

# SUBMITTAL DATA SHEET

230V | Three Phase Output - 2 HP, 3HP, & 5HP  
**AutoDRIVE - Variable Frequency Drive**



**Constant Pressure**

- Reduced tank size
- Quick & simple installation

**Rugged & Compact**

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

**Easy Setup**

- Setup constant pressure in 5 steps or less

**Feature Set | Power Behind The Pump**

- Feature set provides complete control capability for all pumping applications

**Large Graphic Display**

- Bright backlit screen
- Visible in direct sunlight

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.

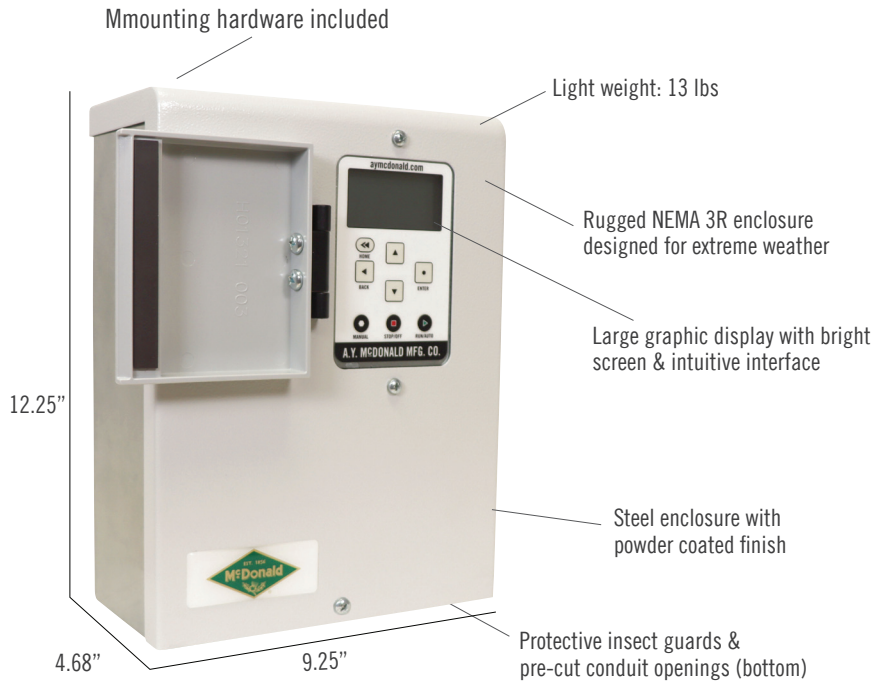
**Submitted by:**

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## Enclosure Overview



## Technical Specifications - Three Phase

Physical / Environmental	
Operating Temperature Range	-20°C to 50°C (-4°F to 122°F) -20°C to 40°C (-4°F to 104°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	SD3-2HP2   SD3-3HP2   SD3-5HP2
Horsepower	2 HP, 3 HP, 5 HP
Motor Style	3-Wire

Rated Current	
Rated Input Current	Max: 20 A, 30 A, 42 A
Rated Output Current	Max: 11 A, 13 A, 22 A

Input Power	
Input Phase	Single Phase
Input Voltage	230 VAC
Input Voltage Range	190V to 275V
Input Frequency	60 Hz

Output Power	
Output Phase	Three Phase
Output Voltage	230V
Output Voltage Range	190V - 275V
Output Frequency	5 Hz to 300 Hz
Horsepower	2 HP to 5 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	1 to 120 s
Shutdown Ramp Time	1 to 120 s or Coast To Stop
Overload Capacity	120% for 60 s

Analog Inputs	
Quantity	Two Programmable
Current Reference	4-20 mA Two Input
Voltage Reference	0 to 5 VDC One Input
Terminal Block Size	24 to 16 AWG