

# ATOM EV - E54 (48A) Charging System

## Product Data & Specifications



### ATOM SWITCH

The Atom Switch is dual UL-listed as a circuit protection device and electric vehicle supply equipment. It offers ground fault protection across the entire circuit as opposed to only the EV cable.

### ATOM SMART POWER DISTRIBUTION ENCLOSURE

The Smart Power Distribution Enclosure can hold up to 12 EVSE units in a centralized and secure location away from parking spots. This eliminates the impact of potential hazards. It leverages remote diagnostics and allows for exact knowledge of operating conditions.

### ATOM LTE

Atom LTE enables control and communications of the EVSE system via Atom Cloud. No internet connection is required to operate the Atom EVSE enclosure, allowing for continued even if there is loss of internet or cloud connection.

# ATOM E54 Charging System Overview

## Dispensers



Atom E54 Wallbox (48A)



Atom E54 Pedestal (48A)



Atom E54 Auto-Retractable  
Cable Management  
Pedestal (48A)

## EVSE



Atom E50 Series ASPD Enclosure  
(Atom Smart Power Distribution Enclosure)



E54 Atom Switch (48A)

## Communications



Atom E50 Series LTE Cabinet

Note: Atom EV products work within a system and requires a dispenser, enclosure, switch, and LTE cabinet to operate.

# ATOM E54 (48A) Auto-Retractable Cable Management Pedestal



Product Catalog Number	AEV-48CMPED-L/R	AEV-48CMPED-D
<b>Cable Rating<sup>1</sup></b>	48A	
<b>Charge Couplers</b>	1	2
<b>Size (inches)</b>	6w x 84h (with 9in. square base)	
<b>Voltage</b>	208VAC/240VAC	
<b>Max Power Output</b>	9.984kW @ 208V 11.52kW @ 240V	
<b>Field Wiring - Power</b> <b>Field Wiring - Ground</b>	#10 AWG-1, Cu, 90°C Rated #10 AWG-6, Cu, 90°C Rated	
<b>Charge Connector Type</b>	SAE J1772 Type 1	
<b>Cable Length</b>	18 ft or 25 ft	
<b>Enclosure Rating</b>	NEMA 3R	
<b>Ambient Operating Temperature<sup>2</sup></b>	-30°C to +50°C (-22°F to +122°F)	
<b>Standards</b>	UL 2594, UL 2251, NEC Article 625, ADA Compliant	
<b>Cable Management System</b>	Self-Retracting Spring-Motor	

1 Maximum rating of equipment. Output power may be changed with energy management system (EMS).

2 Operating temperature is -30°C to +40°C without derating. Temperature derating applies above +40°C.

# ATOM E54 (48A) Pedestal



Product Catalog Number	AEV-48PED-L/R	AEV-48PED-D
<b>Cable Rating<sup>1</sup></b>	48A	
<b>Charge Couplers</b>	1	2
<b>Size (inches)</b>	6w x 52h (with 9in. square base)	
<b>Voltage</b>	208VAC/240VAC	
<b>Max Power Output</b>	9.984kW @ 208V 11.52kW @ 240V	
<b>Field Wiring - Power</b> <b>Field Wiring - Ground</b>	#10 AWG-1, Cu, 90°C Rated #10 AWG-6, Cu, 90°C Rated	
<b>Charge Connector Type</b>	SAE J1772 Type 1	
<b>Cable Length</b>	18 ft or 25 ft	
<b>Enclosure Rating</b>	NEMA 3R	
<b>Ambient Operating Temperature<sup>2</sup></b>	-30°C to +50°C (-22°F to +122°F)	
<b>Standards</b>	UL 2594, UL 2251, NEC Article 625, ADA Compliant	

1 Maximum rating of equipment. Output power may be changed with energy management system (EMS).

2 Operating temperature is -30°C to +40°C without derating. Temperature derating applies above +40°C.

# ATOM E54 (48A) Wall Boxes



Product Catalog Number	AEVBOX1	AEVBOX2
<b>Cable Rating<sup>1</sup></b>		48A
<b>Charge Couplers</b>	1	2
<b>Size (inches)</b>		6W x 4D x 8H
<b>Voltage</b>		208VAC/240VAC
<b>Max Power Output</b>		9.984kW @ 208V 11.52kW @ 240V
<b>Field Wiring - Power</b> <b>Field Wiring - Ground</b>		#10 AWG-1, Cu, 90°C Rated #10 AWG-6, Cu, 90°C Rated
<b>Charge Connector Type</b>		SAE J1772 Type 1
<b>Cable Length</b>		18 ft or 25 ft
<b>Enclosure Rating</b>		NEMA 3R
<b>Ambient Operating Temperature<sup>2</sup></b>		-30°C to +50°C (-22°F to +122°F)
<b>Standards</b>		UL 2594, UL 2251, NEC Article 625, ADA Compliant

1 Maximum rating of equipment. Output power may be changed with energy management system (EMS).

2 Operating temperature is -30°C to +40°C without derating. Temperature derating applies above +40°C.

# ATOM E54 (48A) SWITCH



<b>Product Catalog Number</b>	<b>AS2P60-EVSE</b>
<b>Long Time Trip Setting Range</b>	15A-60A
<b>Input Voltage (VAC)</b>	208 – 240
<b>Input Frequency</b>	60Hz
<b>Interrupting Rating</b>	200kA
<b>Peak Let-Through (current limiting)</b>	< 1.5kA
<b>Incident Energy<sup>1</sup></b>	< 0.02 cal/cm <sup>2</sup>
<b>I<sub>2</sub>t</b>	<150.0A <sup>2</sup> s
<b>Ambient Operating Temperature<sup>2</sup></b>	-30°C to +50°C (-22°F to +122°F)
<b>Humidity</b>	0 to 95%, non-condensing
<b>Storage Temperature</b>	-40°C to +85°C (-40°F to +185°F)
<b>Load Side Connection</b>	#10 AWG-1 AWG, Cu, 90°C Rated
<b>Ground Fault Protection</b>	20mA CCID with auto retry
<b>Standards</b>	UL 489/489i, UL 2594, UL 2231-1/2, NEC Article 625
<b>Energy Management</b>	Local Integration with Static & Dynamic Load Management
<b>Metering Accuracy</b>	Voltage +/-3V, Current +/-1A

1 Check with factory for IEEE 1584 assumptions

2 Operating temperature is -30°C to +40°C without derating. Temperature derating applies above +40°C.

# ATOM E50 SERIES SMART POWER DISTRIBUTION ENCLOSURE



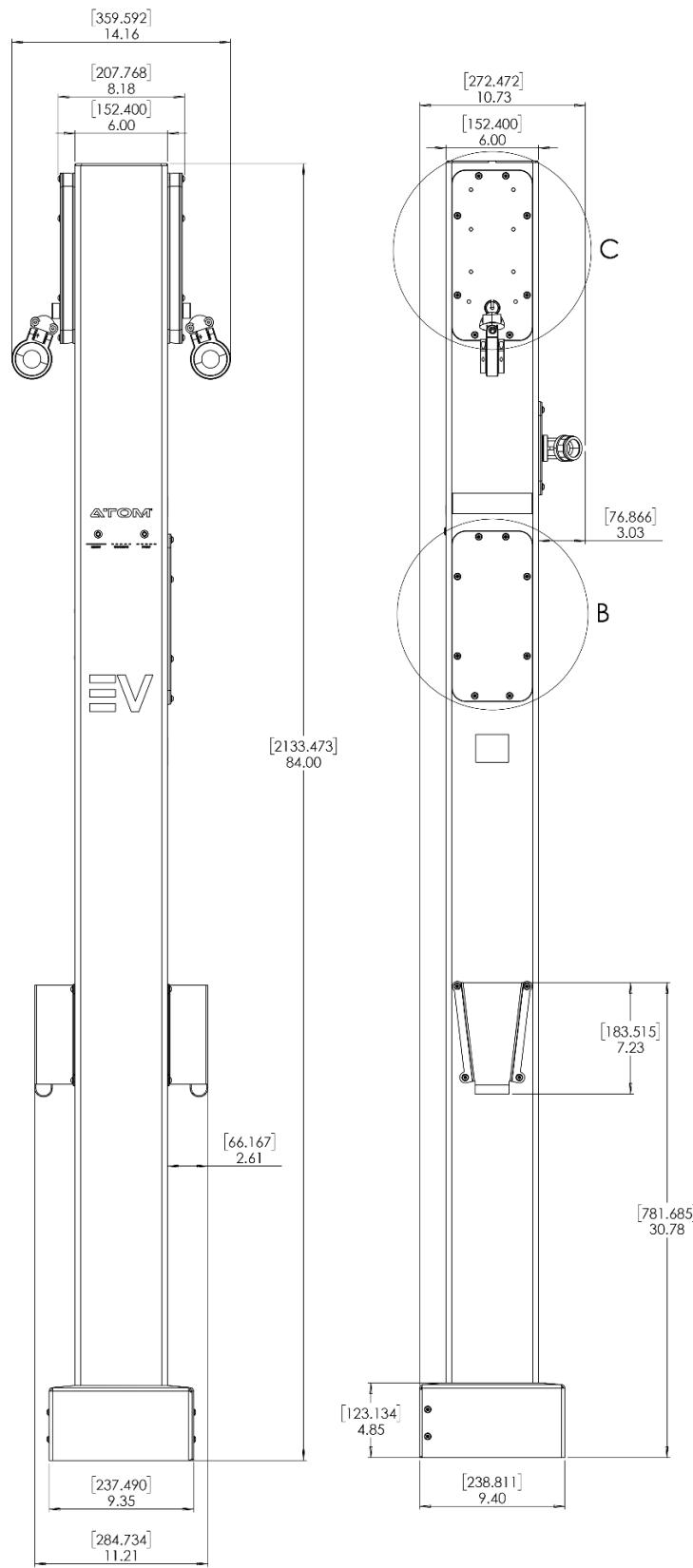
Product Catalog Number	AP3P400-EVSE
Enclosure Dimensions (inches)	20w x 10d x 64h (N1) , 20w x 13d x 68h (N3R)
Max Current (A) Bus Rating	320
Voltage (VAC)	208 - 240
Main Lug Size	#6AWG - #300KCMIL CU/AL (2 per phase)
Phase/Wire	3/3
Maximum EVSEs	12
NEMA Rating	3R (Indoor/Outdoor)
Interrupting Rating	200kA
Standards	UL 2594, UL 2231-1/2, NEC Article 625 Energy Star
Integrations	OCPP 1.6
Connectivity	Ethernet, LTE
EMC Compliance	FCC Part 15 Class A
Ambient Operating Temperature <sup>2</sup>	-30°C to +50°C (-22°F to +122°F)

<sup>2</sup> Operating temperature is -30°C to +40°C without derating. Temperature derating applies above +40°C.

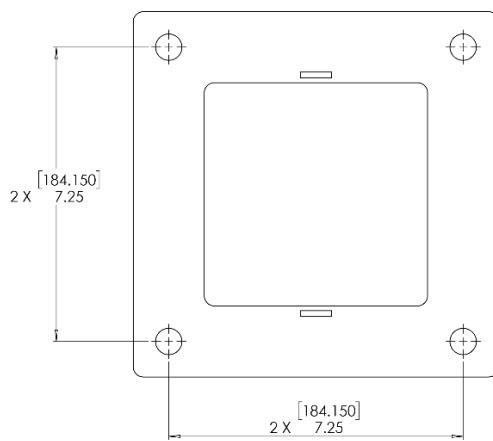
# PRODUCT DIMENSIONS

## Atom E54 Auto-Retractable Cable Management Pedestal

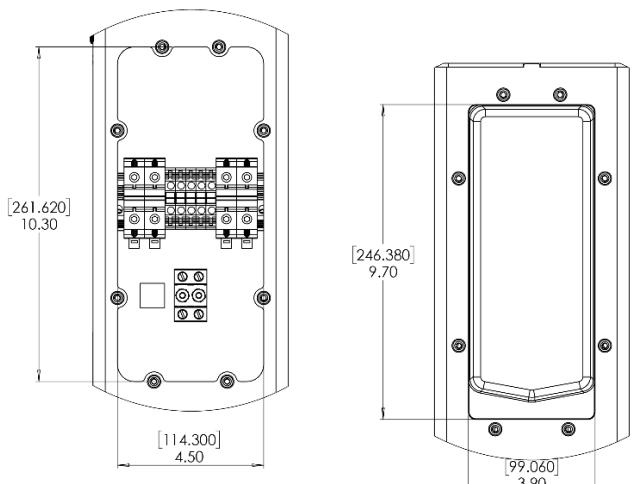
### Pedestal Detail (in)



### Foot Plate Detail



### Gland Plate Details



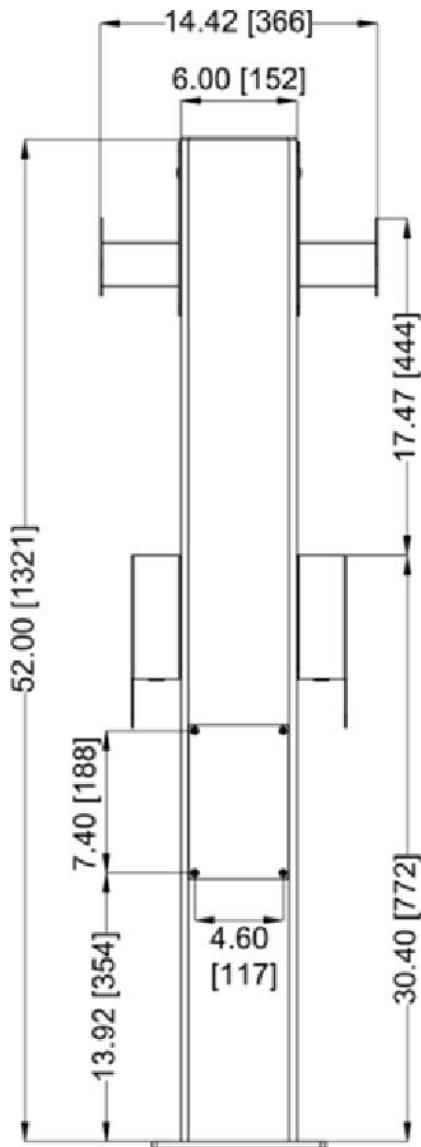
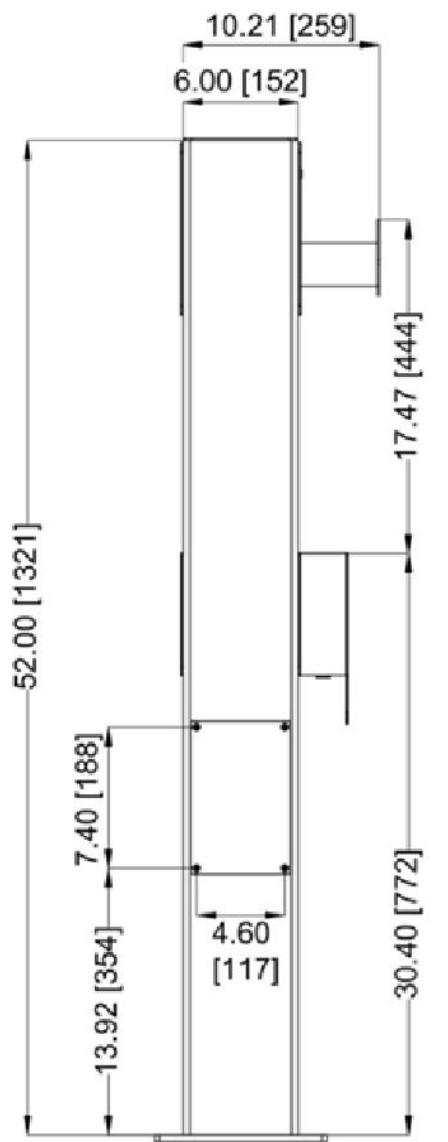
DETAIL B  
SCALE 2:5

DETAIL C  
SCALE 2:5

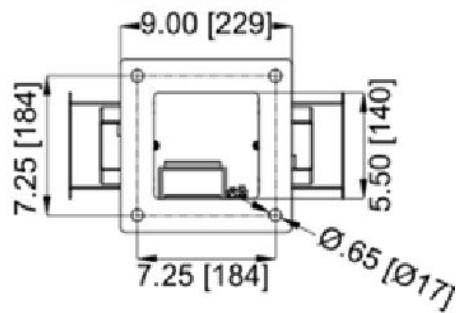
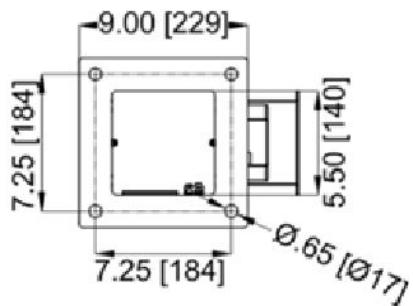
# PRODUCT DIMENSIONS

## Atom E54 Pedestals

### Pedestal Detail (in)



### Foot Plate Detail (in)

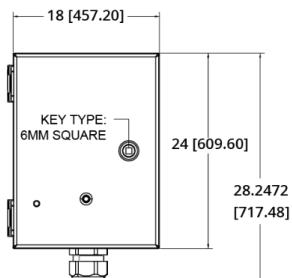


# PRODUCT DIMENSIONS

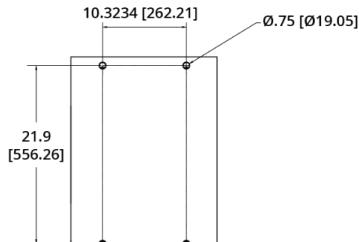
## Atom E54 Wallbox

### Wallbox (Single Cable) Detail (in)

Front View

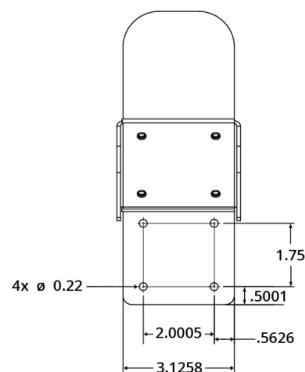


Mounting Detail

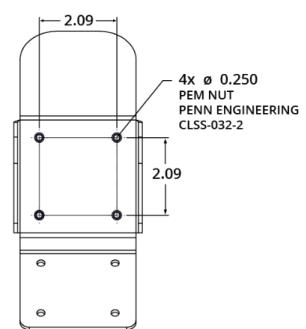


### Cordset Hanger Mounting Detail (in)

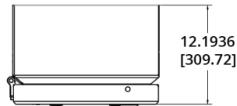
Front View



Back View

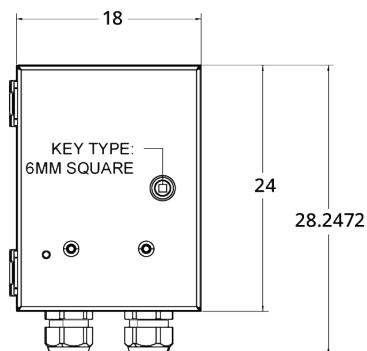


Top View

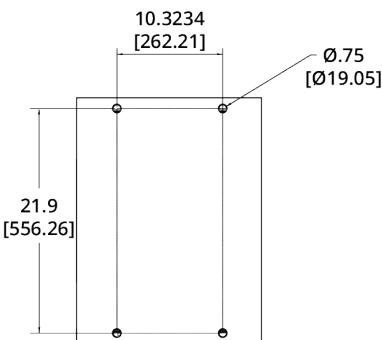


### Wallbox (Dual Cable) Detail (in)

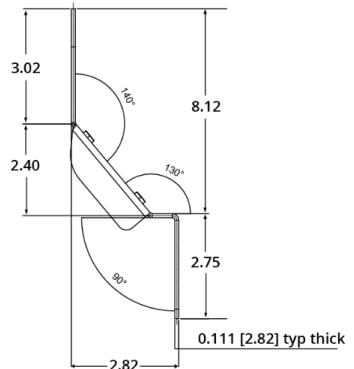
Front View



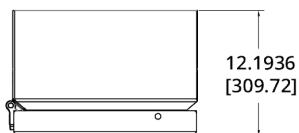
Mounting Detail



Right Side View



Top View



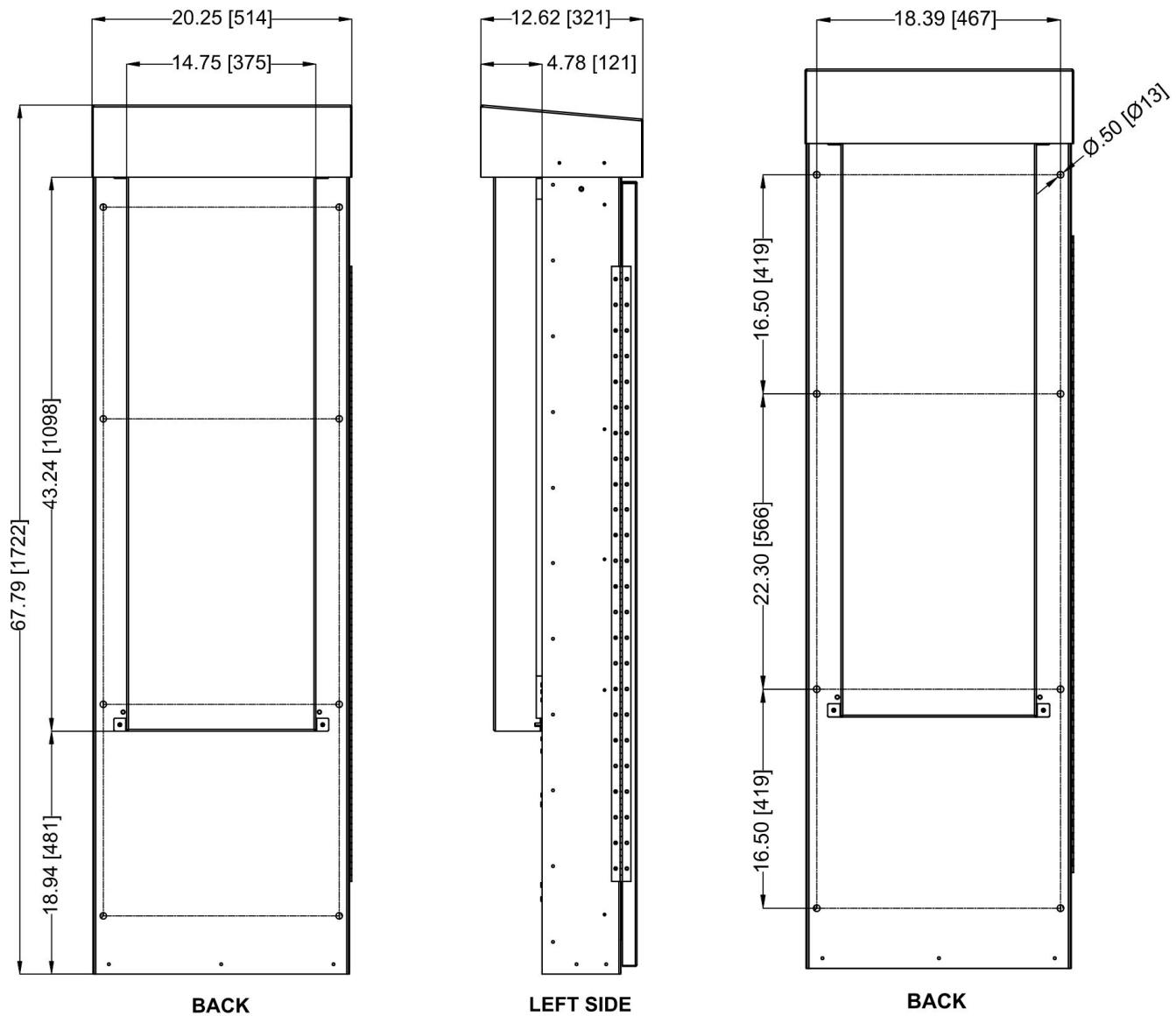
©2023 All Rights Reserved. Atom EV is a trademark of ATOM POWER® \*Details may change. This document is confidential.

# PRODUCT DIMENSIONS

Atom E50 series enclosure (NEMA 3R)

## Power Cabinet Detail

(in [mm])

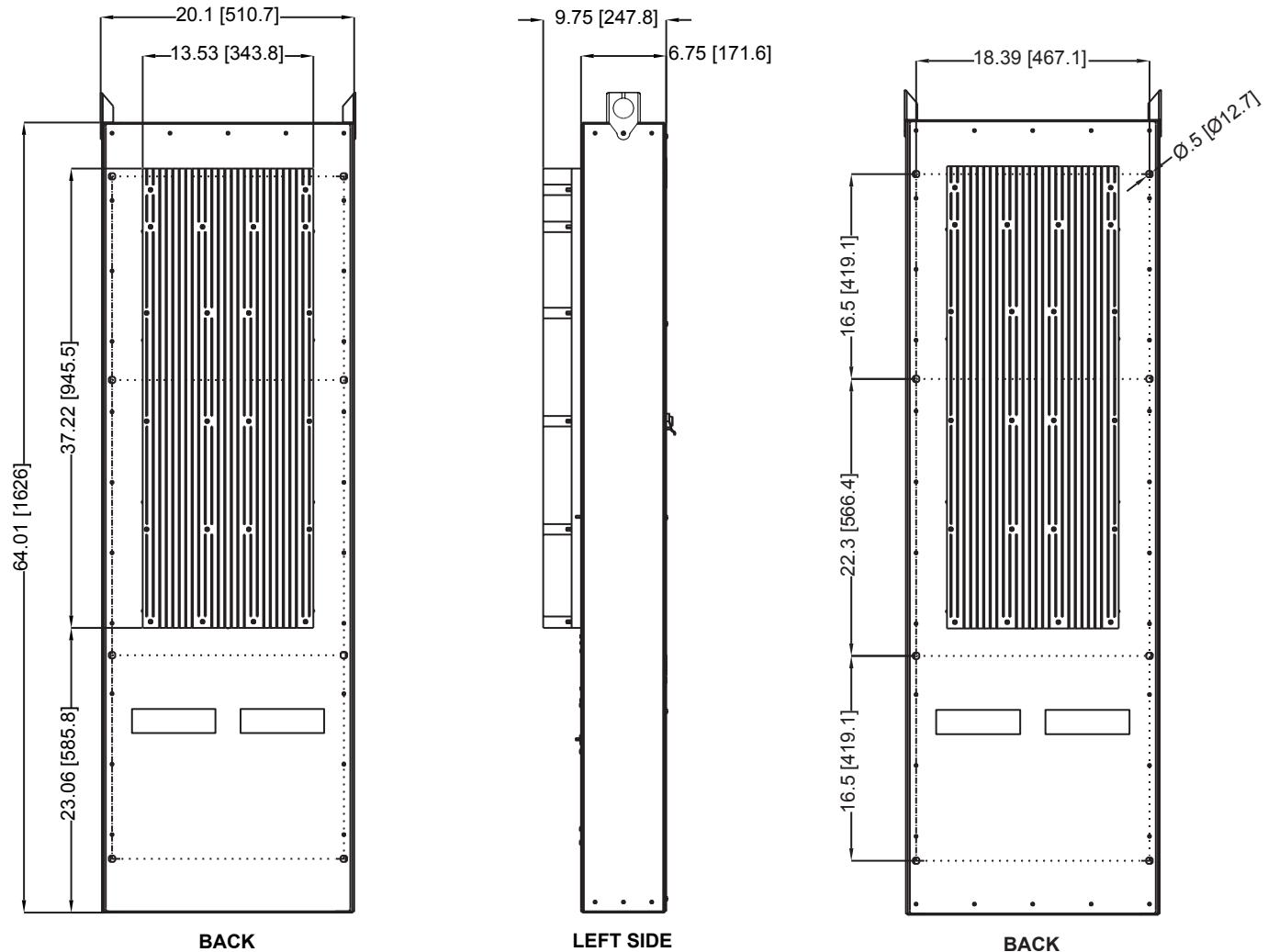


# PRODUCT DIMENSIONS

Atom E50 series enclosure (NEMA 1)

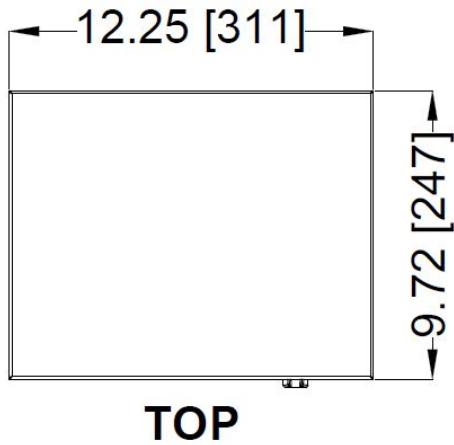
## Power Cabinet Detail

(in [mm])

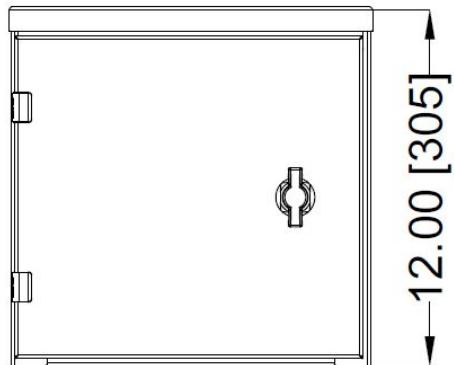


# PRODUCT DIMENSIONS

## Atom EV LTE Cabinet



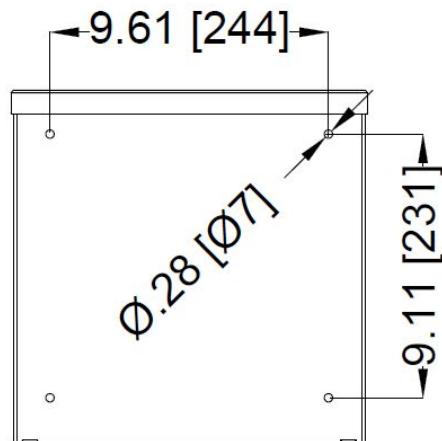
TOP



FRONT

1 DIMENSIONS  
LTE.1 SCALE: NONE

2 MOUNTING  
LTE.1 SCALE: NONE



BACK

# Contact Us

## Atom Power, Inc.

13245 Reese Blvd. W.,  
Suite 130  
Huntersville, NC 28078

844.704.2866  
info@atompower.com



[atompower.com](http://atompower.com)

Scan the QR code to visit the Atom Power  
website and see our full range of products

We reserve the right to make technical changes or modify the contents of this document without prior notification. Atom Power does not accept any responsibility whatsoever for potential errors or possible lack of information in this document. We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in part – is forbidden without prior written consent of Atom Power.

Follow us on social media to get the latest product and support information.

