

SD

RESIDENTIAL

VARIABLE FREQUENCY DRIVE



Physical / Environmental

Operating Temperature Range	-18 °C – 50 °C (0 °F – 122°F) *Heater in enclosure is required below -18 °C and 0 °F, de-rating required above 40 °C
Storage Temperature Range	-40 °C – 57 °C (-40 °F – 135 °F)
Enclosure	NEMA Type 3R: Outdoor Rainproof
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 – 300 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: 5 VDC, 7 A at 250 VAC Relay 2 : 5 VDC, 7 A at 250 VAC
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)



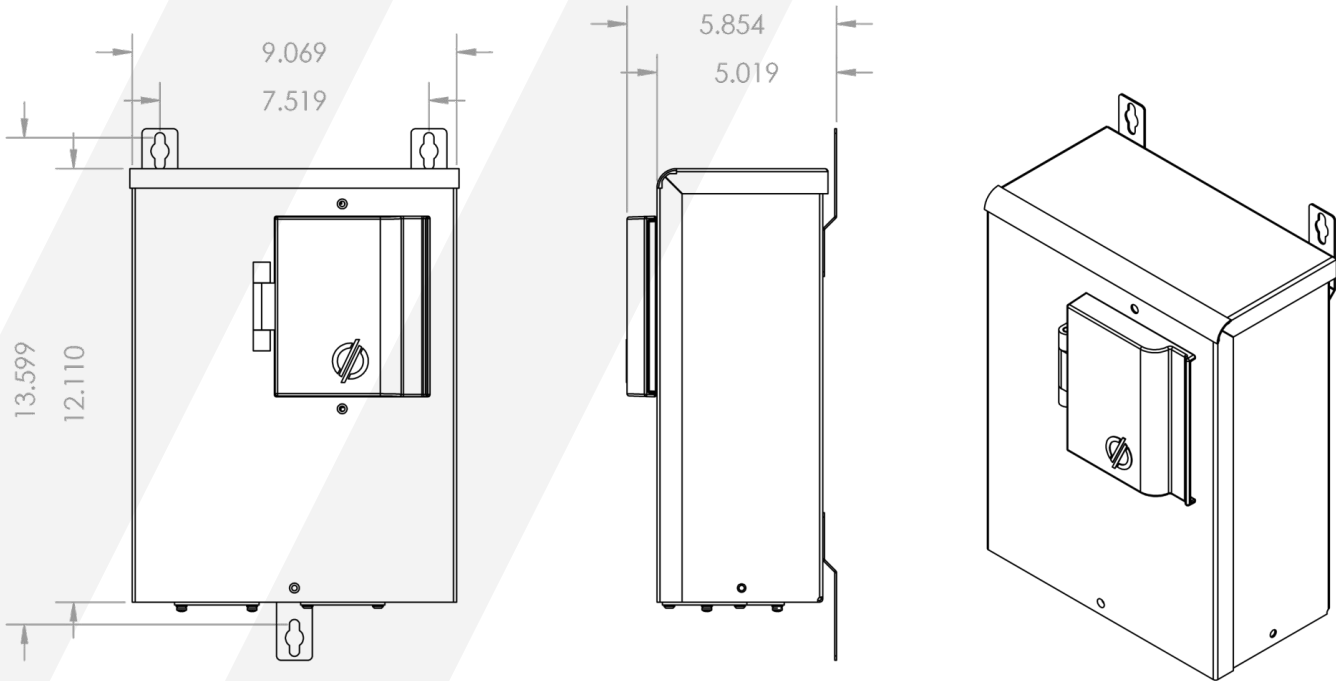
230V

230 V

<i>Model / Part Number</i>	<i>HP</i>	<i>Rated Current (Input)</i>	<i>Rated Current (Output)</i>	<i>Fuse Rating (Recommended)</i>	<i>Circuit Breaker Rating (Recommended)</i>
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



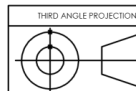
SD 2 & 3 HP



MODELS

SD002R

SD003R



MASS = 0.000lb

Drawing Title:

SD (E&T)

Part Number:

See Model Table

Revision:

2

Material:

Finish:

None

Drawn by:

IHH

Checked/Approved by:

-

Scale:

1:4

Sheet:

1 of 1

Date:

10/17/2023

Units:

IN

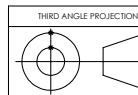
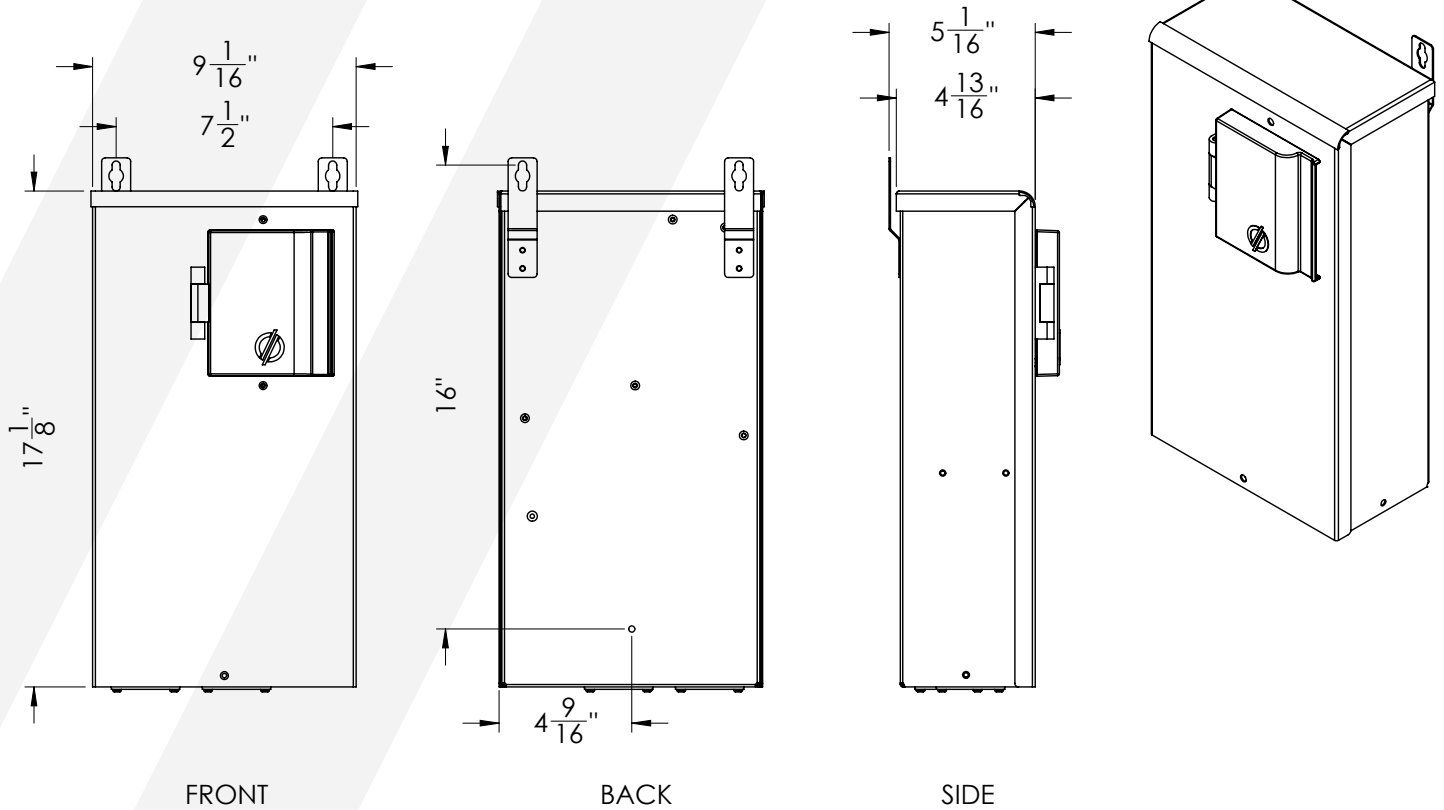
UNLESS OTHERWISE
SPECIFIED:
NO DIM. $\pm 0.060"$ TO MODEL
0.XX: $\pm 0.02"$ 0.XXX: $\pm 0.010"$
ANGLES: $\pm 1^\circ$
HOLE ϕ : $\pm 0.020"$ TO MODEL
HOLE ϕ : $\pm 0.010"$ TO MODEL



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SD 5 HP



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

UNLESS OTHERWISE SPECIFIED:
 NO DIM, $\pm 0.060"$ TO MODEL
 FRACTIONAL $\pm 1/16"$
 0.XX: $\pm 0.06"$ 0.XXX: $\pm 0.020"$
 ANGLES: $\pm 1^\circ$
 HOLE \varnothing : $\pm 0.003"$ TO MODEL
 HOLE \oplus : $\pm 0.010"$ TO MODEL
 WELD: ANSI STANDARD



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INTUITIVELY ENGINEERED



**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.*

10-DAY
AVG. LEAD TIMES

**MADE IN THE
USA**