

SD

GENERAL PURPOSE

VARIABLE FREQUENCY DRIVES



Physical / Environmental

Operating Temperature Range	-40 °C – 50 °C (-40 °F – 122 °F) *Heater in enclosure may be required below –40 °C, de-rating required above 40 °
Storage Temperature Range	-40 °C – 57 °C (-40 °F – 135 °F)
Enclosure	NEMA Type 3R: Outdoor Rainproof
Altitude	Altitude Derate by 1% every 400 ft above 3300 ft elevation

Input Power (20 A - 42 A)

Input Phase	single-phase
Input Voltage	230 V
Input Voltage Range	190 V – 275 V
Input Frequency	60 Hz

Output Power (9 A - 18 A)

Output Phase	three-phase
Nominal Output Voltage	230 V
Output Voltage Range	190 V – 275 V
Output Frequency	5 Hz – 25 Hz
Horsepower	2 HP - 5 HP
Output Power	2 - 11kW
Switching Frequency	2 kHz – 8 kHz
Output	V/f control

Electrical

Short Circuit Withstand Rating	25 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 – 5 VDC, (1) Input
Terminal Block Size	26 - 12 AWG

Digital Inputs

Quantity	(4) Programmable
Ratings	< 5 V, galvanically isolated
Terminal Block Size	26 - 12 AWG

Relay Outputs

Quantity	(4) Programmable
Rating	Relay 1: 28 VDC, 10 A or 250 VAC, 10 A Relay 2 : 30 VDC, 2 A at 125 VAC, 0.5A
Terminal Block Size	26 - 12 AWG

Features

Certification	ETL listed 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)



230V

230 V

Model / Part Number	HP	Rated Current (Input)	Rated Current (Output)	Fuze Rating (Recommended)	Circuit Breaker Rating (Recommended)
SD002	2	20 A	9 A	25 A, 600 V	25 A
SD003	3	30 A	11 A	40 A, 600 V	40 A
SD005	5	42 A	18 A	55 A, 600 V	55 A



SD 2 & 3 HP

MODELS
SD002R
SD003R

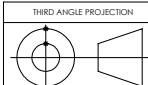
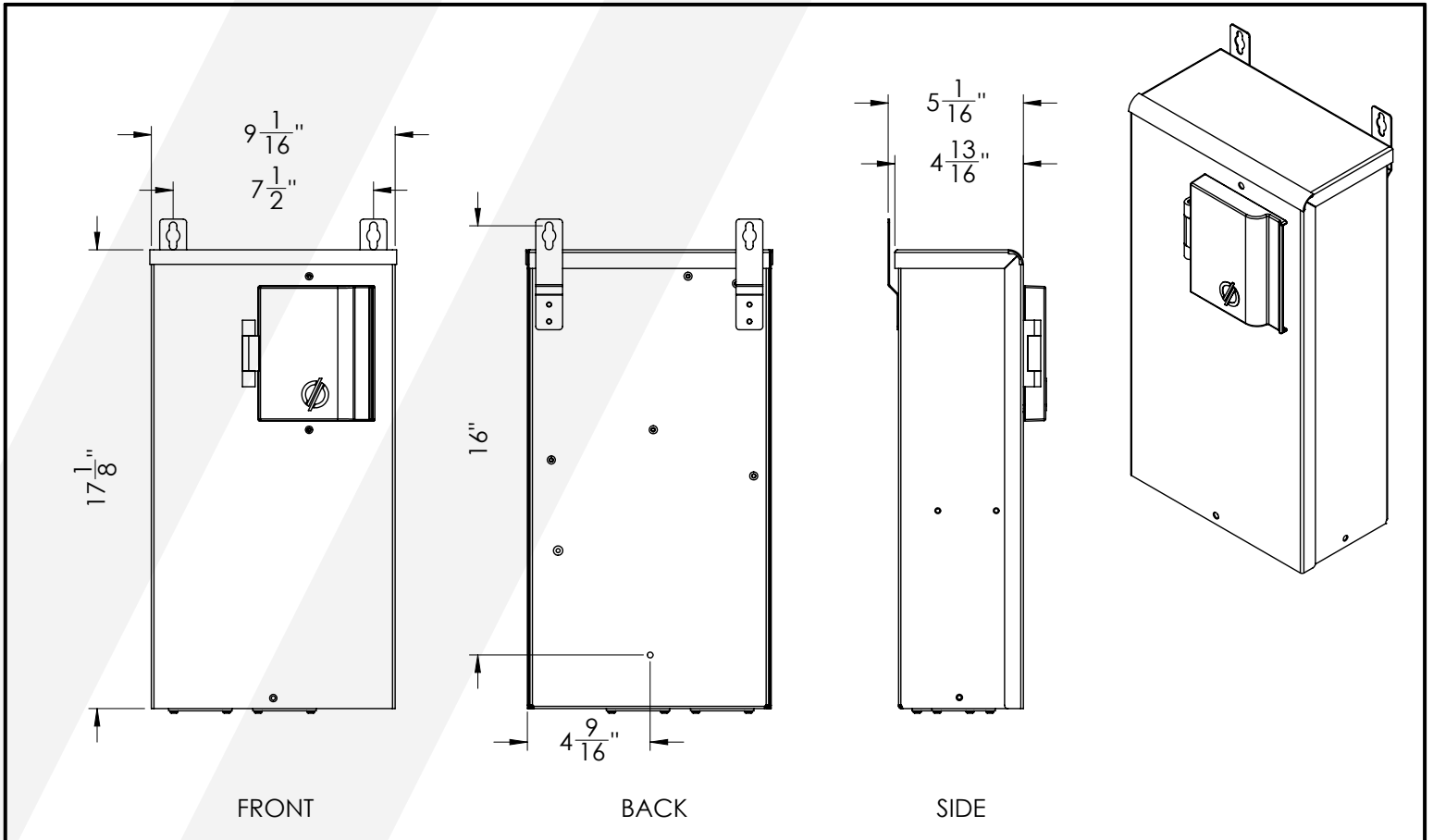
THIRD ANGLE PROJECTION		MASS = 0.000lb	
Drawing Title: SD (E&T)		Revision: 2	
Part Number: See Model Table		Checked/Approved by: -	
Material:		Date: 10/17/2023	
Finish: None		Units: IN	
Drawn by: IHH		Scale: 1:4	Sheet: 1 of 1

UNLESS OTHERWISE SPECIFIED:
 NO DIM, ± 0.060 " TO MODEL
 0.XX: ± 0.02 " 0.XXX: ± 0.010 "
 ANGLES: $\pm 1^\circ$
 HOLE ϕ : ± 0.020 " TO MODEL
 HOLE ϕ : ± 0.010 " TO MODEL

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SD 5 HP



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 Ø: ±0.010" TO MODEL
 WELD: ANSI STANDARD

MASS = 13.074 lb			
Drawing Title: SD005R LINE DRAWING			
Part Number: SD005R		Revision: 0	
Material: VARIOUS			
Finish: VARIOUS			
Drawn by: IHH		Checked/Approved by: -	
Scale: 1:5	Sheet: 1 of 1	Date: 12/14/2023	Units: IN



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**DIGITAL PHASE
CONVERTERS**

**VARIABLE
FREQUENCY
DRIVES**

**MOTOR
PROTECTION**

**STARTER
PANELS**

OUR MISSION

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

