

Life Is On

Schneider
Electric



Altivar Outdoor

The Oil & Gas and Irrigation pumping solution
from Schneider Electric



altivardrives.com

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Altivar 630/930 variable speed drives

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Introduction

Altivar™ Outdoor is a UL Type 3R rated drive designed for pumping solutions in outdoor environments, especially for Oil & Gas and Irrigation

Outdoor installations add a new set of environmental and thermal challenges to operations. You must consider lightning and surge protection as well as the changes in temperature—both hot and cold—which can adversely impact performance.

Altivar Outdoor is designed for these environments, with a wide array of power and automation options from 20 hp to 250 hp to meet your application needs. Schneider Electric offers solutions engineered specifically for you and your pumping needs.



20 - 250 hp ND
20 - 200 hp HD

Other hp ranges available upon request as Engineered To Order

Easily configured to your application needs

Altivar Outdoor offers a field-proven UL Type 3R outdoor platform for the following applications:

Oil & Gas



- Rod pump controls
- PCP controls
- ESP controls
- HPS controls

Irrigation



- Submersible pumps
- Vertical pumps
- Booster skids
- Pump stations

Applications

A drive that consistently delivers performance and value



Key benefits

- Easy-to-use graphic terminal display
- Door-on-door for easy access to keypad
- Dependable, durable, and a complete packaged offering
- Flexible for application requirements to meet customer needs
- Validated and documented control architecture designed to reduce cost, space, and start-up time
- 50 °C temperature evaluated to meet those high-temperature environments
- Comprehensive engineering and design support
- Four-week delivery for standard featured package



- Altivar 630 or Altivar 930 power converter
- Customer interface terminal blocks
- Optional Type 2 Surge protection
- Circuit breaker disconnect
- Optional 5% impedance
- Output terminal lug
- 120 V control power transformer
- Document pocket
- Door-on-door

Uncompromising design with advanced features



Options

- 5% impedance
- 30 mm heavy-duty operators
- Bypass
- Type 2 SPD/HWA surge arrestors
- Passive harmonic filter
- Floor stand kit
- -25 °C (cold weather option)
- E-stop, pushbutton
- Ag/Irrigation (PID ready)

Standard features

- 14 to 122 °F (-10 to 50 °C) range
- Door-on-door arrangement
- 3% impedance
- Cabinet heater
- UL508A listed
- Nonbypass
- Surge protection
- Assembled in the U.S.
- UL Type 3R enclosures
- Thermostatically controlled cooled fans
- Service entrance rated
- 120 V control power transformer
- Hand-off-auto switch manual speed pot
- 22 mm pilot lights
- Power on, tripped, AFC run lights
- Forced ventilation with washable filter
- Additional enclosure space for end user

Altivar Outdoor Dimensions

HP	Volts	Height	Width	Depth
Normal Duty (ND)				
20 - 60	460 VAC	58.9"	36"	26.8"
75 - 125	460 VAC	70.8"	36"	26.8"
150 - 250*	460 VAC	93.9"	40"	41.3"
Heavy Duty (HD)				
20 - 50	460 VAC	58.9"	36"	26.8"
60 - 100	460 VAC	70.8"	36"	26.8"
125 - 200*	460 VAC	93.9"	40"	41.3"

*Welded feet standard

Uncompromising design with advanced features

Altivar Outdoor specifications

Input	
Rated voltage U_n	460 Vac \pm 10%
Rated frequency f_n	50 / 60 Hz \pm 5%
Output	
Control method	Asynchronous motor: Constant load torque standard, variable load torque standard Synchronous motor: load-depending mode PM (permanent magnet) motor
Voltage	3 AC 0...100 % mains voltage
Overload	Normal Duty (ND): 120% for 60 s per 10 minutes Heavy Duty (HD): 150% for 60 s per 10 minutes
Switching frequency	Selectable from .5-8kHz. Factory setting: 2.5kHz
Output frequency range of power converter	0.1...500 Hz
Short-circuit protection	65kA
Mechanical strength	
Operational test vibration	According to IEC/EN 60068-2-6 1.5 mm at 3...10 Hz 0.6 g at 10...200 Hz (3M3 according to IEC/EN 60721-3-3)
Mechanical shock	According to IEC/EN 60068-2-27 4 g for 11 ms (3M3 according to IEC/EN 60721-3-3)
Ambient conditions	
Operating temperature	-10...+50 °C (below 0 °C with additional enclosure heating)
Storage / Transport temperature	-25...+65 °C
Protection degree	UL Type 3R
Environmental Specifications	

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Uncompromising design with advanced features

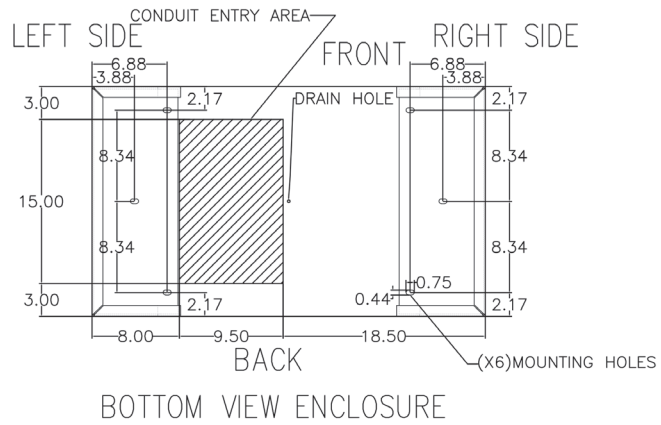
Altivar Outdoor specifications (continued)

Altitude	3,300 ft. (1000 m), without derating, derating of the current by 1% for each additional 330 ft (100m) up to 9,842 ft (3000m) maximum
Pollution degree	Pollution degree 2
Functional safety	
Functional safety of the drive	The function "Safe Torque Off" (STO) allows a controlled shut-down as well as switch-off of the power supply when standstill. It also helps to prevent any unintended start of the motor according to ISO 13849-1, performance level PL e, according to IEC/EN 61508 safety integrity level SIL 3 and IEC/EN 61800-5-2.
Response time	≤ 100 ms at STO (Safe Torque Off)
Standards	
Codes and standards	UL Listed per UL 508A IEEE519 compliant (passive harmonic filter required) Conforms to applicable NEMA ICS, NFPA, and IEC Manufactured under ISO 9001 standards
Operational shock	Conforming to IEC/EN 60068-2-27 4g for 11ms 3M3 conforming to IEC/EN 60721-3-3
Transit shock test	Conforming to National Safe Transit Association and International Safe Transit Association test for packages
Operational test vibration	Conforming to IEC/EN 60068-2-6 1.5 mm at 3-10 Hz, .6g at 10-200Hz 3M3 conforming to IEC/EN 60721-3-3

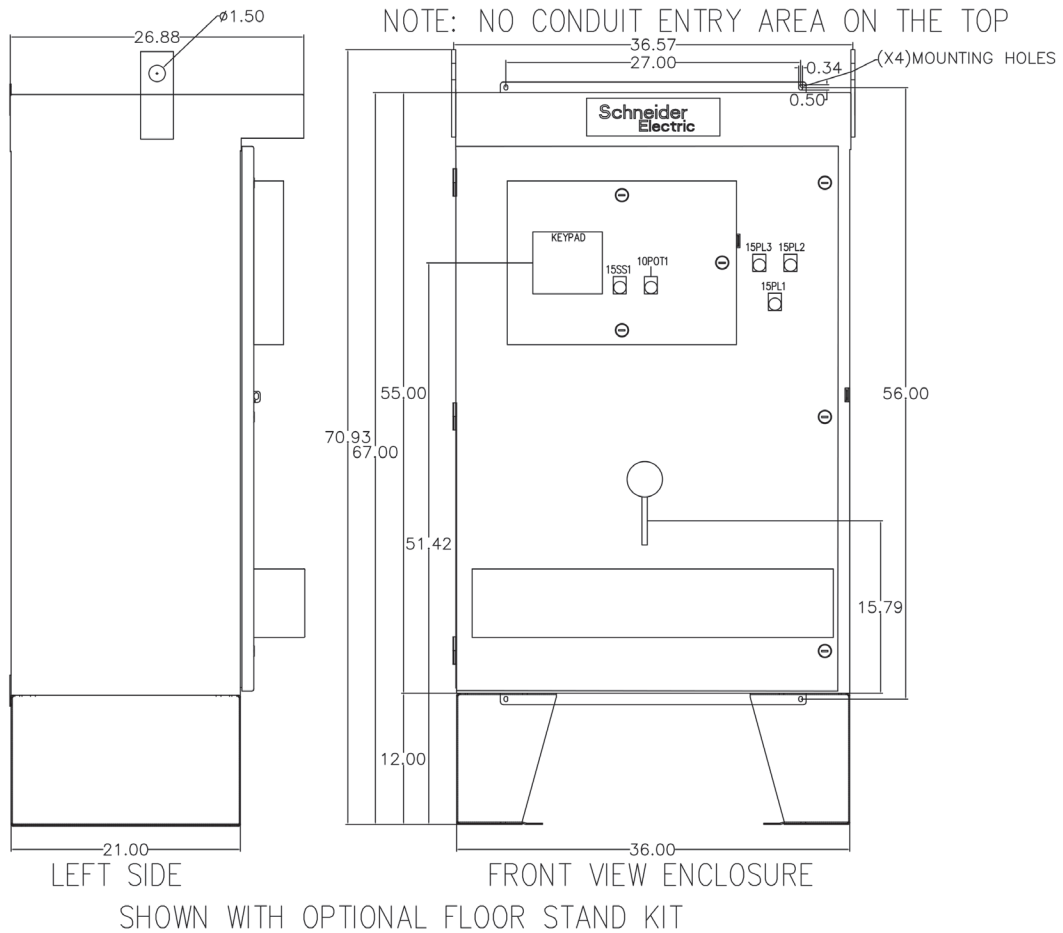
Diagrams

Ratings at 460 V

- 20 - 60 ND with or without Bypass
- 20 - 50 HD with or without Bypass
- 20 - 50 ND/HD Harmonic Filter with or without Bypass



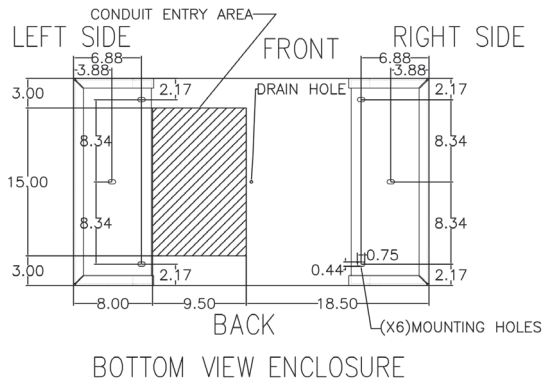
APPROXIMATE WEIGHT: 550 – 950 LBS.



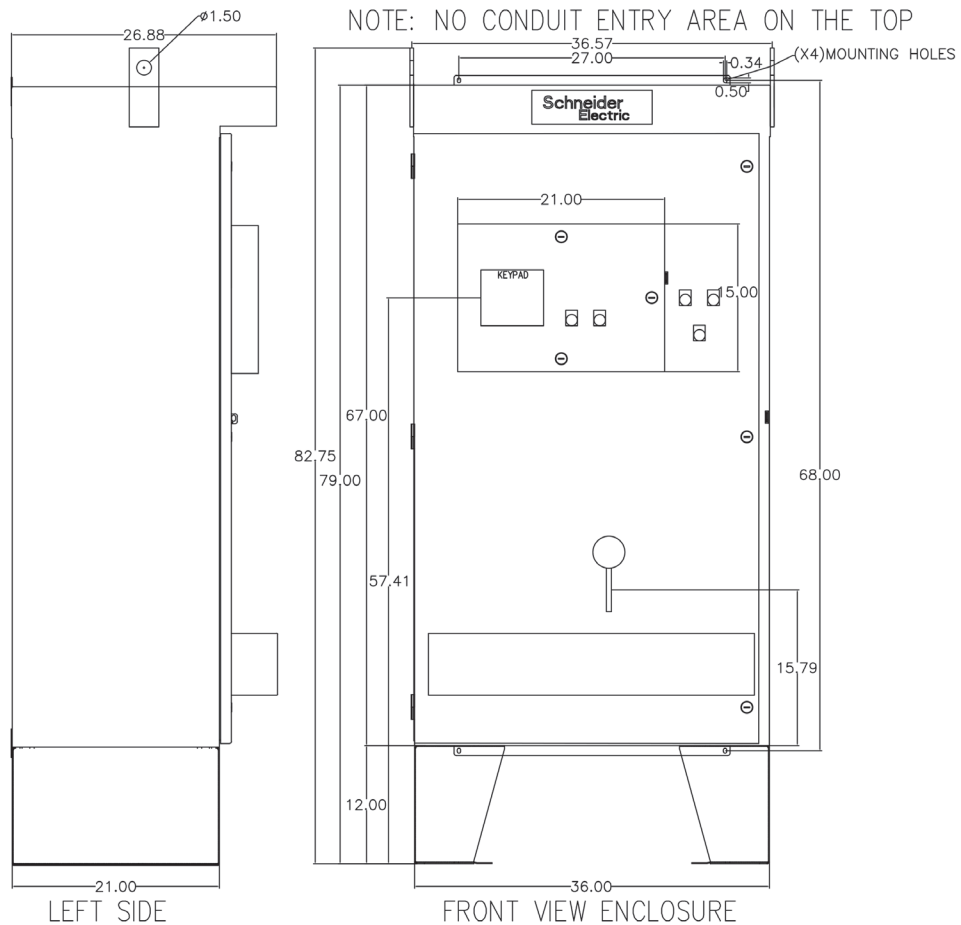
Diagrams

Ratings at 460 V

- 75 - 125 ND with or without Bypass
- 60 - 100 HD with or without Bypass
- 60 - 100 ND/HD Harmonic Filter with or without Bypass



APPROXIMATE WEIGHT: 750 - 1100 LBS.

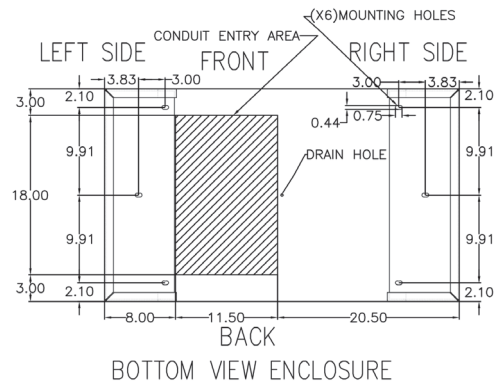


SHOWN WITH OPTIONAL FLOOR STAND KIT

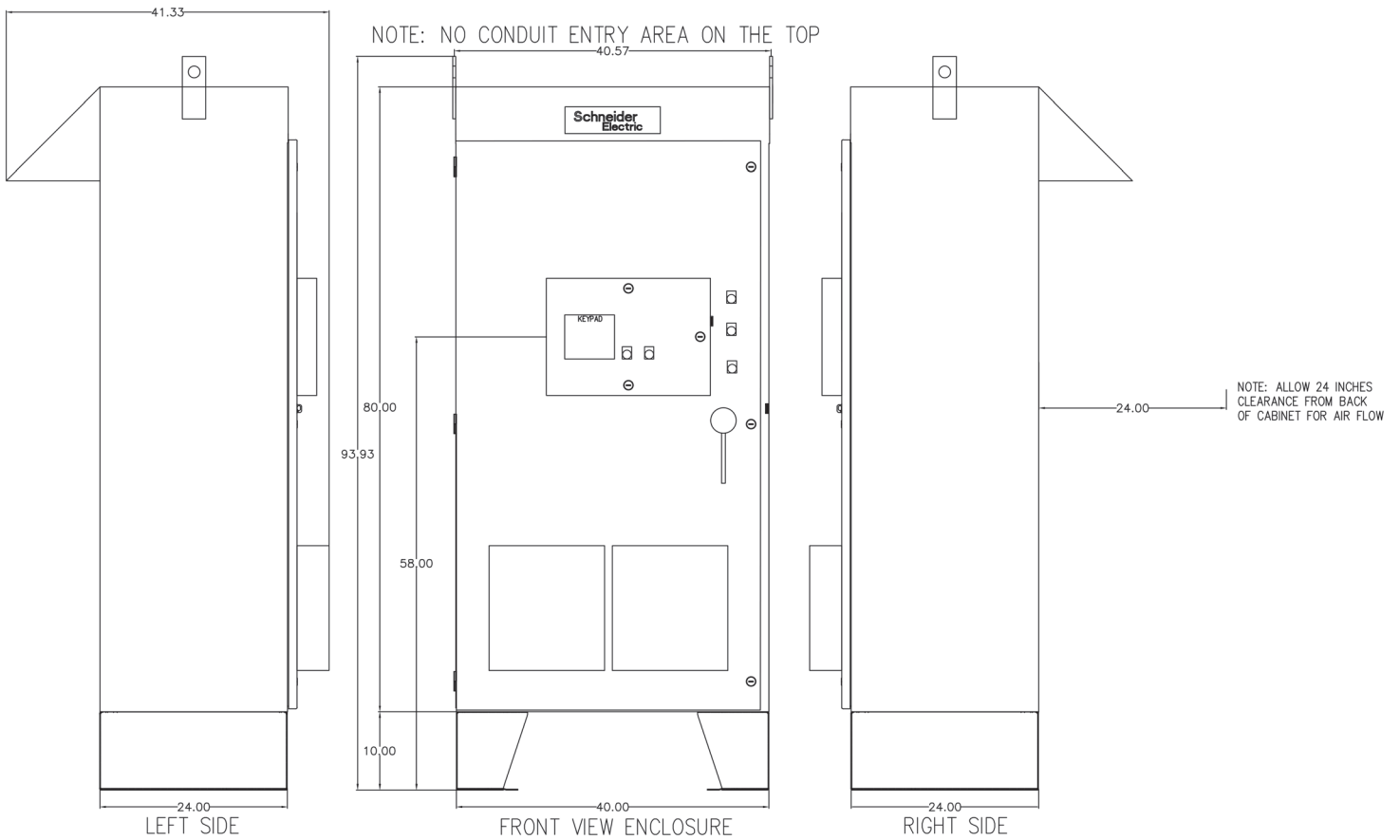
Diagrams

Ratings at 460 V

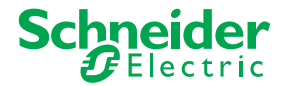
- 150 - 250 ND
- 125 - 200 HD
- 125 - 250 ND Harmonic Filter
- 125 - 200 HD Harmonic Filter
- 150 - 200 ND/HD with Bypass



APPROXIMATE WEIGHT: 900 - 1500 LBS.



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For more information on Altivar Outdoor, contact your local field office
or visit altivardrives.com

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Design: Schneider Electric
Photos: Schneider Electric

Juner 2016 - V1.0