

# SUBMITTAL DATA SHEET

115V / 230V | Single Phase Output - 1/3 HP to 2 HP | 2 Wire & 3 Wire Motors  
Pressure Switch | Pressure Transducer

## AutoDRIVE - Variable Frequency Drive



### Constant Pressure

- Reduced tank size
- Quick & simple installation

### Easy Setup

- Setup constant pressure in 5 steps or less

### Large Graphic Display

- Bright backlit screen
- Visible in direct sunlight

### Rugged & Compact

- NEMA 3R steel enclosure
- Rated to 122°F, (104°F for SD3-5HP2)

### Feature Set | Power Behind The Pump

- Feature set provides complete control capability for all pumping applications

Part No.	Model No.	HP	Wt.
6619-018	SD1-2HP2PS w/Pressure Switch	2	13
6619-019	SD1-2HP2 w/Transducer	2	13
6619-020	SD3-2HP2*	2	13
6619-021	SD3-3HP2	3	13
6619-022	SD3-5HP2	5	13

\* 1 1/2 HP 3 Phase Motor assembled units use the SD3-2HP2 DRIVE

### Breaker Recommendations

Fuse/Breaker Recommendations Single Phase			Fuse/Breaker Recommendations Three Phase		
Motor HP	Input Current	Fuse/Breaker	Motor HP	Input Current	Fuse/Breaker
<b>115V</b>			<b>230V</b>		
1/3	8 A	10 A	2	20 A	25 A
1/2	14 A	20 A	3	30 A	40 A
1	28 A	35 A	5	42 A	55 A
<b>230V</b>					
1/2	6 A	10 A			
3/4	9 A	15 A			
1	14 A	20 A			
1 1/2	18 A	25 A			
2	28 A	35 A			

### Accommodated Wire Size

Connecting Load - Accommodated Wire Sizes	
Power Terminal	14 – 6 AWG
Minimum Torque	10.5 in-lb



NO-LEAD: The weighted average of the wetted surface of this no-lead product contacted by consumable water contains less than one quarter of one percent (0.25%) lead.



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A.Y. McDonald considers the information on this assembly drawing correct when published. Item and option availability, including specifications, are subject to change without notice.

**Submitted by:**

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### Enclosure Overview



### Technical Specifications - Single Phase

Physical / Environmental	
Operating Temperature Range	1/3 HP to 2 HP -20°C to 50°C (-4 F to 122°F)
Storage Temperature Range	-30°C to 60°C (-22°F to 140°F)
Enclosure	NEMA Type 3R: Outdoor   Rainproof
Altitude	Derate by 5 °C every 2000 ft over 5500 ft of elevation
Dimensions	12.25 in x 9.25 in x 4.68 in
Weight	13 lbs
Specifications	
Model Number	SD1-2HP2PS   SD1-2HP2
Horsepower	1/3 HP to 2 HP
Motor Style	2-Wire or 3-Wire
Rated Current	
Rated Input Current	Max: 28 A
Rated Output Current	Max: 16 A
Input Power	
Input Phase	Single Phase
Input Voltage	115 / 230 VAC
Input Voltage Range	90V to 160V 180V to 260V
Input Frequency	60 Hz

Output Power	
Output Phase	Single Phase
Output Voltage	Equal to input
Output Frequency	5 Hz to 120 Hz
Horsepower	1/3 HP to 2 HP
Switching Frequency	2 kHz to 8 kHz
Output	V/f control
Electrical	
Short Circuit Withstand Rating	5 kA RMS Symmetrical Amps
Efficiency	95%
Startup Ramp Time	0 to 120 s
Shutdown Ramp Time	0 to 120 s or Coast To Stop
Overload Capacity	150% for 2 s
<i>Rated output current for 2 HP model based on typical full load current for submersible motors.</i>	
Digital Inputs	
Quantity	Two Programmable
Ratings	<15 V 7 mA   Galvanically Isolated
Analog Inputs	
Quantity	Two Programmable
Current Reference	4-20 mA One Input
Voltage Reference	0 to 5 VDC One Input
Terminal Block Size	24 to 16 AWG