5 × 79.7	19,120						12.5

Above battery systems for 100 - 375kVA systems. For 500kVA and above, please consult local representative or factory.

Standard Features

- IGBT
- UL1778/cUL approved
- Conformally coated boards (industrial environment)
- Front access only (serviceability)
- “DiamondSense” battery self-test

Battery DC Link

- 360 VDC (100 - 375kVA)
- 480 VDC (500kVA)

Operating Environment

- Low acoustic noise
- Temperature: 0~40°C
- Relative humidity: 5~95% (non-condensing)
- Altitude: 0-9,000 feet (no derating)

AC Input Rating

- -15% ~ +15%
- Power: Rated kVA at 1:1.25 ratio

- 480 VAC (600 VAC using input transformer)
- THD (reflected current): 6% max. (100% load) 9% max. (50% load)
- 3-phase, 4-wire, plus ground (Bypass: 4-wire, Rectifier: 3-wire)
- Frequency: 60Hz (±5%)
- Surge withstand: Meets IEEE C62.41-1991

AC Output Rating

- 480Y / 277 VAC or 600Y / 347 VAC
- 3-phase, 4-wire, plus ground
- Output power factor rating: (100-225kVA) 0.8~1.0 Lag (within output kW rating) (300, 375kVA) 0.9~1.0 Lag (within output kW rating)
- Frequency: 60Hz (±0.05%) (free running)

- Voltage accuracy: ±1%
- Transient recovery time: Less than 20 ms
- Load unbalance: 100% ±1% or less
- Step load change: 0~100% ±2%
- Load/Return of AC power: ±1% (at 100% load)
- UPS load transfer, bypass: ±5% (at 100% load)
- THD (voltage): 2% max. (100% linear load); 5% max. (100% non-linear load)

Paralleling Cabinet

- (300 - 500kVA) TBA

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The quality management system of Mitsubishi Electric Corporation Kobe Works has been approved to ISO9001:1994.

The quality management system is applicable to design, development and manufacturing of the UPS.

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Specifications and products offered
subject to change without notice.