

## Mitsubishi's 2033C Series UPS 7.5kVA – 50kVA

### 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 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.)

### Internal Maintenance Bypass (in addition to Static 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
- "Form A" dry contacts
- High tolerance for overload /overcurrent
- Battery current limit

### 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).

### Touch screen display allows user to access:

- Input /Output voltage
- Input /Output current
- KW
- Frequency
- Battery information
  - Charge voltage
  - Discharge voltage
- Diagnostics
  - Fault /Alarm history



### Warranty

Standard warranty is two years, including parts, labor and batteries.

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

kVA	208V to 208V Dimensions (in) W X D X H	208V to 208V Weight (lbs)	480V (or 600V) to 208V Dimensions (in) W X D X H	480V (or 600V) to 208V Weight (lbs)	*480V to 480V Dimensions (in) W X D X H	*480V to 480V Weight (lbs)
7.5	17.7 X 31.5 X 43.3	562	35.4 X 31.5 X 43.3	682	53.1 X 31.5 X 43.3	1,372
10	17.7 X 31.5 X 43.3	562	35.4 X 31.5 X 43.3	935	53.1 X 31.5 X 43.3	1,570
15	17.7 X 31.5 X 43.3	816	35.4 X 31.5 X 43.3	1,111	53.1 X 31.5 X 43.3	1,796
20	17.7 X 31.5 X 43.3	816	35.4 X 31.5 X 43.3	1,186	53.1 X 31.5 X 43.3	1,946
30	23.6 X 31.5 X 59.1	1,322	51.1 X 31.5 X 59.1	1,957	51.1 X 31.5 X 59.1	2,242
40	27.6 X 31.5 X 59.1	1,082	51.1 X 31.5 X 59.1	1,767	51.1 X 31.5 X 59.1	2,102
50	27.6 X 31.5 X 59.1	1,082	51.1 X 31.5 X 59.1	1,842	51.1 X 31.5 X 59.1	2,252

*\*Same for 600V input / 600V output*

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

*Above weights for 7.5-30kVA include batteries.*

#### Standard Features

IGBT (Converter / Inverter)  
UL1778 / cUL listed UL924 listed  
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: 0-9,000 feet (no derating)

#### Options

Seismic bracing brackets  
480V Input (external matching cabinet)  
Software (for specific O/S systems)

#### AC Input Rating

+15% ~ -25%  
Power: Rated 1kVA : 1kW Generator 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% ± 2% 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)