

# Altivar™ 660 Drive Systems

The Schneider Electric Altivar™ 660 Drive Systems provides a robust, packaged, adjustable-speed solution for commercial, industrial, and municipal applications. All ratings are UL 508A listed, with selectable control and power configurations. These drives combine the reliability and ease-of-use of the Altivar drives family with proven, validated, and tested drive system designs.

- 1 - 900hp at 460V Normal Duty
- 1 - 700hp at 460V Heavy Duty
- 1 - 60hp at 230V Normal Duty
- 1 - 50hp at 230V Heavy Duty



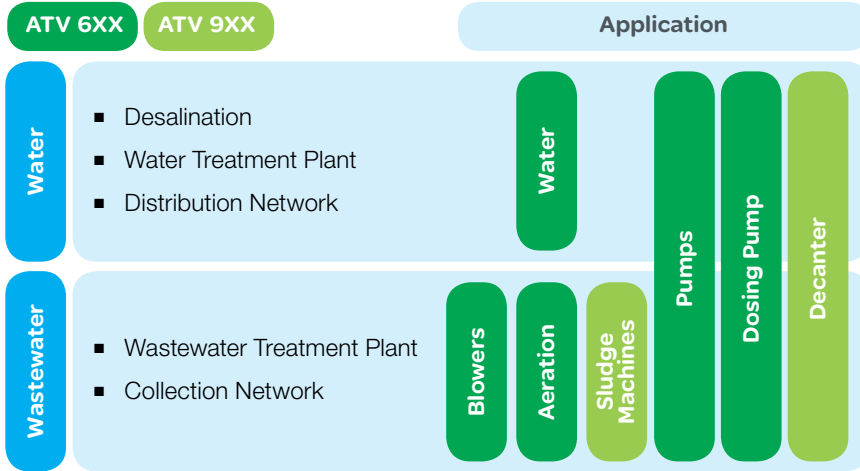
- Pre-engineered, ready to use solutions in highly efficient designs
- Modular and compact to maximize space utilization
- Flexibility for application requirements
- UL Type 1, 12 and 3R rated enclosures
- Built in pump curves
- Embedded ethernet and web server
- Dynamic QR codes
- Real time clock



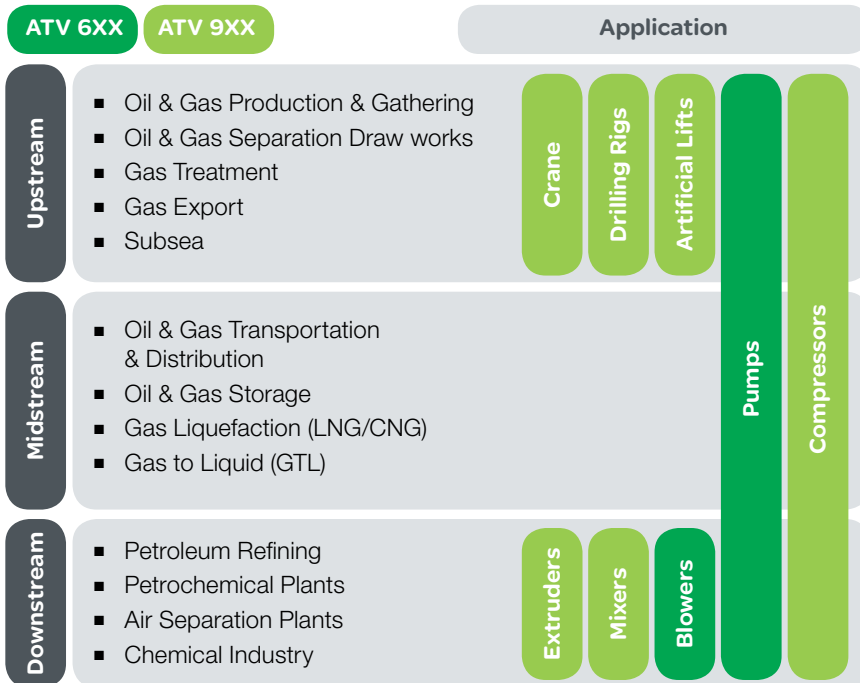
## ATV660 Drive Systems

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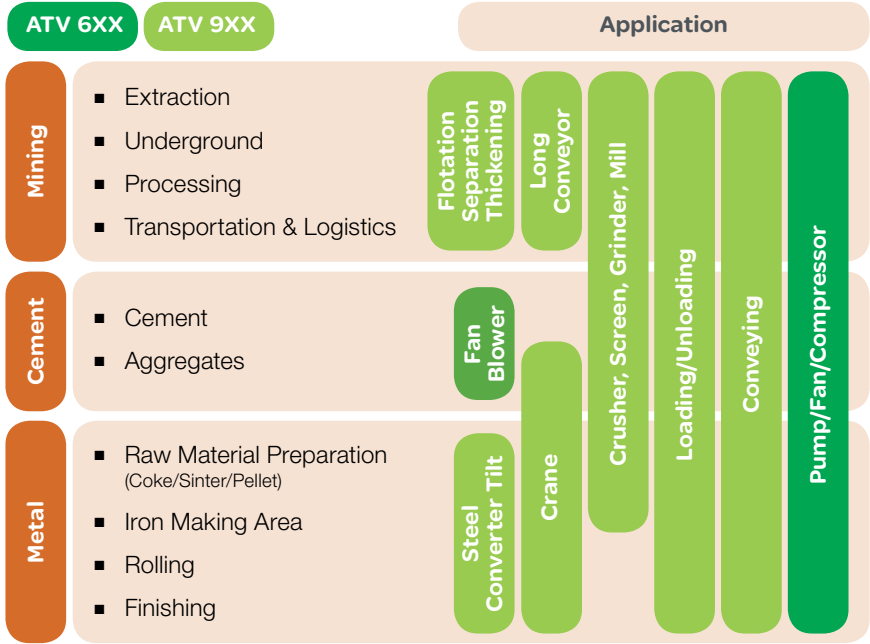
## Applications in WWW



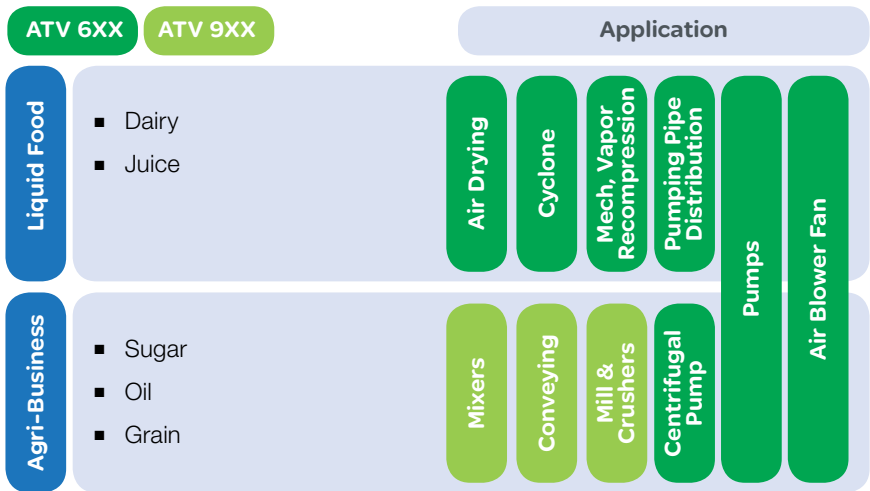
## Applications in O&G



## Applications in MMM



## Applications in F&B



## ATV660 Drive Systems (1-125hp ND)



- 1–125hp Normal Duty at 460V, 1-100hp Heavy Duty at 460V, 1–60hp Normal Duty at 230V, 1-50hp at 230V Heavy Duty
- All four frames are 16 in wide
- All wall mount frames are 19.5 in deep
- Two additional frame enclosures available for ETO options
- UL Type 1, 12 & 3R rated enclosures
- 100,000 SCCR short circuit rating
- Energy management (integrated power measurement)
- Remote graphic keypad
- Standard 3% equivalent impedance
- Circuit breaker disconnect
- White component mounting plate
- Service entrance - 3R

75-125hp ND  
@460V



40-60hp ND  
@460V



20-30hp ND  
@460V



1-15hp ND  
@460V



# ATV660 Drive Systems

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## ATV660 Drive Systems (1-125hp ND)

### Available options:

- Bypass-utilizing Zelio Smart Relay (up to 250hp)
- Harmonic filter
- Service switch (bypass)
- DV/DT motor filter
- 50 Deg C (3R)
- Communication cards
- Control and indicator options
- 5% equivalent impedance option
- Many more to meet customer requirements





# ATV660 Drive Systems

## ATV660 Drive Systems (150-900hp ND)

- 150–900hp Normal Duty @ 460V, 125-700hp Heavy Duty at 460V
- UL Type 1 & Type 12 rated enclosures
- UL 508A
- 100,000 AIC short circuit rating
- Contains frequency inverter & rectifier modules, circuit breaker, line reactor, motor choke
- Remote graphic keypad
- Removable conduit entry plate

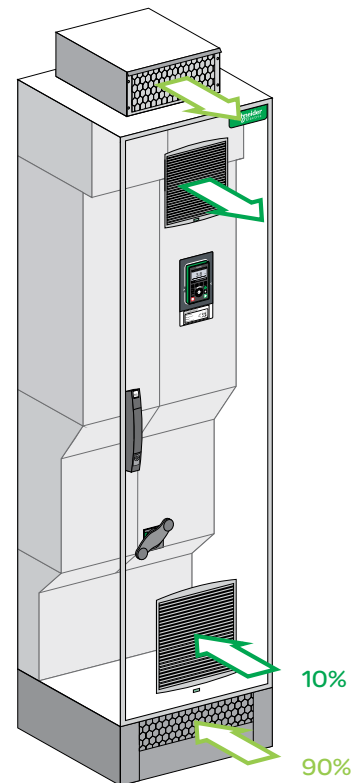
150-250hp ND  
@460V



300-500hp ND  
@460V



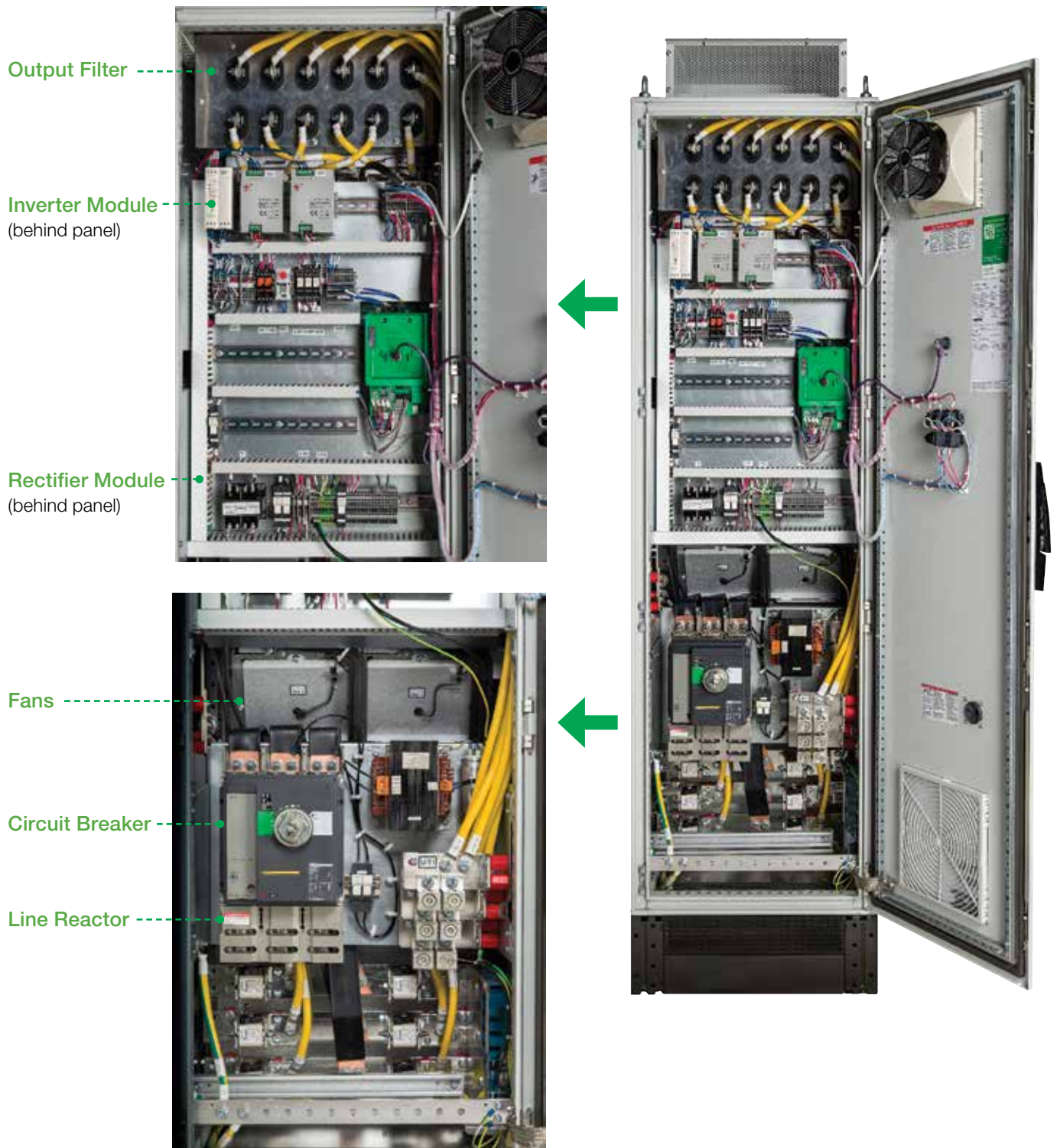
Cooling concept





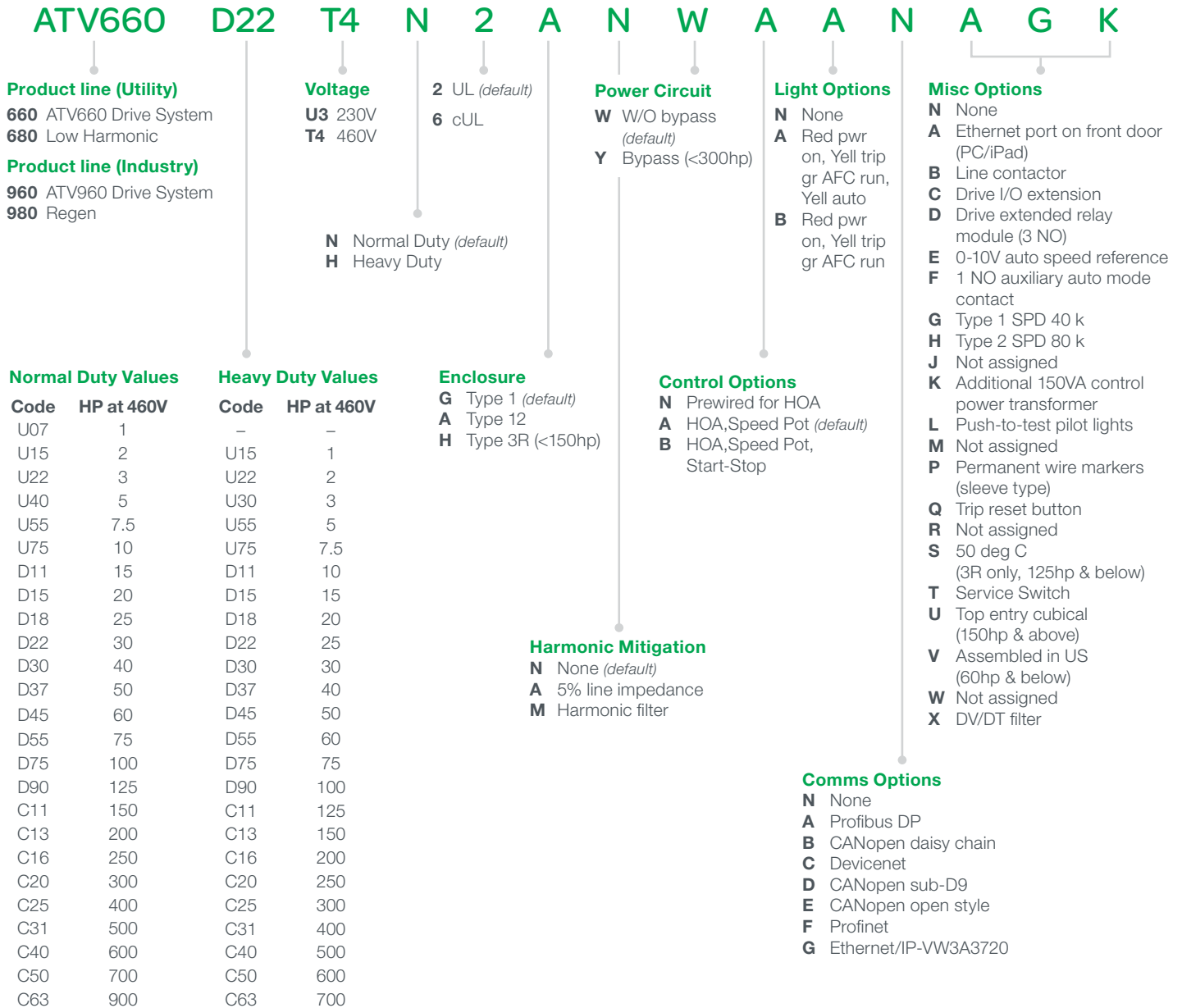
# ATV660 Drive Systems

## ATV660 Drive Systems (150-900hp ND)



Configuration To Order

Catalog number example: ATV660D22T4N2ANWAANAGK



## Make the Switch Today

### M-Flex

- Commercial
- Industrial
- WWW



### ATV Plus

- Commercial
- Industrial
- WWW



### E-Flex

- Industrial
- Some WWW



Smaller footprint  
Advanced keypad  
Option rich

Embedded pump curves  
Embedded web server  
Dynamic QR codes



ATV660 Drive Systems

## ATV660 Drive Systems (1-900hp ND)

Electrical Specifications		Environmental Specifications	
Input mains voltage	230 Vac ± 10%, 460 Vac ± 10%	Storage temperature	-13 to +149 °F (-25 to +65 °C)
Short circuit current rating (AC symmetrical)	100 kA	Operating temperature	+14 to +104 °F (-10 to +40 °C) Type 1/12; +14 to +122 °F (-10 to +50 °C) Type 3R
Control voltage	24 Vdc, 115 Vac + 10%/-15% (control power transformer included)	Humidity	95% with no condensation or dripping water, conforming to IEC 60068-2-78
Displacement power factor	98% through speed range	Altitude	3,300 ft (1000 m), without derating, derating of the current by 1% for each additional 330 ft (100 m) up to 9,842 ft. (3000 m) maximum
Input frequency	50/60Hz ± 5%	Enclosure	UL Type 1 : General indoor; UL Type 12: Indoor dust-tight (ventilated); UL Type 3R: Outdoor (ventilated)
Output voltage	Three-phase output, maximum voltage equal to input voltage	Pollution degree	Pollution degree 2 or 3 per NEMA ICS-1 Annex A and IEC 60664-1
Galvanic isolation	Galvanic isolation between power and control (inputs outputs, & power supplies)	Operational test vibration	Conforming to IEC 60721-3-3-3M3 amplitude 1.5 mm peak to peak from 3-13 Hz 1 g from 13-200Hz
Torque/Over torque	Normal Duty: 110% of nominal motor torque for 60s Heavy Duty: 150% of nominal motor torque for 60s	Transit shock test	15 g, 11 ms
Current (transient)	Normal Duty: 110% of drive rated current for 60s Heavy Duty: 150% of drive rated current for 60s	Codes and standards	UL Listed per UL 508A IEEE519 compliant (passive harmonic filter required); Conforms to applicable NEMA ICS, NFPA, and IEC standards; Manufactured under ISO 9001 standards
Switching frequency	Selectable from .5-8 kHz Factory setting: 2.5 kHz The drive reduces the switching frequency automatically in the event of excessive heat sink temperature	Cyber Security	Achilles™ Level 2 certification
Efficiency	95% (or greater) at full load typical		

**Process drives without bypass are available up to 700hp HD / 900hp ND at 460V or 50hp HD / 60hp ND at 230V. The following standard features for process drives without bypass, when no options are ordered:**

- Disconnect handle with lockout/tagout provisions
- Door mounted keypad holder and display
- One form C tripped relay
- Two form A sequence relays
- Six programmable digital inputs
- Standard color RAL735
- Class 10 overload protection
- Controller programming
  - Acceleration (ACC): 10s
  - Deceleration (DEC): 10s
  - Low Speed (LSP): 3Hz

# ATV660 Drive Systems Specifications

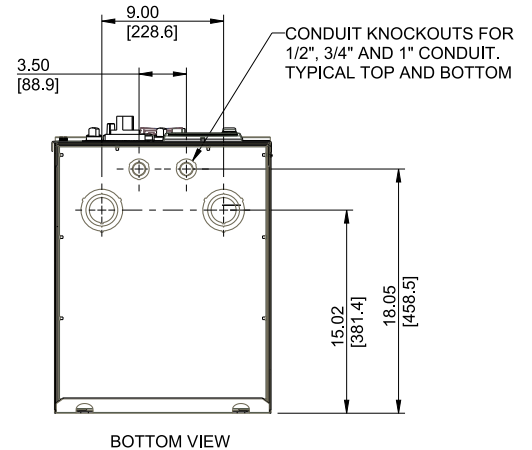
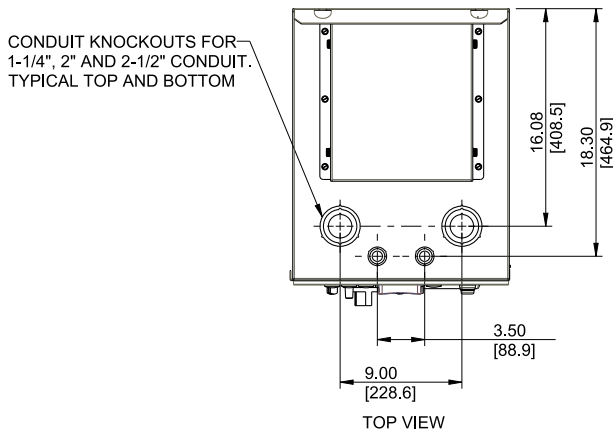
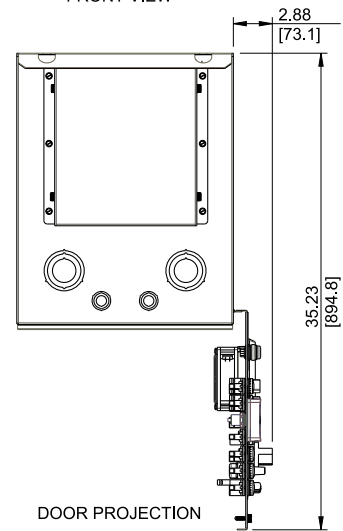
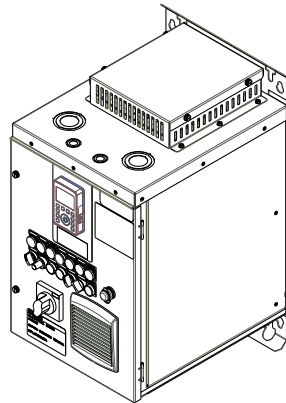
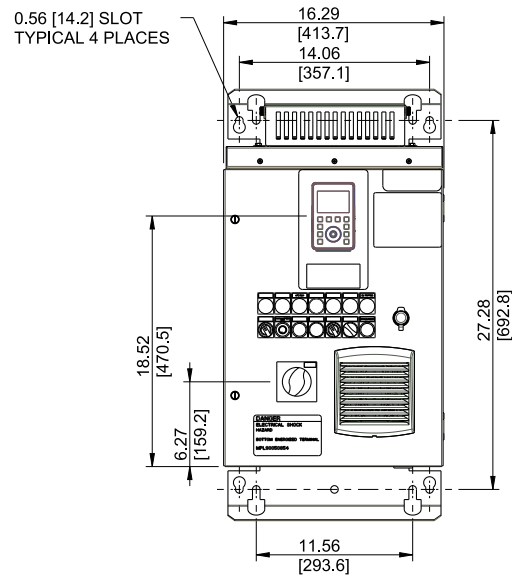
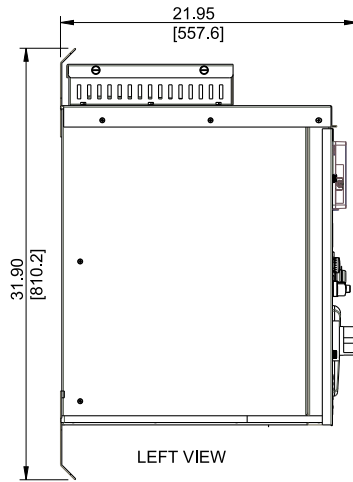
1HP[.75KW] - 15HP[11KW]  
AT 460V NORMAL DUTY\*

1HP[.37KW] - 10HP[7.5KW]  
AT 460V HEAVY DUTY\*

1HP[.75KW] -  
7.5HP[5.5KW] AT 230V  
NORMAL DUTY\*

\*STANDARD DRIVE  
PACKAGE

ELEVATION 600MM  
TYPE 1, 12



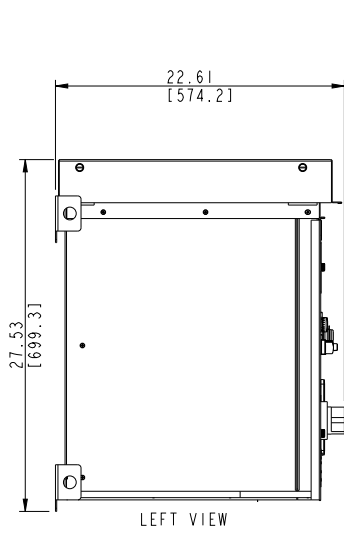
1HP[.75KW] - 15HP[11KW]  
AT 460V NORMAL DUTY\*

1HP[.37KW] - 10HP[7.5KW]  
AT 460V HEAVY DUTY\*

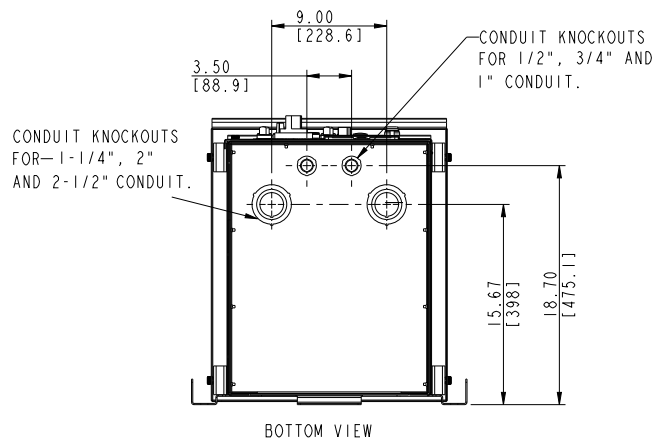
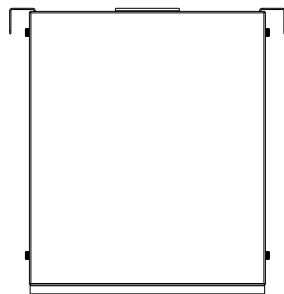
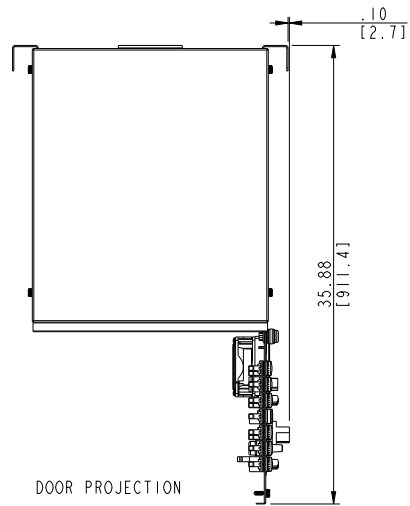
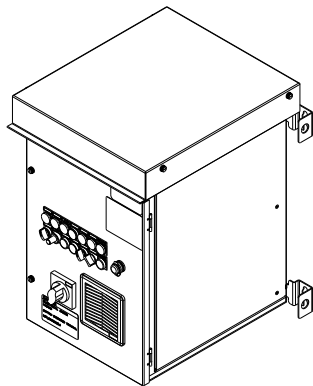
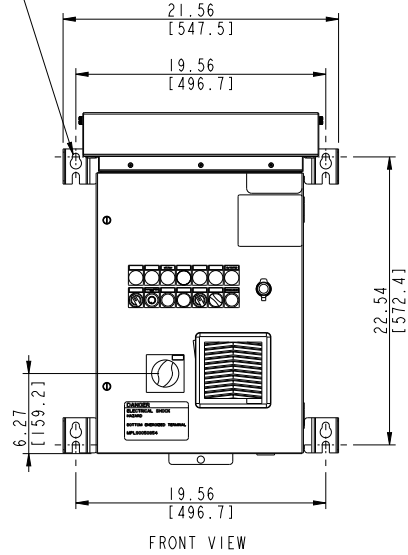
1HP[.75KW] -  
7.5HP[5.5KW] AT 230V  
NORMAL DUTY\*

\*STANDARD DRIVE  
PACKAGE

ELEVATION 600MM  
TYPE 1, 12



0.56 [14.2] SLOT  
TYPICAL 4 PLACES





# ATV660 Drive Systems Specifications

20HP[15KW] - 30HP[22KW]  
AT 460V NORMAL DUTY\*

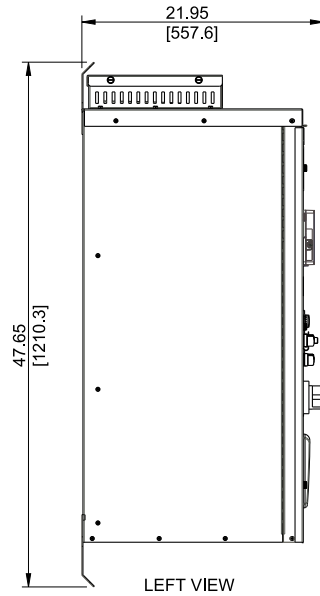
15HP[11KW] - 25HP[19KW]  
AT 460V HEAVY DUTY\*

10HP[7.5KW] -  
15HP[11KW] AT 230V  
NORMAL DUTY\*

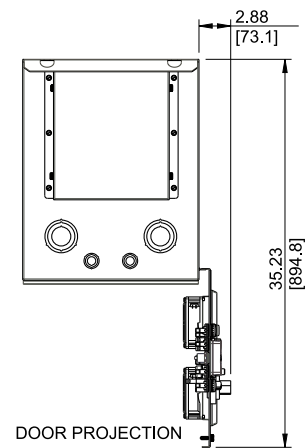
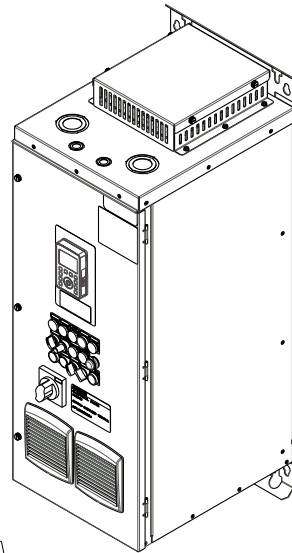
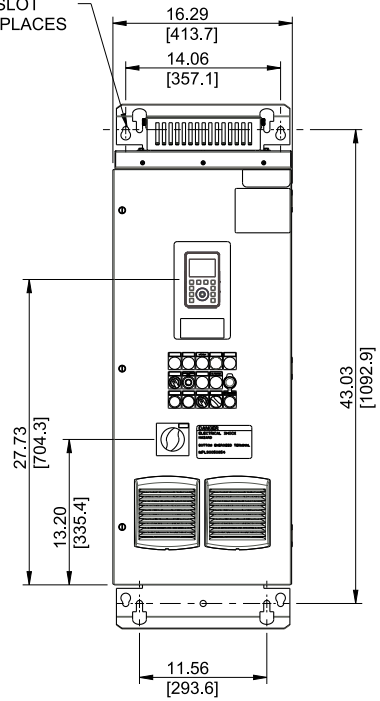
7.5HP[5.5KW] -  
10HP[7.5KW] AT 230V  
HEAVY DUTY\*

\*STANDARD  
DRIVE PACKAGE

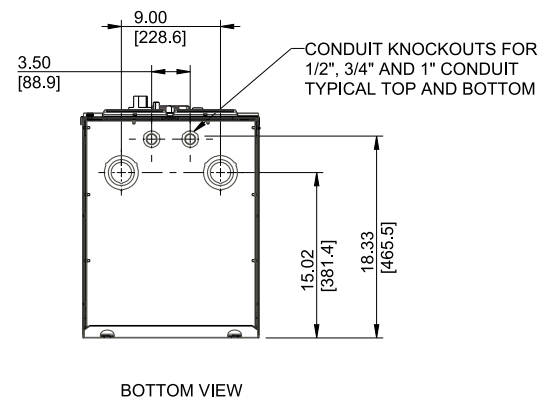
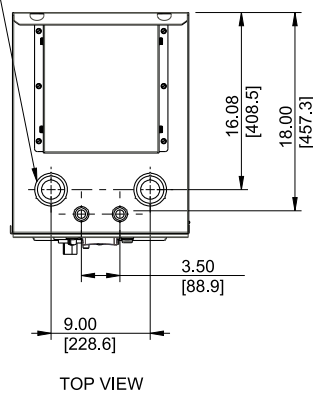
ELEVATION 1000MM  
TYPE 1, 12



0.56 [14.2] SLOT  
TYPICAL 4 PLACES



CONDUIT KNOCKOUTS FOR  
1-1/4", 2" AND 2-1/2" CONDUIT  
TYPICAL TOP AND BOTTOM





20HP[15KW] - 30HP[22KW]  
AT 460V NORMAL DUTY\*

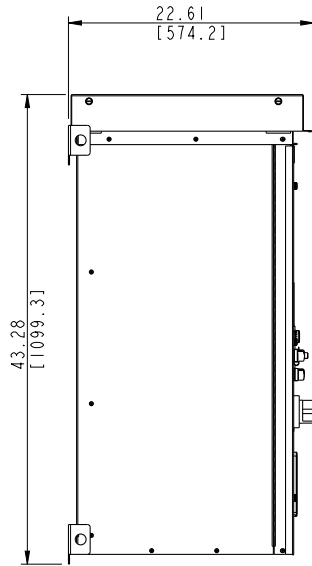
15HP[11KW] - 25HP[19KW]  
AT 460V HEAVY DUTY\*

10HP[7.5KW] -  
15HP[11KW] AT 230V  
NORMAL DUTY\*

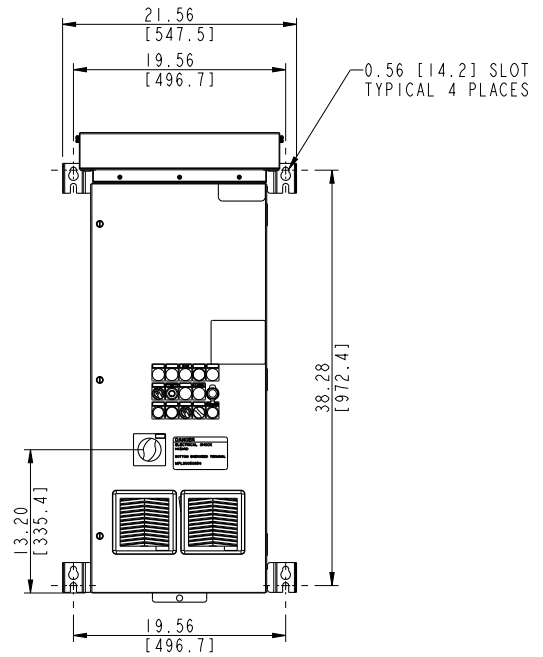
7.5HP[5.5KW] -  
10HP[7.5KW] AT 230V  
HEAVY DUTY\*

\*STANDARD DRIVE  
PACKAGE

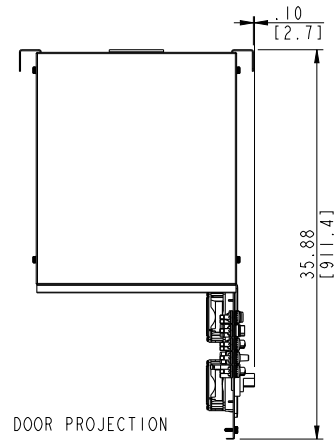
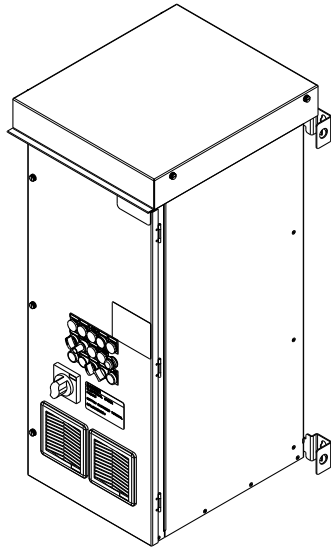
ELEVATION 1000MM  
TYPE 3R



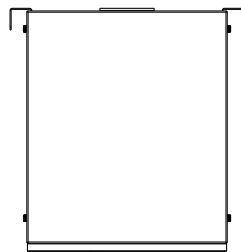
LEFT VIEW



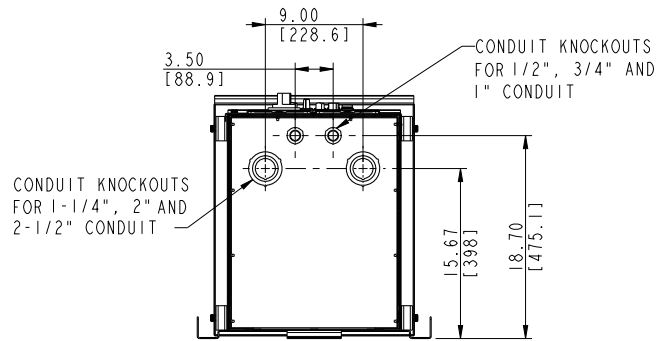
FRONT VIEW



DOOR PROJECTION



TOP VIEW



BOTTOM VIEW

# ATV660 Drive Systems Specifications

40HP[30KW] - 60HP[45KW]  
AT 460V NORMAL DUTY\*

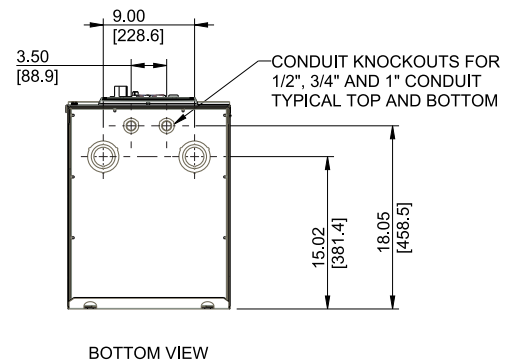
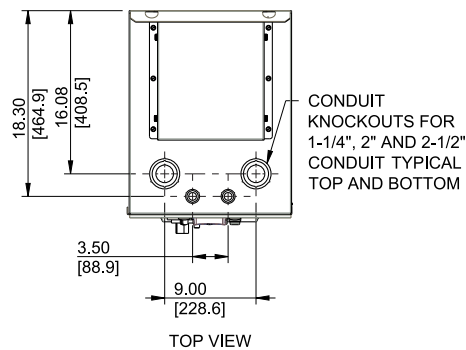
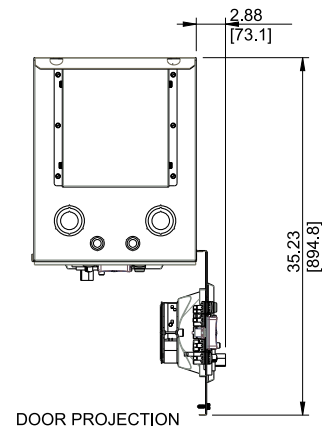
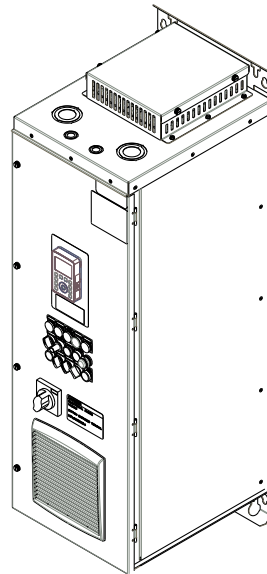
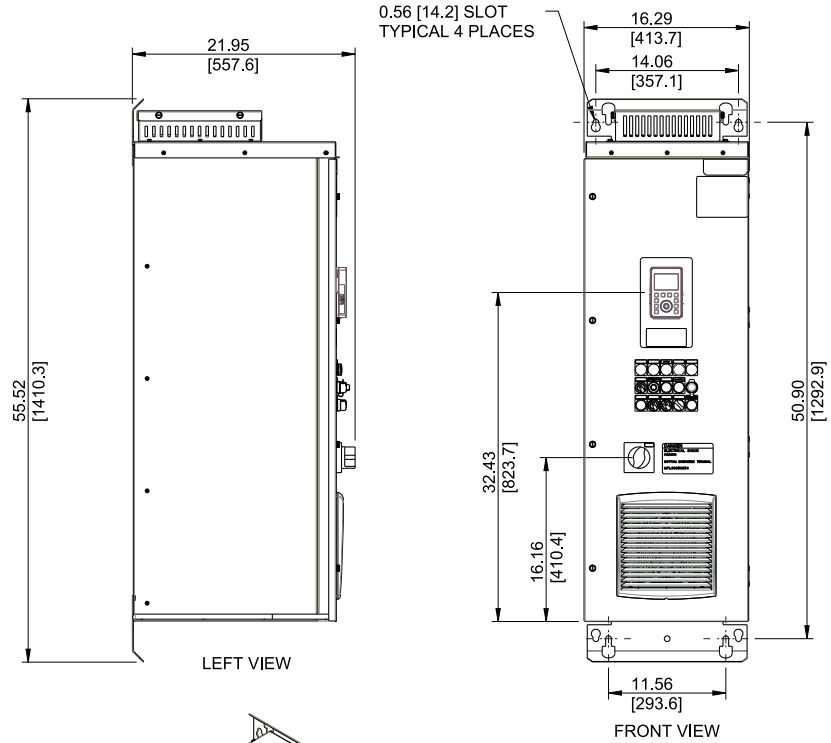
30HP[22KW] - 50HP[37KW]  
AT 460V HEAVY DUTY\*

20HP[15KW] - 30HP[22KW]  
AT 230V NORMAL DUTY\*

15HP[11KW] - 25HP[19KW]  
AT 230V HEAVY DUTY\*

\*STANDARD DRIVE  
PACKAGE

ELEVATION 1200MM  
TYPE 1, 12



40HP[30KW] - 60HP[45KW]  
AT 460V NORMAL DUTY\*

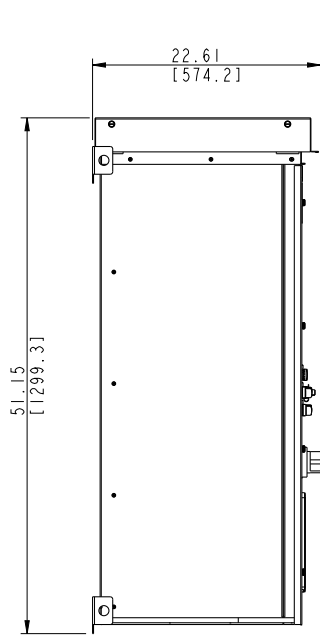
30HP[22KW] - 50HP[37KW]  
AT 460V HEAVY DUTY\*

20HP[15KW] - 30HP[22KW]  
AT 230V NORMAL DUTY\*

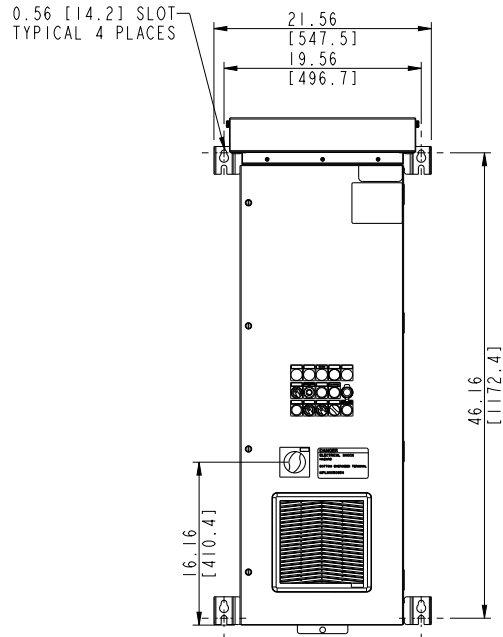
15HP[11KW] - 25HP[19KW]  
AT 230V HEAVY DUTY\*

\*STANDARD DRIVE  
PACKAGE

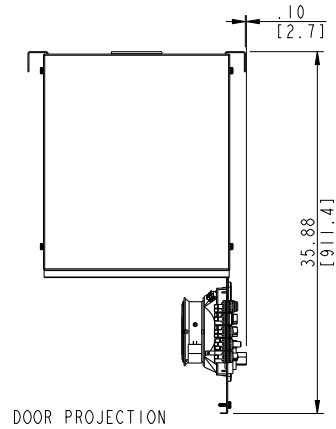
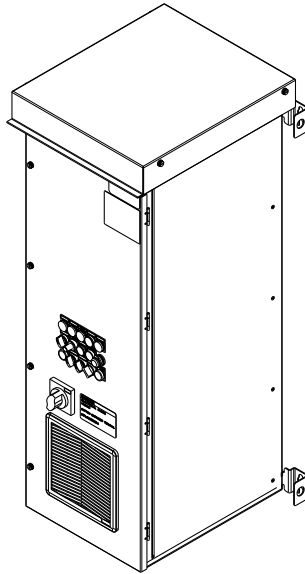
ELEVATION 1200MM  
TYPE 3R



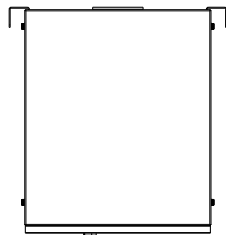
LEFT VIEW



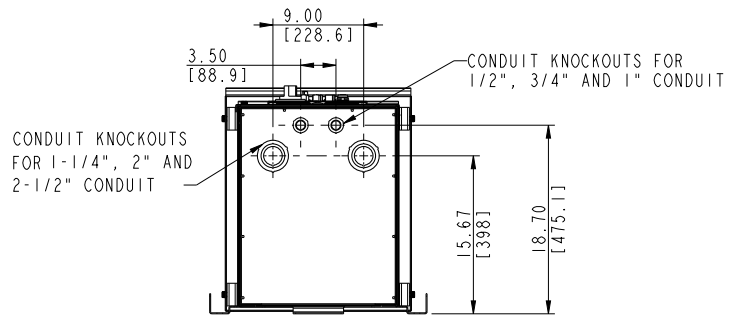
FRONT VIEW



DOOR PROJECTION



TOP VIEW



BOTTOM VIEW

# ATV660 Drive Systems

75HP[55KW] -  
125HP[90KW] AT 460V  
NORMAL DUTY\*

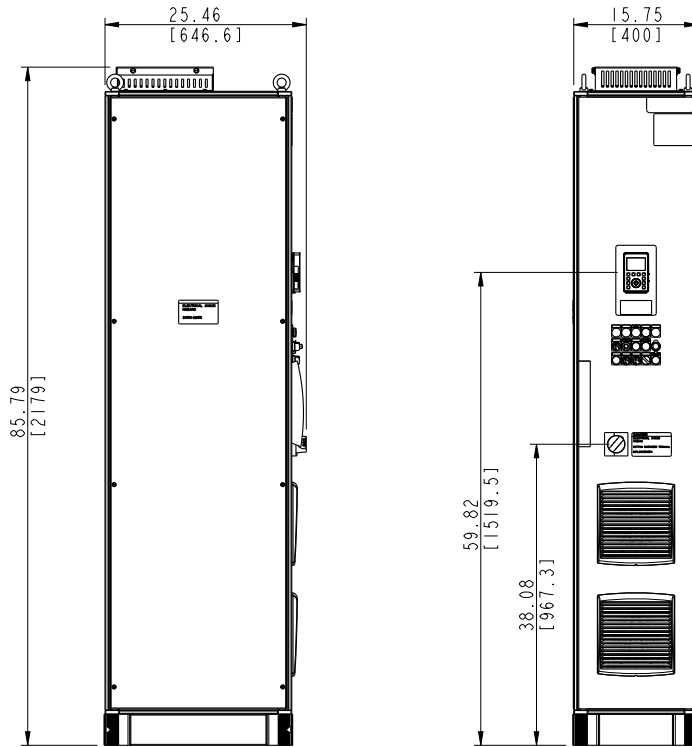
60HP[45KW] -  
100HP[75KW] AT 460V  
HEAVY DUTY\*

40HP[30KW] - 60HP[45KW]  
AT 230V NORMAL DUTY\*

30HP[22KW] - 50HP[37KW]  
AT 230V HEAVY DUTY\*

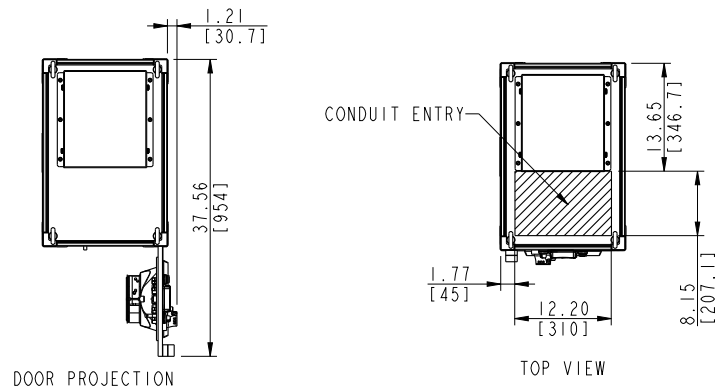
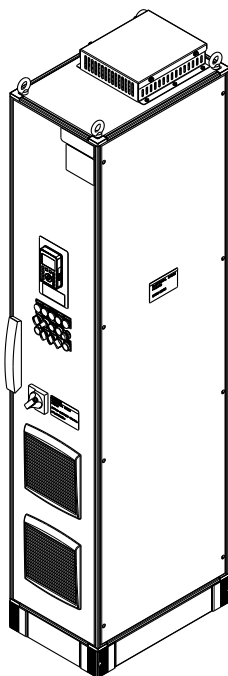
\*STANDARD DRIVE  
PACKAGE

ELEVATION 2000MM  
TYPE 1



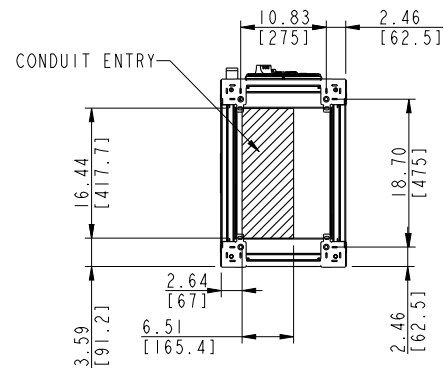
LEFT VIEW

FRONT VIEW



DOOR PROJECTION

TOP VIEW



BOTTOM VIEW  
MOUNTING LOCATIONS

TYPE 1 CONFIGURATION

# ATV660 Drive Systems

75HP[55KW] -  
125HP[90KW] AT 460V  
NORMAL DUTY\*

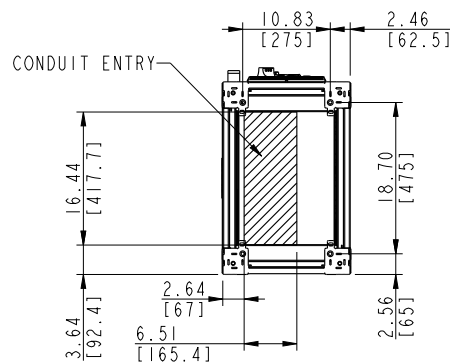
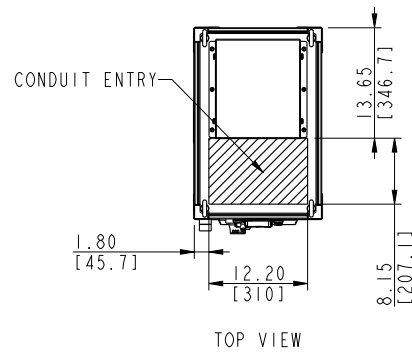
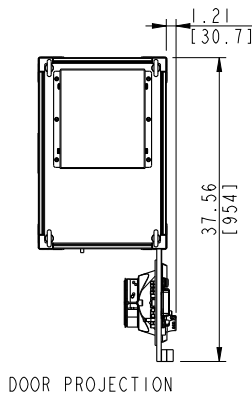
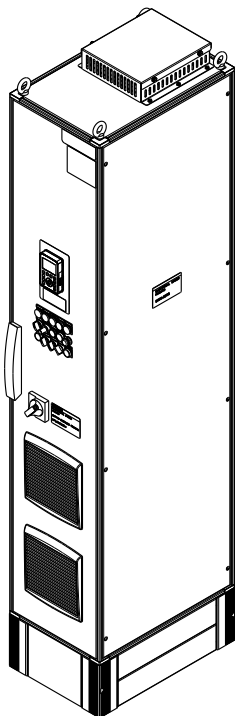
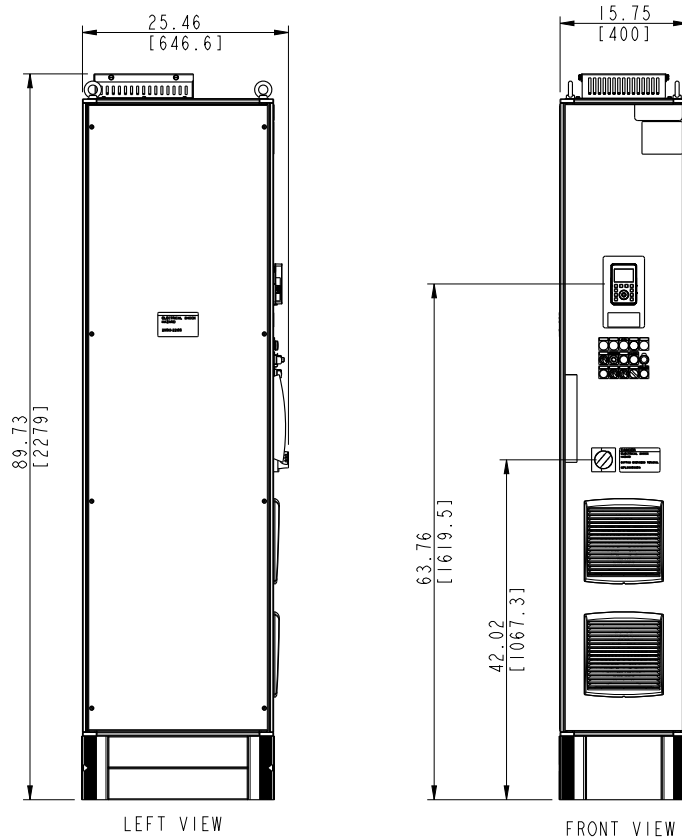
60HP[45KW] -  
100HP[75KW] AT 460V  
HEAVY DUTY\*

40HP[30KW] - 60HP[45KW]  
AT 230V NORMAL DUTY\*

30HP[22KW] - 50HP[37KW]  
AT 230V HEAVY D

\*STANDARD DRIVE  
PACKAGE

ELEVATION 2000MM  
TYPE 12



TYPE 12 CONFIGURATION

BOTTOM VIEW  
MOUNTING LOCATIONS

# ATV660 Drive Systems

75HP[55KW] -  
125HP[90KW] AT 460V  
NORMAL DUTY\*

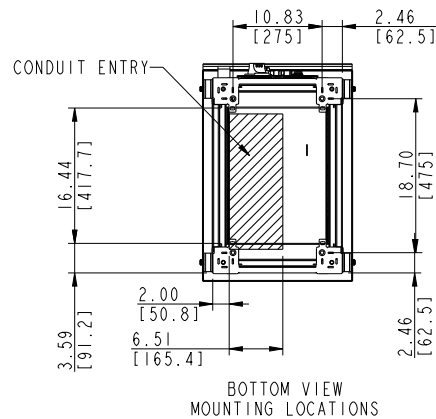
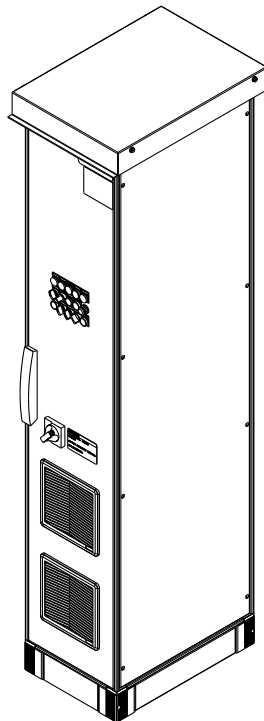
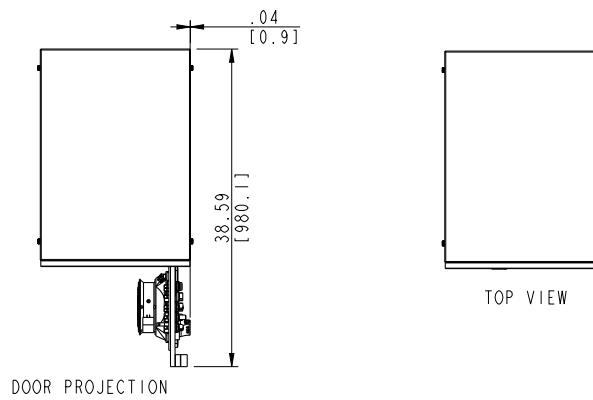
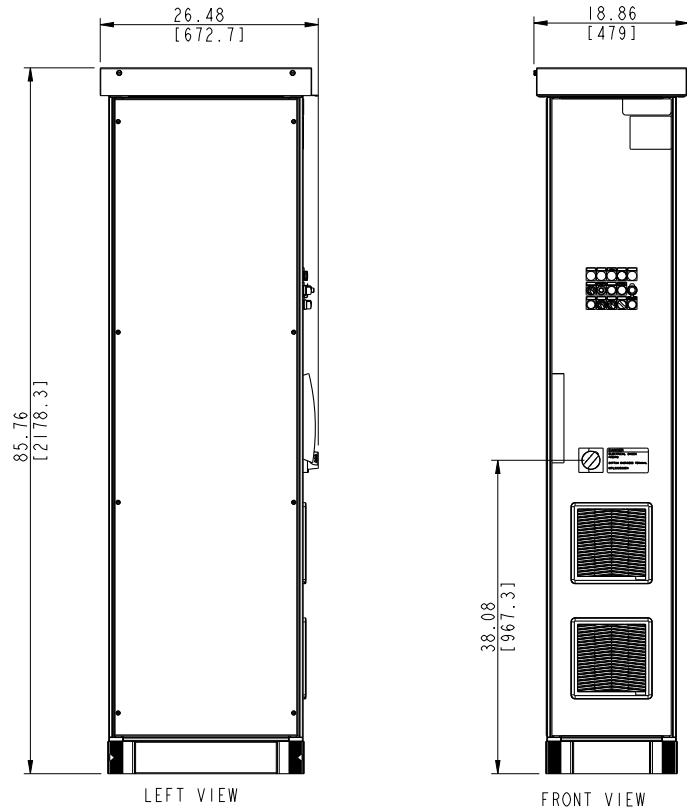
60HP[45KW] -  
100HP[75KW] AT 460V  
HEAVY DUTY\*

40HP[30KW] - 60HP[45KW]  
AT 230V NORMAL DUTY\*

30HP[22KW] - 50HP[37KW]  
AT 230V HEAVY DUTY\*

\*STANDARD DRIVE  
PACKAGE

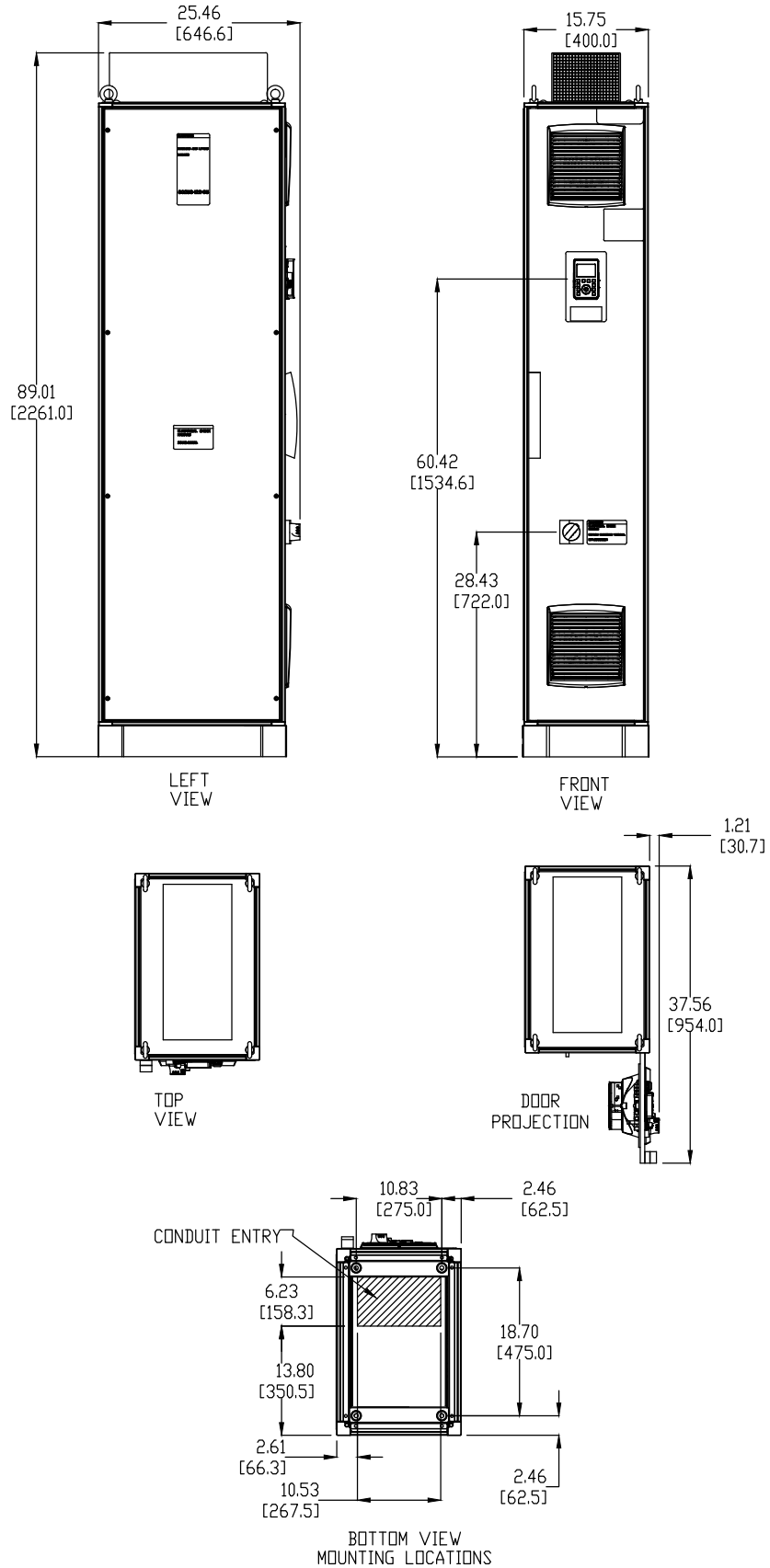
ELEVATION 2000MM  
TYPE 3R



# ATV660 Drive Systems

ATV660  
TYPE 1 FRAME 1P  
150-250HP @ 460V

ELEVATION 2000MM  
TYPE 1

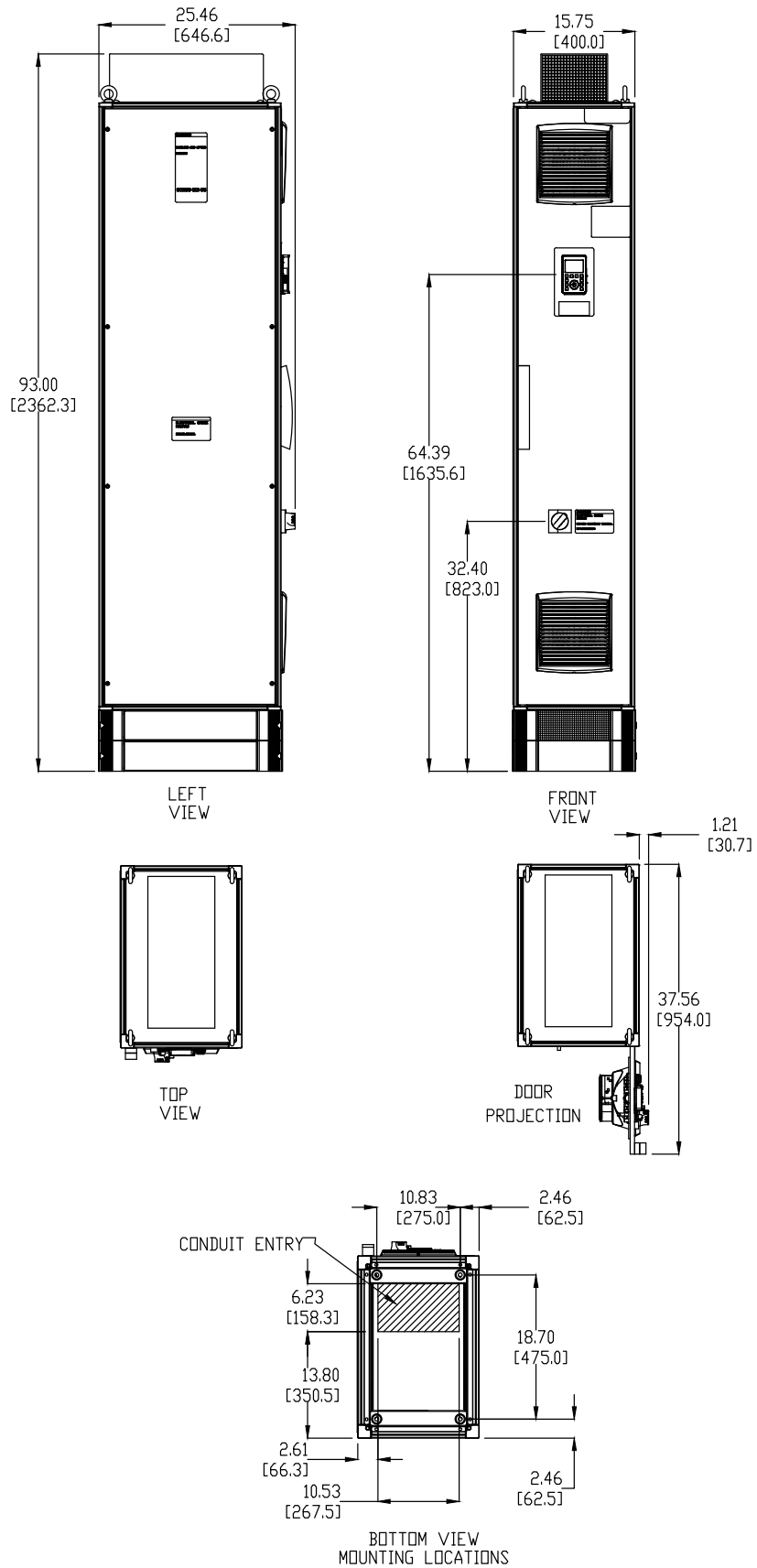




# ATV660 Drive Systems

ATV660  
TYPE 12 FRAME 1P  
150-250HP @ 460V

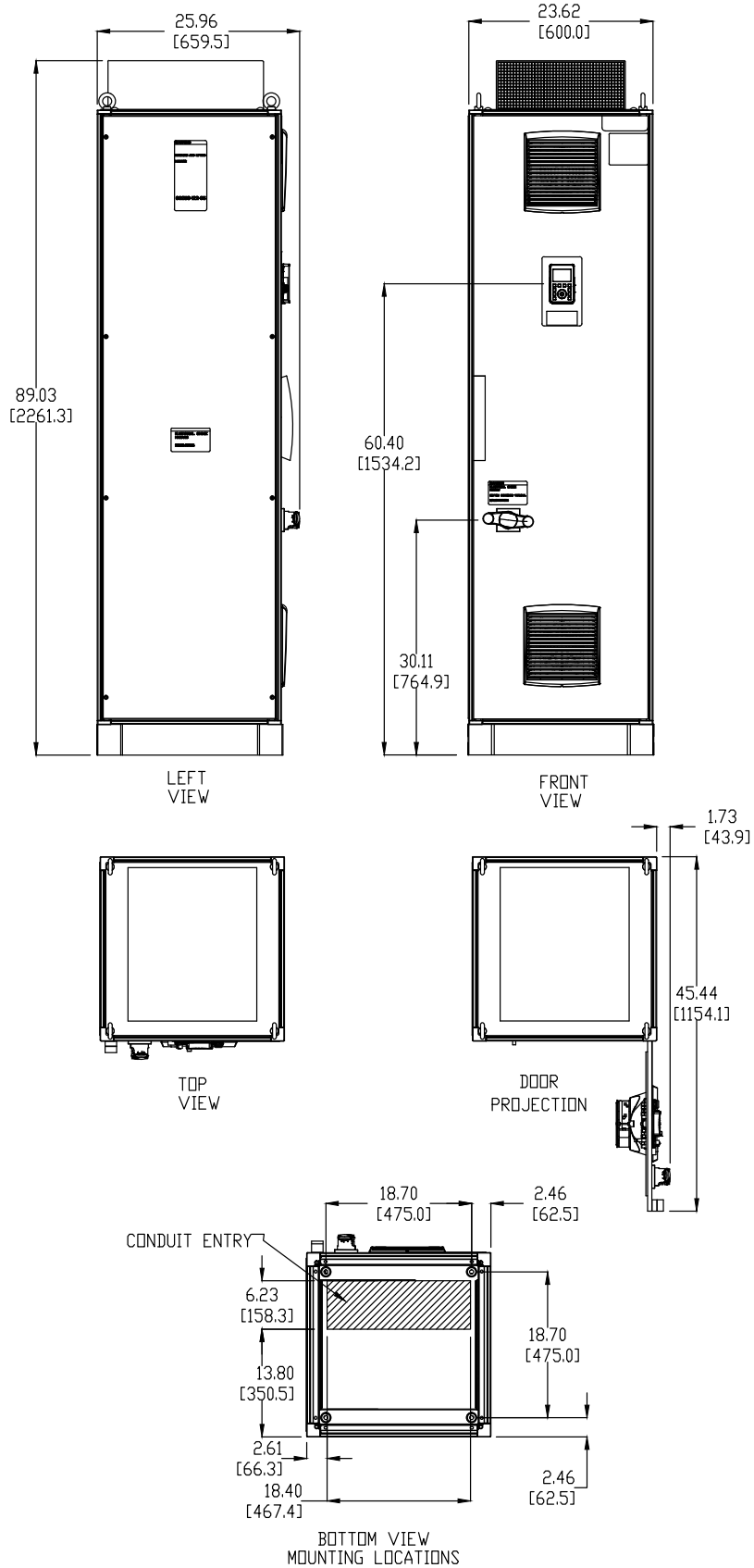
ELEVATION 2000MM  
TYPE 12



# ATV660 Drive Systems

ATV660  
TYPE 1 FRAME 2P  
300-500HP @ 460V

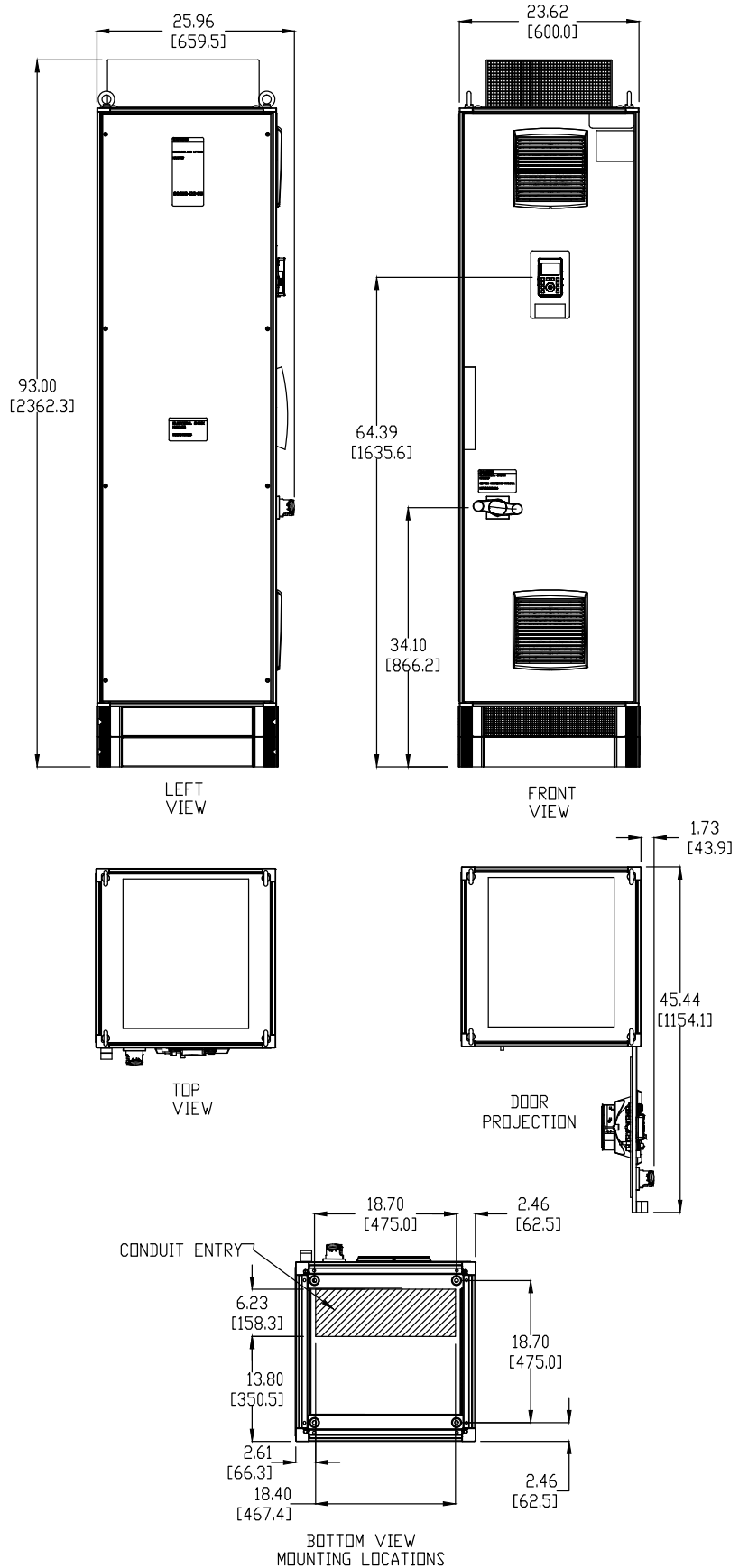
ELEVATION 2000MM  
TYPE 1



# ATV660 Drive Systems

ATV660  
TYPE 12 FRAME 2P  
300-500HP @ 460V

ELEVATION 2000MM  
TYPE 12





# ATV660 Drive Systems

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For additional information,  
contact your local field office.



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8800BR1601  
April 2016 - V1.0