



PHASE



ALPHA



PHASE CONVERTING | 115 V & 230 V | CONSTANT PRESSURE VFD
NEMA 3R OUTDOOR ENCLOSURE | 2-5 HP



Physical / Environmental

Operating Temperature Range	-18 °C – 55 °C (0 °F – 131°F)
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	115V / 230V
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 - 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 60 s



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)

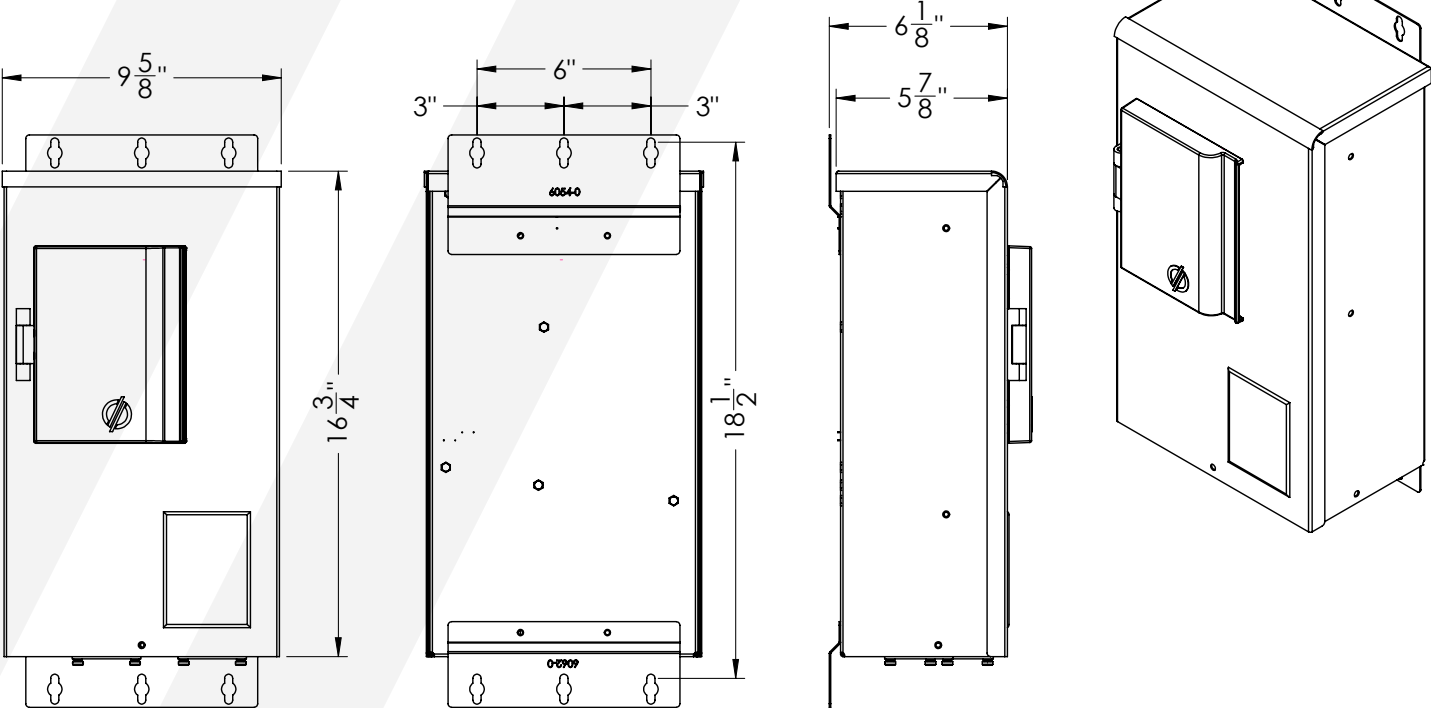
Models

115 V / 230 V

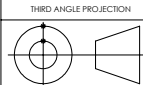
Model / Part Number	HP	Input Voltage	Motor Type	Rated Current (Input)	Rated Current (Output)
AD002R	0.5 - 2 HP	96 V - 275 V	1 & 3-Phase	20 A	9 A
AD003R	0.5 - 3 HP	96 V - 275 V	1 & 3-Phase	30 A	12 A
AD005R	0.5 - 5 HP	96 V - 275 V	1 & 3-Phase	47 A	20 A



Alpha Drive 2 - 5 HP




FLAT



UNLESS OTHERWISE SPECIFIED:
NO DIM. ±0.060" TO MODEL
FRACTIONAL ± 1/16"
0.XX: ±0.06" 0.XXX: ±0.020"
ANGLES: ±1°
HOLE Ø: ±0.003" TO MODEL
HOLE ⌀: ±0.010" TO MODEL
WELD: ANSI STANDARD

MASS = 0.000lb

Drawing Title: AD005R LINE DRAWING			
Part Number: AD005R		Revision:	
Material: VARIOUS			
Finish: VARIOUS			
Drawn by: BWT		Checked/Approved by:	
Scale: 1:5	Sheet: 1 of 1	Date: 3/25/2025	Units: IN



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