

2033C Series

UNINTERRUPTIBLE POWER
SUPPLY SYSTEMS



**Where Reliability
Breeds Confidence**

 **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.



Full IGBT - Transistors – Excellent Performance Characteristics

Mitsubishi Electric is the leading manufacturer of Insulated Gate Bipolar Transistors (IGBT). Mitsubishi Electric utilizes IGBTs in the converter and inverter sections of our 2033C 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)

- 4% typical (100% load)
- 5% typical (75% load)
- 7% typical (50% load)

Input Power Factor

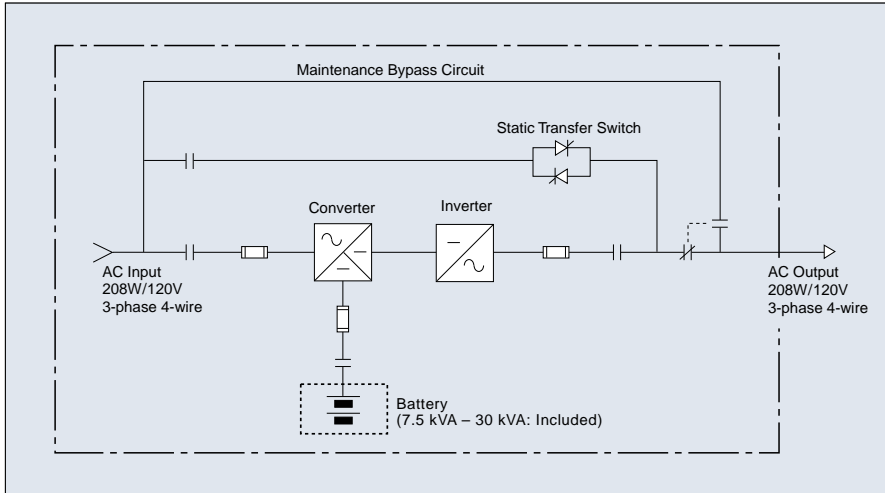
- 1:1 ratio

Low Heat Loss/High Efficiency

Use of the IGBTs permits efficient high speed switching (16kHz or 12kHz), thus reducing heat dissipation in the UPS. (Higher efficiency means lower cost per kilowatt to the customer.)

TECHNICALLY, ANYT

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 systems.

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.
- Color coded power event logging.
- Smart messages can be user defined.
- User-defined actions for a specific list of power-events.
- 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

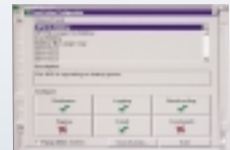
- Power history graph
- Custom user defined events
- Data log viewer
- E-mail configurations
- E-mail options for power events
- Event action
- Events log file
- Modem alert operation
- Pager notification
- Paging option

Supported Operating Systems

- Microsoft Windows®
- Microsoft Windows NT
- Microsoft Windows 95
- Microsoft Windows 98
- OS/2
- Novel NetWare®
- SVR4
- SCO UNIX
- SCO XENIX
- Solaris™

• IBM® AIX®-RS6000™

- HP-UX
- SGI
- Digital UNIX



THING IS POSSIBLE



Battery Included

- All in one
- Reduced foot print

Extended Battery Life

Power draw from batteries during step load conditions is no longer required with the IGBT in both the converter and the inverter. Other UPS systems required assistance from batteries when the converter was unable to supply the required current. This cycling of batteries causes shorter life. Mitsubishi Electric IGBTs incorporate the latest technologies and provide step load applications (0-100%) without the use of batteries, thus ensuring maximum battery service life (i.e. lower lifetime cost of UPS system).

Internal Maintenance Bypass

All 2033C Series UPS systems are equipped with an internal wrap around "Zero Energy" maintenance bypass system for greater maintenance flexibility.

Superior Functions

- Front access only
- 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

- 7.5-20kVA→55dB (A scale, 1m)
- 30-50kVA→59dB (A scale, 1m)

Software

- RS-232C serial interface (Standard)
 - DiamondLink application software (Optional)
- 95% of all operating systems are compatible with DiamondLink.
- Multilingual
 - Paging, E-mail capability during power events
 - SNMP interface

Warranty

Standard warranty is two years, including parts and labor.

(NOTE: All information subject to change without prior notice.)

SPECIFICATIONS

UPS Cabinets

kVA	208V/208V Dimensions (W×D×H) (in)	Weight (lbs)
7.5	17.7 × 31.5 × 43.3	562
10	17.7 × 31.5 × 43.3	562
15	17.7 × 31.5 × 43.3	816
20	17.7 × 31.5 × 43.3	816
30	23.6 × 31.5 × 59.0	1322
40	27.6 × 31.5 × 59.0	1082
50	27.6 × 31.5 × 59.0	1082

NOTES: Batteries included (7.5kVA 8 min., 10kVA 5 min., 15kVA 11 min., 20kVA 7 min., 30kVA 6 min. at 100% load)

Part No.	Dimensions (W × D × H) (in)	Weight (lbs)	40kVA	50kVA

Standard Features

- IGBT (Converter/Inverter)
- UL1778/cUL approved
- UL924 approved
- Zero energy MBS
- Conformally coated boards (industrial environment)
- Front access only (Serviceability)
- "DiamondSense" battery self-test

Battery DC Link

- 360 VDC

Operating Environment

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

AC Input Rating

- -25%~+15%
- Power: Rated kVA at 1:1 ratio
- 208Y/120 VAC
- THD (reflected current):
 - 4% typical (100% load)
 - 7% typical (50% load)
- 3-phase, 4-wire, plus ground
- Frequency: 60Hz (±5%)
- Surge withstand: Meets IEEE C62.41-1991
- EMI compatibility: FCC Title 47, Part 15 Subpart B

AC Output Rating

- 3-phase, 4-wire, plus ground
- 208Y/120 VAC
- Output power factor rating: 0.8~1.0 Lag (within output kW rating)
- Frequency: 60Hz ±0.01% (free running)
- Voltage accuracy: ±1%
- Transient recovery time: 16.7ms
- Load unbalance: 100% ±1% or less
- Step load change: 0~100% ±3%
- Load/Return of AC power: ±1% (at 100% load)
- UPS load transfer, bypass: ±3% (at 100% load)
- THD (Voltage): 2% (100% linear load); 4% (100% non-linear load)
- Slew rate: 1, 2Hz/sec (selectable)



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Corporate Headquarters:

Mitsubishi Electric Automation, Inc.
500 Corporate Woods Parkway
Vernon Hills, IL 60061
Phn: (847) 478-2100
Fax: (847) 478-2253
www.meau.com



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.