COMBINED FAMILY SPECIFICATION

E3MAX

MODULAR INVERTER SYSTEM

E3MAX-1P

E3MAX-2P

E3MAX-3P

E3MAX-SP

ISOLITE ▪ WWW.ISOLITE.COM
ISOLITE HEADQUARTERS ▪ 800.888.5483 ▪ 31 WATERLOO AVENUE BERWYN, PA 19312
ISOLITE WEST ▪ 800.799.5343 ▪ 3563 SUELDO SUITE M, SAN LUIS OBISPO, CA 93401

E3MAX-1P

13,300-17,000 VA Single 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
- Single phase output
- Start-Up Diagnostics checks for proper installation

ASSEMBLED IN THE USA

ORDERING INFORMATION *E3MAX-13300-1P-LC-IB-OB-C##-O##-S##*

1. SERIES	2. VA RATING	3. PHASE	4. BATTERY TYPE	5. INPUT VOLTAGE	6. OUTPUT VOLTAGE
E3MAX		1P	LC	IB	OB
	13300 13300 VA Single Phase **17000** 17000 VA Single Phase	**1P** Single Phase	**LC** Lead Calcium	**IB** 277V	**OB** 277V

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	**EEW**	Extended Electronics Warranty	**WB**	Wall Mounting Bracket[1]	**WEB**	Web Monitoring Connection[2]
CB	Custom Breaker	**TA**	Trip Alarm with Breaker	**BI**	BMS Integration		
DT	Delayed Transfer	**RA**	Remote Annunciator (Not Included with TB)	**BTMS**	Battery Thermal Management System		
EBW20	Extended Battery Warranty	**TB**	Programmable Terminal Block (Not Included with RA)	**EO**	Emergency Power Off		

NOTE

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

ORDERING NOTES

1. WB option only available on 1KVA inverters.
2. In order to use the web-based monitoring available at **Isolite.com**, the -WEB option must be selected.

ACCESSORIES ON NEXT PAGE

E3MAX-1P

13,300-17,000 VA Single Phase Modular AC Inverter

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. For Two Phase, Three Phase, or Split Phase, see E3MAX-3P, E3MAX-2P, or E3MAX-SP
- 10,000 and 12,500 VA only available with 277V input/output

E3MAX-1P

13,300-17,000 VA Single Phase Modular AC Inverter

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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
Single-Phase (1P)	36	24	35	35	23	23	34	22

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
Single-Phase (1P)	13.3 kW	2	53	77	25	790	2336	3161	16
	17.0 kW	2	53	77	25	790	2820	3645	20

ELECTRICAL DATA				
Model	Power Rating (kW)	Minimum Feed Breaker	Suggested Feed Breaker	Full Load BTU/Hr
		Input Voltage IB	Input Voltage IB	
E3MAX-13300-1P	13.3 kW	78 A	80 A	907
E3MAX-17000-1P	17.0 kW	99.7 A	100 A	1159

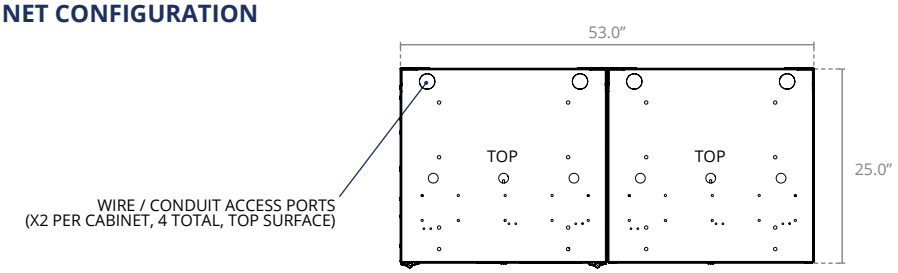
E3MAX-1P

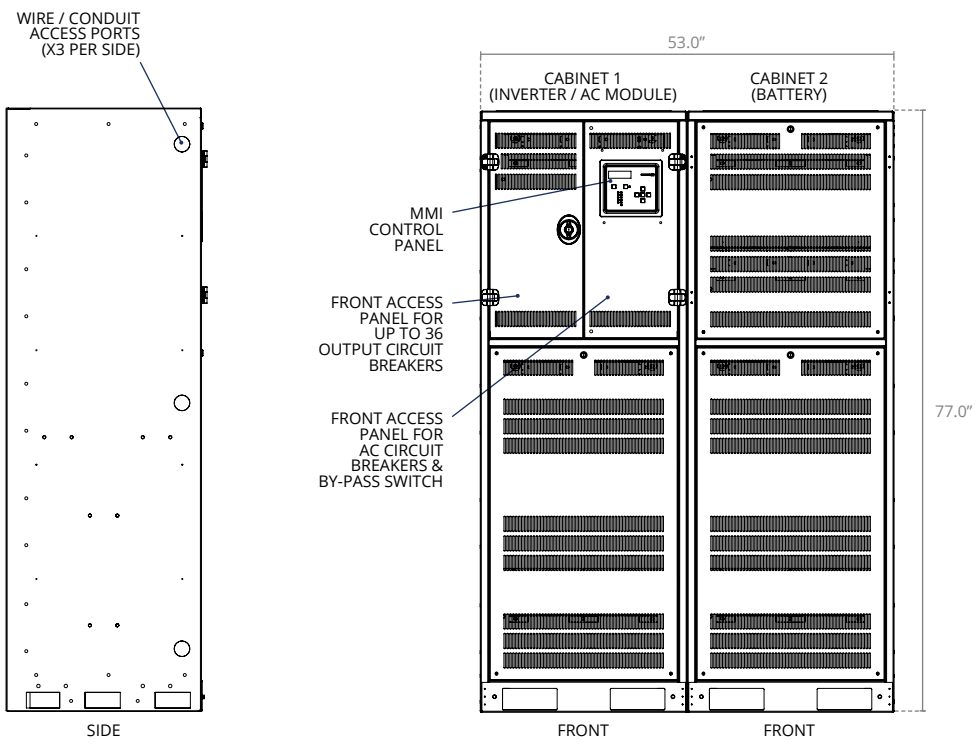
13,300-17,000 VA Single Phase Modular AC Inverter

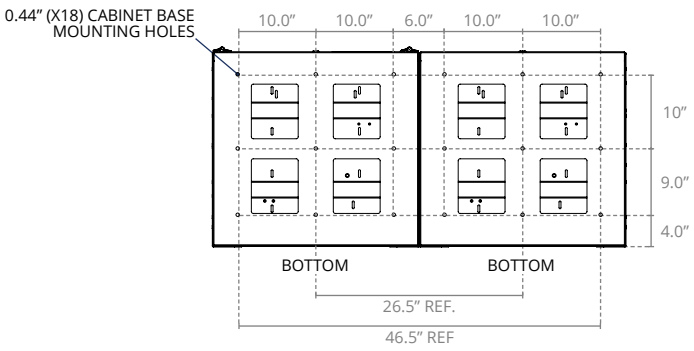
ASSEMBLED IN THE USA

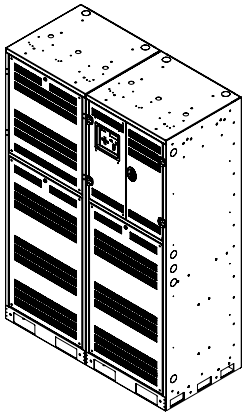
DIAGRAMS

2 CABINET CONFIGURATION



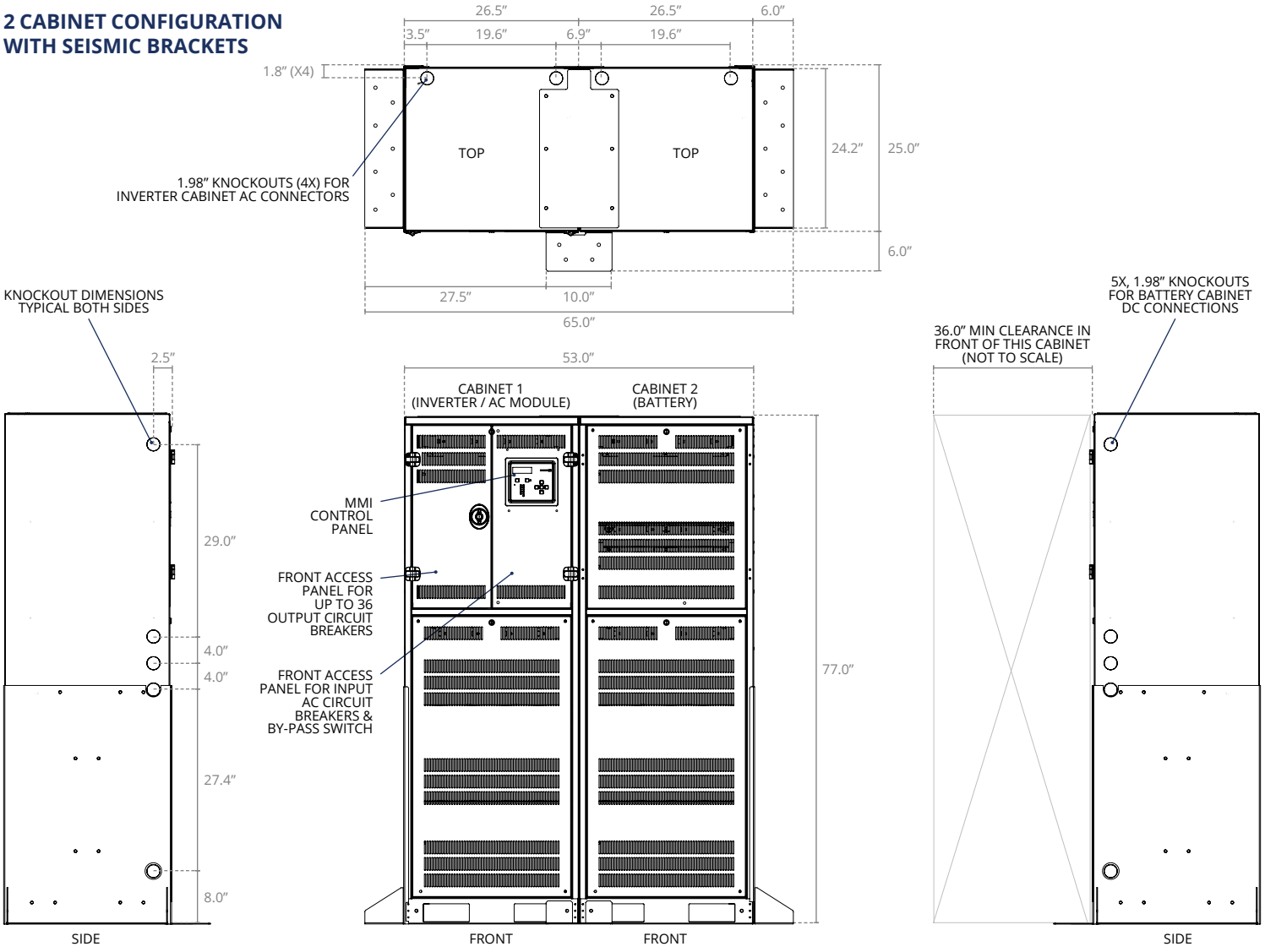


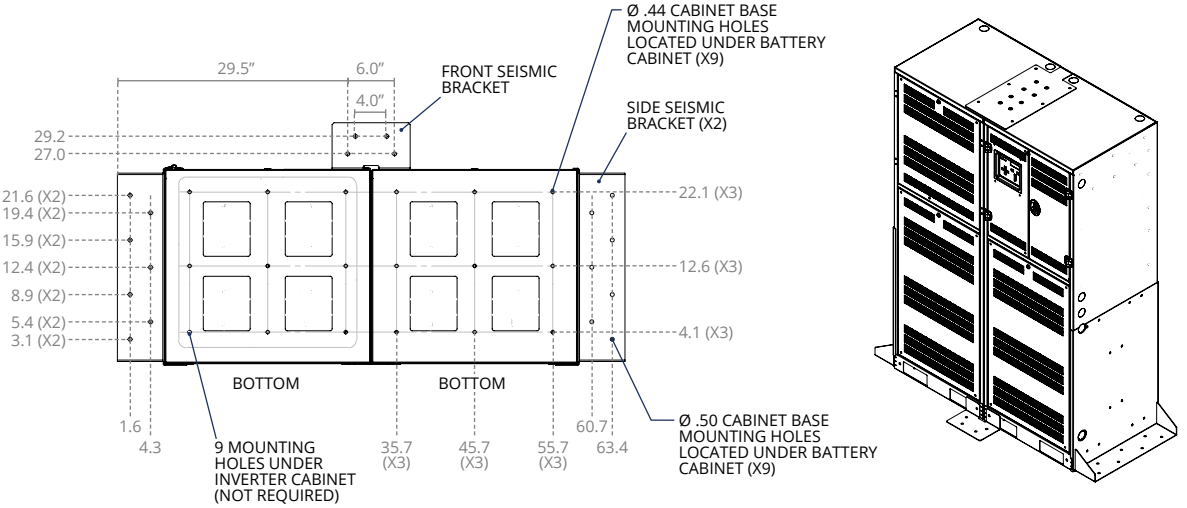




DIAGRAMS (CONTINUED)

2 CABINET CONFIGURATION WITH SEISMIC BRACKETS



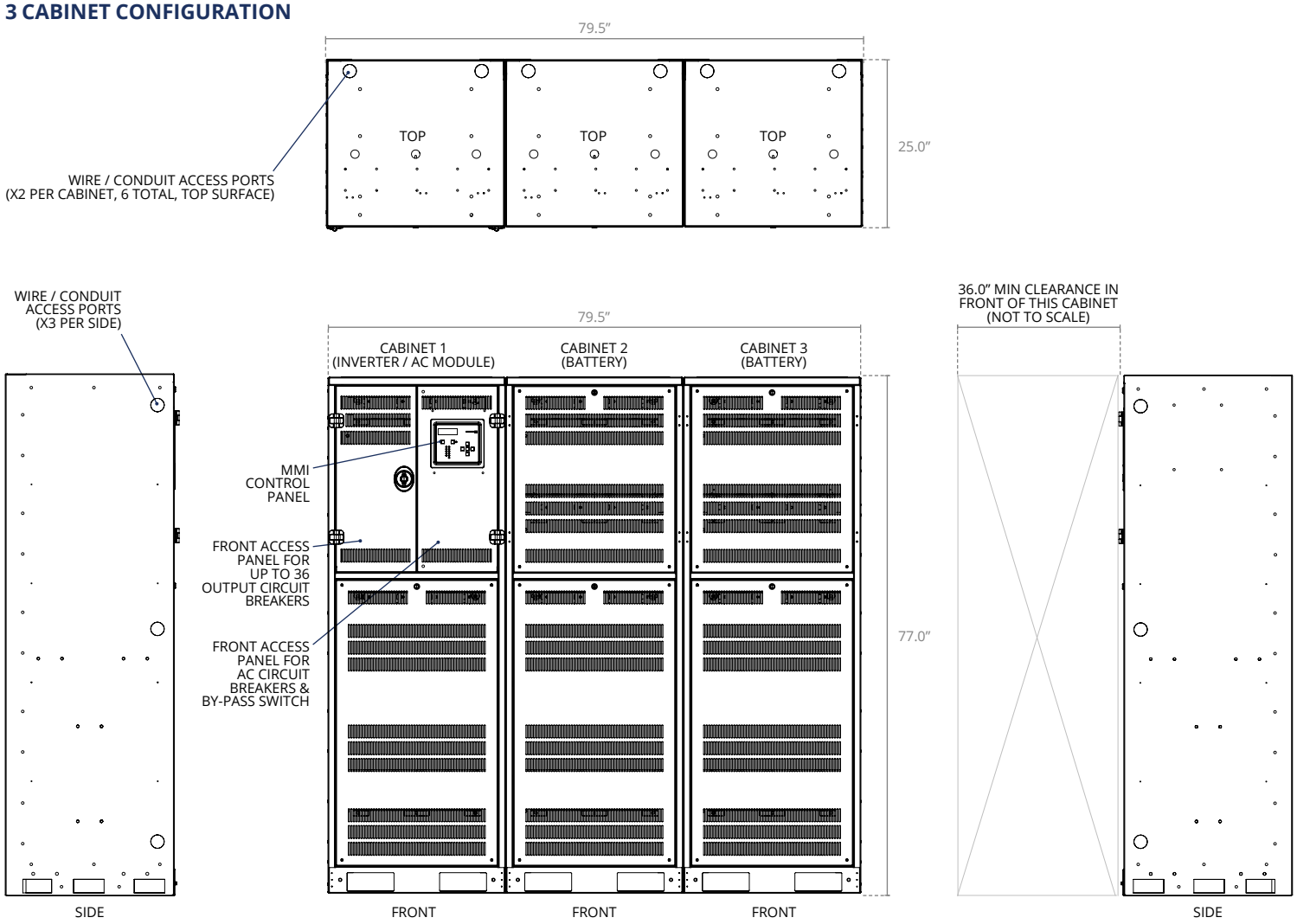


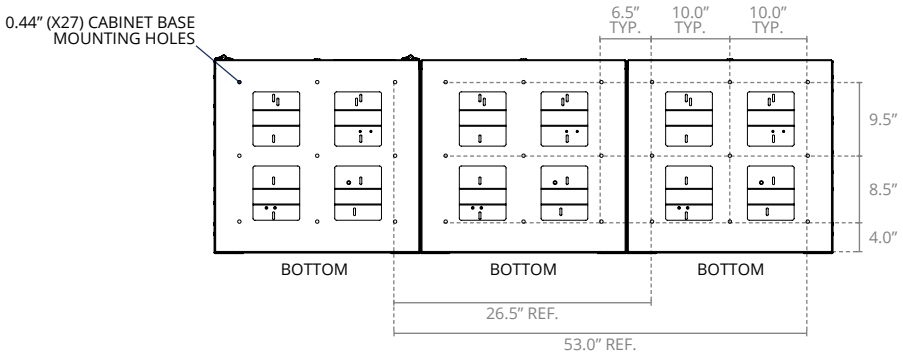
E3MAX-1P

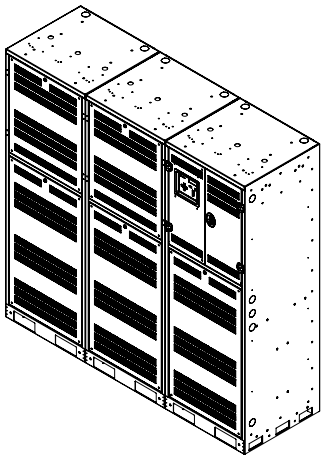
13,300-17,000 VA Single Phase Modular AC Inverter

DIAGRAMS (CONTINUED)

3 CABINET CONFIGURATION

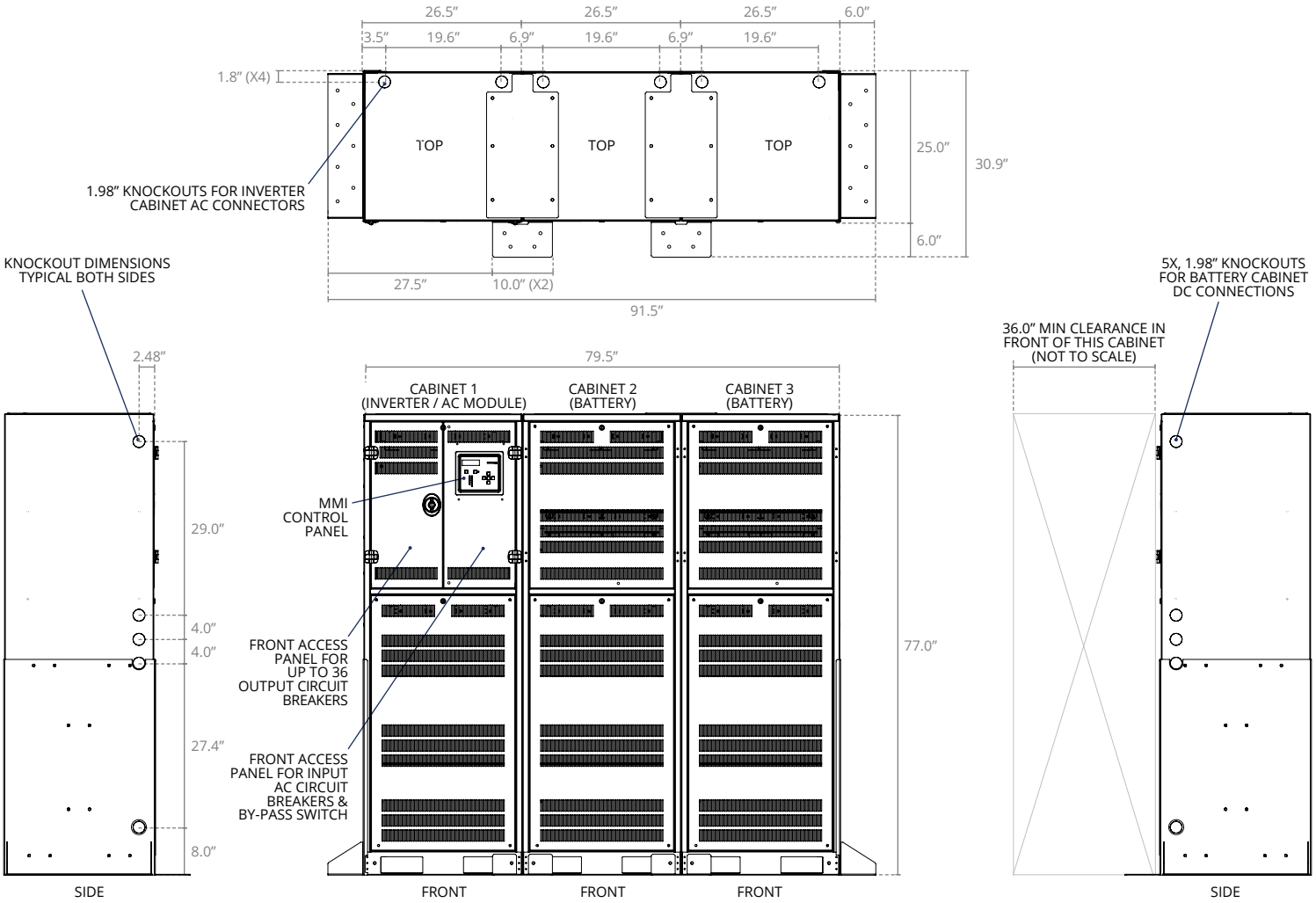


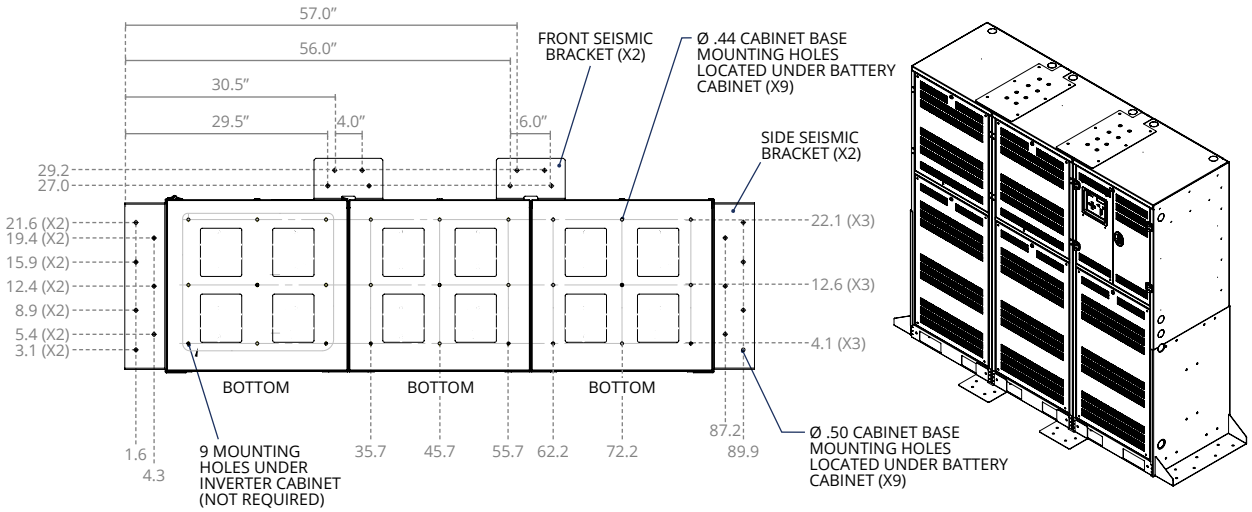




DIAGRAMS (CONTINUED)

3 CABINET CONFIGURATION WITH SEISMIC BRACKETS





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E3MAX-1P

13,300-17,000 VA Single Phase Modular AC Inverter

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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	30113/3014 (UINT32)
System Events	AI	20	30115/30116 (UINT32)

E3MAX-2P

8,500-13,300 VA Two 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

ASSEMBLED IN THE USA

ORDERING INFORMATION *E3MAX-8500-2P-LC-IA-OA-C##-O##-S##*

1. SERIES	2. VA RATING	3. PHASE	4. BATTERY TYPE	5. INPUT VOLTAGE	6. OUTPUT VOLTAGE
E3MAX		2P	LC		
	8500 8500 VA Split Phase **10500** 10500 VA Split Phase **13300** 13300 VA Split Phase	**2P** Two Phase	**LC** Lead Calcium	**IC** 120V/120V/208V **IE** 277V/277V/480V	**OC** 120V/120V/208V **OE** 277V/277V/480V

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	**EEW**	Extended Electronics Warranty	**BI**	BMS Integration
CB	Custom Breaker	**TA**	Trip Alarm with Breaker	**BTMS**	Battery Thermal Management System
DT	Delayed Transfer	**RA**	Remote Annunciator (Not Included with TB)	**EO**	Emergency Power Off
EBW20	Extended Battery Warranty	**TB**	Programmable Terminal Block (Not Included with RA)	**WEB**	Web Monitoring Connection[1]

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

E3MAX-2P

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

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
- Seismic Zone 4 – OSHPD approval, available July 2017
- Circuit breaker protected loads (Switched, Normally On, and Normally Off)
- Fault summary alarm and 2 programmable alarms – Form C dry contacts
- Keyed lockable enclosure

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
- OSHPD Seismic Certified (with Z4 option)
- 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, Split Phase, or Three Phase, see E3MAX-1P, E3MAX-SP, or E3MAX-3P

E3MAX-2P

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

ASSEMBLED IN THE USA

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
Two-Phase (2P)	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
Two-Phase (2P)	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 IC	Input Voltage IE	Input Voltage IC	Input Voltage IE	
E3MAX-8500-2P	8.5 kW	66.4 A	28.8 A	70 A	30 A	580
E3MAX-10500-2P	10.5 kW	82 A	35.5 A	90 A	40 A	716
E3MAX-13300-2P	13.3 kW	103.9 A	45 A	110 A	50 A	907

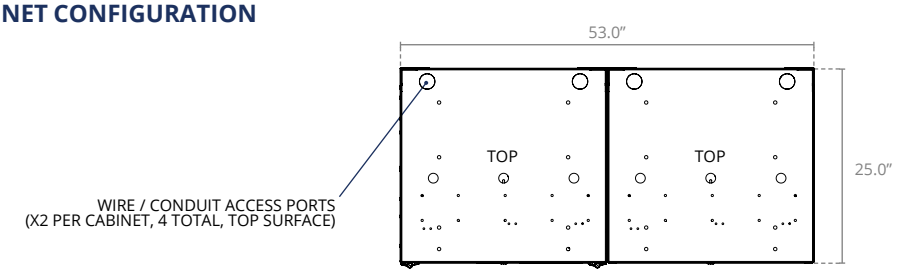
E3MAX-2P

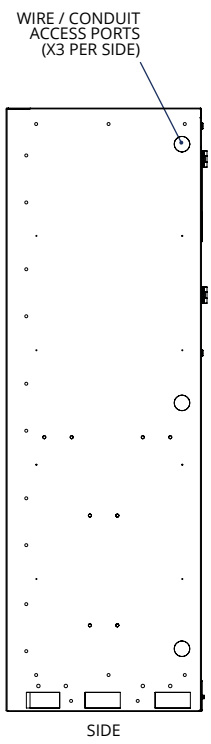
8,500-13,300 VA Two Phase Modular AC Inverter

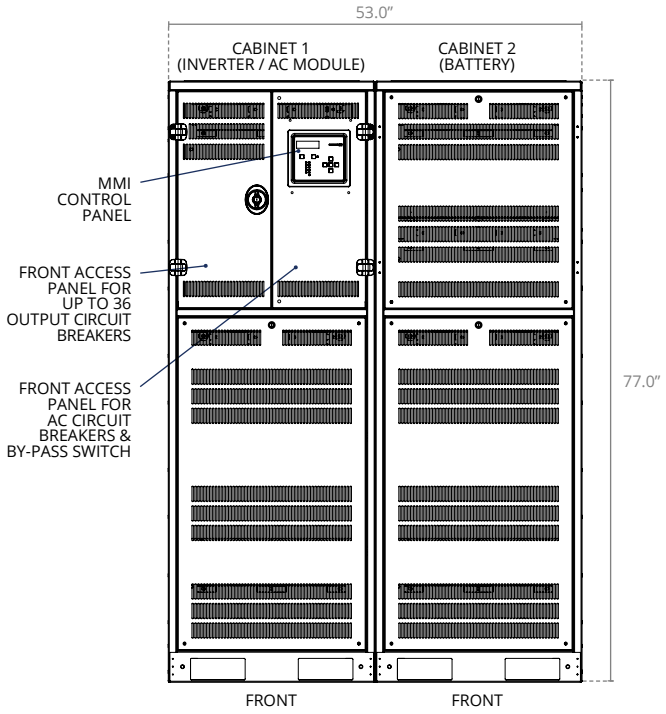
ASSEMBLED IN THE USA

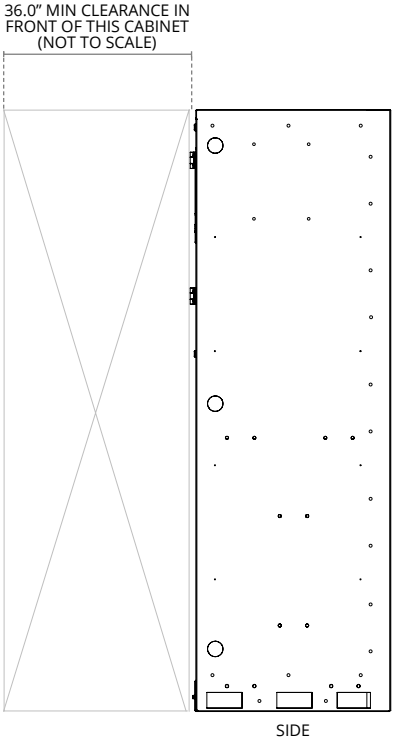
DIAGRAMS

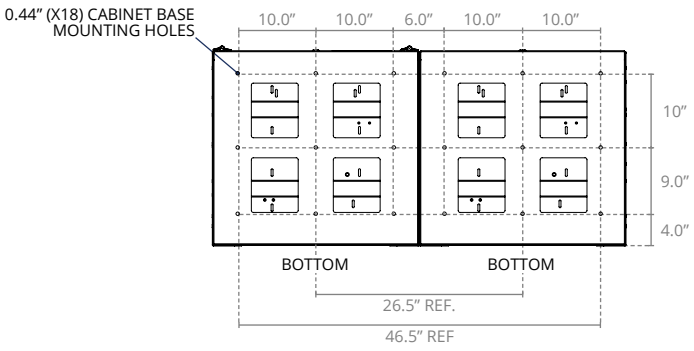
2 CABINET CONFIGURATION

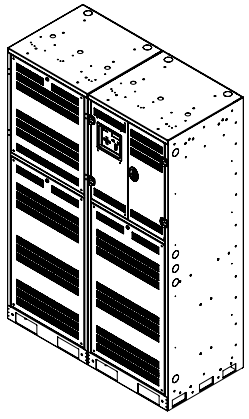












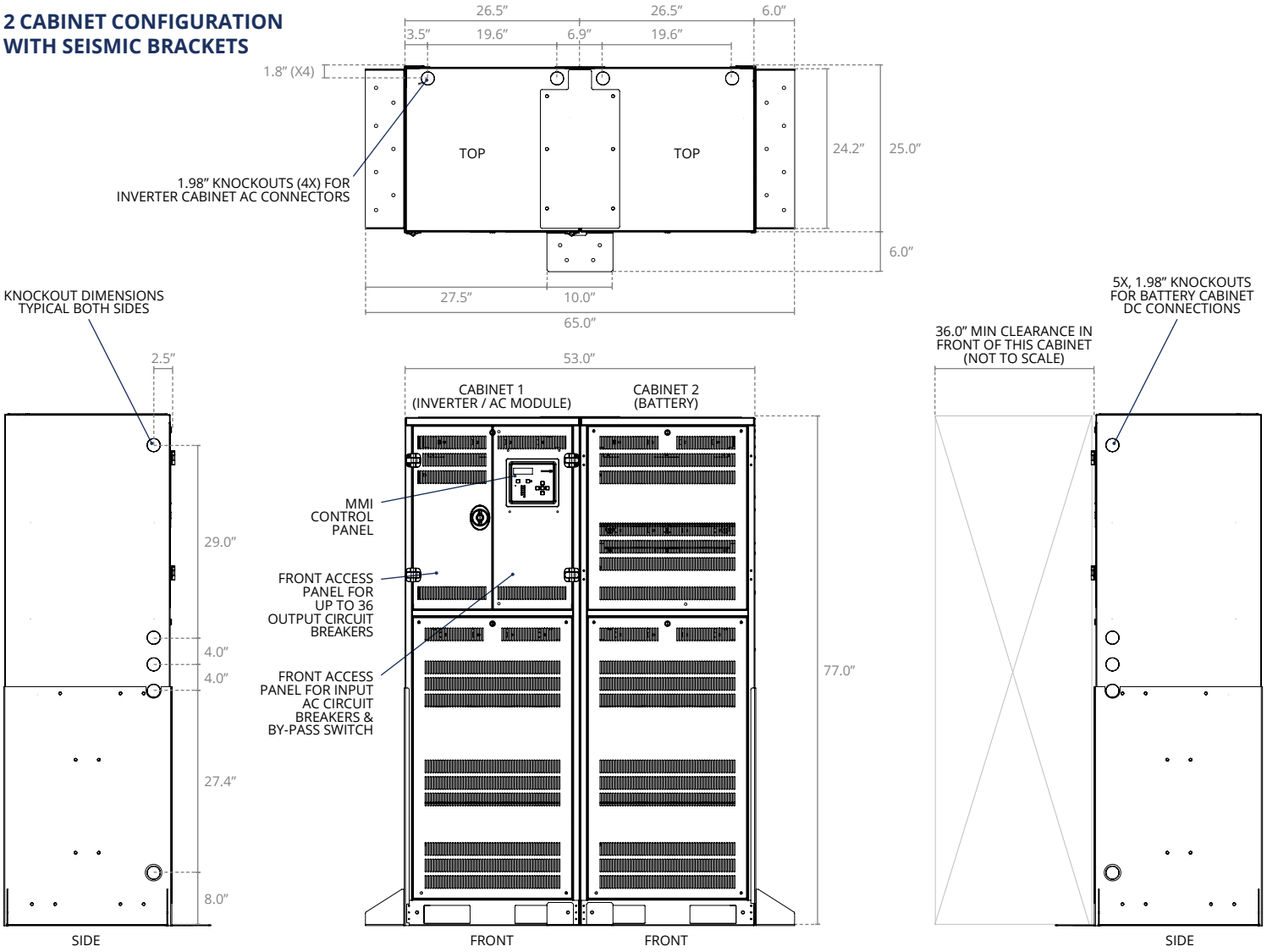
E3MAX-2P

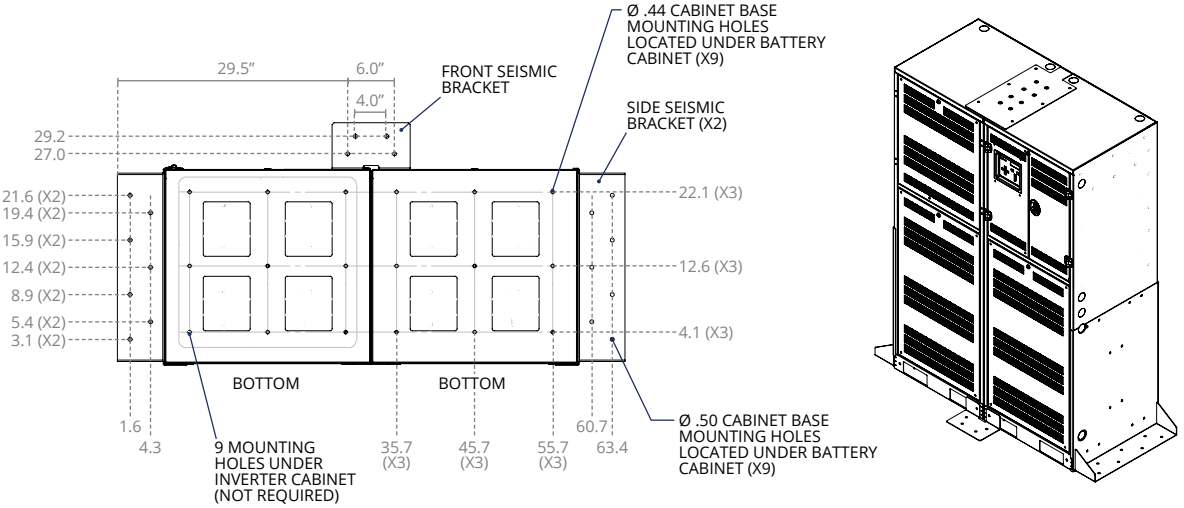
8,500-13,300 VA Two Phase Modular AC Inverter

ASSEMBLED IN THE USA

DIAGRAMS (CONTINUED)

2 CABINET CONFIGURATION WITH SEISMIC BRACKETS





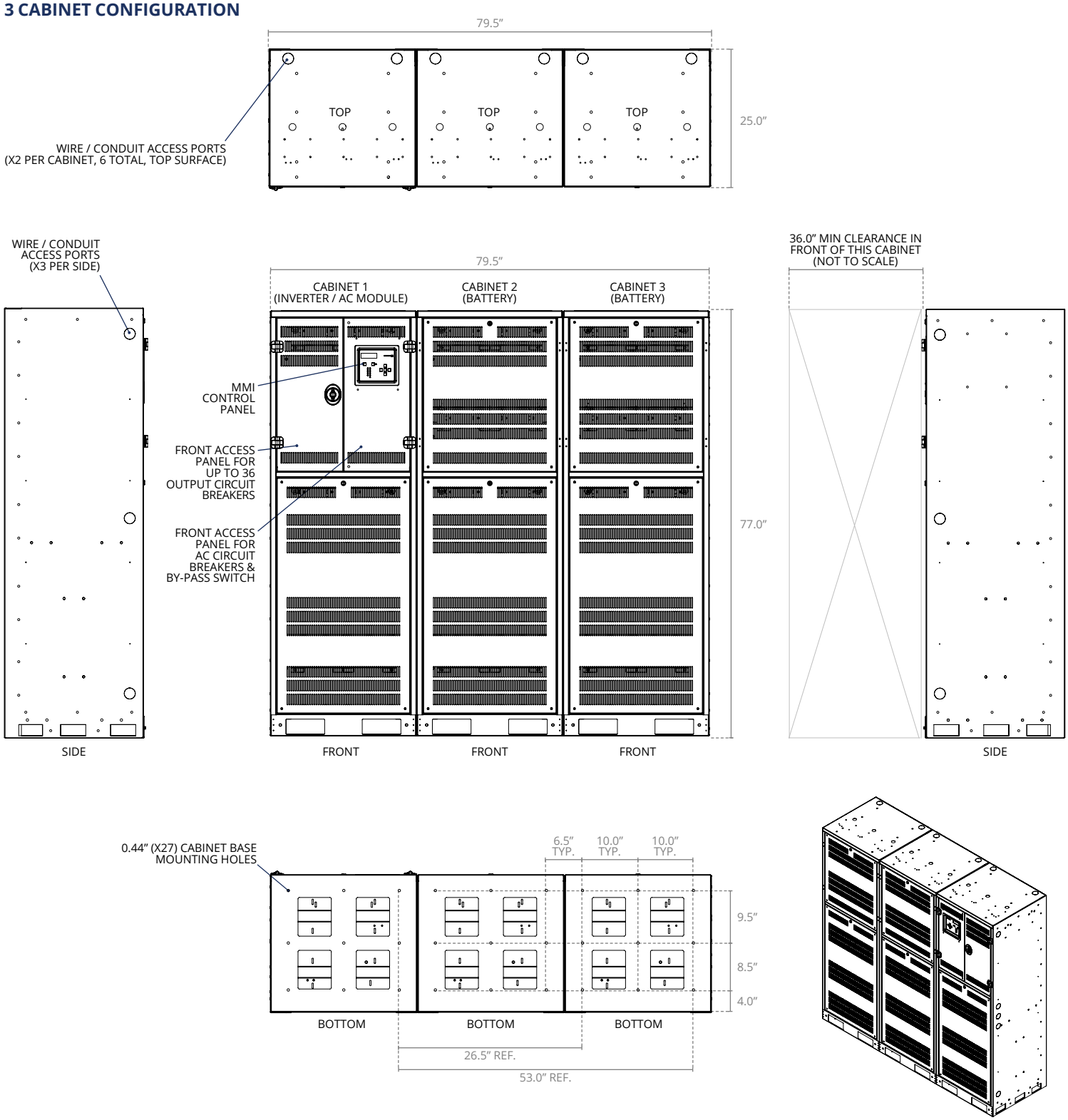
E3MAX-2P

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

ASSEMBLED IN THE USA

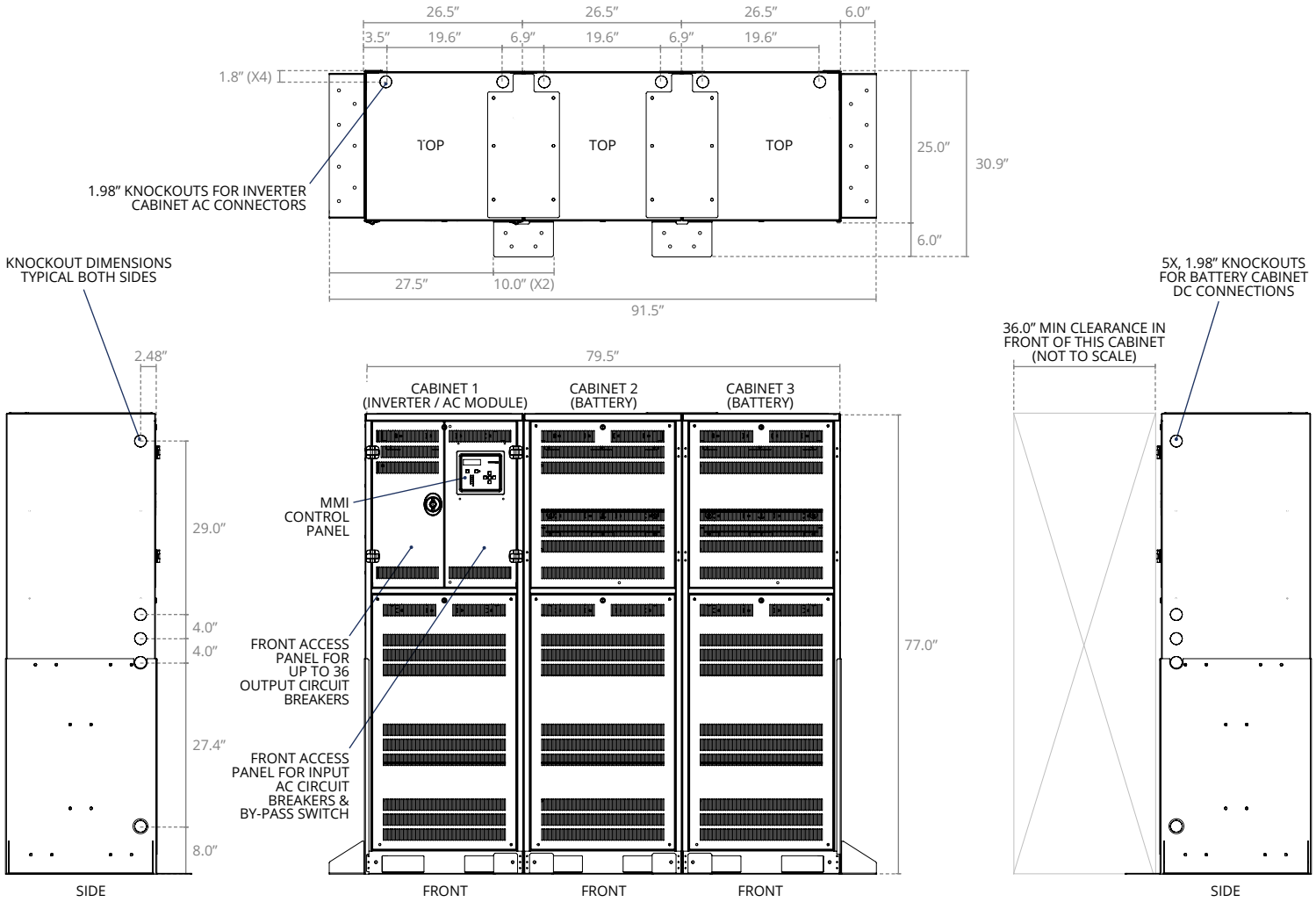
DIAGRAMS (CONTINUED)

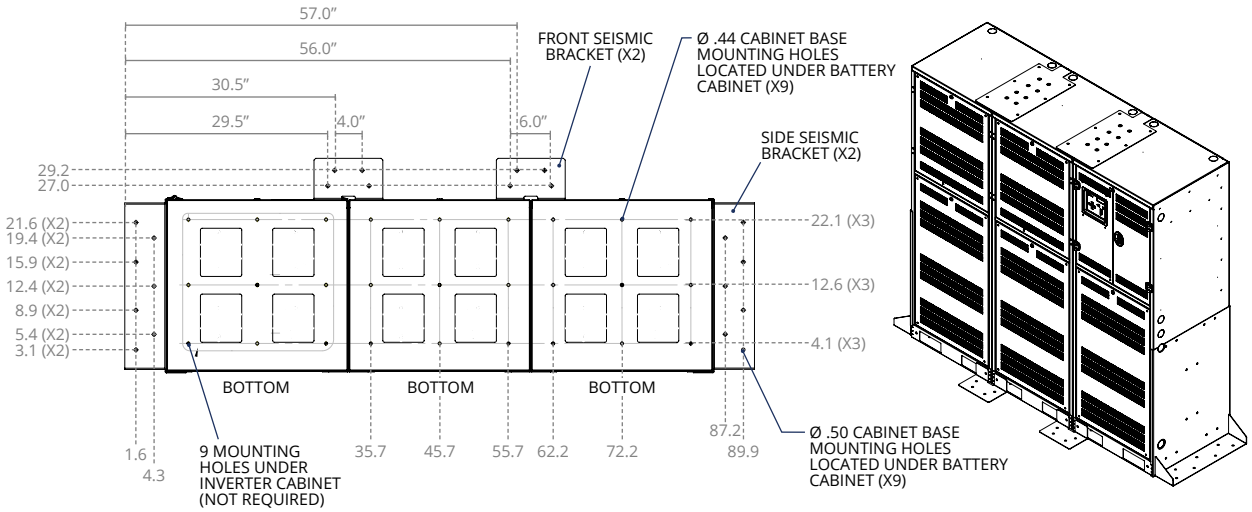
3 CABINET CONFIGURATION



DIAGRAMS (CONTINUED)

3 CABINET CONFIGURATION WITH SEISMIC BRACKETS





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E3MAX-2P

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

ASSEMBLED IN THE USA

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	30113/3014 (UINT32)
System Events	AI	20	30115/30116 (UINT32)

E3MAX-3P

8,500-33,000 VA Three 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
- Three Phase output
- Start-Up Diagnostics checks for proper installation

ASSEMBLED IN THE USA

ORDERING INFORMATION *E3MAX-8500-3P-LC-IF-OF-C##-O##-S##*

1. SERIES	2. VA RATING	3. PHASE	4. BATTERY TYPE	5. INPUT VOLTAGE	6. OUTPUT VOLTAGE
E3MAX -	-	3P -	LC -	-	-
	8500 8500 VA Three Phase	**3P** Three Phase	**LC** Lead Calcium	**IF** 120V/208V L-N/L-L	**OF** 120V/208V L-N/L-L
	10500 10500 VA Three Phase			**IG** 277V/480V L-N/L-L	**OG** 277V/480V L-N/L-L
	13300 13300 VA Three Phase				
	17000 17000 VA Three Phase				
	20500 20500 VA Three Phase				
	26500 26500 VA Three Phase				
	33000 33000 VA Three Phase				

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	**EEW**	Extended Electronics Warranty	**BI**	BMS Integration
CB	Custom Breaker	**TA**	Trip Alarm with Breaker	**BTMS**	Battery Thermal Management System
DT	Delayed Transfer	**RA**	Remote Annunciator (Not Included with TB)	**EO**	Emergency Power Off
EBW20	Extended Battery Warranty	**TB**	Programmable Terminal Block (Not Included with RA)	**WEB**	Web Monitoring Connection[1]

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

E3MAX-3P

8,500-33,000 VA Three Phase Modular AC Inverter

ASSEMBLED IN THE USA

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
- 3 Phase = 4 Wire plus Ground.
- Max power for any phase (L-N, L-L) is 1/3 of total power capacity
- For Single Phase, Two Phase, or Split Phase, see E3MAX-1P, E3MAX-2P, or E3MAX-SP

E3MAX-3P

8,500-33,000 VA Three Phase Modular AC Inverter

ASSEMBLED IN THE USA

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
Three-Phase (3P)	36	24	33	33	21	21	30	18

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
Three-Phase (3P)	8.5 kW	2	53	77	25	760	1600	2355	16
	10.5 kW	2	53	77	25	760	1900	2695	20
	13.3 kW	2	53	77	25	760	2336	3131	16
	17.0 kW	2	53	77	25	810	2820	3665	20
	20.5 kW	3	79.5	77	25	810	3800	4680	40
	26.5 kW	3	79.5	77	25	890	4672	5632	32
	33.0 kW	3	79.5	77	25	890	5640	6600	40

ELECTRICAL DATA

Model	Power Rating (kW)	Minimum Feed Breaker		Suggested Feed Breaker		Full Load BTU/Hr
		Input Voltage IF	Input Voltage IG	Input Voltage IF	Input Voltage IG	
E3MAX-8500-3P	8.5 kW	38.4 A	16.6 A	40 A	20 A	604
E3MAX-10500-3P	10.5 kW	47.4 A	20.5 A	50 A	30 A	747
E3MAX-13300-3P	13.3 kW	60 A	26 A	70 A	30 A	946
E3MAX-17000-3P	17.0 kW	76.7 A	33.2 A	80 A	40 A	1208
E3MAX-20500-3P	20.5 kW	92.5 A	40.1 A	100 A	50 A	1457
E3MAX-26500-3P	26.5 kW	119.6 A	51.8 A	120 A	60 A	1883
E3MAX-33000-3P	33.0 kW	149.0 A	64.5 A	150 A	70 A	2345

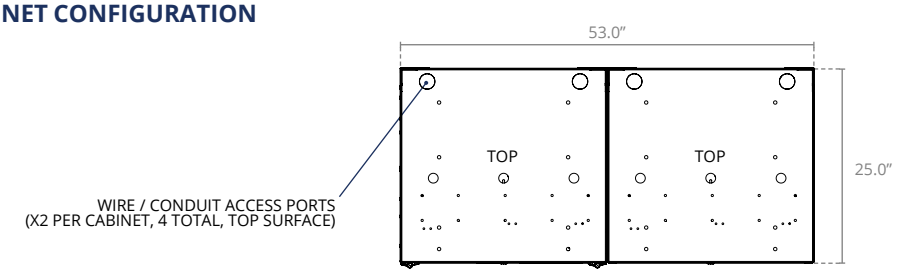
E3MAX-3P

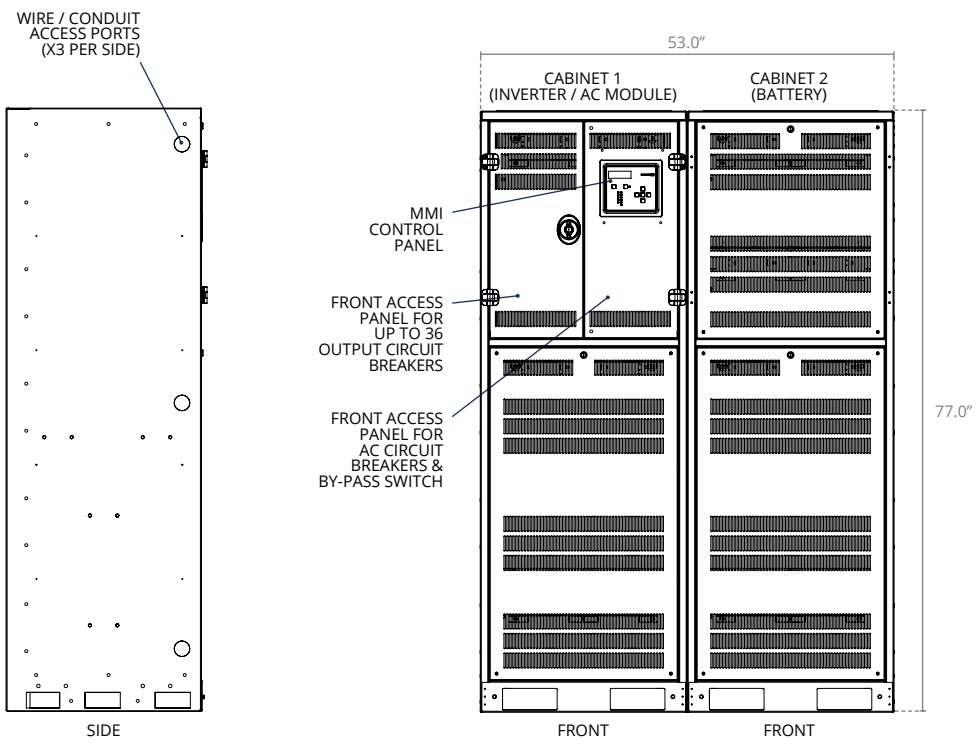
8,500-33,000 VA Three Phase Modular AC Inverter

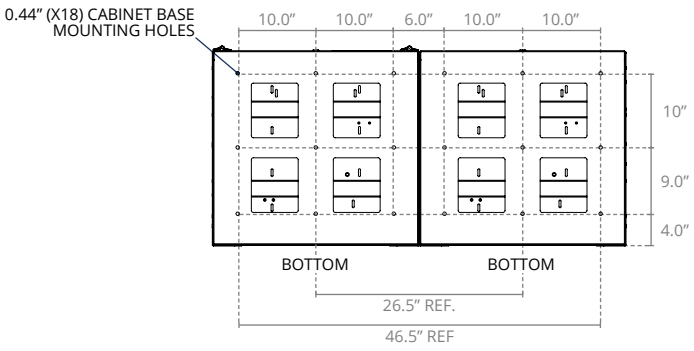
ASSEMBLED IN THE USA

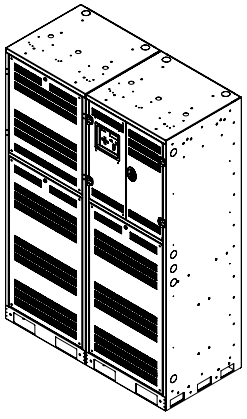
DIAGRAMS

2 CABINET CONFIGURATION



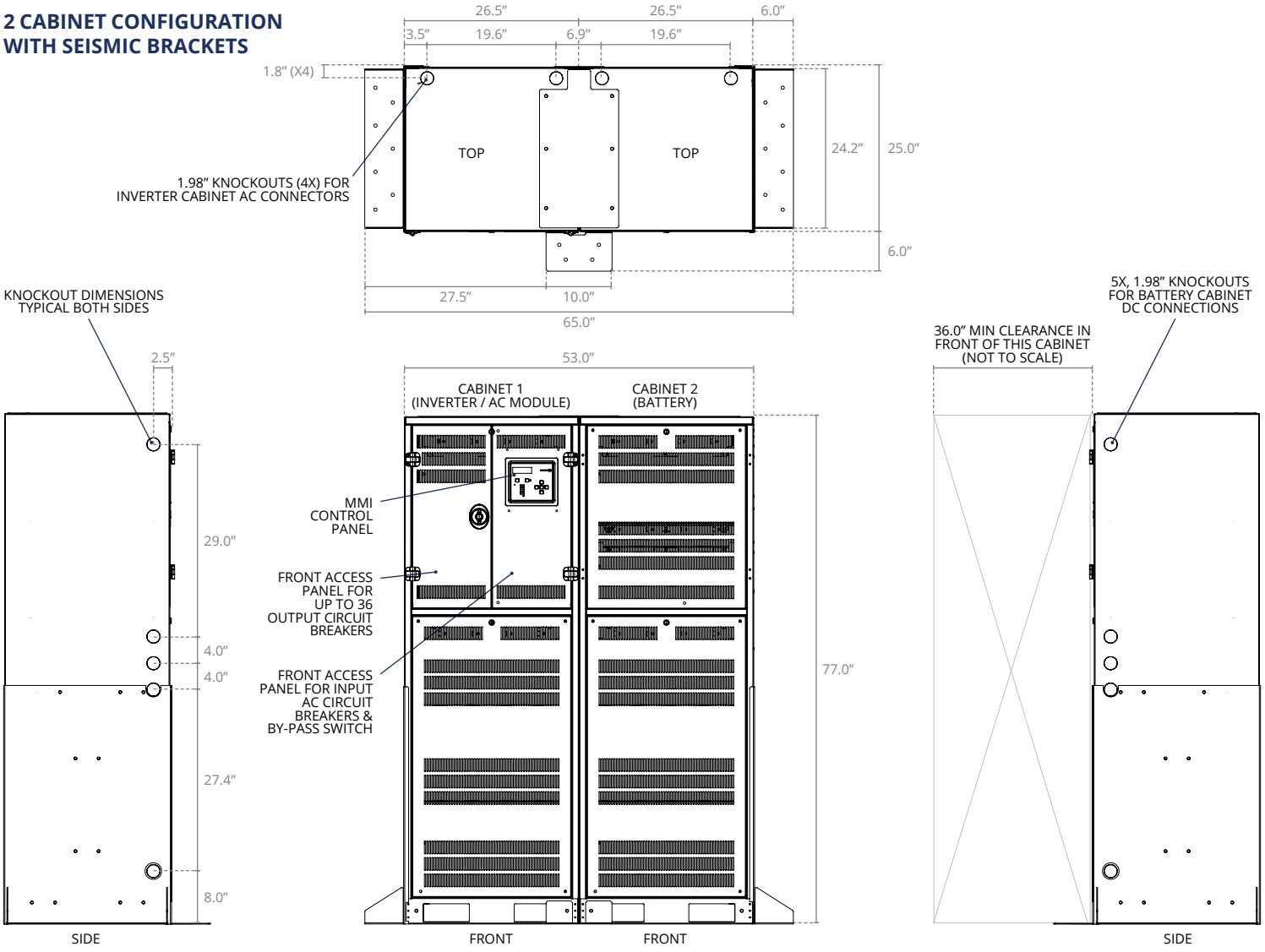


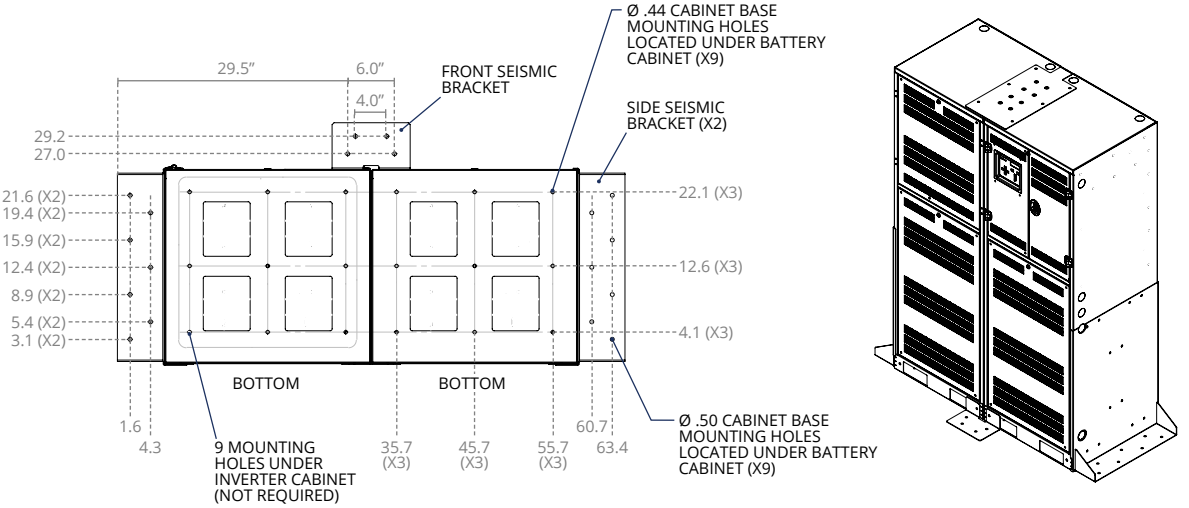




DIAGRAMS (CONTINUED)

2 CABINET CONFIGURATION WITH SEISMIC BRACKETS





E3MAX-3P

8,500-33,000 VA Three Phase Modular AC Inverter

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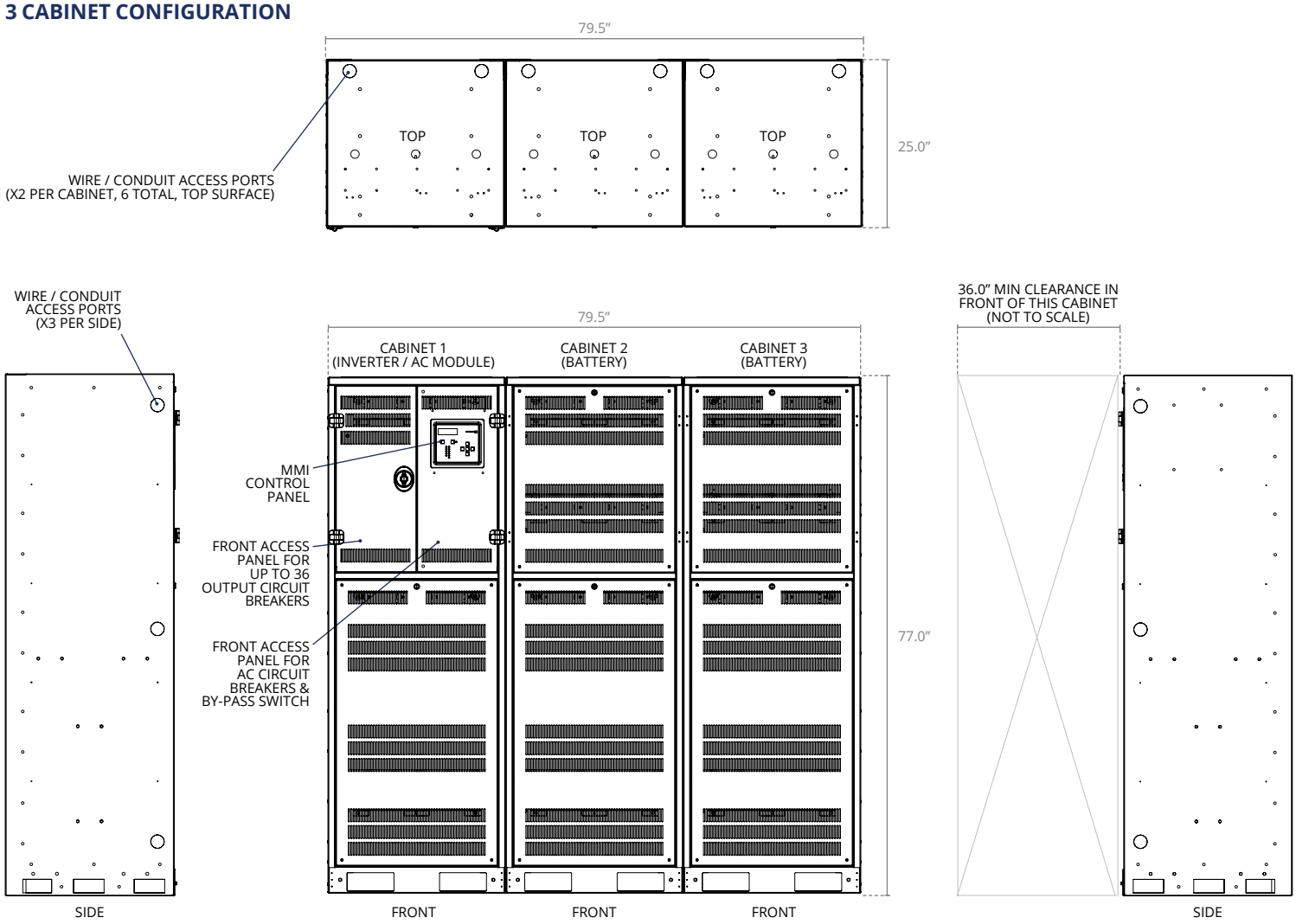
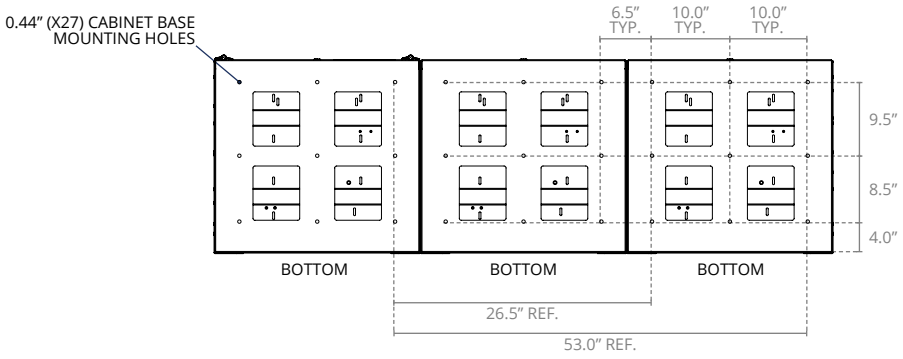
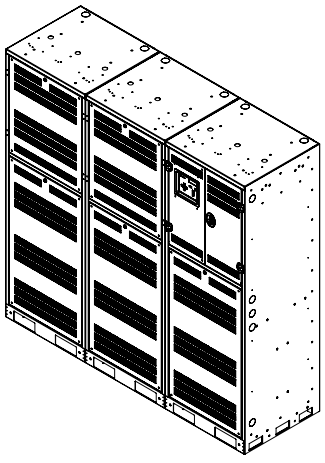
DIAGRAMS (CONTINUED)

3 CABINET CONFIGURATION

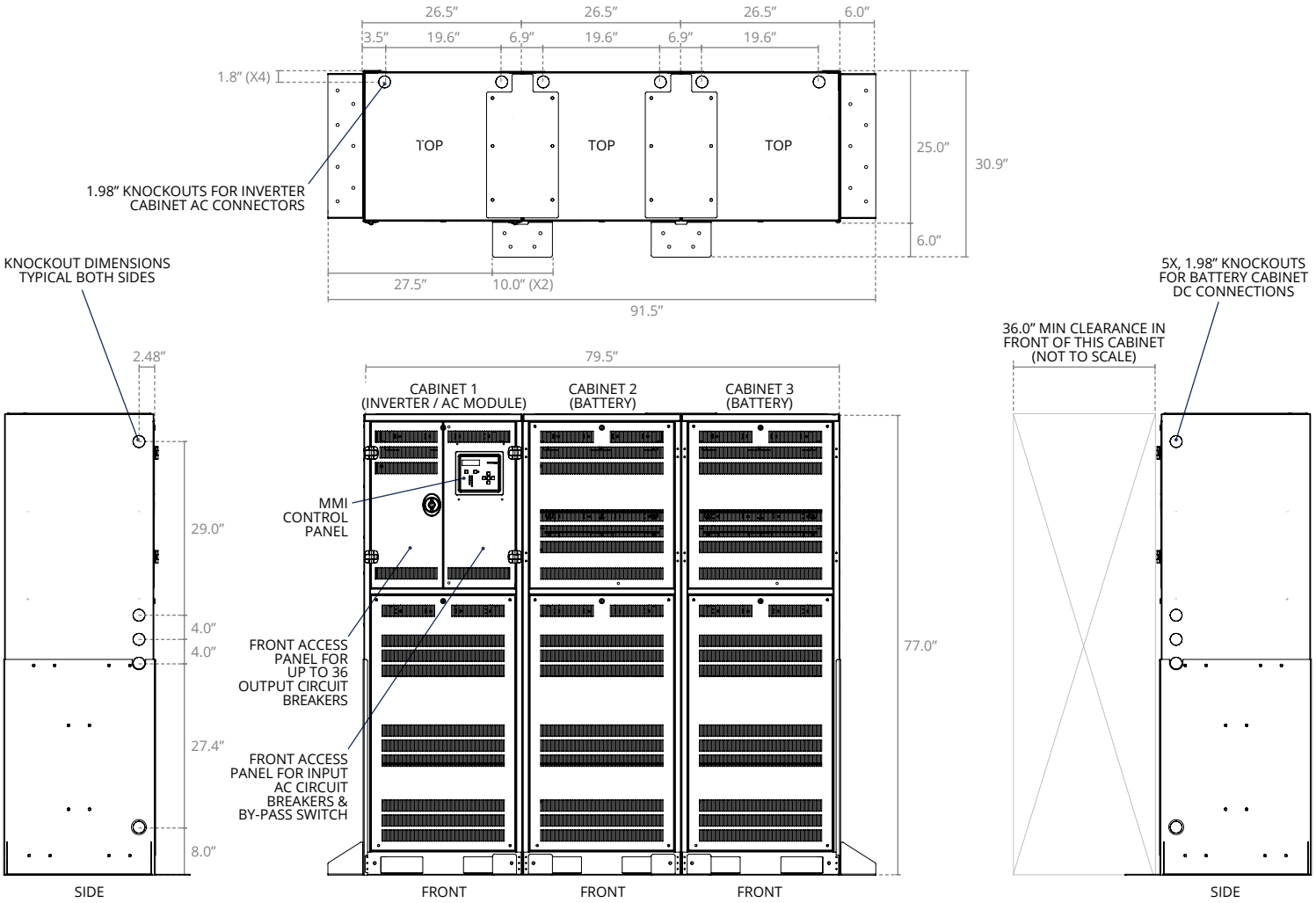






DIAGRAMS (CONTINUED)

3 CABINET CONFIGURATION WITH SEISMIC BRACKETS



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E3MAX-3P

8,500-33,000 VA Three Phase Modular AC Inverter

ASSEMBLED IN THE USA

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	30113/3014 (UINT32)
System Events	AI	20	30115/30116 (UINT32)

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

ASSEMBLED IN THE USA

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	LC	ID	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*

C* * Normally On Breakers

8. OUTPUT BREAKER - NORMALLY OFF*

O* * Normally Off Breakers

9. OUTPUT BREAKER - SWITCHED*

S* * Switched Breakers

SEE BREAKER CONFIGURATION TABLE ON PAGE 3 FOR MAXIMUM BREAKERS

10. OPTIONS

BLANK = NO OPTION

MB	Maintenance Bypass Switch	**EEW**	Extended Electronics Warranty	**BI**	BMS Integration
CB	Custom Breaker	**TA**	Trip Alarm with Breaker	**BTMS**	Battery Thermal Management System
DT	Delayed Transfer	**RA**	Remote Annunciator (Not Included with TB)	**EO**	Emergency Power Off
EBW20	Extended Battery Warranty	**TB**	Programmable Terminal Block (Not Included with RA)	**WEB**	Web Monitoring Connection[1]

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

E3MAX-SP

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

ASSEMBLED IN THE USA

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

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

ASSEMBLED IN THE USA

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

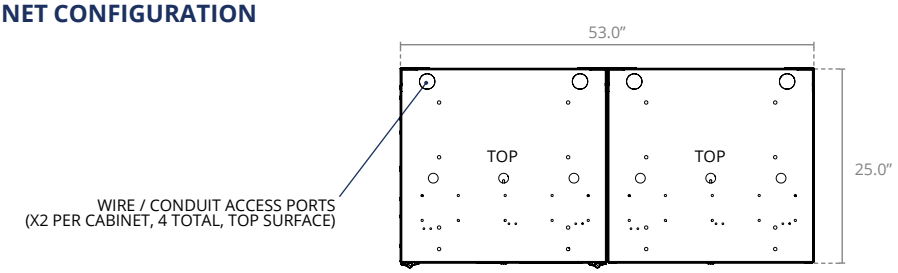
E3MAX-SP

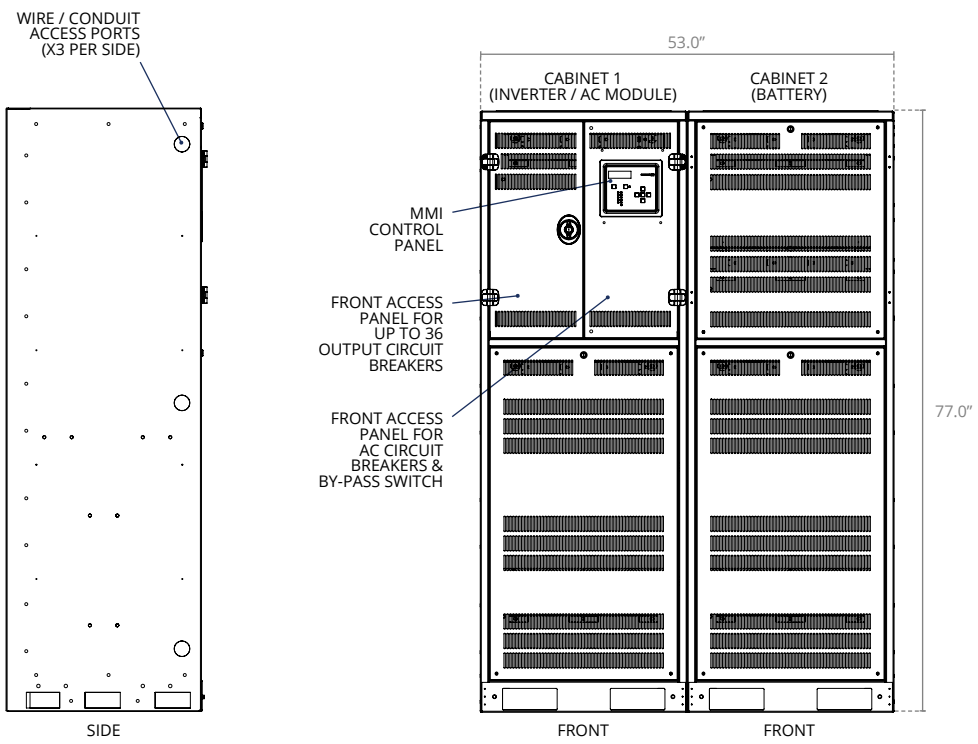
8,500-13,300 VA Split Phase Modular AC Inverter

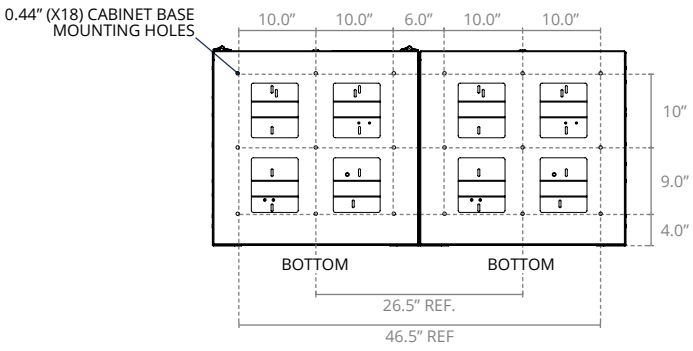
ASSEMBLED IN THE USA

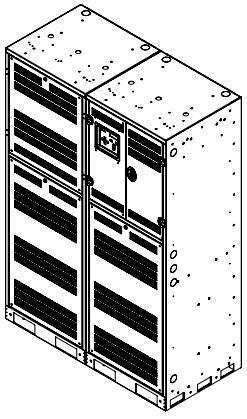
DIAGRAMS

2 CABINET CONFIGURATION









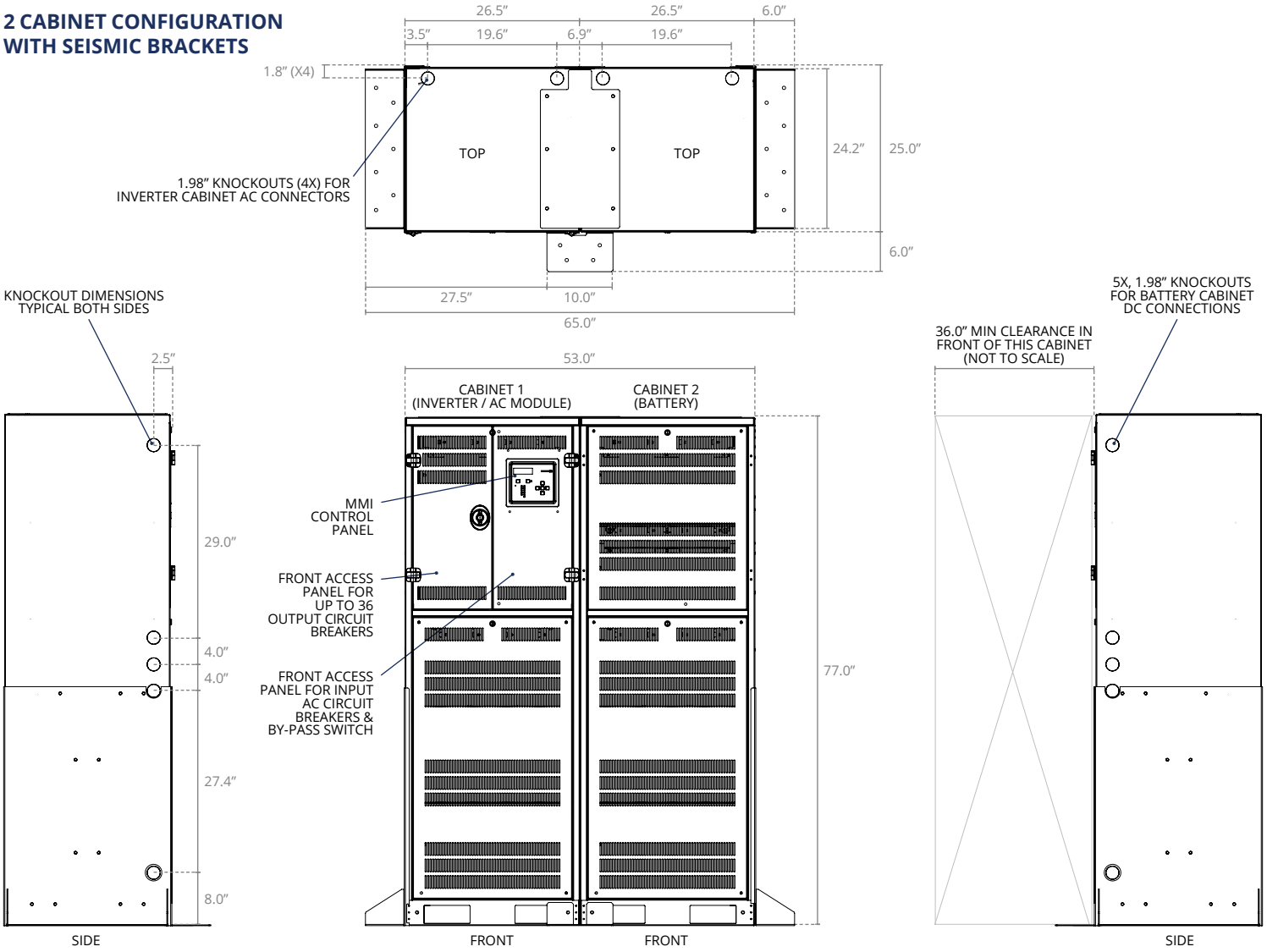
E3MAX-SP

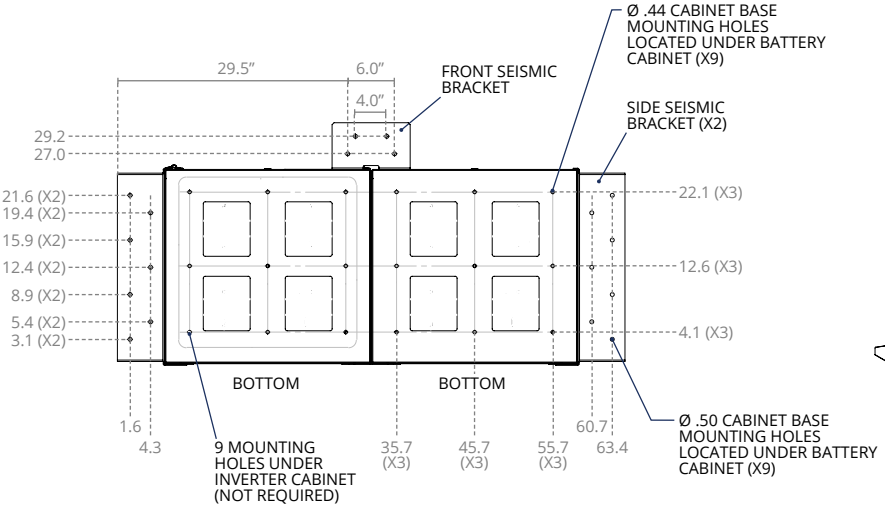
8,500-13,300 VA Split Phase Modular AC Inverter

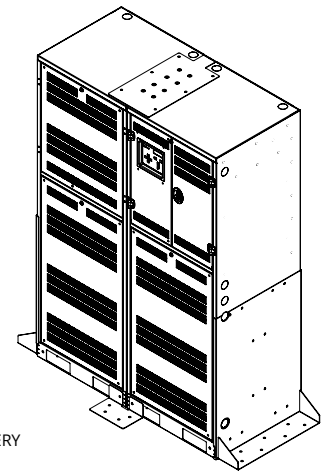
ASSEMBLED IN THE USA

DIAGRAMS (CONTINUED)

2 CABINET CONFIGURATION WITH SEISMIC BRACKETS

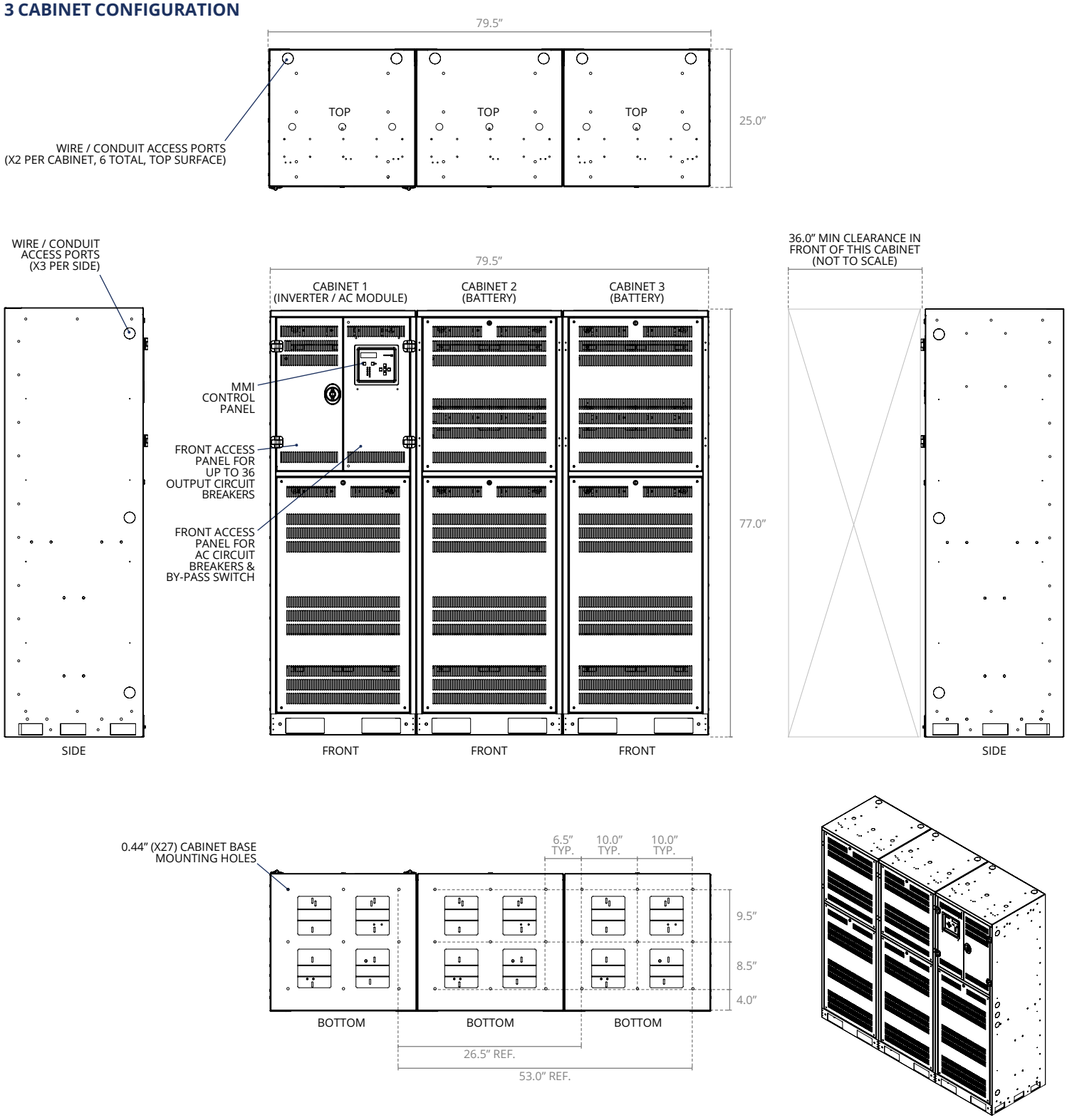






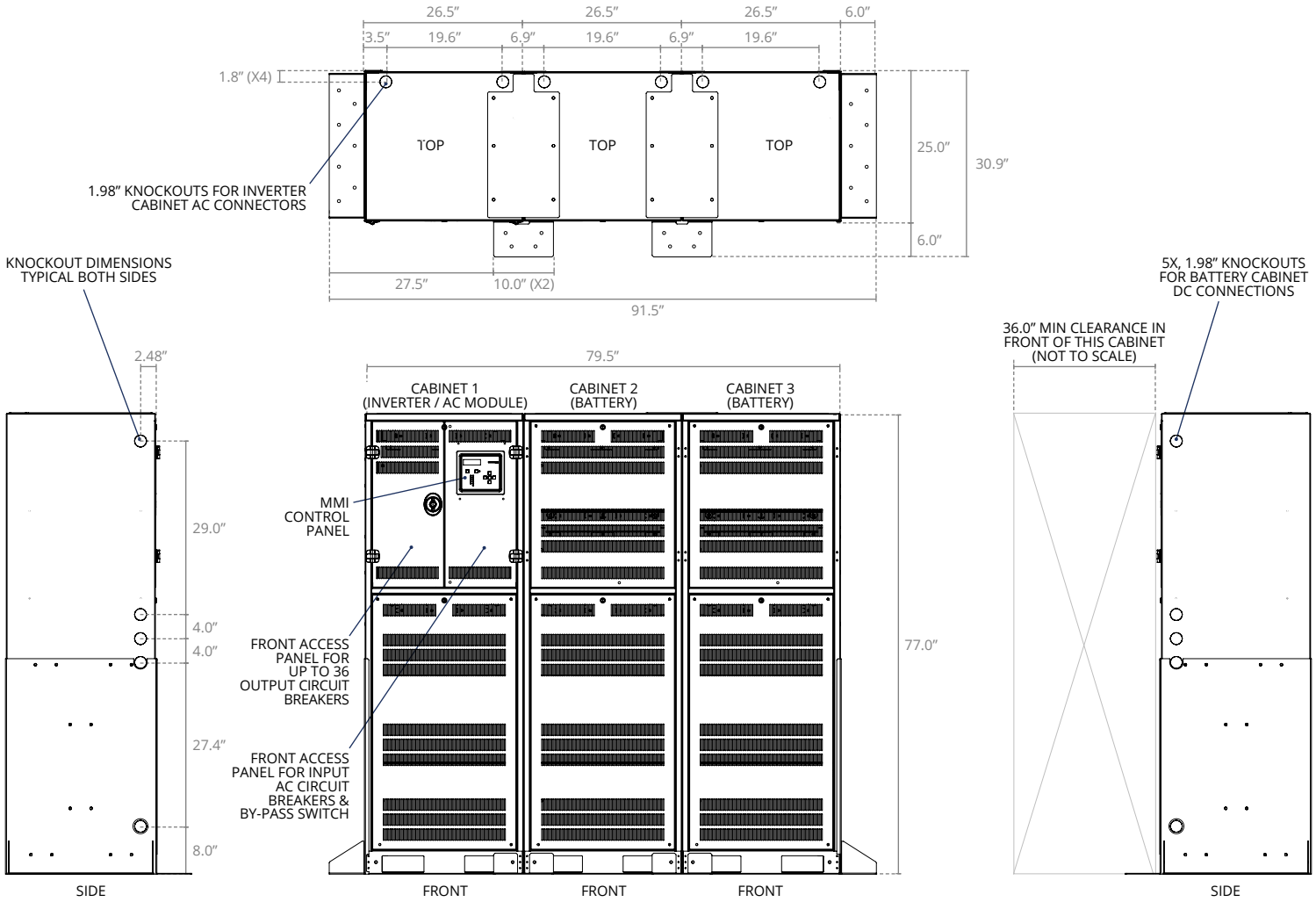
DIAGRAMS (CONTINUED)

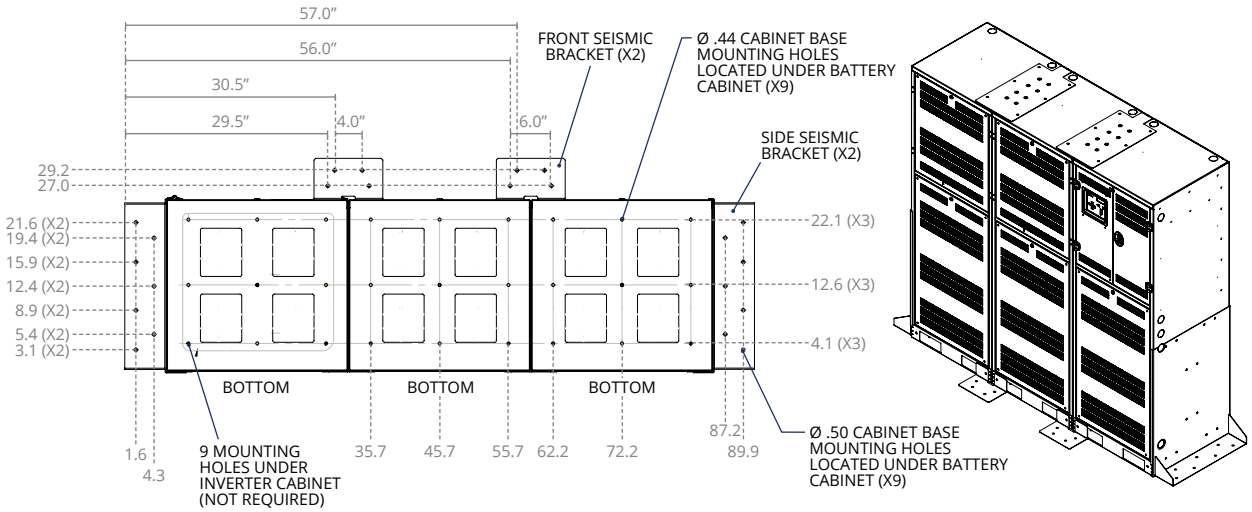
3 CABINET CONFIGURATION



DIAGRAMS (CONTINUED)

3 CABINET CONFIGURATION WITH SEISMIC BRACKETS





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E3MAX-SP

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

ASSEMBLED IN THE USA

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	30113/3014 (UINT32)
System Events	AI	20	30115/30116 (UINT32)