

E3MAX-SP

8,500-13,300 VA Split Phase Modular AC Inverter

DATE:

PROJECT

COMMENTS:



FEATURES

- Optional Web-based Monitoring Platform – easily view, interact with, download and manage records as needed on any PC or mobile device
- Programmable and password protected user interface
- 98% efficient for minimal BTU losses
- PWM Inverter provides pure sine wave output with less than 3% THD
- Crest factor >4 overload protection for demanding high in-rush loads
- Programmable transfer time – select between standard and fast transfer times for load and site compatibility
- UL listed 90 minute run-time
- Compatible with all lighting loads, including HID
- Variable time delay
- Battery recharges in less than 24 hours
- Two Phase output
- Start-Up Diagnostics checks for proper installation



ORDERING INFORMATION *E3MAX-8500-SP-LC-ID-OD-C##-O##-S##*

| 1. SERIES | 2. VA RATING | 3. PHASE | 4. BATTERY TYPE | 5. INPUT VOLTAGE | 6. OUTPUT VOLTAGE |
|--------------|---|-----------------------|------------------------|--------------------------|--------------------------|
| E3MAX | - | - | SP | - | OD |
| | 8500 8000 VA Split Phase 10500 10500 VA Split Phase 13300 13300 VA Split Phase | SP Split Phase | LC Lead Calcium | ID 120V/120V/240V | OD 120V/120V/240V |

7. OUTPUT BREAKER - NORMALLY ON*

8. OUTPUT BREAKER - NORMALLY OFF*

9. OUTPUT BREAKER - SWITCHED*

C* * Normally On Breakers

O* * Normally Off Breakers

S* * Switched Breakers

SEE BREAKER CONFIGURATION TABLE ON PAGE 3 FOR MAXIMUM BREAKERS

10. OPTIONS

BLANK = NO OPTION

MB Maintenance Bypass Switch
CB Custom Breaker
DT Delayed Transfer
EBW20 Extended Battery Warranty

EEW Extended Electronics Warranty
TA Trip Alarm with Breaker
RA Remote Annunciator (Not Included with TB)
TB Programmable Terminal Block (Not Included with RA)

BI BMS Integration
BTMS Battery Thermal Management System
EO Emergency Power Off
WEB Web Monitoring Connection¹

NOTE

Maximum number of OUTPUT breakers supported depends on sizing and option selection. Contact factory for specific details.

ORDERING NOTES

1. In order to use the web-based monitoring available at Isolite.com, the -WEB option must be selected.

ACCESSORIES ON NEXT PAGE

ACCESSORIES; ORDER SEPARATELY

- **E3MAX-MP#** = Maintenance Plan plus number of years (#)

SPECIFICATIONS**OPTIONAL FEATURES**

- Maintenance bypass switch
- Circuit breakers – supervised or unsupervised
- Maintenance contract/plan
- Remote Annunciator
- Factory startup – increases electronics warranty to 3 years
- Circuit breaker protected loads (Switched, Normally On, and Normally Off)
- Fault summary alarm and 2 programmable alarms – Form C dry contacts

FRONT PANEL

- Modern 4x20 LCD character display with white LED back-light
- Heads-up diagnostic LEDs include 5 status (AC present, battery charging, inverter power, system ready, switched load energized), fault summary LED, and 5 specific faults (unit in bypass, circuit breaker trip, startup fault, charger fault, inverter fault)
- Dedicated System Test button – initiates 30-second test with UL compliant diagnostics
- 5-button keypad for menu navigation
- Sonic alarm with dedicated enable/disable pushbutton with heads-up LED Alarm silence has 24-hour ring-back for alarm reminder
- SD memory card – download and store all events, tests, and alarm logs (password protected)
- USB connector – access to all event, tests, and alarm logs (password protected)
- Ethernet – 10 BASE-T, TCP/IP web serving

BATTERY

- Front access VRLA batteries with 10-Year pro-rated warranty

TEMPERATURE RATING

- From 68°F to 86°F

Battery service life will be negatively impacted at ambient temperatures above 77°F

MAINTENANCE PLAN

- Once per year the manufacturer's technician shall visit the site to perform maintenance and software upgrades as needed. Maintenance shall include battery voltage checks, torque setting verification, cleaning, and a thorough visual inspection. All electronics warranties shall be extended to the duration of the Maintenance Plan. Maintenance Plans can be purchased for a duration of 1 year to 5 years.

APPROVALS

- UL 924
- New York City Approved, Calendar Number 51575
- NFPA101 Life Safety Code
- NFPA70-NEC
- OSHA
- NEMA Type 1 enclosure

BMS INTEGRATION

- BACNet IP
- BACNet MS/TP
- Modbus TCP
- Modbus RTU

WARRANTY

- Isolite warrants the E3MAX series electronics assembly against defects in material and workmanship for a period of 2 years, or 3 years with factory startup option. Extended Warranty options available
- Isolite warrants the E3MAX series lead calcium batteries for a 1-year full and 9-year pro-rated limited warranty
- For further details, refer to General Warranty and Obligations in the Isolite manual or on our website
- The EEW option extends the electronics warranty to 5 years. Batteries are not included in the extended warranty.

NOTES

- Due to power factor calculations, we recommend only loading the E3MAX inverter to 90% of load wattage
- Max power for any phase (L-N, L-L) is 1/3 of total power capacity
- For Single Phase, Two Phase, or Three Phase, see E3MAX-1P, E3MAX-SP, or E3MAX-3P



E3MAX-SP

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MAXIMUM BREAKERS

| Phase | # of Breakers Normally On | # of Breakers Normally On with TA | # of Breaker Normally On with MB | # of Breaker Normally On with EO | # of Breakers Normally On with TA + MB | # of Breakers Normally On with TA + EO | # of Breakers Normally On with MB + EO | # of Breakers Normally On with TA + MB + EO |
|------------------|---------------------------|-----------------------------------|----------------------------------|----------------------------------|--|--|--|---|
| Split-Phase (SP) | 36 | 24 | 34 | 34 | 22 | 22 | 32 | 20 |

WEIGHT & DIMENSIONS

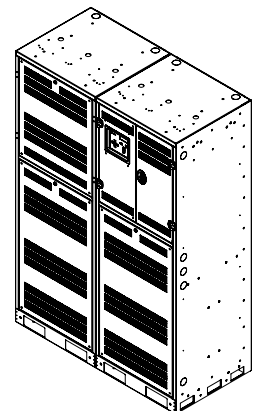
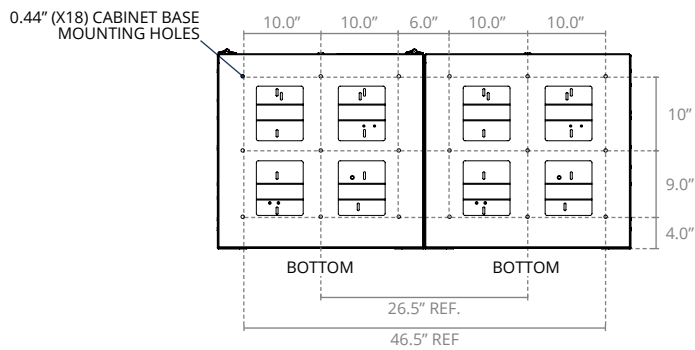
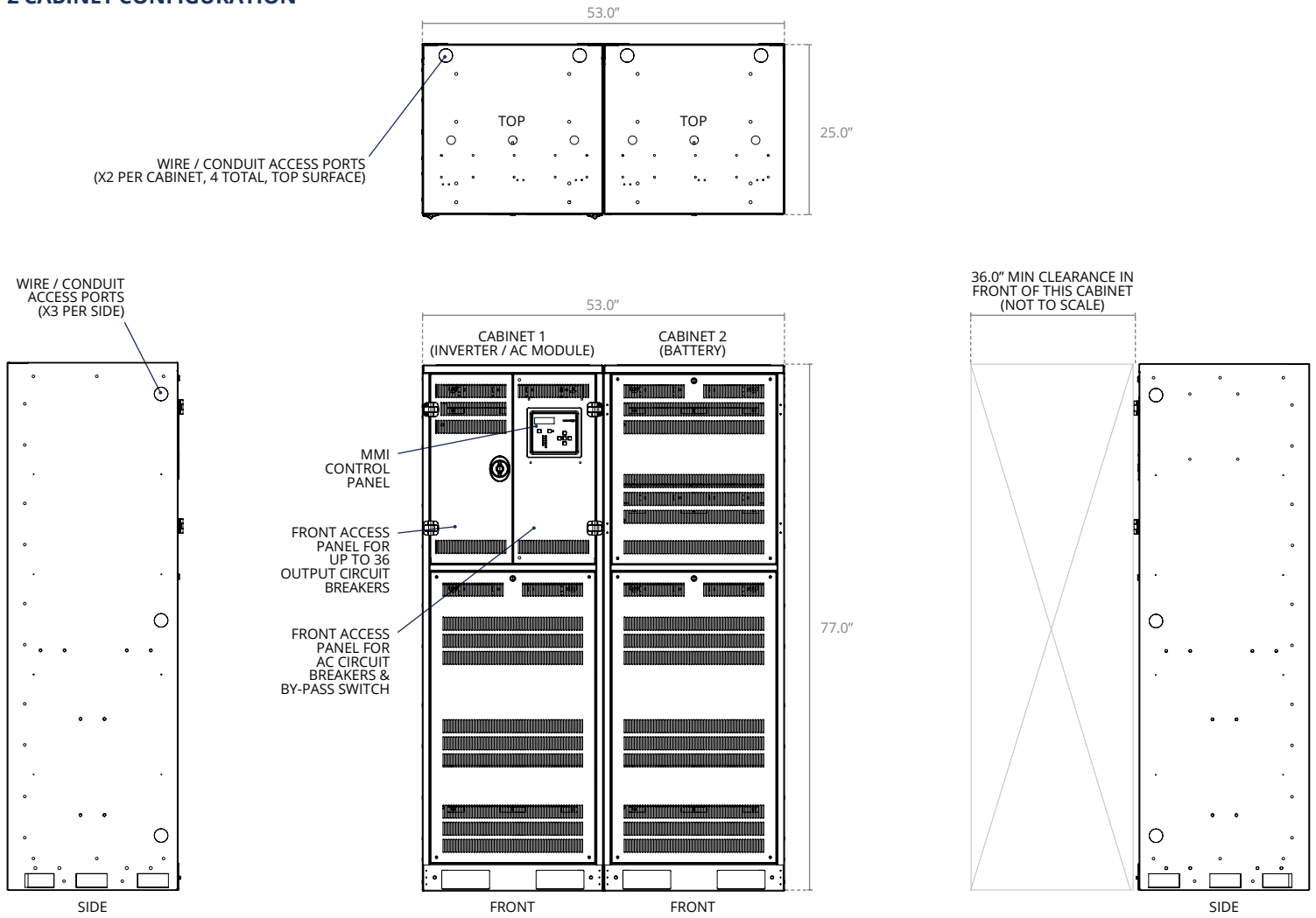
| Phase | Power Rating (kW) | # of Cabinets | Width (in) | Height (in) | Depth (in) | Inverter Cabinet Weight (lbs) | Battery Cabinet Weight (lbs) | Shipping Weight (lbs) | # of Batteries |
|------------------|-------------------|---------------|------------|-------------|------------|-------------------------------|------------------------------|-----------------------|----------------|
| Split-Phase (SP) | 8.5 kW | 2 | 53 | 77 | 25 | 630 | 1600 | 2265 | 16 |
| | 10.5 kW | 2 | 53 | 77 | 25 | 750 | 1900 | 2685 | 20 |
| | 13.3 kW | 2 | 53 | 77 | 25 | 750 | 2336 | 3086 | 16 |

ELECTRICAL DATA

| Model | Power Rating (kW) | Minimum Feed Breaker | Suggested Feed Breaker | Full Load BTU/Hr |
|----------------|-------------------|----------------------|------------------------|------------------|
| | | Input Voltage ID | Input Voltage IC | |
| E3MAX-8500-SP | 8.5 kW | 57.6 A | 60 A | 580 |
| E3MAX-10500-SP | 10.5 kW | 71.1 A | 80 A | 716 |
| E3MAX-13300-SP | 13.3 kW | 90.1 A | 100 A | 907 |

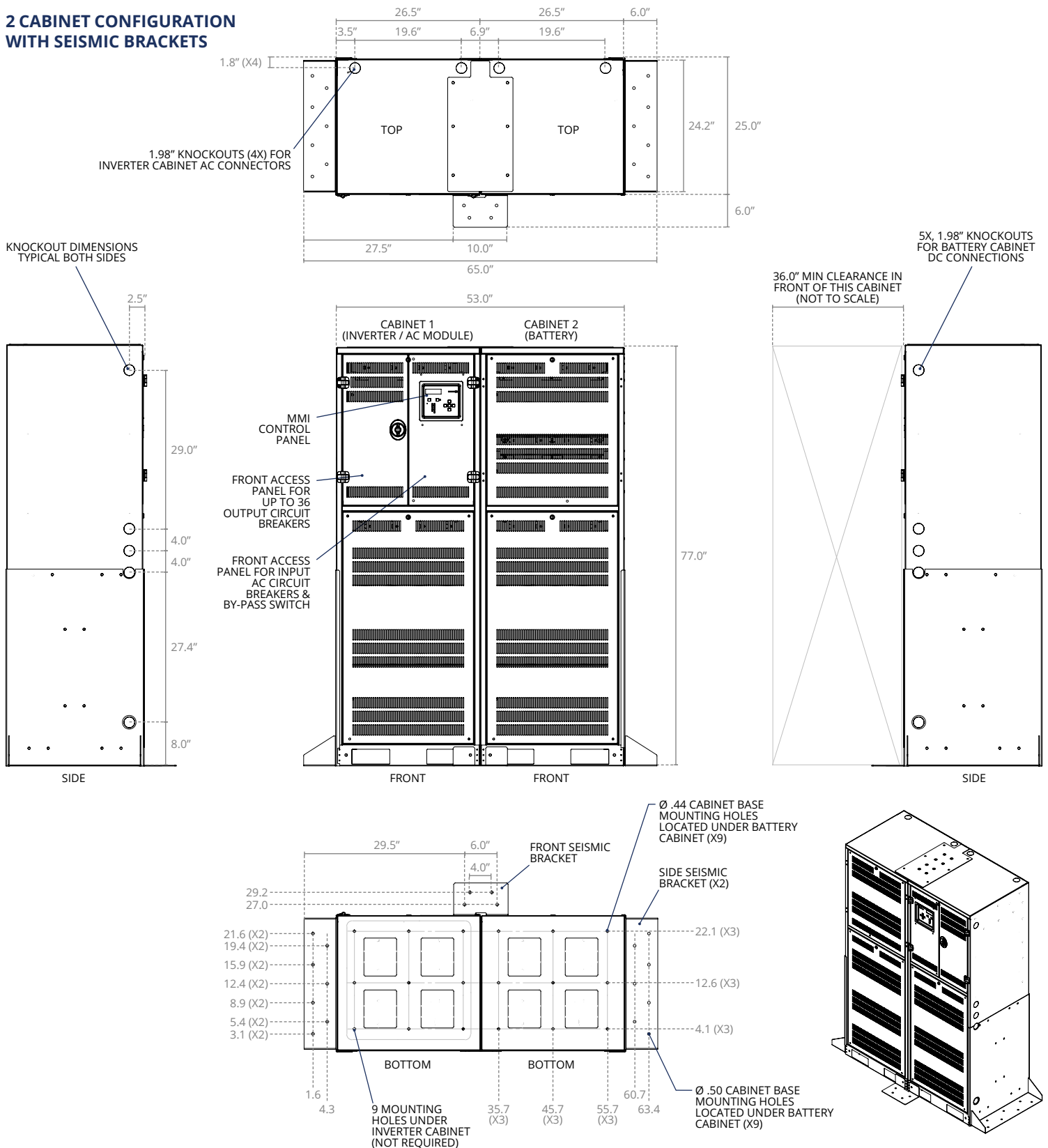
DIAGRAMS

2 CABINET CONFIGURATION



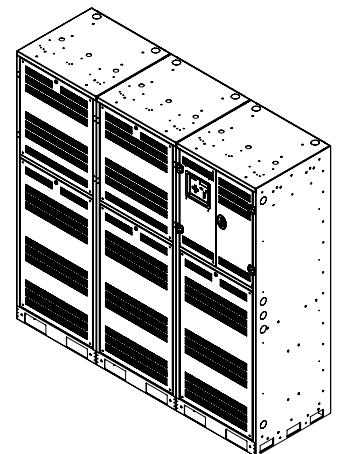
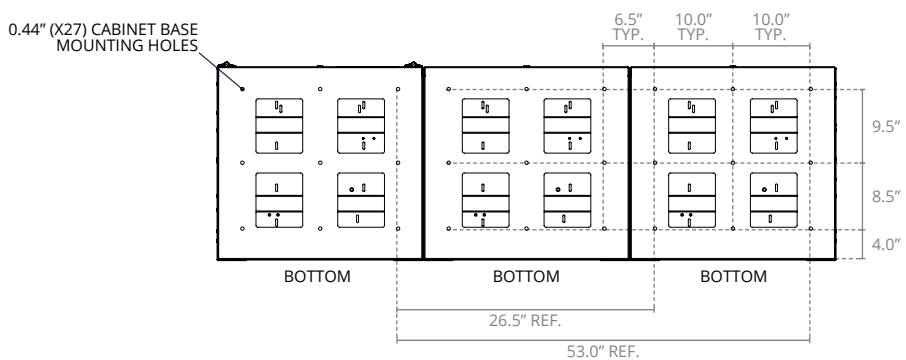
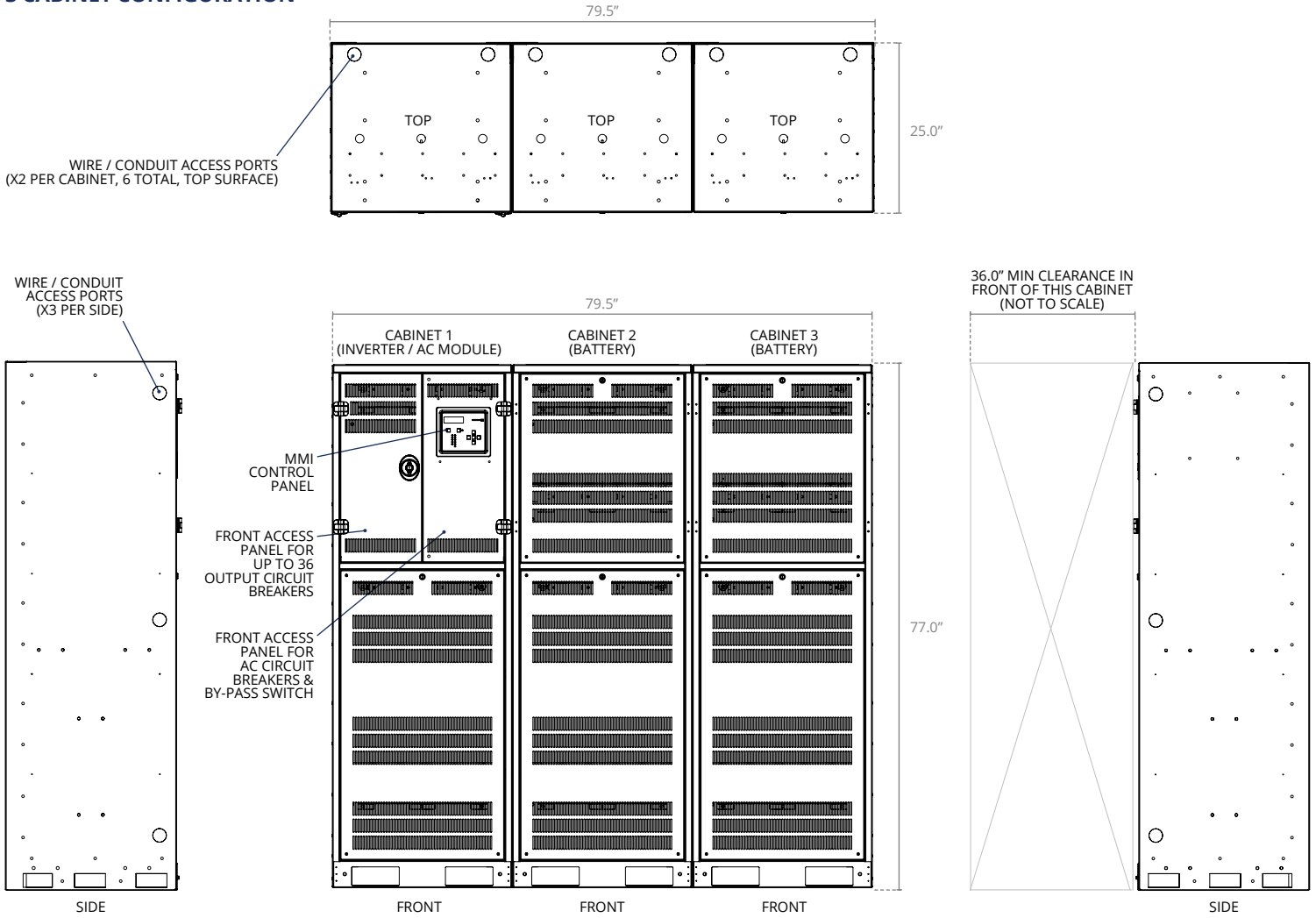
DIAGRAMS (CONTINUED)

2 CABINET CONFIGURATION WITH SEISMIC BRACKETS



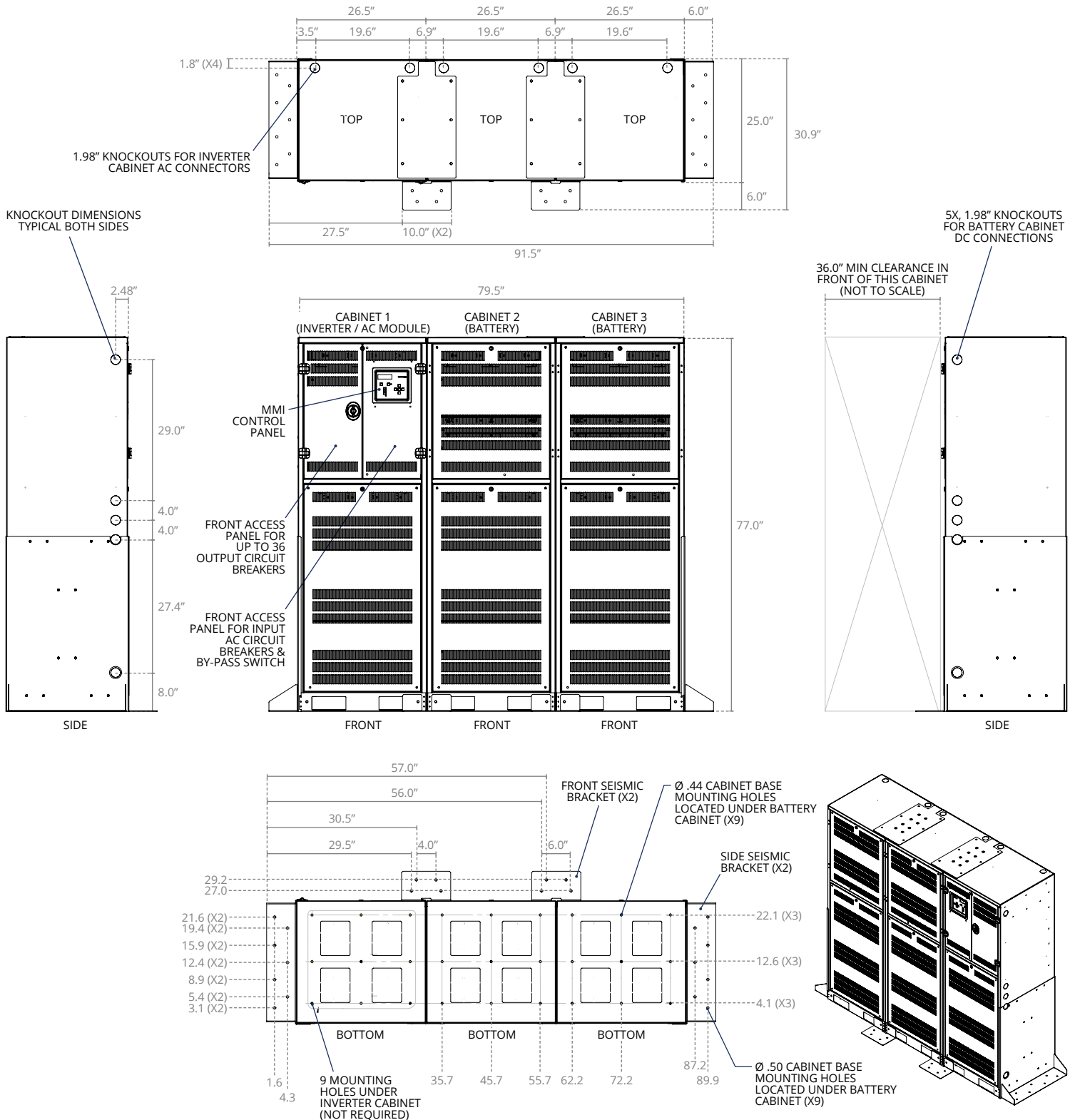
DIAGRAMS (CONTINUED)

3 CABINET CONFIGURATION



DIAGRAMS (CONTINUED)

3 CABINET CONFIGURATION WITH SEISMIC BRACKETS




BMS INTERFACE POINTS LIST

| POINT NAME | BACNET OBJECT TYPE | BACNET OBJECT ID | MODBUS REGISTER |
|----------------------------|--------------------|------------------|----------------------|
| Inverter | BI | 1 | 10001 |
| Charger | BI | 2 | 10002 |
| AC Present | BI | 3 | 10003 |
| Ready | BI | 4 | 10004 |
| Switched Load | BI | 5 | 10005 |
| Alarm Summary | BI | 6 | 10006 |
| Bypass | BI | 7 | 10007 |
| Circuit Breaker Tip | BI | 8 | 10008 |
| Startup Fault | BI | 9 | 10009 |
| Charger Fault | BI | 10 | 100010 |
| Inverter Fault | BI | 11 | 100011 |
| Input Voltage (Phase A) | AI | 1 | 30001/30002 (FLOAT) |
| Input Voltage (Phase B) | AI | 2 | 30003/30004 (FLOAT) |
| Input Voltage (Phase C) | AI | 3 | 30005/30006 (FLOAT) |
| Output Voltage (Phase A) | AI | 4 | 30007/30008 (FLOAT) |
| Output Voltage (Phase B) | AI | 5 | 30009/30010 (FLOAT) |
| Output Voltage (Phase C) | AI | 6 | 30011/30012 (FLOAT) |
| Output Current (Phase A) | AI | 7 | 30013/30014 (FLOAT) |
| Output Current (Phase B) | AI | 8 | 30015/30016 (FLOAT) |
| Output Current (Phase C) | AI | 9 | 30017/30018 (FLOAT) |
| Battery Voltage | AI | 10 | 30019/30020 (FLOAT) |
| Battery Current | AI | 11 | 30021/30022 (FLOAT) |
| Temperature | AI | 12 | 30023/30024 (FLOAT) |
| Output VA (Phase A) | AI | 13 | 30101/30102 (UINT32) |
| Output VA (Phase B) | AI | 14 | 30103/30104 (UINT32) |
| Output VA (Phase C) | AI | 15 | 30105/30106 (UINT32) |
| Battery Power | AI | 16 | 30107/30108 (UINT32) |
| System Runtime (Days) | AI | 17 | 30109/30110 (UINT32) |
| Inverter Runtime (Minutes) | AI | 18 | 30111/30112 (UINT32) |
| Inverter Runtime (Seconds) | AI | 19 | 30113/30114 (UINT32) |
| System Events | AI | 20 | 30115/30116 (UINT32) |