



# PHASE



# ALPHA



PHASE CONVERTING | 115 V & 230 V | CONSTANT PRESSURE VFD  
NEMA 3R OUTDOOR ENCLOSURE | 2-7.5 HP



## Physical / Environmental

Operating Temperature Range	-18 °C – 55 °C (0 °F – 131°F) *Heater in enclosure may be required below –40 °C, de-rating required above 40 °C
Storage Temperature Range	-40 °C – 65 °C (-40 °F – 149 °F)
Enclosure	NEMA Type 3R: Outdoor   Rainproof
Altitude	Derate by 1% every 400 ft above 3300 ft elevation

## Input Power

Input Phase	Single-Phase
Input Voltage	115 V / 230 V
Input Voltage Range	96 V – 275 V
Input Frequency	50 Hz / 60 Hz

## Output Power

Output Phase	Single-Phase or Three-Phase
Output Voltage Range	Equal to Input
Output Frequency	5 Hz – 120 Hz
Horsepower	0.5 HP - 7.5 HP
Output Power	2 - 11kW
Switching Frequency	2 kHz – 8 kHz
Output	V/f control

## Electrical

Short Circuit Withstand Rating	5 kA RMS symmetrical Amps
Efficiency	> 98%
Startup Ramp Time	1 – 120 s
Shutdown Ramp Time	1 – 120 s or Coast to Stop
Overload Capacity	120% for 60s



## Analog Inputs

Quantity	(3) Programmable
Current Reference	4 – 20 mA, (2) Inputs
Voltage Reference	0 – 10 VDC, (1) Input
Terminal Block Size	26 - 12 AWG

## Digital Inputs

Quantity	(3)
Ratings	< 5 V, galvanically isolated
Terminal Block Size	26 - 12 AWG

## Relay Outputs

Quantity	(2)
Rating	Relay 1 & 2 : 5 VDC, 10 A at 120-277 VAC
Terminal Block Size	26 - 12 AWG

## Features

Certification	Conforms to UL 61800-5-1 and CSA C22.2 No. 274-17
User Interface	Push button membrane keypad with backlit graphic display
Available Feature Sets	AquaPhase (Pump Control)



## 115 V & 230 V

115 V / 230 V

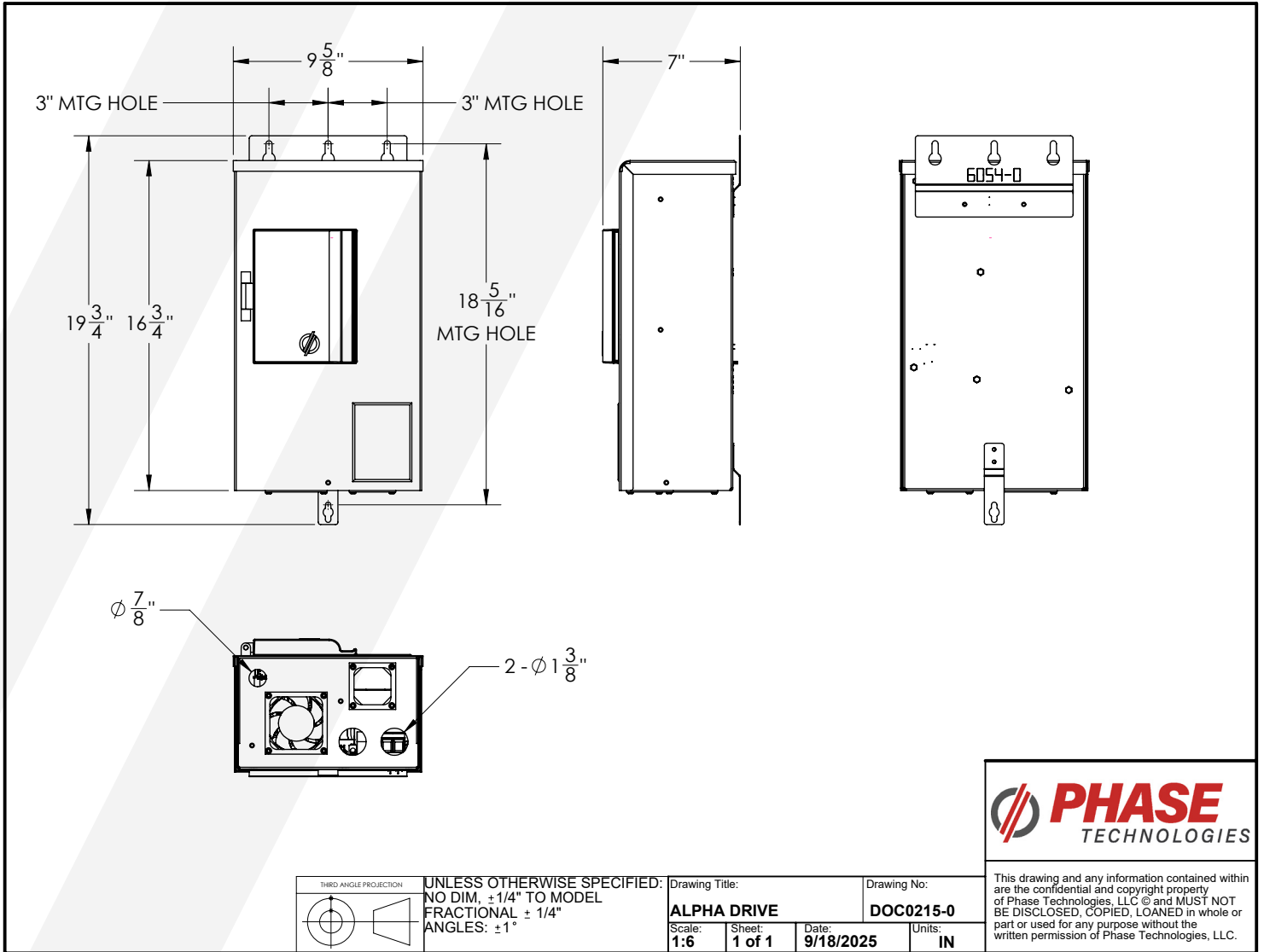
Model / Part Number	Rated Current (Output)	Rated Current (Input)	Horsepower	Input Voltage	Motor Type
AD002R	9 A	20 A	2 HP	96 V - 275 V	Single & Three-Phase
AD003R	12 A	30 A	3 HP	96 V - 275 V	Single & Three-Phase
AD005R	20 A	47 A	5 HP	96 V - 275 V	Single & Three-Phase
AD007R <sup>1</sup>	31 A	73 A	7.5 HP	96 V - 275 V	Single <sup>1</sup> & Three-Phase

- Includes Input and Output Filters
- Includes 4-20 MA Pressure Transducer for Accurate Analog Pressure Readings

<sup>1</sup>Will NOT Run 2-Wire Motors



# Alpha Drive 2 - 5 HP





**DIGITAL PHASE  
CONVERTERS**

**VARIABLE  
FREQUENCY  
DRIVES**

**MOTOR  
PROTECTION**

**SOFT  
STARTER**

**508A  
PANEL  
SHOP**

## **OUR MISSION**

*Relentlessly seek to provide Uncommon Value, solutions, innovation, and support for the industries that we serve.*

