

# Charles Universal Broadband Enclosures (CUBE) CUBE SS Series Large Site Support Cabinets

Charles site support cabinets allow providers to install highly efficient rectifiers and the latest in battery technologies in durable, robust and GR-487 compliant enclosures. With support for VRLA or Ni-Cd batteries, various rectifier and power distribution options, and thermal management options; Charles' site support cabinets protect network integrity with an environmentally friendly, energy efficient solution. Charles can also create custom designs that integrate specific power solutions, call for details.



**MADE IN THE  
USA**

## Specifications

Construction	0.125" Aluminum Welded Construction Outer Enclosure, Powder Coated Off White Finish, 10 Gauge Welded Steel Battery Racks
Mounting Style	Pad Mount Enclosure
Thermal Management	750W/1880W/3000W HX or 4000 BTU Air Conditioner for Equipment Compartment, Direct Air or TEC for Battery Compartment
Rack Mounting	23"; 7, 15, 23, 28, 31 or 35 RU
Door Latching	3-Point Latching with Pad Lockable Handle
Battery Types	Ni-CD or VRLA
Battery Termination	Anderson Disconnects for Each String or 250A Circuit Breaker*
AC Termination	12, 16 or 20 Position Load Center (left-hand side), or None
Bus Bars	Two (2) 2x14 Position Bus Bars
Cable Entrance	Eleven (11) Knockouts for 1.5"/2.0" Conduit on RHS, Eleven (11) Knockouts for 1.5"/2.0" Conduit on LHS, Six (6) Knockouts for 1.5"/2.0" Conduit on Rear Two (2) 2.0" for 3.0" Conduit on Rear
Alarms	Door Intrusion (2), High Temperature, Thermal System
Certifications	Telcordia GR-487 and UL 60950

## Supported Battery Types

<i>Manufacturer</i>	<i>Battery Model #</i>	<i>Ah</i>	<i>Manufacturer</i>	<i>Battery Model #</i>	<i>Ah</i>
Northstar	NSB170FT	170	GNB Marathon	M12V180FT	180
Energys	SBS170F	170	Saft	Tel.X 150	150
Energys	SBS190F	190	Saft	Tel.X 180	180
C&D	TEL12-170F	170	East Penn Deka	12AVR-170ET	170
C&D	TEL12-190F	190	East Penn Deka	12AVR-200HT	200*
C&D	TEL12-210F	210	Fiamm	12UMTX170	170

## ACCESSORY ITEMS

<b>CHARLES PART #</b>	<b>DESCRIPTION</b>
07-002067-0	216 Tool (7/16" Nut Wrench) for Entering Cabinets
97-002145-A	Temporary Shelf for Saft Ni-Cd Battery installation
97-002555-A	4 Pair 2/0 Cable and Conduit Kit for SS & BBU Cabinet Lineup
97-SSLGSHRD-A	AC Load Center Shroud for Large Site Support Cabinets
97-002265-A	Replacement Door for 15RU Site Support Cabinet. Contains (2) 2K BTU HVAC Units
97-002162-A	Field Installed 6" Plinth for CUBE-PM/BB/SS Series
97-002287-A	Ni-Cd to VRLA Retainer Bracket Conv. Kit for SS/BBU Battery Tray
97-002567-A	(4) 2" Diameter, Rigid Conduit and Connectors, 6" Long
97-002570-A	4/0 Power Cable Kit, 16'

\*Only supported in SS4B228xxx Models

OG-OSP052-A20

# CUBE SS Series Large Site Support Cabinets

PART NUMBER	STANDARD MOUNTING	OVERALL DIM. (in.)	RU	LOAD CENTER	THERMAL (POWER)	THERMAL (BATTERY)	BATTERY SUPPORT	WEIGHT EMPTY (lbs.)	WEIGHT w/Ni-Cd BTY
CUBE-SS4B223IC1	Pad Mount	74x32x32	23	16 Position	1880W, 48VDC HX	DAC	2 Strings Saft Tel.X 180, 48V	600	1314
CUBE-SS4B223KJ2	Pad Mount	74x32x32	23	20 Position	48VDC 4K BTU AC	DAC	2 Strings Saft Tel.X 180, 48V	650	1364
CUBE-SS4B223MC2	Pad Mount	74x32x32	23	16 Position	1880W, 48VDC HX	DAC	2 Strings Saft Tel.X 180, 48V	600	1314
CUBE-SS4B223MC3	Pad Mount	74x32x32	23	12 Position	1880W, 48VDC HX	DAC	2 Strings Saft Tel.X 180, 48V	600	1314
CUBE-SS4B223MN3	Pad Mount	74x32x32	23	—	1880W, 48VDC HX	DAC	2 Strings Saft Tel.X 180, 48V	600	1314
CUBE-SS4B223MN4	Pad Mount	74x32x32	23	—	1880W, 48VDC HX	DAC	2 Strings Saft Tel.X 180, 48V	620	1334
CUBE-SS4B223XC3	Pad Mount	74x32x32	23	16 Position	1880W, 48VDC HX	(2) 200W TEC	2 Strings VRLA, 48V	650	1364
CUBE-SS4B223XN2	Pad Mount	74x32x32	23	—	1880W, 48VDC HX	(2) 200W TEC	2 Strings VRLA, 48V	640	1354
CUBE-SS4B228LN1	Pad Mount	84x32x32	35	—	10K BTU DC HVAC	(2) 200W TEC	2 Strings Saft Tel.X 180, 48V	685	1585
CUBE-SS4B228LX1	Pad Mount	84x32x32	35	—	10K BTU DC HVAC	(2) 200W TEC	2 Strings 200AH VRLA, 48V	715	1915
CUBE-SS4B228PN1	Pad Mount	84x32x32	35	—	3800W, 48VDC TS	(2) 200W TEC	2 Strings Saft Tel.X 180, 48V	670	1570
CUBE-SS4B228PX1	Pad Mount	84x32x32	35	—	3800W, 48VDC TS	(2) 200W TEC	2 Strings 200AH VRLA, 48V	700	1900
CUBE-SS4B231KJ2	Pad Mount	90x32x32	31	20 Position	48VDC 4K BTU AC	DAC	2 Strings Saft Tel.X 180, 48V	750	1414
CUBE-SS4B231KN1	Pad Mount	90x32x32	31	—	48VDC 4K BTU AC	DAC	2 Strings Saft Tel.X 180, 48V	700	1364
CUBE-SS4B231LN1	Pad Mount	90x32x32	31	—	(2) 10K BTU DC HVAC	DAC	2 Strings Saft Tel.X 180, 48V	810	1524
CUBE-SS4B231LX2	Pad Mount	90x32x32	31	—	(2) 10K BTU DC HVAC	DAC	2 Strings Saft Tel.X 180, 48V	747	1411
CUBE-SS4B231NX1	Pad Mount	90x32x32	31	—	None	(2) 200W TEC	2 Strings VRLA, 48V	707	1919
CUBE-SS4B231PN2	Pad Mount	90x32x32	31	—	3800W, 48VDC TS	DAC	2 Strings Saft Tel.X 180, 48V	732	1396
CUBE-SS4B231PX2	Pad Mount	90x32x32	31	—	3800W, 48VDC TS	(2) 200W TEC	2 Strings VRLA, 48V	782	1982
CUBE-SS4B231VX1	Pad Mount	90x32x32	31	—	(2) 10K BTU DC HVAC	(2) 200W TEC	2 Strings VRLA, 48V	800	2000
CUBE-SS4C215DB1	Pad Mount	74x32x32	15	12 Position	750W, 48VDC HX	DAC	3 Strings Saft Tel.X 180, 48V	700	1771
CUBE-SS4C215DB3	Pad Mount	74x32x32	15	12 Position	750W, 48VDC HX	DAC	3 Strings Saft Tel.X 180, 48V	740	1811
CUBE-SS4C215DN3	Pad Mount	74x32x32	15	—	750W, 48VDC HX	DAC	3 Strings Saft Tel.X 180, 48V	730	1801
CUBE-SS4C215DN4	Pad Mount	74x32x32	15	—	(2) 750W, 48VDC HX	DAC	3 Strings Saft Tel.X 180, 48V	775	1846
CUBE-SS4C215DN5	Pad Mount	74x32x32	15	—	(2) 750W, 48VDC HX	DAC	3 Strings Saft Tel.X 180, 48V	775	1846
CUBE-SS4C215XC1	Pad Mount	74x32x32	15	—	750W, 48VDC HX	(2) 200W TEC	3 Strings VRLA, 48V	740	1811
CUBE-SS4C215XC2	Pad Mount	74x32x32	15	12 Position	750W, 48VDC HX	(2) 200W TEC	3 Strings VRLA, 48V	740	1811
CUBE-SS4C215XN1	Pad Mount	74x32x32	15	—	750W, 48VDC HX	(2) 200W TEC	3 Strings VRLA, 48V	740	1811
CUBE-SS4C215XN2	Pad Mount	74x32x32	15	—	(2) 750W, 48VDC HX	(2) 200W TEC	3 Strings VRLA, 48V	800	1871
CUBE-SS4C218DB2	Pad Mount	74x34x38	18	8 Position	750W, 48VDC HX	DAC	3 Strings Saft Tel.X 180, 48V	855	1926
CUBE-SS4C218DR2	Pad Mount	74x34x38	18	8 Position	750W, 48VDC HX	DAC	3 Strings Saft Tel.X 180, 48V	855	1926
CUBE-SS4C218KN1	Pad Mount	74x34x38	18	—	48VDC 4K BTU AC	DAC	3 Strings Saft Tel.X 180, 48V	855	1926
CUBE-SS4D207DB1	Pad Mount	74x32x32	7	12 Position	750W, 48VDC HX	DAC	4 Strings Saft Tel.X 180, 48V	740	1971
CUBE-SS4D207DN2	Pad Mount	74x32x32	7	—	750W, 48VDC HX	DAC	4 Strings Saft Tel.X 180, 48V	730	1801
CUBE-SS4D207XN2	Pad Mount	74x32x32	7	—	750W, 48VDC HX	(3) 200W TEC	4 Strings VRLA, 48V	880	2111
CUBE-SS4D215DN2	Pad Mount	90x32x32	15	—	750W, 48VDC HX	DAC	4 Strings Saft Tel.X 180, 48V	750	1821
CUBE-SS4D215XN2	Pad Mount	90x32x32	15	—	750W, 48VDC HX	(2) 200W TEC	4 Strings VRLA, 48V	900	2131

OG-OSP052-K16

**INNOVATIVE ENCLOSED SOLUTIONS™**

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# CUBE SS Series Large Site Support Cabinets

## Integrated Power Configuration Detail

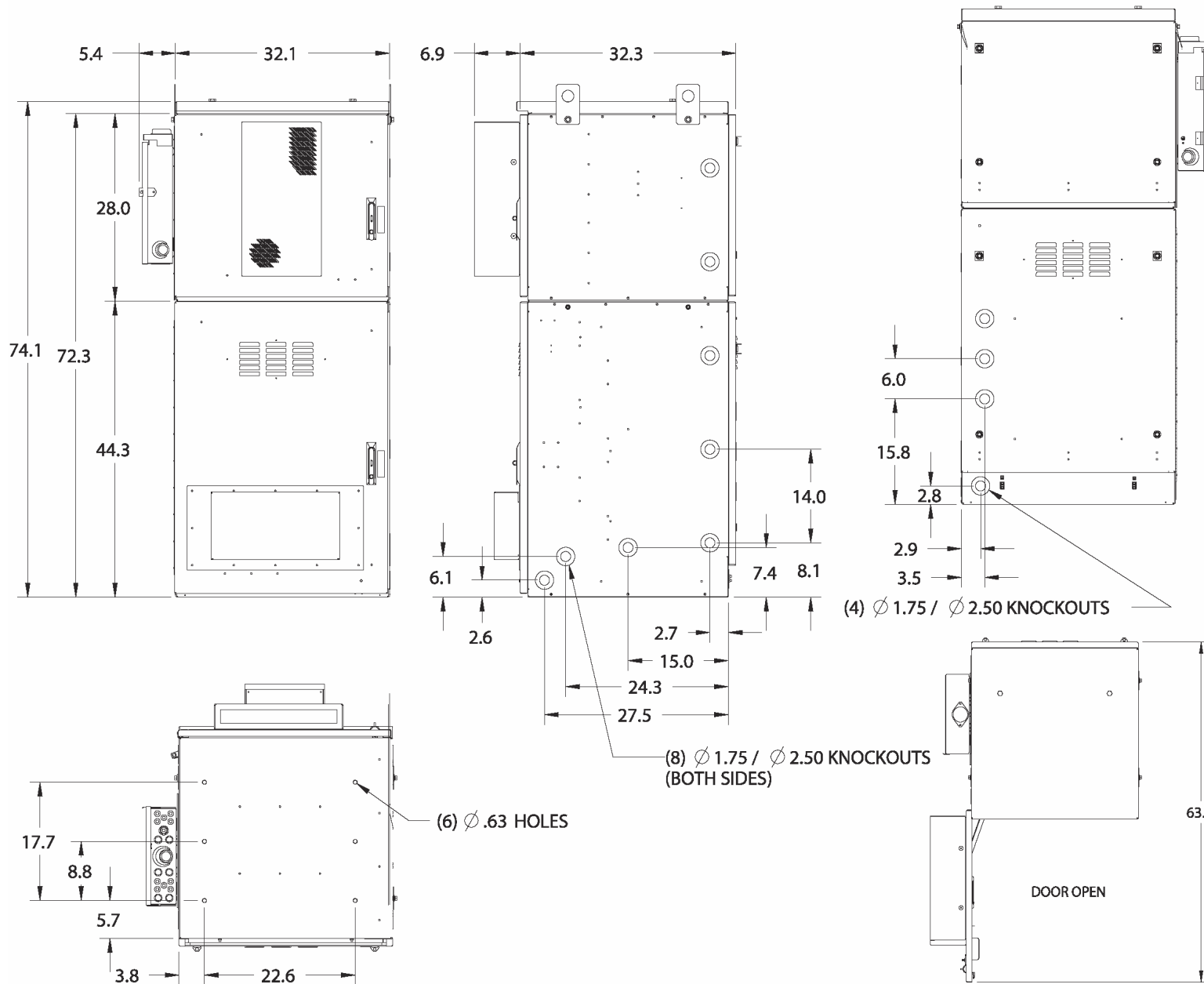
Charles Part #	Integrated Power System	DC DISTRIBUTION					AC INPUT WIRING				
		Rectifier Slots	Rectifiers in Config.	Circuit Breaker Positions	DC Breakers in Config.	GMT Positions	AC Input Voltage	Load Center	Main Breaker	AC Load Breakers	# Open Positions
SS4B223IC1	None	None	None	None	None	None	220	16 Pos.	125A 2P	(1) 15A for GFCI (1) 2P 30A Surge	13
SS4B223KJ2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 5A DAC (1) 15A for AC	None	220	20 Pos.	200A 2P	(1) 15A for GFCI (8) 20A 2P for Rectifiers (1) 2P 30A Surge	1
SS4B223MC2	GE Infinity S, 48/24V, 400A NES4824-23-AC1-PS8-DC1E	8	None	26	(1) 10A for HX (1) 3A DAC (1) 30A Surge	None	220	16 Pos.	125A 2P	(1) 15A for GFCI (4) 40A 2P for Rectifiers (1) 30A 2P Surge	5
SS4B223MC3	GE Infinity S, 48/24V, 400A NES4824-23-AC1-PS8-DC2E	8	None	52	(1) 10A for HX (1) 3A DAC (1) 30A Surge	None	220	12 Pos.	125A 2P	(1) 15A for GFCI (4) 40A 2P for Rectifiers (1) 30A 2P Surge	1
SS4B223MN3	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 10A for HX (1) 3A DAC	None	220	None	None	None	None
SS4B223MN4	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC2E	16	None	26	(1) 10A for HX (1) 3A DAC	None	220	None	None	None	None
SS4B223XC3	GE Infinity S, 48/24V, 800A NES4824-23-AC1-PS16-DC2E	16	None	26	(1) 10A HX (1) 20A TEC	None	220	16 Pos.	125A 2P	(1) 15A for GFCI (6) 40A 2P for Rectifiers (1) 30A 2P Surge	1
SS4B223XN2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 3 A Lights (1) 10A HX (1) 20A TEC	None	None	None	None	None	None
SS4B228LN1	None	None	None	None	None	None	None	None	None	None	None
SS4B228LX1	None	None	None	None	None	None	None	None	None	None	None
SS4B228PN1	None	None	None	None	None	None	None	None	None	None	None
SS4B228PX1	None	None	None	None	None	None	None	None	None	None	None
SS4B231KJ2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 5A DAC (1) 15A for AC	None	220	20 Pos.	200A 2P	(1) 15A for GFCI (8) 20A 2P for Rectifiers (1) 2P 30A Surge	1
SS4B231KN1	None	None	None	None	None	None	None	None	None	None	None
SS4B231LN1	None	None	None	None	None	None	None	None	None	None	None
SS4B231LX2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 3A Lights (1) 30A for AC (1) 20A TEC	None	220	None	None	None	None
SS4B231NX1	None	None	None	None	None	None	220	None	None	None	None
SS4B231PN2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 3A Lights (1) 10A for TS (1) 3A DAC	None	220	None	None	None	None
SS4B231PX2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 3A Lights (1) 10A for TS (1) 20A TEC	None	220	None	None	None	None
SS4B231VX1	None	None	None	None	None	None	220	None	None	None	None

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## Integrated Power Configuration Detail

Charles Part #	Integrated Power System	DC DISTRIBUTION					AC INPUT WIRING				
		Rectifier Slots	Rectifiers in Config.	Circuit Breaker Positions	DC Breakers in Config.	GMT Positions	AC Input Voltage	Load Center	Main Breaker	AC Load Breakers	# Open Positions
SS4C215DB1	None	None	None	None	None	None	220	12 Pos.	125A 2P	(1) 15A - GFCI	11
SS4C215DB3	GE Infinity S, 48/24V, 400A NES4824-23-AC1-PS8-DC1E	8	(4) 50A, 48V	26	(1) 3A DAC (1) 5A for HX (2) 10A (12) 30A	None	220	12 Pos.	125A 2P	(1) 15A for GFCI (4) 40A 2P for Rectifiers (1) 2P 30A Surge	1
SS4C215DN3	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 3A DAC (1) 5A for HX	None	220	None	None	None	None
SS4C215DN4	GE Infinity S, 48/24V, 800A NES4824-23-AC5-PS16-DC2E	16	None	52	(2) 5A for HX (1) 3A for DAC	None	220	None	None	None	None
SS4C215DN5	Emerson Netsure 502 (ZZ061) 582136800	8	None	52	(1) 3A Lights (1) 5A for HX (1) 3A for DAC	None	220	None	None	None	None
SS4C218DR2	GE Infinity S, 48V, 300A NES48-19-AC5-PS6-DC1E	6	None	20	(1) 5A for HX (12) 25A (1) 250A	6 Positions	220	8 Position	100A 2P	(6) 20A Tandem for Rectifiers (1) 15A for GFCI (1) 15A for Surge	None
SS4C215XC1	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC2E	8	None	52	(1) 5A for HX (1) 20A for TEC	None	220	None	None	None	None
SS4C215XC2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 5A for HX (1) 20A TEC (2) 10A (2) 30A	None	220	16 Pos.	200A 2P	(1) 15A for GFCI (8) 40A 2P for Rectifiers (1) 2P 30 A Surge	1
SS4C215XN1	None	None	None	None	None	None	220	None	None	None	None
SS4C215XN2	GE Infinity S, 48/24V, 800A NES4824-23-AC5-PS16-DC2E	16	None	52	(2) 5A for HX (1) 20A for TEC	None	220	None	None	None	None
SS4C218DB2	GE Infinity S, 48V, 300A NES48-19-AC5-PS6-DC1E	6	None	20	(1) 5A for HX (12) 25A (1) 250A	6 Positions	220	8 Position	100A 2P	(6) 20A Tandem for Rectifiers (1) 15A for GFCI (1) 15A for Surge	None
SS4C218KN1	None	None	None	None	None	None	220	None	None	None	None
SS4D207DB1	None	None	None	None	None	None	None	12 Pos.	125A 2P	(1) 15A - GFCI (1) 2P 30A Surge	9
SS4D207DN2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 3A DAC (1) 5A for HX	None	220	None	None	None	None
SS4D207XN2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC1E	8	None	26	(1) 5A for HX (1) 20A for TEC	None	220	None	None	None	None
SS4D215DN2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC2E	8	None	52	(1) 3A DAC (1) 5A for HX	None	220	None	None	None	None
SS4D215XN2	GE Infinity S, 48/24V, 600A NES4824-23-AC5H-PS8-DC2E	8	None	52	(1) 5A for HX (1) 20A for TEC	None	220	None	None	None	None

# CUBE SS Series Large Site Support Cabinets



## CUBE-SS4x223xxx Dimensions

### FACTORY INSTALLED OPTIONS

96-000003-A  
Retractable Overhang

97-002230-A  
8" Top Hat Cable Entry  
Compartment

96-002162-A  
Factory Installed 6" Plinth

All units in inches

MADE IN THE  
USA

OG-OSP052-A20

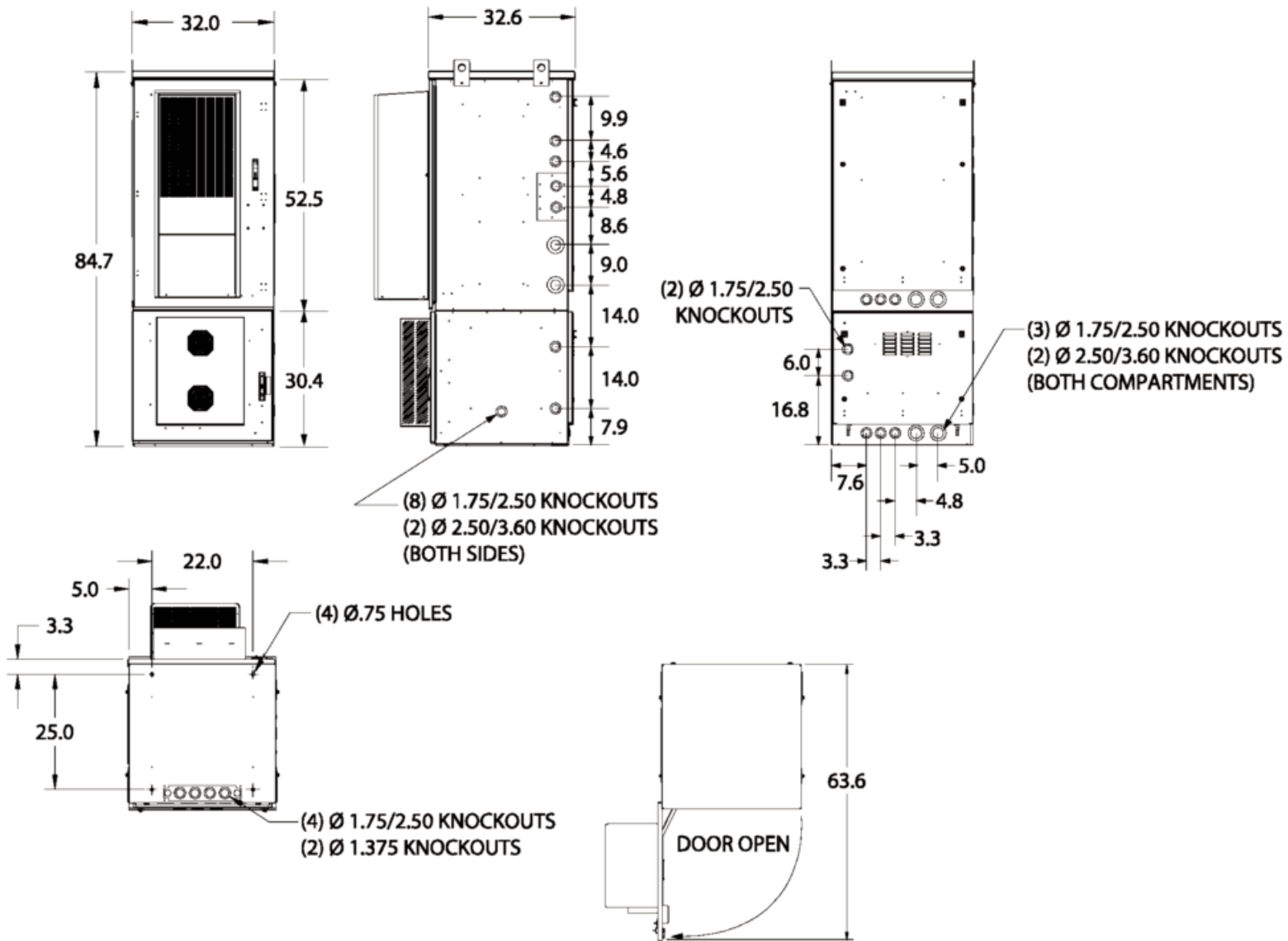
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# CUBE SS Series Large Site Support Cabinets



## CUBE-SS4x228xxx Dimensions

### FACTORY INSTALLED OPTIONS

96-000003-A  
Retractable Overhang

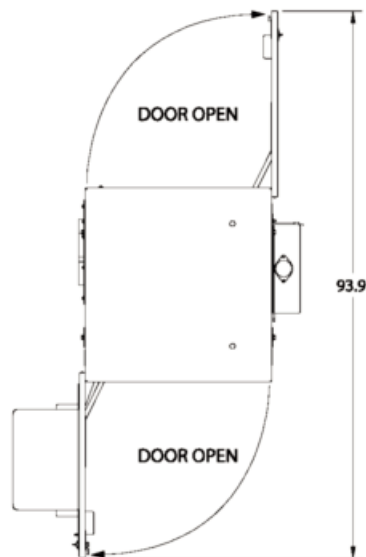
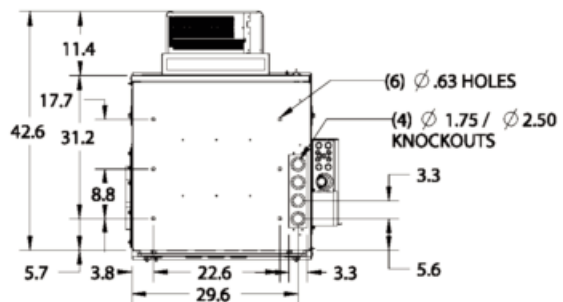
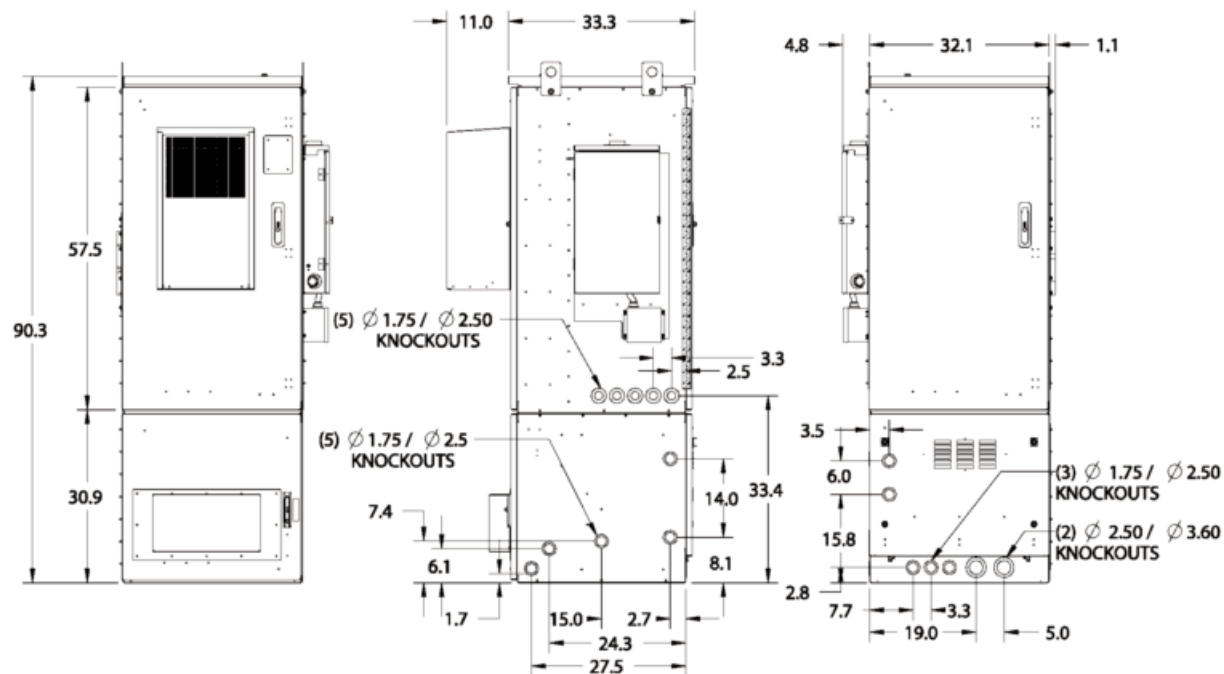
97-002230-A  
8" Top Hat Cable Entry  
Compartment

96-002162-A  
Factory Installed 6" Plinth

All units in inches

OG-OSP052-A20

# CUBE SS Series Large Site Support Cabinets



## CUBE-SS4x231xxx Dimensions

### FACTORY INSTALLED OPTIONS

96-000003-A  
Retractable Overhang

97-002230-A  
8" Top Hat Cable Entry  
Compartment

96-002162-A  
Factory Installed 6" Plinth

All units in inches

MADE IN THE  
**USA**

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**Charles**